AGENDA OF THE OPEN SESSION
OF THE MEETING OF SENATE

Held on Friday, May 21, 2021,
immediately following the Closed Session
via Zoom Video Conferencing

Item		Presenter/s	Action
1.	Call to order	G. Carr	
1.1	Adoption of the Agenda	G. Carr	Approval
1.2	Adoption of April 23, 2021 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 (US-2021-4-D2)	A. Whitelaw	Information
CONSENT AGENDA		G. Carr	
5.	Committee appointments (US-2021-4-D3)		Approval
6.	Library Committee report (US-2021-4-D4)		Information
7.	Academic Programs Committee: Report and recommendations (US-2021-4-D5)		Approval
7.1	Undergraduate curriculum proposals – Faculty of Arts and Science		
7.1.1	Department of Education (US-2021-4-D6)		
7.1.2	Department of Sociology and Anthropology (US-2021-4-D7)		
7.2	Undergraduate curriculum proposals – John Molson School of Business		
7.2.1	Course prerequisite (US-2021-4-D8)		

7.2.2 Conversion to permanent course (US-2021-4-D9)

7.3 Undergraduate curriculum proposal – Office of the Registrar – Regulations (US-2021-4-D10)

7.4 Graduate curriculum proposals – Gina Cody School of Engineering and Computer Science
7.4.1 Requirements and courses (US-2021-4-D11)
7.4.2 Department of Building, Civil and Environmental Engineering (US-2021-4-D12)
7.4.3 Concordia Institute for Information Systems Engineering (US-2021-4-D13)
7.4.4 Department of Chemical and Materials Engineering (US-2021-4-D14)
7.4.5 Department of Mechanical, Industrial and Aerospace Engineering (US-2021-4-D15)

REGULAR AGENDA

8.	Update on alternate grading policy	A. Whitelaw	Information
9.	Research Committee recommendation: University Recognition of Research Unit – Concordia Materials Characterization Platform (CMCP) (US-2021-4-D16)	P. Wood-Adams	Approval
10.	Academic Planning and Priorities Committee and Research Committee recommendation: Proposal to establish a School of Health (US-2021-4-D17)	A. Whitelaw/ P. Wood-Adams	Approval
11.	Question period *(maximum - 15 minutes)*		
12.	Other business		
13.	Adjournment	G. Carr	

US-2021-3

MINUTES OF THE OPEN SESSION OF THE MEETING OF SENATE

Held on Friday, April 23, 2021,
immediately following the meeting of the Closed Session
via Zoom Video Conferencing

PRESENT

Voting members: Graham Carr *(Chair)*; Md Foysal Ahmed; Ali Akgunduz; Shimon Amir; Nicholas Bailey; Matthew Barker; Guylaine Beaudry; Elizabeth Bloodgood; Catherine Bolton; Christopher Brett; Sally Cooke; Frank Crooks; Anne-Marie Croteau; Selvadurai Dayanandan; Mourad Debbabi; Effrosyni Diamantoudi; Linda Dyer; Mary Esteve; Ariela Freedman; Annie Gérin; Vince Graziano; James Hanna; Fiona Harrison-Roberts; Safwan Hye; Debra Irabor; Hannah Jamet-Lange; Isaiah Joyner; Samantha Leger; Colin Long; Christopher Moore; Catherine Mulligan; Helena Osana; Gilles Peslherbe; Duraichelvan Raju; Pascale Sicotte; Reza Soleymani; Robert Soroka; Ron Stern; Alexander Stojda; Kelly Thompson; Guylaine Vaillancourt; Anne Whitelaw; Paula Wood-Adams; Radu Zmeureanu

Non-voting members: Philippe Beauregard; Paul Chesser; Denis Cossette; Stéphanie de Celles; Michael Di Grappa; Isabel Dunnigan; Nadia Hardy; Candace Jacobs

Also attending: Shelina Houssenaly

ABSENT

Voting members: Adewunmi Ajike; Leslie Barker; Alex De Visscher; Sri Divya Doppalapudi; Mehdi Farashahi; Elizabeth Fast; Sarah Mazhero; Virginia Penhune; Praneetha Reddy

Non-voting members: Tom Hughes; Frederica Jacobs; Émilie Martel

1. Call to order

The meeting was called to order at 2:15 p.m.

1.1 Adoption of the Agenda

R-2021-3-5 *Upon motion duly moved and seconded, it was unanimously resolved that the Agenda of the Open Session be approved.*

1.2 Adoption of March 19, 2021 Minutes

R-2021-3-6 *Upon motion duly moved and seconded, it was unanimously resolved that the Minutes of the Open Session meeting of March 19, 2021.*

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

Noting that the end of term was nearing, the President thanked everyone for the efforts to draw the semester successfully to a close and wished the best of success to students in their last push of assignments and exams.

He reassured Senators that the focus is on planning for the fall. The University remains in close contact with the Ministry of Higher Education and public health officials to seek clarity on which measures will be required—particularly around social distancing—for fall, since these could materially affect how many in-person courses and activities can be held. The intention is to announce the schedule before the end of May to allow students to plan. Concordia is working, as are other universities, with the government to address these issues, sensitive both to the desire to welcome international students but also to prioritize health and safety. It is expected that these issues will continue to evolve through spring and summer.

He congratulated the Space Concordia team, Rocketry Division, competing in the NASA sponsored Base 11 Space Challenge, a multi-phase competition against leading US aerospace schools. They won that phase of the competition and are now preparing for a launch 'to the edge of space' this December.

Dr. Carr concluded by apprising Senators that the Times Higher Education (THE) Impact Rankings were released early this week, which measure the performance of universities against the 17 United Nations Sustainability Development Goals. Last year Concordia ranked in the top 200 among 766 universities. He was thrilled that this year Concordia ranked 62nd overall among 1,115 universities worldwide. He was proud of the efforts of the whole community, since these rankings measure not only research and teaching but also community engagement and how institutions, as organizations, embody the goals.

4. Academic update (US-2021-3-D3)

Dr. Whitelaw has no additional information to her written report.

CONSENT

5. Committee appointments (US-2021-4-D4)

R-2021-3-7 That the committee appointments be approved.

6. Academic Programs Committee – Report and recommendations (US-2021-3-D5)

6.1 Undergraduate curriculum proposals – Faculty of Fine Arts
6.1.1 Department of Design and Computation Arts (US-2021-3-D6)
6.1.2 Mel Hoppenheim School of Cinema (US-2021-3-D7)

R-2021-3-8 That the undergraduate curriculum proposals in the Faculty of Fine Arts be approved.

6.2 Undergraduate curriculum proposals – Gina Cody School of Engineering and Computer Science – Department of Mechanical, Industrial and Aerospace Engineering (US-2021-3-D8 and D9)

R-2021-3-9 That the undergraduate curriculum proposals in the Gina Cody School of Engineering and Computer Science be approved.

6.3 Graduate curriculum proposals – Faculty of Arts and Science
6.3.1 Department of Mathematics and Statistics (US-2021-3-D10)
6.3.2 Department of Psychology (US-2021-3-D11)

R-2021-3-10 That the graduate curriculum proposals in the Faculty of Arts and Science be approved.

6.4 Graduate curriculum proposal – Faculty of Fine Arts – Mel Hoppenheim School of Cinema (US-2021-3-D12)

R-2021-3-11 That the graduate curriculum proposal in the Faculty of Fine Arts be approved.

6.5 Graduate curriculum proposals – Gina Cody School of Engineering and Computer Science
6.5.1 Requirements for PhD (Doctorate in Philosophy) program (US-2021-3-D13)
6.5.2 Department of Building, Civil and Environmental Engineering (US-2021-3-D14)
6.5.3 Department of Mechanical, Industrial and Aerospace Engineering US-2021-3-D15)

R-2021-3-12 That the graduate curriculum proposals in the Gina Cody School of Engineering and Computer Science be approved.

REGULAR

7. Question period

Mr. Joyner wondered if access to campus will be feasible in the summer. Dr. Carr responded that the goal is to have some units back on campus and make the campus as accessible as possible. Mr. Di Grappa added that the University continues to plan for a pilot project for the summer and a fall return.

Prof. Dyer asked if the results of the equity survey would be circulated. Dr. Whitelaw answered that the data is currently being looked into and that an in-depth analysis will be done by the Equity Office.

Prof. Thompson noted that the delay in hiring part-time hiring members is putting a strain on departments for forward planning. Dr. Whitelaw explained that a decision was made in conjunction with CUPFA to postpone the hiring until such time that part-time faculty members will know whether if their course will be offered online or in-person. Prof. Soroka emphasized that this decision was made in a spirit of collaboration.

Ms. Jamet-Lange asked if there are any plans to make accommodations for students who cannot attend in-person classes in the fall. Dr. Whitelaw replied that the key to publishing a schedule that indicated which courses would be in person and which would be online was to help students make decisions if they were concerned about returning to campus. Ms. Jamet-Lange asked if accommodations could be made for students who were graduating. Dr. Whitelaw said that students can ask for accommodations from their professor under such extenuating circumstances especially if the course was a program requirement. Dr. Carr made the point that the principle is to minimize the number of exceptions.

8. Other business

There was no other business to bring before the meeting.

9. Adjournment

The meeting adjourned at 2:39 p.m.

D. Tessier

Danielle Tessier
Secretary of Senate

Internal Memorandum

To: Members of Senate
From: Anne Whitelaw, Interim Provost and Vice-President, Academic
Date: May 13, 2021
Re: Academic Update

We're in the final stretch before Spring Graduation, which will be celebrated this year on June 17th. You can follow the different ways we plan to mark occasion on the CU Celebrate hub.

Concordia's Department of Education recently launched the Teaching English as a Second Language (TESL) Resource Centre — a web-based initiative that provides resources for TESL students to support their studies and transition into the workforce. The centre is run by a team of master's and undergraduate students supervised by undergraduate program director and assistant professor Teresa Hernandez Gonzalez. Their goal is to build connection within the TESL community. The centre's official podcast, *Talking TESL*, focuses on different areas of teaching, offers learning experiences and provides advice on how to navigate the courses and internships in order to thrive in the TESL program. Another centre initiative is its mentoring program, which pairs a recent TESL program graduate with a more experienced peer to foster personal and professional growth through collaboration and mutual support.

With one in four artists or culture workers losing their jobs in 2020, Canada's arts industries have been hard hit by the COVID-19 pandemic. The cultural sector in Quebec — home to 22 per cent of all artists in Canada — is no exception. As a response, Concordia's Faculty of Fine Arts has launched two intensive microprograms aimed at retraining people in the arts who want to shift gears into new creative and professional opportunities. Concordia's Microprogram in Screenwriting and Film Producing and the Microprogram in Web Design and User Interface will equip graduates with the necessary skills to pursue work in these fields. The programs also reflect Concordia's long history of making university education accessible to people throughout their lives, no matter what their background

Many believe that students in research-based programs will ultimately pursue a PhD, continue in academia and teach. The reality, however, is that they have a wealth of opportunities to enter — or return to — industry as specialists in their field. With this in mind, the researched-based Master of Science in Management program at Concordia's John Molson School of Business is currently undergoing a curriculum update. While all of John Molson's MSc programs are undergoing similar changes, the MSc in Management is the first to run a new Seminar in Consulting course (MSCA 654) as a pilot project. The fully updated curriculum will launch in September. The new seminar course has been designed with a novel approach of combining research and practice. Students develop a comprehensive and critical perspective regarding the consulting profession. Enhanced by the inclusion of many high-level guest speakers, students gain a greater understanding of the fundamental consulting concepts and the engaging and important research conducted in that area.

The Future Skills Innovation Network (FUSION) Concordia and the Institute for Co-operative Education partnered in the fall of 2020 to offer the online *FUSION Skill-Development Curriculum* - a project of the national FUSION Network - to a subset of 155 Co-op students enrolled in a fall 2020 internship. A total of 97 (63%) students successfully completed the curriculum, with 95% saying the curriculum complemented

their Co-op experience either “somewhat” or “a lot.” FUSION Concordia is planning a second phase of implementation for this curriculum project in the spring / summer, and a third in the fall.

Following approval at Senate on March 19, 2021,Concodia launched Humanities+, a new non-credit program to support the school to career transition of undergraduate Concordians studying in humanities-based programs. Led by FUSION in partnership with FutureReady, the program offers students 50 hours of digital, professional and career development skills workshops followed by a summer work-integrated learning (WIL) experience. A total of 35 students representing nine of the 12 eligible departments/colleges are participating in the program’s inaugural cohort, which launched March 10th, 2021.

The newly launched Innovation Lab saw its first cohort complete four innovation challenges this winter, which included 18 students, 8 mentors, 4 challenges, 400 ideas distilled into 4 final presentations and about 4,225 student hours. 100% of respondents to the final feedback survey said that the experience was overwhelmingly positive, and students felt heard and included (88% of students responded to the optional survey). Participant Yune Sin Li Chang noted: “My journey in the innovation lab was filled with experience. What surprised me the most about this experience was that it was not linear and there was no right or wrong way of addressing this challenge. So, the good thing about it was that it was very stimulating to think outside the box. I would say that overall, this challenge really helped me to reflect on my academic and career path. The most amazing thing about the challenge was the opportunity to work in an interdisciplinary team and receive feedback and learn from the experiences of others.”

CityStudio Montreal , the innovation hub where city staff, students, faculty and community work together to design experimental projects that make Montreal more sustainable, livable, joyful and inclusive, put together a winter semester program of 5 CityStudio challenges integrated in 5 courses (4 undergrad-1 grad) that included a new experience for 2 professors, 7 Montreal city staff, 147 students, 43 project proposals, 70 participants at the Voilà! 2021 showcase on April 30 (40 in December 2020), 2 prizes awarded (Original concept & High impact potential) and 4 jurors' favourites.

Between July 27th and August 27th, 2021, The Centre Interdisciplinaire de Recherche en Opérationnalisation du Développement Durable (CIRODD)'s and its partners will hold their first Summer School on Societal Transformation. The School’s objective, which will be given over 45 hours, is to develop key competencies for the achievement of UN’s Sustainable Development Goals (SDGs) at the municipal level for up to 50 change driven leaders drawn from both the public and private sectors. Participants will work with other committed professionals and graduate students from Quebec and Canada concerned with local responses necessary in civil society and will help craft solutions that are to be applied to real-life community challenges. 36 applications were received from Trent University, Concordia, McGill, University of Toronto, EFREI (France), IAE Nantes and Ecole spéciale d’architecture, to name a few.

Riipen, the matchmaking platform where faculty and industry partners connect to collaborate on a course-integrated experiential learning project, had a successful winter term that included 536 student experiences by class size, 10 courses using Riipen, around 19,125 experiential learning hours and 48 requests sent by students. Engagement from employers was demonstrated by 60 company projects, 6 projects per course and 115 requests sent by employers. Notable experiential activities include website development, virtual internships in Human Relations, marketing research and community development.

Beat the Odds is a program that offers paid internships to students who stand to benefit from them the most. From April 2020 to March 2021, 27 internships were offered. Students stated that they gained hands-on experience related to their program of study, perceived an increase in their self-confidence, and

developed self-advocacy skills. One student said: “Before I got this opportunity, I was very self-conscious, with low self-esteem. However, after receiving an internship from BTO…I slowly gained my confidence in my ability to accomplish tasks.”

SHIFT’s Funding Hub, the second of our participatory governance structures, officially launched on April 8th. After an overview of the SHIFT funding program’s goals and objectives and an introduction to principles of participatory funding, hub members discussed and made recommendations in relation to the jury recruitment priorities and evaluation process for the first iteration of the Ongoing Connections Grant selection process. The second meeting of the Governance hub took place on April 22nd and focused on providing hub members with a history of the evolution of SHIFT’s governance model.

SHIFT has also placed 12 interns with SHIFT projects for summer 2021 roles, including our first student from the Gina Cody School of Engineering. SHIFT also has renewed commitments from Concordia’s Translation, Business Technology Management, and Design & Computation Arts departments to develop collaborations between our projects and their courses in the fall term.

With funding from MES, the Office of Community Engagement has successfully placed 10 Concordia students as interns for experiential learning projects with community organizations for summer 2021.

It’s been a busy time for District 3 with the launch of the Market Connect Program - Healthcare US Edition. In partnership with leading medical innovation ecosystem players in the US, the program aims to create a customized journey for Canadian healthtech and medtech startups’ integration into the US market. The Student Residency Program is giving startups access to student talent this summer. The initiative aims to help startups in areas such as growing revenue through marketing, validating revenue streams, and raising funds.

in more D3 news, they are recruiting for the spring cohort of the Quebec Scientific Entrepreneurship Program (QcSE), an online lab-to-market program in partnership with the Fonds de recherche du Québec to help scientists explore entrepreneurship and assess the market viability of their research.

D3 also selected 14 startups for the spring cohort of the Validation Program and ten teams for the Social Validation program. Suitable for startups wanting to validate their business model and learn the necessary competencies, the Validation Program enables startups to build a scalable company with global impact. In addition, they selected three startups for the FranQuebec Program. In partnership with Center Hubstart, Startlabs, Genepole and Agoranov, the program is designed for startups in any field who already have a proven solution, recurring sales revenues, and acquiring new customers in France and Europe.

Two 2020 public scholars, Bettina Forget (PhD candidate in Art Education) and Erica Pimentel (PhD candidate in JMSB), received international notice in April. Bettina, who uses lunar topography to inspire young women to consider STEM careers, was featured in the New York Times and was interviewed by CTV news. Erica Pimentel, who researches the changing nature of work in a digitized environment, was named to the University of Bath’s #ThinklistNext 2021 - a list of doctoral researchers on social media who raise awareness about responsible business.

Nadia Bhuiyan was awarded the Order of Merit of Brossard in the fields of Science and Education (ceremony in June). The Ville de Brossard honours residents who have distinguished themselves through their unique professional achievements and contributions on behalf of society. The Ordre du Mérite

recognizes residents who have demonstrated exceptional community engagement in the course of their professional duties or taking part in civic or volunteer activities. The Order of Merit is the highest distinction awarded by the City to citizens, whose influence in the sectors: environmental, cultural, community, sports, economic, educational, humanitarian or scientific springs up within the community.

Christopher Salter and Marcelo Wanderley (McGill) were co-recipients of one of FRQSC's new PRISME awards. Their project "Metamorphosis : Nouveaux modes d'interaction expressifs en théâtre basés sur la réalité augmentée" will explore new expressive modes of interaction in theatre based on extended reality. The PRISME exploratory program aims to encourage researchers working in different sectors and considered remote to jointly develop a project bringing together the arts and sciences. The projects submitted must lead to the realization of works or artistic performances.

*Lorenza Böttner: Requiem for the Norm*curated by Paul B. Preciado, runs at the Ellen Gallery from April 29th to June 19th. This first monographic exhibition on Lorenza Böttner (1959-1994), a disabled and trans Chilean / German artist will also feature an on-line live lecture and Q&A with the curator on May 22nd. On May 14th, Prof. Alexandre Baril lectured on Lorenza and transness, disability and resistance to cisgendrism and ableism.

4TH SPACE marked the end of the Winter 2021 semester with numerous notable activities featuring graduate student research, including the 3MT competition, an INDI Research Day, and the final 2020-21 Public Scholar event. Over 500 attendees registered for these online events and almost 2000 others watched the live streams. Undergraduate research was also celebrated via timely and innovative project competitions in the year-end CityStudio Program showcase, Voilà, and the Innovation Lab's first cohort's prototype presentations. Finally, important community events focused on getting to zero waste at Concordia, Indigenous research methodologies, and bridging the gap between science and journalism, attracted varied audiences. 4TH SPACE continues to visit labs to produce video demonstrations and invites researchers into conversations released as podcasts.

GradProSkills and 4TH SPACE hosted the 10th edition of Concordia's Three Minute Thesis competition on April 23rd. This milestone event had more than 200 live attendees on Zoom and Facebook, and more than 1700 impressions on Facebook. Sixty-four students joined the 3MT coaching workshop that took place over the winter term, but only 13 finalists made it to the final competition, following elimination heats. The winners were Mudabir Abdullah (PhD, Biology), Marie Lecuyer (PhD, Sociology and Anthropology) and Mahshid Keramatnejad (Master's, Chemistry).

The PERFORM Centre welcomed six international speakers at its seventh annual research conference: *Lifestyle Across the Lifespan*, which was held May 10th to 13th, 2021. Topics included: *The effects of age and age of obesity onset on adipocyte size and adipose tissue fibrosis*; *Circadian Rhythms and Sleep: Implications for Neurologic and Metabolic Health* and *Beyond the medicine cabinet: Non-pharmacological approaches to treat cognitive-motor disorders*.

D3 hosted its first Bio Innovation Conference April 6-7th. The innovation-driven conference focused on bioengineering and biomanufacturing for clean and sustainable technologies, agri-food, and biomaterials fields within the Canadian ecosystem. The conference welcomed 553 registrants worldwide - 246 professionals, 200 students, 54 District 3 Startups and alumni, 53 Non-D3 Startups—who gathered to hear from 30 different organizations, startups and groups passionate about the bio economy. Top universities in attendance include Concordia (13.5%), McGill (13%), and the University of Toronto (7%). Representing

30 countries, most of the attendees were Masters, PhD, or Postdoctoral fellows educated within bio-related fields.

D3 collaborated with Montreal New Tech on *Creative Collisions: Tech & Collaborations shaping the future of life sciences*. District 3's Venture Associate, Healthcare Stream Philippe Thompson and Life Sciences Specialist Ana Fernandez moderated the panel *Wearables, IoT & Biomarkers for Better Treatment Outcomes*, presented by AstraZeneca**.**

Milieux held several activities including Opera in Le PARC! CLOrk / the Concordia Laptop Orchestra presented a premiere of Juanita Marchand Knight's "Mixed Messages, No Pants" —a mini opera about pandemic job loss, artificial intelligence, and pyjama bottoms. The live YOUTUBE event was co-hosted by Milieux's Performing Arts Research Cluster (Le PARC) and Concordia's Dept. of Music, in collaboration with the RISE opera project (supported by SSHRC).

Grant results season is upon us! The 2021-2022 NSERC Doctoral competition was very successful for Concordia University and our doctoral students. Concordia's quota for the 2021-2022 competition was 15, and 11 of these 15 nominations were successful in the national competition. This represents a 73.3% success rate, nearly doubling our rates of the past two years. Our SSHRC results maintained the same success rate as 2020-2021, with 26 successful students among 53 applicants. This does not include three additional successsul applications from Indigenous students, which are not factored into the University quota.

Concordia also saw strong results in the faculty research completion: funding results for NSERC included 32 Discovery Grants totaling $5,370,000; 4 Research Tools and Instruments grants totaling $588,738; 2 Discovery Accelerator Supplements totaling $240,000; 1 Discovery Grant-Sub-Atomic Physics award of $180,000; 12 Discovery Launches (for early career researchers) totaling $125,000. On the Social Sciences and Humanities front, 13 SSHRC Insight Grants totaling $1,977,214 were awarded. And finally, funding results for FRQNT included 8 Projets de recherche en équipes totaling $1,200,000 and 6 Établissement de la relève professorale totaling $240,000**.** Congratulations to all award recipients!!

This is the last Academic Update to Senate of the 2020-21 academic year. I wish everyone a restful and productive spring and summer: take some downtime to reflect on the year that has been, to revel in the summer research period, and to re-energize for fall.

UNIVERSITÉ Concordia UNIVERSITY

COMMITTEE APPOINTMENTS

Committee	Appointee	Term
Academic Planning and Priorities	Lea Katsanis (JMSB)	2021/2024
Academic Programs	Rahul Ravi (JMSB)	2021/2024
Research	Alex de Visscher (Faculty Senator)	2021/2022
	Jean-Philippe Warren (Faculty Senator)	2021/2022
Special Graduation Awards	Catherine Bolton (Faculty Senator)	2021/2022
	Sally Cooke (Faculty Senator)	2021/2022
Steering	Elizabeth Bloodgood (A&S)	2021/2022
	Selvadurai Dayanandan (A&S)	2021/2022
	Alex de Visscher (GCS)	2021/2022
	Medhi Farashahi (JMSB)	2021/2022
	Robert Soroka (part-time)	2021/2022
	Guylaine Vaillancourt (FA)	2021/2022

Appointments requiring Senate ratification	Appointee	Term
Faculty Tribunal Pool	Latha Shanker (JMSB)	2021/2023
Honorary Degree and Convocation	Shimon Amir (Faculty Senator)	2021/2022
	Anne-Marie Croteau (Dean)	2021/2022
	Robert Soroka (Faculty Senator)	2021/2022

May 13, 2021

LIBRARY

REPORT TO SENATE
FROM THE
LIBRARY COMMITTEE

(Senate Meeting – May 21, 2021)

The second meeting of the LC for the academic year was held on April 21, 2021.

Concordia University Library under the pandemic – Update

Dr. Beaudry informed the committee that since July the Library has reopened the study spaces exclusively to Concordia students. At Webster, the number of students in the reading room has never been more than 100 despite the 250-seat capacity and at Vanier the number of students has been around 25-30 despite the 60-seat capacity, far from the maximum capacity. For the end of the semester, we have close to 1750-1850 reservations per week. Whereas, during other weeks of the semester, we have close to 1500-1600 reservations per week. The Library is monitoring very closely the number of reservations versus the number of people occupying the reading rooms in order to make adjustments to meet users' needs.

The libraries are not open 24/7 during the pandemic. Presently, the opening hours are Monday to Friday: 8:30 a.m. to 7:30 p.m. and Saturday and Sunday: 10 a.m. to 5 p.m. We will go back to 24/7 as soon as the public health authorities will allow. All the other Library services (reference, circulation, interlibrary loan and chat reference) are all working very well, thanks to the fabulous contributions and excellent services offered by the Library team.

Dr. Beaudry apprised the members that the Library is already looking at the upcoming summer and fall semesters. If everything goes well, we are looking at a summer "transition scenario". To the current services, we would like to add access to the public workstations in both libraries, access on appointment to stacks and to microform readers, as well as access to the visualization studio. All of this will be possible once we get the green light from Environmental Health and Safety. The reserve rooms will stay closed for the summer semesters.

For the fall, we are looking at a "close-to-normal" scenario. We are confident that for September the two libraries will be reopened (except for Grey Nuns). We are planning to reopen the loan and reference desks, providing some access to group study rooms, and the print reserve rooms in both libraries.

We have been informed that even if the Grey Nuns residence will reopen with a limited number of students, the Grey Nuns reading rooms and the 14 group study rooms will not reopen. Nevertheless, we are ready to coordinate the reopening of the Grey Nuns library spaces as soon as the public health authorities will allow.

Concordia University Press Update

Geoffrey Little, Associate University Librarian, Scholarly Communications and Director, Concordia University Press gave an overview of Concordia University Press's work over the last year, including a description of book projects that are soon to be published, as well as emerging themes within the Press's areas of publishing focus.

Open Access Author Fund Update

Geoffrey Little described recent changes to the Open Access Author Fund, specifically a transition from the Open Access Author Fund to the Open Access Fund. This change was made following consultation with researchers and in collaboration with the Office of Research and Graduate Studies. The emphasis will now be on supporting institutional/organizational memberships or subject repositories, rather than individual grants to authors. This will ensure a broader and more effective use of limited funds. Going forward, Concordia researchers will be able to take advantage of publishing discounts with selected journals or publishers, or repositories. A list of publishers is being drafted and community consultation will take place before a final list is approved by the Open Access Working Group.

Community Relations Programs

Dr. Lorie Kloda, Associate University Librarian, Planning & Community Relations, provided an update on the following community relations programs.

The Researcher in Residence program was launched in 2016. Developed as a one-year residency for a researcher (PhD student, post-doc, or librarian/archivist/professor on sabbatical), it was created to promote research in the library and the use of research by practitioners. Past researchers in residence were Dr. Emily Kopley, Dr. Claire Burrows, Dr. Lynne Bowker, and Dr. Katherine McLeod. Library is planning to welcome its fifth researcher in residence in the fall of 2021. https://library.concordia.ca/about/researcher-in-residence/

The Wikipedian in Residence program took place in 2019-2020. For one-year, part-time position was created with t*he overarching goal of promoting of Wikipedia, digital literacy, and the creation of a long-lasting partnership between the Wikimedia Foundation and Concordia.* The Wikipedian in Residence, Amber Berson, is writer, curator, researcher, and PhD candidate in Art History. During her residency, she facilitated a variety of outreach activities, consultations with faculty and research units, and worked with Library staff to create materials to support information and digital literacy instruction. https://library.concordia.ca/about/wikipedian-in-residence/

The Indigenous Student Librarian program was launched in 2017 to offer the opportunity for an Indigenous student to work part-time as a student librarian (or archivist) at Concordia Library, while pursuing a master's degree in information studies at either McGill or Université de Montréal. It is a two-year, part-time position. There are currently two students in the program, who will be going into their second year. The program is offered annually. https://library.concordia.ca/about/indigenous-student-librarian/

Special Collections Update 2020/21

Alexandra Mills, Special Collections Archivist, is responsible for preserving and providing access to a diverse array of archival fonds, collections, and rare books and manuscripts. The Library's Special Collections continue to grow in response to the teaching and research needs of the Concordia University community. The Reading Room (VL 121-1) reopened in January 2021 after being closed to researchers since the start of the Covid-19 pandemic. Members of the Concordia community (students, faculty, and staff) are able to book appointments Tuesday to Thursday to conduct their research. Virtual reference continues to be provided to users regardless of affiliation.

Respectfully submitted,
Dr. Guylaine Beaudry
University Librarian
May 4, 2021

ACADEMIC PROGRAMS COMMITTEE
REPORT TO SENATE
Sandra Gabriele, PhD
May 21, 2021

The Academic Programs Committee requests that Senate consider the following changes for the Fall 2022 Undergraduate Calendar:

Following approval of Faculty Councils, on April 22, 2021, APC members reviewed the following undergraduate curriculum submissions. As a result of discussions, APC resolved that the following curriculum proposals be forwarded to Senate for approval:

Faculty of Arts and Science

Department of Education

US-2021-4-D6 (For September 2022 Implementation)

[The proposal involves the implementation of a pass/fail grading system for internships offered in the Early Childhood and Elementary Education program, in compliance with the 'Teacher Training – Orientations – Professional Competencies' published by the Ministère de l'Éducation du Québec.]

- Requirements
- Courses

Department of Sociology and Anthropology

US-2021-4-D7 (For September 2022 Implementation)

[The proposal involves the conversion of three special topics courses into permanent courses.]

- Courses

John Molson School of Business

US-2021-4-D8 (For September 2022 Implementation)

[The proposal involves a modification to the prerequisites of BTM 481 Information Systems Analysis, to ensure that students have a grounding in the key business functions prior to enrolling.]

- Courses

US-2021-4-D9 (For September 2022 Implementation)

[The proposal involves the conversion of a special topics course to a new permanent course, FINA 421 Sustainable Investments.]

- Courses

Office of the Registrar

US-2021-4-D10 (For June 2021 Implementation)

[The proposal involves changes to the Academic Regulations to accommodate the introduction of the microprogram credential.]

- Regulations

The Academic Programs Committee requests that Senate consider the following changes for the Winter 2022 Graduate Calendar:

Following approval of the Graduate Curriculum Committee, on April 22, 2021, APC members reviewed the following graduate curriculum submissions. As a result of discussions, APC resolved that the following curriculum proposals be forwarded to Senate for approval:

Gina Cody School of Engineering and Computer Science

US-2021-4-D11 (For January 2022 Implementation)
[The proposal involves the deletion of obsolete doctoral seminars, updates to the descriptions of 'topics' courses, and the removal of notes that are no longer necessary.]

- Requirements
- Courses

Department of Building, Civil and Environmental Engineering
US-2021-4-D12 (For January 2022 Implementation)
[The proposal involves streamlining the research themes of the MASc degrees in Building Engineering and in Civil Engineering.]

- Requirements

Concordia Institute for Information Systems Engineering
US-2021-4-D13 (For January 2022 Implementation)
[The proposal involves the introduction of a new course INSE 6615 Blockchain Technology within the Information Systems Security elective course grouping of the MEng and MASc programs.]

- Courses
- Requirements

Department of Chemical and Materials Engineering
US-2021-4-D14 (For January 2022 Implementation)
[The proposal involves updates to the requirements of the Graduate Diploma in Chemical Engineering to allow students more flexibility by reducing the number of required courses and expanding the choice of technical electives.]

- Requirements

Department of Mechanical, Industrial and Aerospace Engineering
US-2021-4-D15 (For January 2022 Implementation)
[The proposal involves changes to the degree requirements of the MEng in Industrial Engineering, as well a modification to the course description for MECH 6761 Vehicular Internal Combustion Engines.]

- Courses
- Requirements

Sandra Gabriele, PhD
Vice-Provost, Innovation in Teaching and Learning May 4, 2021

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. Pascale Sicotte, Dean, Faculty of Arts and Science
Chair, Arts and Science Faculty Council

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

DATE: February 24, 2021

SUBJECT: Undergraduate Calendar Curriculum Changes
Department of Education (EDUC-79)

The following proposal was presented under ASFC-2021-1M-A and approved at the Arts and Science Faculty Council meeting of January 29, 2021. We request that this proposal be reviewed at the next meeting of the Academic Programs Committee.

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

UNIVERSITÉ Concordia UNIVERSITY

INTERNAL MEMORANDUM

TO: Dr. Pascale Sicotte, Dean, Faculty of Arts and Science
Chair, Arts and Science Faculty Council

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

DATE: January 15, 2021

SUBJECT: 2022-23 Undergraduate Calendar Curriculum Changes
Department of Education
EDUC-79
Pass/fail grading and certification note added for internships in the Specialization in Early Childhood and Elementary Education

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The Faculty Curriculum Committee has reviewed and approved the following proposal and requests that it be considered at the next Arts and Science Faculty Council.

In compliance with the 'Teacher Training – Orientations – Professional Competencies' published by the Ministère de l'Éducation du Québec in 2001, the **Department of Education** proposes the implementation of a pass/fail grading system for internships offered in the Early Childhood and Elementary Education program (ECEE). These courses include EDUC 295 *Internship I: Prekindergarten Teaching*, EDUC 395 *Internship III: Kindergarten Teaching*, EDUC 493 *Internship IV: Primary Teaching* and EDUC 495 *Internship V: Upper Elementary Teaching*.

The role of evaluators is to assess whether or not students have achieved certain competencies and skill sets, and letter grades cannot holistically reflect these achievements. Implementing this more global grading approach better responds to the expectations of the Ministry.

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

Reference documents:
FCC 2020.5_EDUC-79

Department of Education

EDUC-79

Memo from Chair

Program change

Specialization in Early Childhood and Elementary Education

Note added

EDUC 295	Internship I: Prekindergarten Teaching
EDUC 395	Internship III: Kindergarten Teaching
EDUC 493	Internship IV: Primary Teaching
EDUC 495	Internship V: Upper Elementary Teaching

INTERNAL MEMORANDUM

TO: Richard Courtemanche, Associate Dean, Academic Programs, FAS

FROM: Sara Kennedy, Chair, Department of Education

DATE: December 4, 2020

SUBJECT: **EDUC-79: Specialization in ECEE – P/F Internship Courses**

The Department proposes for consideration, the attached dossier (EDUC-79), which was approved at Department of Education Council meeting on November 11, 2020 and CTEC on November 16, 2020, with the following modification to the BA in Early Childhood and Elementary Education (ECEE).

We are requesting a change in grading for internships in the ECEE program (EDUC 295, EDUC 395, EDUC 493 and EDUC 495) from numeric to pass/fail to comply with the most current "Teacher Training: Orientations/Professional Competencies", published by Quebec Ministry of Education in 2001. The Ministry recommends that internships are evaluated in a holistic manner, by explicitly indicating whether or not students have acquired teaching competencies (http://www.education.gouv.qc.ca/fileadmin/site_web/documents/dpse/formation_ens_a.pdf).

The current numeric and letter grading systems creates a culture of accounting, and tries to assign a numeric value to a concept that does not lend itself to letter grading, much as letter grades do not adequately capture successful completion of a master's or doctoral thesis. We believe that by indicating whether or not the level of mastery is sufficient (pass/fail) will better evaluate performance as a whole. Additionally, the assessment of whether a student has sufficiently acquired a particular skillset is accompanied with providing detailed feedback on each of the targeted competencies throughout the internship courses. We believe that this approach better responds to the expectations set by Quebec Ministry of Education.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **EDUC-79** VERSION: 5

PROGRAM CHANGE: Specialization Early Childhood and Elementary Education Internships P/F

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Education
Program: Specialization Early Childhood and Elementary Education
Degree: BA
Calendar Section/Graduate Page Number: 31.090

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

Present Text (from 2021/2022) calendar	**Proposed Text**
BA Specialization Early Childhood and Elementary Education (120 credits)	**BA Specialization Early Childhood and Elementary Education (120 credits)**
93 *Credits from* Early Childhood and Elementary Education Group A	93 *Credits from* Early Childhood and Elementary Education Group A
6 *Credits from* Early Childhood and Elementary Education Group B	6 *Credits from* Early Childhood and Elementary Education Group B
21 *Credits from* Early Childhood and Elementary Education Group C	21 *Credits from* Early Childhood and Elementary Education Group C
Notes:	*Notes:*
Students must take all Group A and Group B courses in the Early Childhood and Elementary Education (ECEE) program at Concordia. For Group C courses, students must have a valid reason for taking courses at another university and must obtain permission from the director of the ECEE program regarding any substitutions.	*Students must take all Group A and Group B courses in the Early Childhood and Elementary Education (ECEE) program at Concordia. For Group C courses, students must have a valid reason for taking courses at another university and must obtain permission from the director of the ECEE program regarding any substitutions.*
This program is open to full-time students only. In addition to the application submitted to the University, specialization applicants MUST complete an additional application which may be obtained from the Early Childhood and Elementary Education program assistant.	*This program is open to full-time students only. In addition to the application submitted to the University, specialization applicants MUST complete an additional application which may be obtained from the Early Childhood and Elementary Education program assistant.*
Students may be recommended to the Quebec Teachers Certification Service for a Quebec permanent teaching diploma, valid for teaching kindergarten and cycles 1 to 3	*Students may be recommended to the Quebec Teachers Certification Service for a Quebec permanent teaching diploma, valid for teaching kindergarten and cycles 1 to 3*

(Grades 1 to 6) provided they have met the following requirements: *1. successfully completing the degree and certification requirements for the BA Specialization in Early Childhood and Elementary Education;* *2. satisfying the English language proficiency requirements of the MEES; and* *3. applying to graduate.*	*(Grades 1 to 6) provided they have met the following requirements:* *1. successfully completing the degree and certification requirements for the BA Specialization in Early Childhood and Elementary Education;* *2. satisfying the English language proficiency requirements of the MEES; and* *3. applying to graduate.* *The following internships are graded as pass/fail: EDUC 295, EDUC 395, EDUC 493, EDUC 495.*
To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must: *1. achieve at least a "B" grade in each of the following ~~practicum~~ courses:* EDUC ~~295~~, EDUC 296, ~~EDUC 297, EDUC 395,~~ EDUC 396, ~~EDUC 493,~~ EDUC 494, ~~EDUC 495,~~ EDUC 496; ~~*and*~~ *2. achieve at least a "C+" grade in each of the following methods courses:* EDUC 222, EDUC 301, EDUC 355, EDUC 380, EDUC 381, EDUC 382, EDUC 384, EDUC 385, EDUC 386, EDUC 387, EDUC 388.	*To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must:* *1. achieve at least a "B" grade in each of the following seminar courses:* EDUC 296, EDUC 396, EDUC 494, EDUC 496; 2. achieve at least a "B" grade in each of the following internship/seminar course: EDUC 297; 3. achieve a "pass" in each of the following internships: EDUC 295, EDUC 395, EDUC 493, EDUC 495; and *4. achieve at least a "C+" grade in each of the following methods courses:* EDUC 222, EDUC 301, EDUC 355, EDUC 380, EDUC 381, EDUC 382, EDUC 384, EDUC 385, EDUC 386, EDUC 387, EDUC 388.
Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade. (For the status of this grade as part of the student record, see Section 16.2.6.*)* *Students who fail to achieve the above minimum grades in two internships/methods courses (i.e. failing the same internship/ methods course twice or two different internships/methods courses) cannot continue in the program and are required to withdraw from the Early Childhood and Elementary Education Specialization program (see* Section 16.2.6*).*	*Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade. (For the status of this grade as part of the student record, see* Section 16.2.6.*)* *Students who fail to achieve the above minimum grades in two internships/methods courses (i.e. failing the same internship/ methods course twice or two different internships/methods courses) cannot continue in the program and are required to withdraw from the Early Childhood and Elementary Education Specialization program (see* Section 16.2.6*).*

Rationale:
We propose to change EDUC 295, 395, 493, and 495 to pass/fail to comply with the Ministry's teacher training program as was previously approved for the TESL teaching training program (EDUC-67). Note, the internships (EDUC 295, 395, 493 and 495) are taken concurrently with the accompanying "internship" seminars (EDUC 296, 396, 494, 496); these will remain the minimum "B" grade requirement. EDUC 297 will also retained as a letter grade as it consists of both an internship and an internship seminar component. The internship is fewer hours than the other ECEE internships (40 hours), and students do not receive a specific grade for it. Rather, passing the internship is a requirement of the entire course. Students complete assignments throughout the course, and this is how they are evaluated and given a final grade.

Resource Implications:
n/a

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **EDUC-79** VERSION: 5

COURSE CHANGE: EDUC 295 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Education
Program: Specialization Early Childhood and Elementary Education
Degree: BA
Calendar Section/Graduate Page Number: 31.090

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [ ] Editorial [ ] New Course
[ ] Course Deletion [X] Other - Specify: note

Present Text (from 2021/2022) calendar	**Proposed Text**
EDUC 295 Internship I: Prekindergarten Teaching (3.00) *Prerequisite/corequisite:* The following course must be completed concurrently: EDUC 296. Enrolment in the Early Childhood and Elementary Education Specialization is required. Students must be in their first year of the ECEE program in order to enrol. *Description:* This internship gives students first-hand knowledge of the importance of early education. It permits students to develop preliminary skills in observing, assessing, and meeting the needs of individual children, articulating educational objectives, working effectively with small groups, and planning and implementing a play-based curriculum. Students are placed in a prekindergarten class one day a week for a total of 60 hours. *Component(s):* Lecture, Internship. *Notes:* • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve ~~at least a "B"~~ grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade.	**EDUC 295 Internship I: Prekindergarten Teaching (3.00)** *Prerequisite/corequisite:* The following course must be completed concurrently: EDUC 296. Enrolment in the Early Childhood and Elementary Education Specialization is required. Students must be in their first year of the ECEE program in order to enrol. *Description:* This internship gives students first-hand knowledge of the importance of early education. It permits students to develop preliminary skills in observing, assessing, and meeting the needs of individual children, articulating educational objectives, working effectively with small groups, and planning and implementing a play-based curriculum. Students are placed in a prekindergarten class one day a week for a total of 60 hours. *Component(s):* Lecture, Internship. *Notes:* • This course is graded on a pass/fail basis. • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve a "pass" grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade.

Rationale:
We propose to change EDUC 295, 395, 493, and 495 to pass/fail to comply with the Ministry's teacher training program as was previously approved for the TESL teaching training program (EDUC-67). Note, the internships (EDUC 295, 395, 493 and 495) are taken concurrently with the accompanying "internship" seminars (EDUC 296, 396, 494, 496); these will

remain the minimum “B” grade requirement. EDUC 297 will also retained as a letter grade as it consists of both an internship and an internship seminar component. The internship is fewer hours than the other ECEE internships (40 hours), and students do not receive a specific grade for it. Rather, passing the internship is a requirement of the entire course. Students complete assignments throughout the course, and this is how they are evaluated and given a final grade.
Resource Implications: None.
Other Programs within which course is listed: None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **EDUC-79** VERSION: 5

COURSE CHANGE: EDUC 395 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Education
Program: Specialization Early Childhood and Elementary Education
Degree: BA
Calendar Section/Graduate Page Number: 31.090

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [ ] Editorial [ ] New Course
[ ] Course Deletion [X] Other - Specify: note

Present Text (from 2021/2022) calendar	Proposed Text
EDUC 395 Internship III: Kindergarten Teaching (3.00) *Prerequisite/corequisite:* The following courses must be completed previously: EDUC 295; EDUC 296; EDUC 297. The following course must be completed concurrently: EDUC 396. Enrolment in Early Childhood and Elementary Education Specialization is required. Students must have completed 30 credits prior to enrolling. *Description:* This internship is a seven-week (245 hours) supervised student-teaching experience in a full-day kindergarten classroom. Students share in the daily work of their co-operating teachers, and progress gradually from being participant observers working with small groups to taking charge of the whole class. Students practise their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines. *Component(s):* Internship. *Notes:* • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve ~~at least a "B"~~ grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade.	**EDUC 395 Internship III: Kindergarten Teaching (3.00)** *Prerequisite/corequisite:* The following courses must be completed previously: EDUC 295; EDUC 296; EDUC 297. The following course must be completed concurrently: EDUC 396. Enrolment in Early Childhood and Elementary Education Specialization is required. Students must have completed 30 credits prior to enrolling. *Description:* This internship is a seven-week (245 hours) supervised student-teaching experience in a full-day kindergarten classroom. Students share in the daily work of their co-operating teachers, and progress gradually from being participant observers working with small groups to taking charge of the whole class. Students practise their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines. *Component(s):* Internship. *Notes:* • This course is graded on a pass/fail basis. • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve a "pass" grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade.

Rationale:
We propose to change EDUC 295, 395, 493, and 495 to pass/fail to comply with the Ministry's teacher training program as was previously approved for the TESL teaching training program (EDUC-67). Note, the internships (EDUC 295, 395, 493 and 495) are taken concurrently with the accompanying "internship" seminars (EDUC 296, 396, 494, 496); these will remain the minimum “B” grade requirement. EDUC 297 will also retained as a letter grade as it consists of both an internship and an internship seminar component. The internship is fewer hours than the other ECEE internships (40 hours), and students do not receive a specific grade for it. Rather, passing the internship is a requirement of the entire course. Students complete assignments throughout the course, and this is how they are evaluated and given a final grade.

Resource Implications:
None.

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **EDUC-79** VERSION: 5

COURSE CHANGE: EDUC 493 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Education
Program: Specialization Early Childhood and Elementary Education
Degree: BA
Calendar Section/Graduate Page Number: 31.090

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [ ] Editorial [ ] New Course
[ ] Course Deletion [X] Other - Specify: note

Present Text (from 2021/2022) calendar	Proposed Text
EDUC 493 Internship IV: Primary Teaching (3.00) *Prerequisite/corequisite:* The following courses must be completed previously: EDUC 200; EDUC 295; EDUC 296; EDUC 297. The following courses must be completed previously or concurrently: EDUC 388, EDUC 395, EDUC 396. The following course must be completed concurrently: EDUC 494. Enrolment in the Early Childhood and Elementary Specialization is required. Students must have completed 60 credits prior to enrolling. *Description:* The internship is a seven-week (245 hours) supervised student-teaching experience in a primary classroom (Grades 1 to 3). Students share in the daily work of their co-operating teachers, and progress gradually from being participant observers working with small groups to taking charge of the whole class as independent, creative practitioners. Students perfect their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines. *Component(s):* Internship. *Notes:* • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve ~~at least a "B"~~ grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade.	**EDUC 493 Internship IV: Primary Teaching (3.00)** *Prerequisite/corequisite:* The following courses must be completed previously: EDUC 200; EDUC 295; EDUC 296; EDUC 297. The following courses must be completed previously or concurrently: EDUC 388, EDUC 395, EDUC 396. The following course must be completed concurrently: EDUC 494. Enrolment in the Early Childhood and Elementary Specialization is required. Students must have completed 60 credits prior to enrolling. *Description:* The internship is a seven-week (245 hours) supervised student-teaching experience in a primary classroom (Grades 1 to 3). Students share in the daily work of their co-operating teachers, and progress gradually from being participant observers working with small groups to taking charge of the whole class as independent, creative practitioners. Students perfect their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines. *Component(s):* Internship. *Notes:* • This course is graded on a pass/fail basis. • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve a "pass" grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade.

Rationale:
We propose to change EDUC 295, 395, 493, and 495 to pass/fail to comply with the Ministry's teacher training program as was previously approved for the TESL teaching training program (EDUC-67). Note, the internships (EDUC 295, 395, 493 and 495) are taken concurrently with the accompanying "internship" seminars (EDUC 296, 396, 494, 496); these will remain the minimum “B” grade requirement. EDUC 297 will also retained as a letter grade as it consists of both an internship and an internship seminar component. The internship is fewer hours than the other ECEE internships (40 hours), and students do not receive a specific grade for it. Rather, passing the internship is a requirement of the entire course. Students complete assignments throughout the course, and this is how they are evaluated and given a final grade.

Resource Implications:
None.

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **EDUC-79** VERSION: 5

COURSE CHANGE: EDUC 495 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Education
Program: Specialization Early Childhood and Elementary Education
Degree: BA
Calendar Section/Graduate Page Number: 31.090

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [ ] Editorial [ ] New Course
[ ] Course Deletion [X] Other - Specify: note

Present Text (from 2021/2022) calendar	Proposed Text
EDUC 495 Internship V: Upper Elementary Teaching (3.00) *Prerequisite/corequisite:* The following courses must be completed previously: EDUC 222; EDUC 295; EDUC 296; EDUC 297; EDUC 301; EDUC 380; EDUC 381; EDUC 382 EDUC 386; EDUC 387; EDUC 395; EDUC 396.The following courses must be completed previously or concurrently: EDUC 388, EDUC 493, EDUC 494. The following course must be completed concurrently: EDUC 496. Enrolment in the Early Childhood and Elementary Education Specialization is required. Students must have completed 90 credits prior to enrolling. *Description:* Students are placed in an elementary classroom (Grades 4 to 6) for a seven-week student-teaching experience (245 hours). They are provided with the opportunity to continue to develop their own teaching strategies and enhance their skills in curriculum planning and implementation, preparing and evaluating classroom materials, and monitoring student progress. Students participate in the daily routines and educational duties of their co-operating teachers and become involved in student activities. *Component(s):* Internship. *Notes:* • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve ~~at least a "B"~~ grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade.	**EDUC 495 Internship V: Upper Elementary Teaching (3.00)** *Prerequisite/corequisite:* The following courses must be completed previously: EDUC 222; EDUC 295; EDUC 296; EDUC 297; EDUC 301; EDUC 380; EDUC 381; EDUC 382 EDUC 386; EDUC 387; EDUC 395; EDUC 396.The following courses must be completed previously or concurrently: EDUC 388, EDUC 493, EDUC 494. The following course must be completed concurrently: EDUC 496. Enrolment in the Early Childhood and Elementary Education Specialization is required. Students must have completed 90 credits prior to enrolling. *Description:* Students are placed in an elementary classroom (Grades 4 to 6) for a seven-week student-teaching experience (245 hours). They are provided with the opportunity to continue to develop their own teaching strategies and enhance their skills in curriculum planning and implementation, preparing and evaluating classroom materials, and monitoring student progress. Students participate in the daily routines and educational duties of their co-operating teachers and become involved in student activities. *Component(s):* Internship. *Notes:* • This course is graded on a pass/fail basis. • To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must achieve a "pass" grade in this course. Students who obtain a grade that is below the above-required level are placed on conditional standing within the program and are informed in writing. Students are allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required

	grade.

Rationale:
We propose to change EDUC 295, 395, 493, and 495 to pass/fail to comply with the Ministry's teacher training program as was previously approved for the TESL teaching training program (EDUC-67). Note, the internships (EDUC 295, 395, 493 and 495) are taken concurrently with the accompanying "internship" seminars (EDUC 296, 396, 494, 496); these will remain the minimum “B” grade requirement. EDUC 297 will also retained as a letter grade as it consists of both an internship and an internship seminar component. The internship is fewer hours than the other ECEE internships (40 hours), and students do not receive a specific grade for it. Rather, passing the internship is a requirement of the entire course. Students complete assignments throughout the course, and this is how they are evaluated and given a final grade.

Resource Implications:
None.

Other Programs within which course is listed:

None.

INTERNSHIP 2: INITIATION
COMMON EVALUATION FORM

STUDENT	
SCHOOL	
LEVEL(S)	**Kindergarten**
COOPERATING TEACHER	
UNIVERSITY SUPERVISOR	

INTERNSHIP DATES	**FROM** **September 21, 2020**
	TO **November 6, 2020**

COURSE CODE

ECEE	**EDUC 395**
ARTE	
TESL	

PURPOSE

Self Assessment/Reflection	
Formative Assessment	
Summative Evaluation	

INTERNSHIP # 2: INITIATION

Purpose
Students are initiated into teaching supported by the cooperating teacher.

General Tasks and Responsibilities

The student observes the class and becomes familiar with school routines and rules.

The student is introduced to the overall educational project of the school, learns of the services available at the school and from the board or other agencies, and receives information on the school's success plan.

The student assists in the regular collateral work of a teacher: supervision, correction, field trips or school activities, meeting with professional non-teaching support staff.

The student gradually assumes responsibility for leading the class on a project, theme, or lessons in which there is evidence of sound grasp of the fundamentals of effective lesson planning.

The student attends team meetings, school meetings, professional development and in-service activities organized by the school or school board.

The student demonstrates that he/she has attained at least an acceptable level of competency development for each of the professional competencies targeted during this internship

Evaluation
The targeted professional competencies for the second internship are: #1, 2, 3, 4, 6, 9, 10, 11 and12. The features listed for each of the professional competencies serve to guide this observation but are not to be individually assessed. The competency is assessed holistically.

"A competency, unless extremely general, should . . . be regarded as a work-in-progress, more of an ongoing pursuit than an achievable goal."
(Teacher Training: Orientations-Professional Competencies, p.50, MELS, 2001)

Cooperating teachers are asked to use the Level of Competency Development scale to assess the student's performance during the internship.

The level of mastery should be what can be reasonably expected of a student completing his/her second internship.

Levels of Competency Development Scale

5 Exceptional	Student shows considerable autonomy, has mastered the different features of the competency and progressed without difficulty, having made adjustments as the need arose.
4 High	Student has developed the competency with minimal support, has mastered several features of the competency, and has made the necessary adjustments over time.
3 Acceptable	Student adequately addresses most features of the competency but requires some further support in developing the competency.
2 Weak	Student is experiencing some difficulty in attaining a satisfactory level of proficiency in this competency and has required constant support.
1 Not Achieved	Student is experiencing great difficulty in attaining a satisfactory level of proficiency despite the support received.

The features listed for each of the professional competencies serve to guide this observation but are not to be individually assessed. **The competency is assessed holistically.**

Comments on each competency are not required, however they would be useful and appreciated.

Comments are always required when "exceptional, weak, or not achieved" assessment is accorded.

FOUNDATIONS: Competencies 1 and 2

Professional Competency #1: To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.					
- Makes some links between subject specific knowledge addressed in the classroom and students' knowledge - Confronts own preconceptions about teaching with actual school experience - Shows evidence of a basic understanding of subject-specific competencies related to the grade /cycle - Displays evidence of basic content knowledge - Encourages students to question					
Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

Professional Competency #2: To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching
- Uses varied and appropriate language when speaking - Observes rules of written language in communications - Corrects errors made by students when speaking and writing - Uses appropriate tone when speaking with students, teachers, other professionals, parents - Communicates in a clear and respectful manner appropriate to students' age and interests - Communicates professionally with parents, colleagues and professional staff, as needed

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

TEACHING ACT: Competencies 3, 4, 5 and 6

Professional Competency # 3: To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study.
- Plans learning situations consistent with the program of study - Plans learning situations and teaching strategies conducive to the active participation of students, taking into account their particular needs and characteristics - Ensures the availability of the resources needed to carry out tasks and estimates the approximate time needed for each task - Foresees possible questions about the content addresses, as well as the appropriate answers

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

Professional Competency #4: To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the programs of study.
- Organizes and supervises learning situations requiring cooperation so that all students are actively engaged - Creates conditions in which students can engage in meaningful problem situations, tasks or projects and can develop safe work habits - Informs students about the resources that are available to them and provides instructions on how to use them in a safe manner - Encourages students with words or discreet gestures - Reinforces the task (i.e., by using visual aids or by having students re-explain)

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

TEACHING ACT: Competencies 3, 4, 5 and 6

Professional Competency #6: To plan, organize and supervise a class in such a way as to promote students' learning and social development.
- Maintains an atmosphere conducive to learning by fostering cooperation, including discussion of rules with students - Applies rules and routines in a consistent manner - Monitors students as they carry out different tasks so as to ensure that they are focused on their work

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

SOCIAL AND EDUCATION CONTEXT: Competencies 7, 8, 9 and 10

Professional Competency # 9: To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.
- Seeks information about and develops an awareness of the roles and functions of the school team of professionals - Supports students involved in school activities or projects - Performs the assigned support and supervision tasks - Attends, when possible, school councils, and staff meetings

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

SOCIAL AND EDUCATION CONTEXT: Competencies 7, 8, 9 and 10

Professional Competency #10: To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned.
- Collaborates with the cooperating teacher and other teachers in planning teaching/learning situations for the same group of students that they teach - Proposes projects related to the targeted objectives of the cooperating teacher - Evaluates projects/tasks taking into account the targeted objectives and the students concerned

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

PROFESSIONAL IDENTITY: Competencies 11 and 12

Professional Competency #11: To engage in professional development individually and with others.
- Accepts direction and feedback and acts upon suggestions for improvement. - Reflects on his/her competencies and takes steps to develop them to meet the objectives set by the cooperating teacher - Participates in professional activities organized by the school or school board, if possible - Selects samples and artifacts to include in the portfolio to monitor and assess personal progress in achieving the professional competencies. - Keeps up to date with research to enrich his/her lesson plans

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

PROFESSIONAL IDENTITY: Competencies 11 and 12

Professional Competency #12: To demonstrate ethical and responsible professional behaviour in the performance of his or her duties.
- Respects the confidential aspects of his/her profession - Avoids any form of discrimination towards students, parents or colleagues - Provides students with appropriate attention and support - Respects, in words and actions, the educational project of the school - Respects school's code of professional conduct, is neat in grooming and attire and presents a professional image - Demonstrates sound judgement - Fosters inclusion - Maintains a positive attitude towards all students - Uses constructive feedback - Is aware of and is respectful of cultural and religious differences

Assessment	**Exceptional** ☐	**High** ☐	**Acceptable** ☐	**Weak** ☐	**Not Achieved** ☐

Additional Comments

OVERALL ASSESSMENT

RECOMMENDATION

☐	proceed to next internship
☐	not proceed to next internship

COOPERATING TEACHER _____ Date _____

UNIVERSITY SUPERVISOR _____ Date _____

STUDENT _____ Date _____

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. Pascale Sicotte, Dean, Faculty of Arts and Science
Chair, Arts and Science Faculty Council

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

DATE: March 18, 2021

SUBJECT: Undergraduate Calendar Curriculum Changes
Department of Sociology and Anthropology (SOAN-39)

The following proposal was presented under ASFC-2021-2M-B and approved at the Arts and Science Faculty Council meeting of March 12, 2021. We request that this proposal be reviewed at the next meeting of the Academic Programs Committee.

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

UNIVERSITÉ Concordia UNIVERSITY

INTERNAL MEMORANDUM

TO: Dr. Pascale Sicotte, Dean, Faculty of Arts and Science
Chair, Arts and Science Faculty Council

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

DATE: February 22, 2021

SUBJECT: 2022-23 Undergraduate Calendar Curriculum Changes
Department of Sociology and Anthropology
SOAN-39
New courses: ANTH/SOCI 284, 320, 429

The Faculty Curriculum Committee has reviewed and approved the following proposal and requests that it be considered at the next Arts and Science Faculty Council.

The **Department of Sociology and Anthropology** is proposing converting three special topics courses into permanent courses; ANTH/SOCI 284 *Risk Society and Social Control* provides an introduction to the topic of risk and surveillance as well as a solid background for advanced courses on this topic; ANTH/SOCI 320 *The Governance of 'Nature'* will be the first governance course offered as part of the department's curriculum, and its interdisciplinary interest implies that it can also serve as an elective for other departments; it has been offered three times. ANTH/SOCI 429 *The Thought of Karl Marx* will be the first 400-level classical theory course, with a primary focus on Karl Marx's social theories, for all students in Sociology and Anthropology program; it has also been offered three times. All three courses will also serve students in the Joint Sociology and Anthropology specialization.

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

Reference documents:
FCC 2020.7_SOAN-39

Department of Sociology and Anthropology

SOAN-39

Memo from Chair

New courses

ANTH 284	*(also listed as SOCI 284)* *Risk Society and Social Control*
SOCI 284	*(also listed as ANTH 284)* *Risk Society and Social Control*
ANTH 320	*(also listed as SOCI 320)* *The Governance of 'Nature'*
SOCI 320	*(also listed as ANTH 320)* *The Governance of 'Nature'*
ANTH 429	*(also listed as SOCI 429)* *The Thought of Karl Marx*
SOCI 429	*(also listed as ANTH 429)* *The Thought of Karl Marx*

UNIVERSITÉ Concordia UNIVERSITY

INTERNAL MEMORANDUM

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

FROM: Amy Swiffen, Chair, Department of Sociology and Anthropology;
Aaron Brauer, Undergraduate Programs Director, Department of Sociology and Anthropology

DATE: January 25, 2021

SUBJECT: Undergraduate curriculum changes for the Sociology and Anthropology programs - 2022-2023

The Department of Sociology and Anthropology is requesting curriculum changes to its undergraduate programs. These changes were recommended by the Department Curriculum Committee on November 3, 2020 and on December 1, 2020 and were unanimously approved at the December 7, 2020 Department Assembly. We are submitting these curriculum changes for your and the Faculty Curriculum Committee's consideration. There are no resources implications for any of the proposed changes. The courses will be taught using our existing course section allocation.

We are proposing to expand our course offerings by converting the following three courses that we have successfully offered as special topics to permanent courses.

ANTH/SOCI 284 – Risk Society and Social Control
ANTH/SOCI 320 – The Governance of 'Nature'
ANTH/SOCI 429 – The Thought of Karl Marx

ANTH/SOCI 284 has been successfully offered twice under ANTH/SOCI 298 (2018-19, 74/75 students; 2020-21, 75/75 students). We have faculty members who are actively engaged in this area of research but at present we do not have a permanent course in the area of risk at the introductory level. This course will not only provide introductory exposure to the area of risk and surveillance, but it will also serve to stimulate interest in students who would like to study this topic at an advanced level in courses like ANTH/SOCI 484 – Surveillance Studies and SOCI 460 – Sociology of Fear and Risk, for example.

ANTH/SOCI 320 has been successfully offered three times under ANTH/SOCI 398 (2018-19, 59/65 students; 2019-20, 45/65 students; 2020-21, 46/65 students). This course adds to the complement of courses that we offer in the area of Sociology and the Environment and will be the first permanent course about governance in our curriculum. Our faculty are also actively engaged in this area of research. At a broader

university level, the course is also a direct implementation of Concordia's important commitment to decolonize curricula and we have added a critical indigenous perspective to each class. The course would also likely be of interest to students pursuing the minor in Sustainability Studies and could ultimately be added as an elective for that program.

ANTH/SOCI 429 has been successfully offered three times under ANTH/SOCI 498 (2016-17, 16/25 students; 2018-19, 10/25 students; 2019-20, 25/25 students) and is being offered for a fourth time in January 2021 (25/25 students). All our students following a Major, Specialization, and Honours in Sociology and our students following the Joint Anthropology/Sociology Specialization must take Classical Social Theory (SOCI 300) but we do not offer any classical theory courses at the 400 level. SOCI 300 exposes students to Marxist theories, among others, but the proposed course is unique in that it provides students with the opportunity to take an in-depth and focused study of Marx's social theory rather than a breadth or comparative study approach, at an advanced level. The course will be taught by one of a number of our faculty members who are critically engaged with Marxist theories and this area of research.

All three courses are to be cross listed in Anthropology and Sociology. This will enhance our course offerings in both disciplines and will be of increased benefit, particularly for our students in the Joint Anthropology and Sociology Specialization, who must take a minimum of fifteen cross listed credits.

The details for the aforementioned proposed changes are documented in the attached Provotrack forms.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **SOAN-39** VERSION: 3

COURSE CHANGE: ANTH 284 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Sociology and Anthropology
Program:
Degree: BA
Calendar Section/Graduate Page Number: 31.310

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**
	ANTH 284 Risk Society and Social Control (3.00) ***(also listed as SOCI 284)*** *Description:* This course introduces students to literature that discusses risk, surveillance, and social control. Emphasizing sociological and anthropological approaches, topics may include risk and surveillance in the contexts of local and global migrations, our changing climate, policing and national security, public health and medical care, work and leisure, consumption and addiction, urban spaces, and digital traces of our social relations and cultures. The course also prepares students interested in taking more advanced courses that deal with themes of risk, surveillance, fear, digital culture, consumption and addiction in everyday life. *Component(s):* Lecture. *Note(s):* • Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. • Students who have received credit for this topic under an ANTH or SOCI 298 number may not take this course for credit. • This course is equivalent to SOCI 284. Students who have received credit for SOCI 284 may not take this course for credit. • A crosslisted SOCI/ANTH course counts as either SOCI or ANTH as needed to satisfy the program requirements regardless of whether the student registered for the course as SOCI or ANTH.

Rationale:
This course has been successfully offered twice under SOCI/ANTH 298 (2018-19, 74/75 students; 2020-21, 75/75 students).The course introduces students to the area of risk and surveillance and will also serve to stimulate interest for those who would like to study this topic in courses that we offer at an advanced level.

Resource Implications:
None.

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **SOAN-39** VERSION: 3

COURSE CHANGE: ANTH 320 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Sociology and Anthropology
Program:
Degree: BA
Calendar Section/Graduate Page Number: 31.310

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**
	ANTH 320 The Governance of 'Nature' (3.00) ***(also listed as SOCI 320)*** *Prerequisite/corequisite:* The following course must be completed previously: ANTH 202 or equivalent; and 3 credits of 200-level Anthropology courses. *Description:* This course explores historically enduring non-governmental institutions - such as botanic gardens, museums, and zoos and/or other institutions similar in kind - that seek to work in the service of society and play a role in the governance of 'nature' by producing and disseminating social, cultural, and environmental scientific knowledge in informal education settings. Topics covered may include the intersection of these institutions with the emergence of Modernity, European colonialism/coloniality, and current decolonization debates, as well as their reinvention in the 20th and 21st century as sites of socio-environmental conservation and climate change adaptation. *Component(s):* Lecture. *Note(s):* • Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. • Students who have received credit for this topic under an ANTH or SOCI 398 number may not take this course for credit. • This course is equivalent to SOCI 320. Students who have received credit for SOCI 320 may not take this course for credit. • A crosslisted SOCI/ANTH course counts as either SOCI or ANTH as needed to satisfy the program requirements regardless of whether the student registered for the course as SOCI or ANTH.

Rationale:
This course has been successfully offered three times under ANTH/SOCI 398 (2018-19, 59/65 students; 2019-20, 45/65 students; 2020-21, 46/65 students). The course adds to the complement of courses that we offer in area of Sociology and the Environment and will be our first permanent course about governance. Loyola College for Diversity and Sustainability has been advised of the new course as it may be of interest to them.

Resource Implications:
None.

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **SOAN-39** VERSION: 3

COURSE CHANGE: ANTH 429 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Sociology and Anthropology
Program:
Degree: BA
Calendar Section/Graduate Page Number: 31.310

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**
	ANTH 429 The Thought of Karl Marx (3.00) (***also listed as SOCI 429***) *Prerequisite/corequisite:* The following course must be completed previously: ANTH 301 and 9 credits of 300-level Anthropology courses. If prerequisites are not satisfied, permission of the Department is required. *Description:* In this course, students undertake a study of Karl Marx's critical theory of society through a sustained engagement with his most comprehensive work, *Capital,* and other texts. The course allows students to discover the continuing relevance of his thought in illuminating the deep structure and movement of contemporary capitalist society. *Component(s):* Lecture. *Note(s):* • Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. • This course is equivalent to SOCI 429. Students who have received credit for SOCI 429 may not take this course for credit. • Students who have received credit for for this topic under an ANTH or SOCI 498 number may not take this course for credit. • A crosslisted SOCI/ANTH course counts as either SOCI or ANTH as needed to satisfy the program requirements regardless of whether the student registered for the course as SOCI or ANTH.
Rationale:	

This course has been successfully offered three times under SOCI/ANTH 498 (2016-17, 16/25 students; 2018-19, 10/25 students; 2019-20, 25/25 students) and is being offered for a fourth time in January 2021 (25/25 students). The course will provide students with an opportunity to take an in-depth and focused study of Marx's social theory rather than a breadth or comparative study approach, at an advanced level.

Resource Implications:
None.

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **SOAN-39** VERSION: 3

COURSE CHANGE: SOCI 284 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Sociology and Anthropology
Program:
Degree: BA
Calendar Section/Graduate Page Number: 31.310

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**
	SOCI 284 Risk Society and Social Control (3.00) (***also listed as ANTH 284***) *Description:* This course introduces students to literature that discusses risk, surveillance, and social control. Emphasizing sociological and anthropological approaches, topics may include risk and surveillance in the contexts of local and global migrations, our changing climate, policing and national security, public health and medical care, work and leisure, consumption and addiction, urban spaces, and digital traces of our social relations and cultures. The course also prepares students interested in taking more advanced courses that deal with themes of risk, surveillance, fear, digital culture, consumption and addiction in everyday life. *Component(s):* Lecture. *Note(s):* • Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. • Students who have received credit for this topic under an ANTH or SOCI 298 number may not take this course for credit. • This course is equivalent to ANTH 284. Students who have received credit for ANTH 284 may not take this course for credit. • A crosslisted SOCI/ANTH course counts as either SOCI or ANTH as needed to satisfy the program requirements regardless of whether the student registered for the course as SOCI or ANTH.

Rationale:
This course has been successfully offered twice under SOCI/ANTH 298 (2018-19, 74/75 students; 2020-21, 75/75 students).The course introduces students to the area of risk and surveillance and will also serve to stimulate interest for those who would like to study this topic in courses that we offer at an advanced level.

Resource Implications:
None.

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **SOAN-39** VERSION: 3

COURSE CHANGE: SOCI 320 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Sociology and Anthropology
Program:
Degree: BA
Calendar Section/Graduate Page Number: 31.310

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**
	SOCI 320 The Governance of 'Nature' (3.00) ***(also listed as ANTH 320)*** *Prerequisite/corequisite:* Students in related disciplines who wish to take cognate courses in Sociology may apply to the Sociology undergraduate advisor for a prerequisite waiver on the basis of equivalent background. *Description:* This course explores historically enduring non-governmental institutions - such as botanic gardens, museums, and zoos and/or other institutions similar in kind - that seek to work in the service of society and play a role in the governance of 'nature' by producing and disseminating social, cultural, and environmental scientific knowledge in informal education settings. Topics covered may include the intersection of these institutions with the emergence of Modernity, European colonialism/coloniality, and current decolonization debates, as well as their reinvention in the 20th and 21st century as sites of socio-environmental conservation and climate change adaptation. *Component(s):* Lecture. *Note(s):* • Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. • Students who have received credit for this topic under an ANTH or SOCI 398 number may not take this course for credit. • This course is equivalent to ANTH 320. Students who have received credit for ANTH 320 may not take this course for credit. • A crosslisted SOCI/ANTH course counts as either SOCI or ANTH as needed to satisfy the program requirements regardless of whether the student registered

	for the course as SOCI or ANTH.

Rationale:
This course has been successfully offered three times under SOCI/ANTH 398 (2018-19, 59/65 students; 2019-20, 45/65 students; 2020-21, 46/65 students). The course adds to the complement of courses that we offer in area of Sociology and the Environment and will be our first permanent course about governance. Loyola College for Diversity and Sustainability has been advised of the new course as it may be of interest to them.

Resource Implications:
None.

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **SOAN-39** VERSION: 3

COURSE CHANGE: SOCI 429 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: Arts and Science
Department: Sociology and Anthropology
Program:
Degree: BA
Calendar Section/Graduate Page Number: 31.310

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**
	SOCI 429 The Thought of Karl Marx (3.00) ***(also listed as ANTH 429)*** *Prerequisite/corequisite:* 400-level courses are open to students who have successfully completed at least six credits from 300-level SOCI courses. *Description:* In this course, students undertake a study of Karl Marx's critical theory of society through a sustained engagement with his most comprehensive work, *Capital,* and other texts. The course allows students to discover the continuing relevance of his thought in illuminating the deep structure and movement of contemporary capitalist society. *Component(s):* Lecture *Note(s):* • Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. • This course is equivalent to ANTH 429. Students who have received credit for ANTH 429 may not take this course for credit. • Students who have received credit for topic under an ANTH or SOCI 498 number may not take this course for credit. • A crosslisted SOCI/ANTH course counts as either SOCI or ANTH as needed to satisfy the program requirements regardless of whether the student registered for the course as SOCI or ANTH.

Rationale:
This course has been successfully offered three times under SOCI/ANTH 498 (2016-17, 16/25 students; 2018-19, 10/25 students; 2019-20, 25/25 students) and is being offered for a

fourth time in January 2021 (25/25 students). The course will provide students with an opportunity to take an in-depth and focused study of Marx's social theory rather than a breadth or comparative study approach, at an advanced level.
Resource Implications: None.
Other Programs within which course is listed: None.

Aaron H. Brauer

From: Aaron H. Brauer
Sent: January 24, 2021 3:26 PM
To: Rebecca Tittler
Subject: New ANTH/SOCI course

Dear Rebecca,

I trust that you are well and safe.

I wanted to let you know about a topics course that we are proposing to convert to a permanent course, and may be of interest to students in the Sustainability Studies Minor. The course is a 300 level cross listed ANTH/SOCI course titled *The Governance of 'Nature'* and the course description is as follows:

This course explores historically enduring non-governmental institutions - such as botanic gardens, museums, and zoos and/or other institutions similar in kind - that seek to work in the service of society and play a role in the governance of 'nature' by producing and disseminating social, cultural, and environmental scientific knowledge in informal education settings. Topics covered may include the intersection of these institutions with the emergence of Modernity, European colonialism/coloniality, and current decolonization debates, as well as their re-invention in the 20th and in the 21st century as sites of socio-environmental conservation and climate change adaptation.

Once approved, the course will appear in the 2022-23 undergraduate calendar. Our proposal suggests, among other things, that the course could be of interest to students in the Sustainability Studies Minor, but I wanted you to be aware that we are proposing this as a permanent course and open a dialogue with you about it.

I would be happy to hear your thoughts.

Best regards,

Aaron

Aaron Brauer, Senior Lecturer & Undergraduate Programs Director| Department of Sociology and Anthropology, H1125-63 | Concordia University | 1455 boul. de Maisonneuve O. | Montréal, QC, Canada | H3G 1M8 | P: 514.848.2424 x. 7333| F: 514.848.4539

SOCI-ANTH 298
Risk Society/Surveillance Society*

Fall 2020

Contact Information

Martin French
Associate Professor
Department of Sociology and Anthropology
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Teaching Assistant

Name: Jessica Agathangelou
Email: jessica.agathangelou@mail.concordia.ca

Office:

Cyberspace

Office Hours:

By appointment, holding Mon 1-3

Class Meetings:

Tuesdays 2:45PM-5:30 PM

Classroom:

Wherever you are…

Sections of this Syllabus

*__Image__: https://www.canada.ca/en/public-health/services/publications/diseases-conditions/covid-19-going-out-safely.html.

1. Territorial Acknowledgement:

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

2. Acknowledgement of our Pandemic Circumstances:

This course will be unlike any University course I've ever given, especially in the sense that we are going to be doing it in the middle of the global COVID-19 pandemic, without access to many public spaces and resources (e.g., our library). As much as we might be feeling pressured by different sources of authority to 'carry on as normal', there is no doubt that our lives and our societies have been drastically transformed over the past 6 months. This transformation intersects with, and has exacerbated, already existing social divisions along lines of class, race, gender, age, ability, and so on. Wherever we are, we are affected by the COVID-19 pandemic, but also by the much older global pandemics of classism, racism, sexism, and ableism. How shall we approach this course—and post-secondary education more generally—amidst these pandemic circumstances?

This is a big question, and I don't presume to have the answer; but I think that it's important, as we work towards some sort of answer, that we be kind to ourselves and each other. I think it's more important than ever to be understanding of the different circumstances and social positions that we occupy. I ask you to please approach this class with patience, and in the spirit of collaboration and cooperation. I will endeavour to do the same, and I hope that we will all benefit from our work together over the semester.

3. Description:

This course introduces students to literature that discusses risk societies and surveillance societies. Focused by the proposition that surveillance represents a quintessential, contemporary approach to risk management, we will consider discourses on risk and surveillance as they relate to different social problems and settings. Emphasizing sociological and anthropological approaches, topics may include risk and surveillance in the contexts of local and global migrations, our changing climate, policing and national security, public health and medical care,

[†] For more information, please see the Concordia University Territorial Acknowledgement page: http://www.concordia.ca/about/indigenous/territorial-acknowledgement.html.

work and leisure, consumption and addiction, urban spaces, and digital traces of our social relations and cultures. This course will help to prepare students interested in taking more advanced undergraduate and graduate courses that deal with themes of risk, surveillance, fear, digital culture, consumption and addiction in everyday life (e.g. SOCI-ANTH 484).

4. Course Objectives:

This course will introduce you to canonical texts that have theorized risk societies. It will read these texts through the prism of surveillance, drawing on ideas from the scholarly field of surveillance studies. We will look at contemporary examples that express concern about different kinds of risk, and we will consider how these risks are surveillantly apprehended. This course has four main objectives:

1. to encourage appreciation of history and social theory for exploring the identification, representation, and regulation of risk and surveillance
2. to encourage the questioning of taken-for-granted assumptions about risk and surveillance, and the exploration of where those assumptions come from
3. to encourage critical thinking
4. to help students begin to identify the social justice and human rights challenges that may arise as a result of social responses (or non-responses) to risk and surveillance

5. Learning Outcomes:

To successfully complete this course you are expected to attain and demonstrate:

- Knowledge of key concepts, theories, and issues in debates about risk and surveillance
- The ability to read and comprehend scholarly works on risk and surveillance
- The ability to question received wisdom and to think critically about risk and surveillance in everyday life
- The ability to work independently through lecture material, course readings, and quizzes; the ability to work collaboratively in group-based learning (e.g. in virtual meetings).

6. Course Materials:

A curated selection of articles and book-length chapters (listed below in Section 9, the **Schedule in Detail**) will be made available through the Library's Course Reserve System. You will be able to link to these materials through the course's Moodle page.

7. Course Platforms and the University's Code of Conduct

In this 'emergency remote' version of SOCI-ANTH 298, we will connect virtually, primarily using two platforms, Moodle and Zoom. It is important to comport yourself on these platforms in the same ways you would 'in real life'. As per the University's Code of Conduct, it is expected that our work together will promote and protect the values of civility, equity,

respect, non-discrimination and appreciation of diversity. Offenses of conduct (i.e. discrimination, harassment, violent or threatening behaviour) will not be tolerated. Please consult the University's Code of Conduct in your Undergraduate Calendar.

8. Schedule at a Glance, with Due Dates (may be subject to change)

Week 1	Tuesday	Sept. 8	**Intro to Risk Society/Surveillance Society I**	
Week 2	Tuesday	Sept. 15	**Intro to Risk Society/Surveillance Society II**	
Week 3	Tuesday	Sept. 22	**Anthropological Approaches: Risk and Culture**	**Quiz 1: 10%**
Week 4	Tuesday	Sept. 29	**Sociological Approaches: Risk Distribution**	
Week 5	Tuesday	Oct. 6	**Edgework and Risk 'Governmentality'**	**Quiz 2: 10%**
Week 6	Tuesday	Oct. 13	**Addiction and the Gamblification of Daily Life**	
Week 7	Tuesday	Oct. 20		**Quiz 3: 40%**
Week 8	Tuesday	Oct. 27	**Introduction to the 'Surveillance Society'**	
Week 9	Tuesday	Nov. 3	**Terms & Conditions May Apply**	
Week 10	Tuesday	Nov. 10	**Interrogating Mass Surveillance**	
Week 11	Tuesday	Nov. 17	**Surveillance, Social Sorting, and Racism**	
Week 12	Tuesday	Nov. 24		**Quiz 4: 40%**
Week 13	Tuesday	Dec. 1	**Optional Essay Writing Tutorials**	

9. Schedule in Detail (with Required Readings/Viewing)

Instructions

This section of the syllabus is broken into thirteen sub-sections, which correspond to each week of our semester. At the start of the semester, I'd like you to review all thirteen sub-sections so you have a sense of the overall trajectory of the course. Please also be sure to note the dates of the quizzes in your calendar.

You will see that each sub-section lists Required Readings (and sometimes, Required Viewing). These Required Readings and Viewings, which include my lecture slides as well as journal articles and book chapters, make up this course's **'examinable'** material; in other words, they're the source of our quiz questions.

Most sub-sections also include a list of Additional Readings. These are not required and are **not 'examinable'** material; in other words, you don't need to worry about reading these as you study for your quizzes. However, they do provide you with additional information for the week's topic; you may therefore wish to consult them if you are interested in learning more about the topic.

Class Description
You may complete Quiz 4 during class time, or outside of class time, but it must be completed on November 24, 2020.

Comprehensive Quiz 4: 40%

Week 13: Tuesday, December 1, 2020: **Optional Essay Writing Tutorials**

10. Evaluation Scheme: Quizzes and Optional Essay

You will be required to complete 4 multiple-choice quizzes throughout the semester. Quizzes will test your knowledge of key concepts, theories, and issues in debates about risk and surveillance. They will cover required reading and viewing. There will be two, short multiple-choice quizzes (worth 10% each), and two longer, comprehensive and cumulative multiple-choice quizzes (worth 40% each).

Grade breakdown at a glance

Short Quiz 1	10%	Week 3 – Tuesday, September 22, 2020
Short Quiz 2	10%	Week 5 – Tuesday, October 6, 2020
Comprehensive Quiz 3	40%	Week 7 – Tuesday, October 20, 2020
Comprehensive Quiz 4	40%	Week 12 – Tuesday, November 24, 2020

Research Essay Option
Students may knock out their lowest Comprehensive Quiz mark by completing an optional research essay.

Step 1: Essay Writing Tutorial
Sign up for, and attend, one of the Optional Essay Writing Tutorials, which will be held on Tuesday, December 1, 2020. You must bring a **one paragraph abstract** of your essay to this tutorial. In your abstract, provide a description of the topic you are proposing to research.

Step 2: Research Essay
In **five pages** (about 1500 words, double-spaced, standard margins, 12-point Times New Roman font) write a brief research paper that develops the topic outlined by your abstract. In **additional pages** (as many as necessary), provide a list of references. In the document header, write the title of your essay, your name and student number. In the footer of the document, include page numbers. Please upload your assignment to Moodle. You must use MS Word. Please name your file as follows: "Surname_380 Research Paper". Due in class in Week 13.
----------**Value: 40%**

Evaluation Scheme:

A+	90-100	Outstanding	C+	67-69	Satisfactory
A	85-89		C	63-66	
A-	80-84		C-	60-62	

B+	77-79	Very Good	D+	57-59	Marginal Pass
B	73-76		D	53-56	
B-	70-72		D-	50-52	

F, FNS	40 (30-49)
R	20 (0-29)
NR	The student is unknown to the instructor

11. Course Policies

Code of Conduct—Rights and Responsibilities

Every member of the Concordia University community should be familiar with the University's *Code of Conduct*: http://www.concordia.ca/students/academic-integrity/code.html

Email

Please allow at least 24 hours for email replies. Please do not expect replies to email on evenings or weekends. Please use email only for administrative purposes (e.g. not for substantive questions about course material).

….Email etiquette—please treat your correspondence with me in a professional manner.

Late Work

Late penalties apply from the day after the published due date. The penalty applied is two marks (out of 100) per day, including weekend days. If you have a documented reason for turning in a late assignment (e.g. a doctor's note), some or all of the late penalty may be waived.

….Detailed comments are not provided on late assignments.

Plagiarism and other Academic Offenses

Concordia University's Academic Code of Conduct outlines several academic offenses. Please be sure to review sections 18 and 19 of the Code so that you are aware of what counts as an academic offence.

Additionally, please take note of the following **direct quotation** of Concordia University's Academic Integrity Website (http://www.concordia.ca/conduct/academic-integrity/plagiarism.html):

> The most common offense under the Academic Code of Conduct is plagiarism, which the Code defines as "**the presentation of the work of another person, in whatever form, as one's own or without proper acknowledgement**" (Article 19a).

SOCI/ANTH 398A

The governance of 'Nature' and the nature of governance:

Botanic Gardens, Natural Science Museums, and Zoos

Professor Katja Neves

Class Time & Location
TBA
Professor Information
katja.neves@concordia.ca
please use this email address for emails needing a reply
Office hours (Zoom)
15:00 – 17:00 Thursday Zoom
For emergency related office hours email for an appointment

Resources

- **Course syllabus links :** In the weekly calendar section of this syllabus you will find the full list of resources you can engage with in this context of this course. Please note however that the course's scholarly readings are to be found in electronic course reserves under Soci/Anth 398a and that pre-recorded lectures by the professor will be uploaded via YuJa which you can reach at https://concordia.yuja.com (see also moodle for this course)
- **Moodle**: pre-recorded weekly suggested work-flows; pre-recorded lectures by professor; syllabus; announcements; assignments; instructions on how to upload assignments; grade-book; forums
- **Library**: readings on e-reserves soci/anth 398a. You can also text a library live if you go to Concordia University's main webpage and click on Libraries.

Land Acknowledgement

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

Green Graffiti by Anna Garforth https://thissydneylife.wordpress.com/2012/05/30/anna-garforths-

Assignments (guidelines on moodle)

•**Participation**: contribute to in-class discussion and activities to solidify your learning and to increase the quality of everyone's course experience. Participation is measured for quality and consistency throughout the semester.

•**Summary statement and debate question:** Write 350 words about what you think is the main message of a specific week's learning content and present a question for debate in class. Weeks 2, 4, 6, 10, 11 submitted on blog forum for the week

•**Mini-assignment 1**: following detailed guidelines you will provide a short synopsis of the socio-environmental history of one specific crop culture (e.g. coffee, tea, chocolate, cinchona, cotton) to reflect on the workings of botanical garden is-à-vis colonialism. Week 5 submitted as PDF on the assignment item created on moodle for that week

•**Mini-assignment 2**: in this short and fun assignment you will use a tool that we will derive from a reading in order to analyze the contemporary Dysneyization of zoos and its effects on people and animals (detailed assignment guidelines provided) Week 7 submitted as PDF on the assignment item created on moodle for that week

•**Mini-assignment 3**: this short assignment explores the socio-environmental politics of museum displays. With detailed assignment guidelines you will analyze a museum's website (list provided) to assess the current representation of Indigenous peoples and then reflect on your findings in relation to decolonization issues. Week 8 submitted as PDF on the assignment item created on moodle for that week

•**Term Paper:** the course's main term paper is an application of the knowledge you will gain throughout the semester. There are two tracks for this (each student does only one). Track A is is an applied paper that addresses a 'real world' issue in collaboration with a partner from outside academia. They are an exciting opportunity to learn a set of skills that extends your scholarly abilities beyond the university. Track B is a purely theoretical/research paper option which you are welcome to discuss during office hours. Students do a presentation on their final papers in the last 2 weeks of the semester. Final assignments are Due December 9th format optional

Course Synopsis

This course explores the role of botanic gardens, natural science museums, and zoos in relation to the historical genesis of modern governance as well as in relation to the governance of contemporary socio-environmental matters. The course covers 3 main focal areas. 1) The historical role that these three institutions and civic spaces played in the emergence of modernity, the nation state, and the establishment of colonial processes of empire building; 2) their current re-invention as institutions that attend to social-environmental issues; 3) contemporary attempts to decolonize these institutions. Students taking this course are invited to engage as co-constructors of their learning experience in a stimulating supportive environment.

Course Goals

Upon completing this course you should be able to understand the important roles that institutions like botanic gardens, natural science museums, and zoos have played, and continue to play, in the governance of humans and nonhumans alike. The course also engages with a critical discussion of these institutions's potential to help nurture the development of new forms of eco-citizenry in a world of biodiversity loss and climate change. Towards these ends with this course you will:

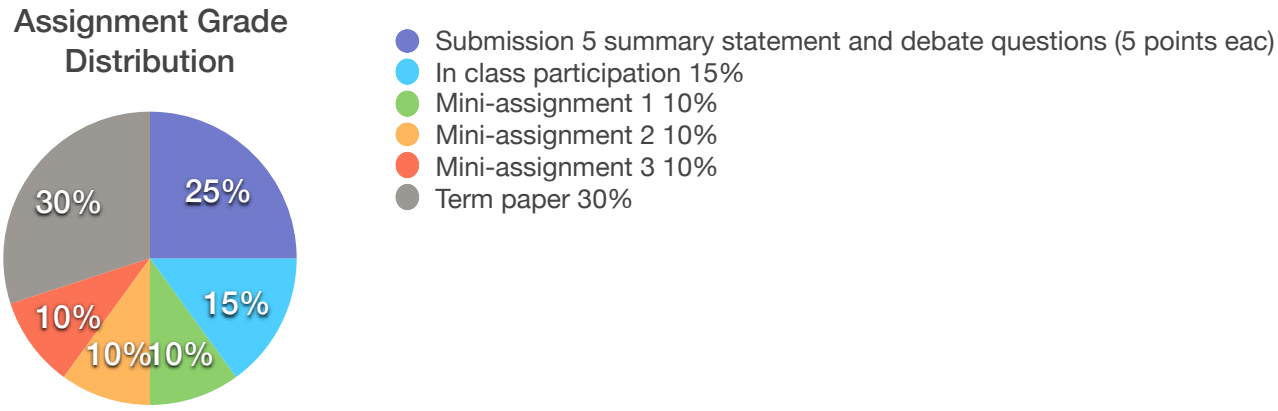
♣ Become familiar with the complex histories of these institutions and the current dilemmas they face vis-à-vis the global environmental crisis, as well as with their colonial pasts;

♣ Appreciate the importance of decolonizing these institutions, and learn of approaches to decolonization;

♣ To be able to apply the knowledge learned in this course to address 'real life' challenges within the City of Montreal;

Assignment Rationale

This course's assignments were designed to cultivate and/or enhance learning motivation, to provide you with opportunities to develop and implement applied skills, as well as scholarly aptitude. As such, I invite you to approach this course's assignments as stimulating learning experiences in and of themselves. In order to facilitate this process the course offers 4 mini-assignments where you get to conduct fun research online and analyze this information through the lens of scholarly concepts learned in the course. There is also the possibility of choosing between a scholarly theoretical research paper for the course, or an applied term paper such as for example within the scope of Concordia's City Studio initiative. I provided detailed assignment guidelines on moodle which will also be presented in class.



Grading Scheme

A+ 90-100 outstanding work that is flawless; goes well beyond basic requirements (e.g. student consulted additional sources + added excellent scholarly commentary); impeccable structure, grammar and punctuation; student consults additional sources when studying for the exam than those covered in class and/or respective assigned chapter as this is a basic tenet of scholarly academic performance. An A+ is attributed to those who complement knowledge of course materials with equally good scholarly sources (e.g. top rated journals, top experts in the field, highly relevant articles).

A 85-89 excellent work without flaw; covers all points implied in exam questions; elaborates issues in full depth; adds insightful well prepared scholarly perspective; impeccable structure, grammar and punctuation. Does not include additional good quality sources as an A+ paper does.

A- 80-84 above average work with very few flaws (and even then they are minor); covers almost all question points; elaborates issues in considerable depth; very good to excellent structure, grammar and punctuation.

B+ 77-79 very good work although with space for improvement before reaching an A level; covers many core aspects of exam questions but not all; elaborates on issues in some depth but a few aspects require further development; very good structure, grammar, and punctuation; very good logical flow.

B 73-77 good work with some flaws; covers some aspects of the question but leaves a few behind; elaborates on issue but either thoughts are not thoroughly developed; or there are flaws in logic; good structure, grammar and punctuation; good logical flow. Solid knowledge of the material provided in class and in the chapters that have been covered.

B- 70-72 average work, sentences read more like informal language than scholarly writing, answers part of the question but leaves many aspects behind; depth of issue exploration is inconsistent

(strong at points insufficient at others); some grammatical error etc; average logical flow and structure.

C Level grades are satisfactory work but with several degrees of flaws and/or need of improvement. You are advised to visit the professor and/or the course TA during office hours in order to discuss possible strategies to improve your performance in this course.

C+ 67-69 C 63-66 C- 60-62

D Level grades indicate work in serious need of improvement at all levels. You are urged to see the professor during office hours to discuss your performance in this course.

D+ 57-59 D 53-56 D- 50-52

F = - 50 unsatisfactory work

Procedures and Frequently Asked Questions

Office hours: I welcome students during my office hours (zoom sessions Thursdays 15:00 to 17:30 zoom link provided in announcements session of moodle platform for the course), unless otherwise specified for health or professional reasons. In order to increase your chances of having a guaranteed slot, please send me an email to katja.neves@concordia.ca before noon on Wednesday.

Break(s) during class: There will be formal short breaks during class. However, if you need to step away from your computer for a few moments when we are not on break please use the coffee icon on zoom so that I know you are not there.

Email: short questions/answers only, anything else is best done during this course's official office hours (see above). I do not reply to emails during evenings/nights, weekends, and holidays (this is my private time).

Special learning-needs and disabilities: Please let me know as soon as possible so that I can do my best to accommodate your needs in conjunction with the office of disabilities.

Professor missed class: In the event of unforeseen and unavoidable circumstances where I am forced to miss a class (for example due to illness), the following class will be exactly as originally scheduled in the course syllabus. A new date will be scheduled as a make-up class for the skipped lecture at the end of the semester. I ALWAYS follow the outline and always stick to it.

Assignment Submission: Assignments will be submitted through moodle where they will also be graded. They can be submitted any time before they due date and time, at which point moodle will no longer allow assignment upload. Most importantly however, it is critically important for your formation and preparation for the job market that you learn how to always meet work deadlines — and manage your time accordingly.

SOCI / ANTH 498E: THE THOUGHT OF KARL MARX

Bev Best **Winter, 2021**
bev.best@concordia.ca

Why still read the work of Karl Marx today? In this course, we will bear this question in mind as we undertake a sustained examination of Marx's critical theory of society and, arguably, his most important work, *Capital*. From this remarkable text, we will map Marx's analysis of the particular movement of the social relation he called "capital" and the historical dynamics of capitalist society. Marxist scholar David Harvey once said, "It is both a virtue and a difficulty in Marx that everything relates to everything else. It is impossible to work on one [aspect of Marxian theory] without simultaneously working on all other aspects of the theory" (*Limits to Capital*, 2006, xxix). Unfurling Marx's deeply holistic treatments, we will discover the continuing relevancy of his work and the ways in which it continues to illuminate so much of the deep structure and movement of contemporary global, capitalist society. We will endeavour to grasp why Marx argued that capitalism was not just a mode of production that produces new objects for subjects, but new subjects and new worlds altogether.

REQUIRED READING:

- Karl Marx, *Capital* Vol. 1, Penguin Classics, Reprint edition, 1992 (digital copy available).

COURSE REQUIREMENTS:

(1) Reading Journals; 3 instalments @ 15% each (total 45%)
2-page (double-spaced) reflection on the previous week's readings. Due before class (15:00) on Feb 5, Feb 19 & Mar 26. Instalments submitted directly on course Moodle site, on appropriate week.

(2) Midterm exegesis essay (30%): Mar 12
Close-reading paper (4 pages, double-spaced).

(3) Final reading journal (25%): Apr 22
3 pages, double-spaced.

SEMINAR SCHEDULE AND READINGS**:**

Week 1 / Jan 15: Introduction to the course; discussion of course logistics

All Readings from Marx, Capital *Vol. 1 (Penguin or Vintage Edition)*

Week 2 / Jan 22: Commodities (39)

- Chap 1 (sections 1, 2 & 3: 125–163)

Week 3 / Jan 29: The Commodity Fetish; Exchange (25)

- Chap 1 (section 4: 163–177)
- Chap 2

Week 4 / Feb 5: Money and Circulation (57)

- Chap 3

********Reading Journal 1 due before class (submit on course Moodle site)*

Week 5 / Feb 12: The Transformation of Money into Capital (34)

- Chap's 4, 5 & 6

Week 6 / Feb 19: The Valorization Process; The Production of Absolute Surplus-value (49)
- Chap's 7 & 8
- Chap 9 (section 1: 320–29; section 4: 338–9)

********Reading Journal 2 due before class (submit on course Moodle site)*

Week 7 / Feb 26: The Working Day (Exploitation & Class Struggle) (59)
- Chap 10 (340–82; 411–16)
- Chap 11

(Mar 5: Midterm break)

Week 8 / Mar 12: Midterm exegesis essay due (no seminar meeting)

Week 9 / Mar 19: The Production of Relative Surplus-value (34)
- Chap 12
- Chap 13 (443–44; 447–454)
- Chap 14 (468–70; 472–77; 480–86)

Week 10 / Mar 26: Machinery & Large-scale Industry (55)
- Chap 15 (492–3; 505–18; 526–37; 544–50; 557–8; 565–70; 578–83; 617–19; 635)
- Chap 16 (643–47)

********Reading Journal 3 due before class (submit on course Moodle site)*

Apr 2: Good Friday; no meeting.

Week 11 / Apr 9: The Process of Accumulation of Capital (59)
- Chap 23 (including intro, 709–10)
- Chap 24 (725–30; 738–40; 753–7)
- Chap 25 (762–4; 768–94; 799)

Week 12 / Apr 16: So-called Primitive Accumulation (22)
- Chap 26
- Chap 27 (895)
- Chap 28 (896–900)
- Chap 31 (924–6)
- Chap 32 (929)
- Chap 33

Week 13 / Apr 22: Final reading journal due; no seminar meeting.

Supplementary "lecture material" on *Capital*, Vol. 1, if you ever find you are unable to attend a seminar discussion:
- David Harvey's online courses on reading *Capital*, Vol 1: http://davidharvey.org/reading-capital/#capital-v1-2019
- The Franke Lectures (Yale), "The Value of Marx's Capital": https://www.youtube.com/playlist?list=PLqHnHG5X2PXBMv33LAUiS76Tq9UKBKGGa

Evaluation Scheme:

A+	90-100	B	73-76	C-	60-62	F	<50
A	85-89	B-	70-72	D+	57-59		
A-	80-84	C+	67-69	D	53-56		
B+	77-79	C	63-66	D-	50-52		

A = Exceptional work; superior in both content and presentation. Work not only answers all components of the question, but also offers insightful and imaginative analysis. It presents a clear and persuasive argument, is well structured, and provides examples to illustrate the argument. It contains few, if any, presentation errors.

B = Very good work; better than average in both content and presentation. Work is clear and well structured. Minor components of an answer might be missing, and there may be fewer illustrations for the argument. Some minor but noticeable errors in presentation may have interfered with the general quality of the work.

C = Good, average work. Student demonstrates a satisfactory understanding of the material. Ideas are presented in a style that is at least coherent and orderly. Occasional examples are provided to support arguments. Presentation errors that affect the quality of the work are more apparent than in B work. Some components of a question may have been omitted in the response.

D = Student has a basic grasp of the material. A sense of organization and development is often not demonstrated in the response. Few, if any, examples are provided to illustrate the argument. Major components of a question might have been neglected and major presentation errors hamper the work.

F = Work demonstrates an inadequate grasp of the material or ideas involved. Work has major errors of style and provides no supporting illustration for the argument. Ideas are not clear to the reader. Work lacks a coherent structure.

Plagiarism

Plagiarism is an affront to me and to your peers. Anyone suspected of plagiarism will be reported to the Faculty of Arts and Science where the administrator of the Academic Code of Conduct will adjudicate on the case.

The Academic Code of Conduct defines plagiarism as **"the presentation of the work of another person as one's own or without proper acknowledgement."**

This could be material copied word for word from books, journals, Internet sites, professor's course notes, etc. It could be material that is paraphrased but closely resembles the original source. It could be the work of a fellow student, for example, an answer on a quiz, data for a lab report, a paper or assignment completed by another student. It might be a paper purchased through one of the many available sources. Plagiarism does not refer to words alone - it can also refer to copying images, graphs, tables, and ideas. Finally, if you translate the work of another person into French or English and do not cite the source, this is also plagiarism.

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

Cc: Julie Johnston, University Curriculum Advisor

From: Anne-Marie Croteau, Dean, John Molson School of Business

Date: March 16, 2021

Subject: Proposal to change Pre-requisites of BTM 481 (Information System Analysis) (COMM-60)

As part of the course BTM 481, Information Systems Analysis, students approach existing companies to analyze their information system process and policies to develop a system proposal. To accomplish this, students require a solid foundation and clear understanding of key business functions before enrolling in the course. Adding the prerequisite of the completion of 24 COMM credits will ensure they have the necessary knowledge to successfully complete their project. There are no resource implications of this prerequisite change.

JMSB Faculty Council approved this dossier on March 12, 2021, by a majority vote.

I kindly request that the proposed changes be presented to the next Academic Programs Committee meeting for consideration.

Thank you.

INTERNAL MEMORANDUM
CONCORDIA UNIVERSITY
JOHN MOLSON SCHOOL OF BUSINESS

TO: Dr. Sandra Betton
Chair, Faculty Academic Programs Committee

FROM: Dr. Jooseop Lim, Associate Dean, Academic and Student Affairs,
Undergraduate Programs

DATE: November 24, 2020

SUBJECT: Request to Change Pre-requisites of BTM 481 (Information Systems Analysis)

The Department of Supply Chain and Business Technology Management would like to change the pre-requisites of BTM 481, Information Systems Analysis. Because students taking this course must assess the information systems processes and policies of real companies, the Department would like to require students to acquire understanding of key business disciplines before taking this course. The Undergraduate Curriculum Committee (UCC) has evaluated and approved the proposal on November 20, 2020.

I respectively request that the Faculty Academic Programs Committee approve the request so that it can be submitted to the faculty council.

Thank you.

Internal Memorandum

To: Jooseop Lim, Associate Dean, Undergraduate Programs

From: Rustam Vahidov, Interim Chair, Department of Supply Chain & Business Technology Management

Date: November 17th, 2020

Subject: BTM 481 Calendar Change

Dear Dr. Lim,

The Supply Chain & Business Technology Management Department has met on November 17th, 2020 to consider the calendar change to the pre-requisites for the BTM 481 ("Information Systems Analysis") course submitted by the Department Curriculum Committee. The course builds around the project where students have to go to real companies and analyse their processes and policies in order to come up with system requirements. Thus, understanding the key business functions (e.g. Financial Accounting, Finance, Marketing, and others) and concepts is a must for entering the BTM 481 class. Currently, the students can register for the course in their first year, without having proper exposure to business practices. The change aims at preventing first year students from enrolling in BTM 481 without a minimal business knowledge. The Department has unanimously approved the change to BTM 481. Therefore, I am to submitting the proposed change for the consideration by the Undergraduate Curriculum Committee.

Regards,

Rustam Vahidov

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **COMM-60** VERSION: 2

COURSE CHANGE: BTM 481 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: John Molson School of Business
Department: Supply Chain and Business Technology Management
Program: Major/Minor in Business Technology Management
Degree: Bachelor of Commerce/Bachelor of Administration
Calendar Section/Graduate Page Number: 61.50

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[X] Prerequisite
[ ] Course Description	[ ] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
BTM 481 *Information Systems Analysis* (3.00 credits) *Prerequisite/corequisite:* The following course must be completed previously or concurrently: BTM 382. *Description:* This course covers the first phase of the systems development life cycle, which culminates in the systems proposal. Topics include the preliminary survey, analysis of existing systems and identification of deficiencies, the development of functional specifications, feasibility and cost/benefit analysis and development of a recommended course of action. In addition, various diagramming techniques are examined. *Component(s):* ~~Lecture.~~ *Notes:* • Students who have received credit for DESC 481 may not take this course for credit.	**BTM 481 *Information Systems Analysis*** (3.00 credits) *Prerequisite/corequisite:* Students must have completed a total of 24 COMM credits prior to enrolling. The following course must be completed previously or concurrently: BTM 382. *Description:* This course covers the first phase of the systems development life cycle, which culminates in the systems proposal. Topics include the preliminary survey, analysis of existing systems and identification of deficiencies, the development of functional specifications, feasibility and cost/benefit analysis and development of a recommended course of action. In addition, various diagramming techniques are examined. *Component(s):* *Notes:* • Students who have received credit for DESC 481 may not take this course for credit.

Rationale:
Currently, students are eligible to take the course as early as their second term at JMSB. Their knowledge of business at that time has proven to be insufficient to analyze the complex business processes of a company. This has a negative impact on the individual student's performance in the course and on the performance of the team; they work as consultants for a company as required by the course. The additional COMM courses students will complete with the proposed change will give them a chance to expand their business knowledge before taking the course.
.

Resource Implications:
None

Other Programs within which course is listed:

N/A

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

Cc: Julie Johnston, University Curriculum Advisor

From: Anne-Marie Croteau, Dean, John Molson School of Business

Date: March 16, 2021

Subject: Proposed addition of FINA 421, Sustainable Investments, to the course offerings of the Department of Finance (COMM-61)

The topic of sustainable investing has been successfully offered by the Department of Finance for the past four years as a slot course (FINA 455). Given the relevance of the subject and the high enrollment numbers, the department has decided to permanently include it in its offerings as FINA 421, Sustainable Investments. The revised prerequisites will ensure that the students have the foundation needed to succeed in this course. There are no new resources required for the course – the slot course was already part of the regular teaching of the department.

Motion was passed for this dossier by a majority vote, at the JMSB Faculty Council on March 12, 2021.

I respectfully request that the proposed changes be presented to the next Academic Programs Committee meeting for consideration.

Thank you.

INTERNAL MEMORANDUM
CONCORDIA UNIVERSITY
JOHN MOLSON SCHOOL OF BUSINESS

TO: Dr. Sandra Betton
Chair, Faculty Academic Programs Committee

FROM: Dr. Jooseop Lim, Associate Dean, Academic and Student Affairs,
Undergraduate Programs

DATE: November 24, 2020

SUBJECT: Proposed addition of FINA 421 to the offerings of the Department of Finance

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Please find attached the proposed addition of FINA 421 to the offering of the Department of Finance.

The Department Curriculum Committee proposes two changes – 1) addition of FINA 421, sustainable investments, to the offerings of the Department of Finance and 2) removal of FINA 395 as a prerequisite. The enrollment of this course has been very strong with 44 (Winter 2018), 62 (Winter 2019), 44 (Winter 2020), and 50 (Winter 2021) undergraduate students. With respect to prerequisite, considering that this course does not require corporate finance knowledge beyond the content covered in COMM 308 (Introduction to Finance), the Department requests to have only FINA 385 as a prerequisite.

I would appreciate if you could forward the proposed changes to the respective committees for discussion and approval.

Thank you.

1455 De Maisonneuve Blvd. W., Montreal, Quebec, Canada H3G 1M8
Tel. 514-848-2424 johnmolson.concordia.ca

UNIVERSITÉ Concordia UNIVERSITY

JOHN MOLSON SCHOOL OF BUSINESS

INTERNAL MEMORANDUM

TO: Imants Paeglis, Interim Chair, Department of Finance

FROM: Rahul Ravi, on behalf of the Department Curriculum Committee *Rahul Ravi*

DATE: September 24, 2020

SUBJECT: **FINA 421 – Sustainable Investments (formerly FINA 455)**

Members of the Department of Finance Curriculum Committee met on September 23, 2020 to discuss the course pre-requisite of FINA 421 – Sustainable Investments.

At the department meeting of September 11, 2019, the Finance Department voted in favor of moving the course from a slot course FINA 455 to permanent status on the curriculum (421). During the next phase of review, the Associate Dean's office recommended the description to be streamlined. Consequently, the meeting added this item to its agenda.

The committee revised the previous approved description of the course and proceeded to make its final recommendation (see attached).

After the description was complete the committee discussed the request to remove FINA 395 as a pre-requisite.

Recommendations

The committee unanimously agreed to put forth the new description of FINA 421 – Sustainable Investments in hopes that this will allow the course to receive its place in the permanent curriculum. Further, the committee recommended that FINA 395 no longer be listed as a pre-requisite but rather a co-requisite.

The Finance Department Curriculum Committee therefore asks that these curriculum updates be brough to the Department for approval.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **COMM-61** VERSION: 2

COURSE CHANGE: FINA 421 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: September 2022

Faculty/School: John Molson School of Business
Department: Finance
Program: All Undergraduate Finance Programs
Degree: Bachelor of Commerce/Bachelor of Administration
Calendar Section/Graduate Page Number: 61.70

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [ ] Editorial [X] New Course
[ ] Course Deletion [ ] Other - Specify:

Present Text (from 2020/2021) calendar	**Proposed Text**
	FINA 421 *Sustainable Investments* (3.00 credits) *Prerequisite/corequisite:* The following course must be completed previously: FINA 385. The following courses must be completed previously or concurrently: FINA 390 or FINA 395. This course presents the framework, analysis, and metrics involved in the growing practice of factoring sustainability into investment strategy, especially as it pertains to financial measurement of environmental, social, and governance (ESG) risks and opportunities. The course highlights the actions taken by investors, policymakers, central banks, regulators, and data providers to recognize ESG factors and help investors navigate the risks and opportunities presented by them. *Component(s):*

Rationale:
The topic: Sustainable Investments has been taught as a slot course (FINA 455 Seminar in Finance) since Winter 2015. For six years the course has been successfully offered during each winter term. The enrollment in this course in the recent four years has been 44 (Winter 2018), 62 (Winter 2019), 44 (Winter 2020), and 50 (Winter 2021) undergraduate students. Given the healthy demand for the course among the student body and sustainability fast emerging as a critical issue, the Department of Finance would like to propose that the course on Sustainable Investments be given a permanent number and listing in the Concordia Undergraduate calendar.

Resource Implications:
None

Other Programs within which course is listed:

N/A

Université Concordia University

JOHN MOLSON SCHOOL OF BUSINESS

INTERNAL MEMORANDUM

TO: Dr. Imants Paeglis
Interim Chair
Department of Finance

FROM: Amr Addas

DATE: August 24, 2020

SUBJECT: **FINA 455 – Sustainable Investments**

Dear Dr. Paeglis
In reference to the request to change the pre-requisite for FINA 455-D (Sustainable Investments), please note that the course currently has FINA 385 and FINA 395 as prerequisites. Based on the course content, FINA 385 is sufficient given that there is no corporate finance knowledge required beyond the content covered in COMM 308. Removal of FINA 395 as a prerequisite would make more feasible for students interested in the Sustainable Investing Practicum (SIP) to take FINA 455-D in the second semester of their second year. Members of the SIP are selected directly from FINA 455-D. Since the SIP is a one-year program that runs from May to April, if students are unable to take FINA 455-D by the Winter term of their second year, they are less likely to be able to fit the SIP into their schedule, which reduces the pool of potential applicants for the SIP and thus the quality of the students ultimately selected.

Best regards

Amr Addas
Adjunct Professor | Department of Finance
Director, Van Berkom Small-Cap Investment Management Program & Van Berkom Small-Cap Case Competition
Supervisor, Sustainable Investing Practicum
John Molson School of Business
Concordia University, Montreal, QC
MB 10.327
(514) 848-2424 ext. 5275
amr.addas@concordia.ca

Course Outline

SUSTAINABLE INVESTING

FINA 455D

WINTER 2019

Tuesdays 14:45 – 17:30
MB 3.430
Credits: 3
Professor: Amr Addas
Email: amr.addas@concordia.ca
Office Hours: By appointment

UNIVERSITÉ Concordia UNIVERSITY
Concordia University John Molson School of Business

Learning Outcomes

From a “fringe” industry of a few mutual funds in the early 1980s, the Sustainable Investing (SI) industry in 2019 includes over 1000 mutual funds and hundreds of ETFs, with $12 trillion of investments under professional management in the United States and over $2 trillion in Canada alone. In addition to the assets invested in mutual funds, SI practices are now widely adopted by public pension funds, retirement plans, universities, sovereign wealth funds, foundations, and increasingly, individual investors. Most Wall Street firms now offer SI products to their retail and institutional clients. During the past decade, SI assets under management have grown twice as fast as conventional assets under management, and over 20% of investments in the US are now subject to some form of SRI management. Not only has the industry expanded in scale but also in scope, undergoing an evolution in its investment approach that has taken it from negative screening to more sophisticated approaches including positive screening and full integration. This course will provide a walk through the framework, analysis and metrics involved with the growing practice of factoring sustainability into investment strategies, especially as it pertains to financial measurement of environmental, social & governance (ESG) risks & opportunities.

Course Materials

Required Readings:

1. **Readings posted on Moodle**
2. **A list of readings and cases will be provided for you to purchase directly from the Harvard Business School case center**

Recommended book:

3. **Sustainable Investing: Revolutions in theory and practice**; Krosinsky/Purdom (Routledge, 2017). Available on Amazon and Indigo.

Teaching Method

This course will be interactive and will rely on active student participation. I will provide you with a number of relevant readings from various sources. Part of each class will consist of a slide presentation and lecture, often to be followed by a class discussion. In some classes we will also conduct a case analysis. We may have one or more guest speakers from industry during the semester.

The CSR Report Analysis will consist of analyzing the corporate social responsibility reports of companies within a particular sector. The stock pitch will require you to analyze stocks within a sector and recommend one for investment in a presentation to the class. For the CSR report analysis, the stock pitch, and the Bloomberg assignment, students are expected to work in groups of 5. The purpose of the first two exercises is to allow you to develop and sharpen your analytical skills and to apply the analytical tools you will learn in class. This is best done in a group setting in order to resemble the environment you will face in your future careers. More details on the group projects will be discussed in class. The database assignment will require use of the Bloomberg terminal to conduct an ESG analysis.

Course Schedule

Session	Date	Readings	Topics
1	Jan 8	•Investing for a Sustainable Future •Driving Sustainable Success	• Course Introduction • Sustainability 2.0: From Divestment and Negative Screening to Strategic Investing and Positive Screening
2	Jan 15	•Investing for a Sustainable Future •Driving Sustainable Success •Case: “Dow Chemical”	• ESG Risks: Sustainability as a Risk Management challenge
3	Jan 22	•Readings posted on Moodle	• ESG Risks: Sustainability as a Risk Management challenge • Assets stranding risk
4	Jan 29	•Case: “Sarvajal: Water for All”	• Emerging Risks
5	Feb 5	•The Carbon Market	• Emissions Trading • Carbon Pricing
6	Feb 12	•Readings posted on Moodle	• How can we measure ESG Risks and opportunities? • Rankings, Data Providers, ESG Indexes
7	Feb 19	•Case: Generation Investment Management	• Building a Sustainable Investing Practice
8	Mar 5	**Midterm Exam (Case Analysis)**	
9	Mar 12	•Readings posted on Moodle	• Emerging Markets and Sustainability
10	Mar 19	•Readings posted on Moodle	• Green Real Estate Investing • Renewable Energy Finance
11	Mar 26	•The Equator Principles	• Sustainability and the Financial Sector • Other Asset Classes: Green Bonds, Green Real Estate, Private Equity
12	Apr 2	•Group Presentations	• Stock Pitch
13	Apr 9	•Group Presentations	• Stock Pitch

Evaluation

The final grade for the course will be based on the following components:

Class Participation	10%
Midterm Exam	30%
Group Finance Lab Assignment	10%
Group Stock Pitch	20%
Group CSR Report Analysis	30%
Total	100%

Academic Integrity

The Code of Conduct (Academic) at Concordia University states that "The integrity of University academic life and of the degrees, diplomas and certificates the University confers is dependent upon the honesty and soundness of the instructor-student learning relationship and, in particular, that of the evaluation process. Therefore, for their part, all students are expected to be honest in all of their academic endeavours and relationships with the University." (Undergraduate Calendar 2014-2015, section 17.10, pages 56-62.)

All students enrolled at Concordia are expected to familiarize themselves with the contents of this Code. You are strongly encouraged to read the pertinent section in the 2014-2015 Concordia Undergraduate Calendar, and visit the following web address: http://www.concordia.ca/students/academic-integrity.html, both of which provide useful information about proper academic conduct.

Policy on Copyright Compliance

As in all Canadian universities, members of the Concordia community are users of copyrighted materials and, as such, are subject to copyright legislation. The necessity of complying with the Copyright Act is not open to question.

This Policy deals with the responsible use of copyrighted materials by members of the University. Its objective is to ensure copyright compliance in accordance with federal legislation, thus protecting the rights of creators and the interests of the University's faculty members, staff and students.

This Policy applies to all members of the University (faculty, staff and students). Compliance with the Copyright Act and this Policy is the responsibility of each member of the University. Failure to comply with the Copyright Act is a violation of federal legislation. In addition to any action that may be taken by any copyright owner, its licensing agent or the police authorities, the University reserves the right to take disciplinary or other action against a member with respect to any breaches of this Policy.

List of Student Services

1. Counselling and Psychological Services: concordia.ca/students/counselling-life-skills
2. Concordia Library Citation and Style Guides: library.concordia.ca/help/howto/citations
3. Student Success Centre: concordia.ca/students/success
4. Health Services: concordia.ca/students/health
5. Financial Aid and Awards: concordia.ca/offices/faao
6. HOJO (Off Campus Housing and Job Bank): csu.qc.ca/hojo
7. Academic Integrity: concordia.ca/students/academic-integrity
8. Access Centre for Students with Disabilities: concordia.ca/offices/acsd
9. CSU Advocacy Centre: csu.qc.ca/advocacy
10. Dean of Students Office: concordia.ca/offices/dean-students
11. International Students Office: concordia.ca/students/international
12. Student Hub: concordia.ca/students

Disclaimer

The instructor reserves the right to change or update this outline, and any other course related materials, as required. The student will be informed in a timely manner through announcements during class and/or on Moodle.

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: Stéphanie de Celles, University Registrar

Date: April 15, 2021

Re: 2022-22 Undergraduate Calendar Proposal (OOR-8)
Microprogram Regulations

The edits included in this dossier reflect changes to the Academic Regulations to accommodate the introduction of the microprogram credential. These modifications to the regulations follow the approval of the Microprogram in Web Design and User Interface (offered by the Department of Design and Computation Arts) and the Microprogram in Screenwriting and Film Producing (offered by the Mel Hoppenheim School of Cinema) at the March 18, 2021 meeting of APC. These dossiers have been submitted for approval at the April 23, 2021 meeting of Senate.

The introduction of the microprogram credential allows the University to provide students with more flexible offerings and to reach a broader student pool, including life-long learners. The microprogram credential also aligns with current governmental initiatives including the *Programme d'aide à la relance par l'augmentation de la formation* (PARAF), which seeks to support upskilling and reskilling of Quebec's workforce in a changing labour market. By offering innovative, short-term, targeted, and highly specialized training to lifelong learners (LLL) and candidates who are not currently in a position to undertake a more traditional bachelor degree in Fine Arts, the microprogram credential will also contribute to the diversity of our student body.

Additionally, in a world of rapidly changing labour market and digital economy governments, employers and employees all understand the importance of both upskilling and reskilling. In June 2019, the Government of Canada signed two agreements with the Government of Quebec to provide the province with nearly $5.4 billion to invest in its workers and businesses. This funding is committed until 2022–23 and gives an estimated 240,000 Quebec workers an opportunity to benefit from skills training programs designed to transition them into the job market, gain access to new career opportunities, or maintain their employment. An example of these Quebec-based skills training programs is the Renewed Prosperity Through Greater Training Program (PARAF), which is dedicated to both workers who are new to the job market and those re-entering it after losing a job. PARAF provides financial assistance to candidates enrolled in training programs that lead to a trade or occupation with good job prospects (i.e., considered to have a balanced labour supply and demand or a labour shortage).

This initiative is timely given that Concordia University has offered all courses remotely since March 2020 and departments are actively discussing outcomes and successes of synchronous and asynchronous teaching and learning and recognizing opportunity for advancing meaningful teaching opportunities beyond the standard class structure and classroom setting.

It should also be noted that Concordia is currently focusing resources on initiatives that promote and prioritise equity, diversity and inclusion (EDI) and the condensed nature of the microprogram credential will provide access to students who, in their current situation, may not have the financial resources nor the time to commit to a 90-credit degree program. We anticipate this will broaden the scope of our student population by providing lifelong learning opportunities to encourage students with diverse backgrounds to join the university community, those with caregiving or family commitments, those with physical challenges to travel for in-person activities, varied ages, those employed but wishing to upgrade skill through online/distanced learning, and those coming to the University with varied levels of prior academic and work experience.

A continuously growing sector of mid-career workers are currently seeking intensive and short-term learning opportunities to upgrade their current work experience or to explore new fields of employment that may better suit their employment objectives. Many will change their job status many times over the years as employment is not stable, constantly evolving or even disappearing. A 2020 survey conducted for Higher Education Strategy Associates estimated the market for new micro credential programs at over seven million Canadians. Concordia is positioned to be a leading source of programs that meet these needs, providing adult learners with flexibility, brevity and specificity in developing new skills.

Micro-credentials are gaining relevance in the Canadian job market by offering an on-ramp that identifies and meets specific learning needs in a variety of fast-moving industries. Both academic and non-university organizations now frequently break learning down into small, rapidly-digestible microprograms, and stackable degrees.

To accommodate the introduction of the microprogram credential, this dossier includes the following changes:

13.3.2 Applicants from Other Canadian Provinces and 14.2 Program Requirements
Given the intended short and intensive timeframe for the completion of microprograms, normally to be taken over one term, a note is added to this section to clarify that the Extended Credit Program and Mature Entry Program requirements do not apply to students applying for admission to microprograms.

13.5.2 Deadlines
A note is added to direct students to the Concordia website for microprogram admission deadlines.

16.1 General Information
This section is updated to indicate that the regulations outlined here also apply to microprograms, in addition to certificate and degree students.

16.1.5 Withdrawal and 81.20.5 Lapsed Program
These sections are updated to indicate that students enrolled in a microprogram in the Faculty of Fine Arts who have not registered for a course for four consecutive terms or more have a lapsed notation entered on their student record. This is in alignment with the expectation that students must complete a microprogram within a maximum of two years.

16.1.8 Graduation
This section is updated, as students enrolled in microprograms will not be required to submit an application for graduation, but will graduate following completion of their program requirements.

16.2.1 Modifications to Academic Programs and Regulations
This section is updated to clarify that University reserves the right to modify the requirements for microprograms, as is the case for existing degree programs and certificates.

16.2.2 Residence Requirements
Given the condensed nature of the microprogram credential, this section is updated so that students must complete 100% of the program requirements at Concordia.

16.2.4 Concentration Requirements
The microprogram credential is added to the list of credentials offered at Concordia, along with the following definition: An undergraduate microprogram is a coherent program, usually of 9-12 credits, made up of regular undergraduate courses. A microprogram is normally completed within one academic term.

81.20.4 Academic Performance Requirements
A note is added to clarify that the acceptable standing, conditional standing and failed standing performance requirements do not apply to microprograms. Students will be considered eligible to graduate from a microprogram if they have passed all of the required courses.

Sincerely,

Stéphanie de Celles,
University Registrar

UNIVERSITÉ Concordia UNIVERSITY

FACULTY OF FINE ARTS

INTERNAL MEMORANDUM

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

FROM: Dr. Annie Gérin, Dean, Faculty of Fine Arts

CC: Dr. Elaine Paterson, AD, Academic Programs and Pedagogy, Faculty of Fine Arts

DATE: April 14, 2021

RE: Microprograms regulations – OOR-8

Dear Dr. Gabriele,

As Dean of the Faculty of Fine Arts, I fully support the microprogram regulation changes proposed as part of OOR-8.

The Faculty of Fine Arts was consulted during the preparation of this dossier and I approve the regulations as they apply to the Faculty of Fine Arts.

With thanks for you consideration,

Annie Gérin, PhD
Dean, Faculty of Fine Arts
Annie.gerin@concordia.ca

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 13.3.2 Applicants from Other Canadian Provinces

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree:
Calendar Section/Graduate Page Number: 13.3.2 Applicants from Other Canadian P

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
# 13.3.2 Applicants from Other Canadian Provinces When applying to a Faculty program, graduates of secondary schools in Canadian provinces and territories other than Quebec are considered for admission to the Extended Credit Program (ECP) at Concordia. The ECP requires completion of 30 credits in addition to the regular requirements. The duration of a degree program is normally four years. The BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc in Athletic Therapy, and BFA (Specialization in Art Education) will generally require five years of full-time study to complete.	# 13.3.2 Applicants from Other Canadian Provinces When applying to a Faculty program, graduates of secondary schools in Canadian provinces and territories other than Quebec are considered for admission to the Extended Credit Program (ECP) at Concordia. The ECP requires completion of 30 credits in addition to the regular requirements. The duration of a degree program is normally four years. The BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc in Athletic Therapy, and BFA (Specialization in Art Education) will generally require five years of full-time study to complete. The ECP requirements are not applicable to students applying for admission to microprograms.
Rationale: Given the intended short and intensive timeframe for the completion of microprograms, normally to be taken over one term, a note is added to this section to clarify that the Extended Credit Program requirements do not apply to students applying for admission to microprograms.	
Resource Implications: None	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 13.5.2 Deadlines

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 13.5.2 Deadlines

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
# 13.5.2 Deadlines September is the normal point of entry to full-time and part-time studies. Entry in January is limited to certain programs. Students should refer to the admissions information within the relevant Faculty section on the Concordia website. March 1 and November 1 are the application deadline dates normally set for the fall and winter terms respectively. However, candidates are encouraged to submit their applications well before the start of term to allow sufficient time for evaluation and notification. Candidates applying from outside of Canada should submit their applications by February 1 for September entry and September 1 for January entry.	# 13.5.2 Deadlines September is the normal point of entry to full-time and part-time studies. Entry in January is limited to certain programs. Students should refer to the admissions information within the relevant Faculty section on the Concordia website. March 1 and November 1 are the application deadline dates normally set for the fall and winter terms respectively. However, candidates are encouraged to submit their applications well before the start of term to allow sufficient time for evaluation and notification. Candidates applying from outside of Canada should submit their applications by February 1 for September entry and September 1 for January entry. Application deadlines for microprograms may vary, and students should consult the relevant Faculty section on the Concordia website for specific dates.
Rationale: A note is added to direct students to the Concordia website for microprogram admission deadlines.	
Resource Implications: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 14.2 PROGRAM REQUIREMENTS

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 14.2 PROGRAM REQUIREMENTS

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
14.2 PROGRAM REQUIREMENTS Normally, Mature Entrants without any Diplôme d'études collégiales (DEC) or equivalent must complete at least 18 additional credits of preparatory or complementary courses. These additional credits are intended to help them to prepare for their subsequent studies. Students with a partial DEC or equivalent may be awarded transfer credits for some of the additional 18 credits. When selecting courses to fulfill the additional credit requirements, Mature students are required to consult with advisors in the respective Faculty. When selecting program courses, all students are required to consult with their program advisor. Students in the Gina Cody School of Engineering and Computer Science are required to consult only with their Faculty program advisors.	**14.2 PROGRAM REQUIREMENTS** Normally, Mature Entrants without any Diplôme d'études collégiales (DEC) or equivalent must complete at least 18 additional credits of preparatory or complementary courses. These additional credits are intended to help them to prepare for their subsequent studies. Students with a partial DEC or equivalent may be awarded transfer credits for some of the additional 18 credits. When selecting courses to fulfill the additional credit requirements, Mature students are required to consult with advisors in the respective Faculty. When selecting program courses, all students are required to consult with their program advisor. Students in the Gina Cody School of Engineering and Computer Science are required to consult only with their Faculty program advisors. The MEP requirements are not applicable to students applying for admission to microprograms.

Rationale:
Given the intended short and intensive timeframe for the completion of microprograms, normally to be taken over one term, a note is added to this section to clarify that the Mature Entry Program requirements do not apply to students applying for admission to microprograms.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 16.1 GENERAL INFORMATION

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2020

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 16.1 GENERAL INFORMATION

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
# 16.1 GENERAL INFORMATION … The regulations contained in this section apply to all students at the undergraduate level, whether they are enrolled in degree, certificate, or Qualifying programs or registered as Visiting or Independent students, with the following exceptions: a) Degree, certificate, and Qualifying program requirements are determined by those in effect in the year of the student's admission. (See §16.2) b) Regulations concerning residence requirements and academic performance are also governed by those in effect in the year of a student's admission. c) Determination of high academic achievement is governed by the most recent regulation in effect.	# 16.1 GENERAL INFORMATION The regulations contained in this section apply to all students at the undergraduate level, whether they are enrolled in degree, certificate, microprogram, or Qualifying programs or registered as Visiting or Independent students, with the following exceptions: a) Degree, certificate, microprogram, and Qualifying program requirements are determined by those in effect in the year of the student's admission. (See §16.2) b) Regulations concerning residence requirements and academic performance are also governed by those in effect in the year of a student's admission. c) Determination of high academic achievement is governed by the most recent regulation in effect. …

Rationale:
This section is updated to indicate that the regulations outlined here also apply to microprograms, in addition to certificate and degree students.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 16.1.5 Withdrawal

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 16.1.5 Withdrawal

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

Present Text (from 2021/2022) calendar	**Proposed Text**
# 16.1.5 Withdrawal ... 4. Withdrawal Deadlines Withdrawal deadlines are published online at concordia.ca/students/registration/term-dates-deadlines. All financial regulations pertaining to course withdrawals, and refunds or financial credit for fees, are available online at: • concordia.ca/admissions/tuition-fees > Fee Payment Deadlines • MyConcordia.ca > My Student Centre > Finances > other financial (drop down menu) > Refund Request 5. Lapsed Program Status Students in the Faculty of Fine Arts who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.	# 16.1.5 Withdrawal ... 4. Withdrawal Deadlines Withdrawal deadlines are published online at concordia.ca/students/registration/term-dates-deadlines. All financial regulations pertaining to course withdrawals, and refunds or financial credit for fees, are available online at: • concordia.ca/admissions/tuition-fees > Fee Payment Deadlines • MyConcordia.ca > My Student Centre > Finances > other financial (drop down menu) > Refund Request 5. Lapsed Program Status Students in the Faculty of Fine Arts who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.Students enrolled in a microprogram in the Faculty of Fine Arts who have not registered for a course for four consecutive terms or more will have a lapsed notation entered on their student record.

Rationale:
This section is updated to indicate that students enrolled in a microprogram in the Faculty of Fine Arts who have not registered for a course for four consecutive terms or more have a lapsed notation entered on their student record. This is in alignment with the expectation that students must complete a microprogram within a maximum of two years.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 16.1.8 Graduation

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2022

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 16.1.8 Graduation

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
# 16.1.8 Graduation Degree and certificate candidates who expect to complete requirements in a particular year must apply to the Office of the Registrar before July 15 for fall graduation and before January 15 for spring graduation. Students must complete the graduation application online by accessing the Concordia website: MyConcordia.ca > Student Information System > My Student Centre > Academics >Apply for Graduation. The graduation fee is payable whether or not a student attends convocation.	# 16.1.8 Graduation Degree and certificate candidates who expect to complete requirements in a particular year must apply to the Office of the Registrar before July 15 for fall graduation and before January 15 for spring graduation. Students must complete the graduation application online by accessing the Concordia website: MyConcordia.ca > Student Information System > My Student Centre > Academics >Apply for Graduation. The graduation fee is payable whether or not a student attends convocation. Students enrolled in microprograms are not required to submit an application for graduation, but will graduate following completion of their program requirements.

Rationale:
This section is updated, as students enrolled in microprograms will not be required to submit an application for graduation, but will graduate following completion of their program requirements.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 16.2.1 Modifications to Academic Programs and Regulations

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 16.2.1 Modifications to Academic Progra

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
16.2.1 Modifications to Academic Programs and Regulations … 3. Where students acquire credit towards a degree or certificate in a discontinuous manner and over a protracted time, the University reserves the right, at any time, to require them to take further credits or fulfill additional requirements to obtain that degree or certificate.	**16.2.1 Modifications to Academic Programs and Regulations** … 3. Where students acquire credit towards a degree or certificate in a discontinuous manner and over a protracted time, the University reserves the right, at any time, to require them to take further credits or fulfill additional requirements to obtain that degree, certificate, or microprogram.

Rationale:
This section is updated to clarify that University reserves the right to modify the requirements for microprograms, as is the case for existing degree programs and certificates.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 16.2.2 Residence Requirements

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 16.2.2 Residence Requirements

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
16.2.2 Residence Requirements 2. At least 50 per cent of the credits for honours, specializations, majors, minors, certificates or other concentrations must be taken at Concordia.	**16.2.2 Residence Requirements** 2. At least 50 per cent of the credits for honours, specializations, majors, minors, certificates or other concentrations must be taken at Concordia. In the case of microprograms, 100% of the credits must be taken at Concordia.
Rationale: Given the condensed nature of the microprogram credential, this section is updated so that students must complete 100% of the program requirements at Concordia.	
Resource Implications: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 16.2.4 Concentration Requirements

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 16.2.4 Concentration Requirements

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

Present Text (from 2021/2022) calendar	**Proposed Text**
16.2.4 Concentration Requirements … 6. Certificate Programs … 7. Baccalaureate by Accumulation	**16.2.4 Concentration Requirements** … 6. Certificate Programs … 7. Microprograms An undergraduate microprogram is a coherent program, usually of 9-15 credits, made up of regular undergraduate courses. A microprogram is normally completed within one academic term. 8. Baccalaureate by Accumulation
Rationale: Microprogram regulations.	
Resource Implications: The microprogram credential is added to the list of credentials offered at Concordia, along with the definition that the program is normally conducted in condensed timeframe, andwithin 9-12 credits.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 81.20.4 Academic Performance Requirements

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 81.20.4 Academic Performance Requireme

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
81.20.4 Academic Performance Requirements … Acceptable standing requires that a student obtain an AGPA of at least 2.00. NOTE: Although a "C-" grade (1.70 grade points) is designated as satisfactory for an individual course in §16.1.11, an AGPA of 2.00 is required to remain in acceptable standing. Conditional standing results when a student obtains an AGPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments. Students in conditional standing may not write supplemental examinations and will not be permitted to register for further study until their program has been approved by the appropriate advisor in their Faculty or department. They must obtain acceptable standing at the time of their next assessment. Failed standing results when a student obtains an AGPA of less than 1.50, or conditional standing in two consecutive periods of assessment. Failed students may not write supplemental examinations. In order to continue in their program, failed students must apply for readmission through Student Academic Services. If readmitted, failed students will be placed on academic probation. In addition, there may be other conditions determined by the Faculty at the time of readmission. Decisions of the relevant authority in the Faculty are final. Failed students wishing to be admitted to another Faculty must apply through the Dean's Office of the Faculty to which they wish to be admitted. Credits achieved at another institution while on failed standing may not be transferred to a program at Concordia University. These credits, however, may be used to determine a student's potential for readmission. If 24 or more credits are successfully completed at another institution while on failed standing at Concordia, students will be required to	**81.20.4 Academic Performance Requirements** … Acceptable standing requires that a student obtain an AGPA of at least 2.00. NOTE: Although a "C-" grade (1.70 grade points) is designated as satisfactory for an individual course in §16.1.11, an AGPA of 2.00 is required to remain in acceptable standing. Conditional standing results when a student obtains an AGPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments. Students in conditional standing may not write supplemental examinations and will not be permitted to register for further study until their program has been approved by the appropriate advisor in their Faculty or department. They must obtain acceptable standing at the time of their next assessment. Failed standing results when a student obtains an AGPA of less than 1.50, or conditional standing in two consecutive periods of assessment. Failed students may not write supplemental examinations. In order to continue in their program, failed students must apply for readmission through Student Academic Services. If readmitted, failed students will be placed on academic probation. In addition, there may be other conditions determined by the Faculty at the time of readmission. Decisions of the relevant authority in the Faculty are final. Failed students wishing to be admitted to another Faculty must apply through the Dean's Office of the Faculty to which they wish to be admitted. Credits achieved at another institution while on failed standing may not be transferred to a program at Concordia University. These credits, however, may be used to determine a

submit a new application for program admission and not an application for readmission.	student's potential for readmission. If 24 or more credits are successfully completed at another institution while on failed standing at Concordia, students will be required to submit a new application for program admission and not an application for readmission. The Academic Performance Requirements for acceptable standing, conditional standing and failed standing do not apply to students enrolled in microprograms.
Rationale: A note is added to clarify that the acceptable standing, conditional standing and failed standing performance requirements do not apply to microprograms, given that they are intended to be completed in a single term. Students will be considered eligible to graduate from a microprogram if they have passed all of the required courses.	
Resource Implications: None	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 81.20.4 Academic Performance Requirements

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 81.20.4 Academic Performance Requiremen

Type of Change:

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

Present Text (from 2021/2022) calendar	Proposed Text
81.20.4 Academic Performance Requirements ... **Graduation Requirements** Students must satisfy all course requirements, be in acceptable standing, and have a minimum final graduation GPA of 2.00. Potential graduates who fail to meet the requirements of acceptable standing, but meet the requirements of conditional standing, will have the following options: a) register for an additional 12 credits and, at the next assessment, meet the requirements for acceptable standing; or b) register for fewer than 12 additional credits. In this case, standing will be determined on the basis that these extra credits constitute an extension of the last assessment period. For both option a) and option b), the additional courses taken must be selected in consultation with the student's department.	**81.20.4 Academic Performance Requirements** ... **Graduation Requirements** Students must satisfy all course requirements, be in acceptable standing, and have a minimum final graduation GPA of 2.00. Potential graduates who fail to meet the requirements of acceptable standing, but meet the requirements of conditional standing, will have the following options: a) register for an additional 12 credits and, at the next assessment, meet the requirements for acceptable standing; or b) register for fewer than 12 additional credits. In this case, standing will be determined on the basis that these extra credits constitute an extension of the last assessment period. For both option a) and option b), the additional courses taken must be selected in consultation with the student's department. **Graduation Requirements for Microprograms** Students will be considered eligible to graduate from a microprogram if they have passed all of the required courses.

Rationale:
Students will be considered eligible to graduate from a microprogram if they have passed all of the required courses. Given the intention that students should complete the microprogram in a single term, removing the graduation GPA requirement of 2.00 means that students will not be required to repeat courses to raise their GPA for graduation, which would extend their time to completion.

In the case that students need to improve their GPA after they have graduated from their microprogram, for entry into another program at Concordia or elsewhere, they would need to

enroll as Independent Students in order to repeat the course.
Resource Implications: None

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **OOR-8** VERSION: 1

PROGRAM CHANGE: 81.20.5 Lapsed Program

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2022/2023
Implementation Month/Year: June 2021

Faculty/School: Office of the Registrar
Department: Office of the Registrar
Program:
Degree: Microprogram
Calendar Section/Graduate Page Number: 81.20.5 Lapsed Program

Type of Change:

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

Present Text (from 2021/2022) calendar	**Proposed Text**
# 81.20.5 Lapsed Program Students enrolled in a specialization or major program in the Faculty of Fine Arts who have not registered for a course for nine consecutive terms or more will have a lapsed notation entered on their student record. Lapsed students must meet with the appropriate advisor in order to resume their program and be made aware of possible program modifications. In some cases, students might be required to submit a new application.	# 81.20.5 Lapsed Program Students enrolled in a specialization or major program in the Faculty of Fine Arts who have not registered for a course for nine consecutive terms or more will have a lapsed notation entered on their student record. Lapsed students must meet with the appropriate advisor in order to resume their program and be made aware of possible program modifications. In some cases, students might be required to submit a new application.Students enrolled in a microprogram in the Faculty of Fine Arts who have not registered for a course for four consecutive terms or more will have a lapsed notation entered on their student record.

Rationale:
These section is updated to indicate that students enrolled in a microprogram in the Faculty of Fine Arts who have not registered for a course for four consecutive terms or more havea lapsed notation entered on their student record. This is in alignment with the expectation that students must complete a microprogram within a maximum of two years.

Resource Implications:
None.

UNIVERSITÉ Concordia UNIVERSITY

SCHOOL OF GRADUATE STUDIES

US-2021-4-D11

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

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

DATE: March 30, 2021

SUBJECT: **GRADUATE CURRICULUM CHANGES (ENCS-106)**
(CALENDAR – 2021/2022)
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 Gina Cody School of Engineering and Computer Science is proposing to modify its calendar entry by deleting obsolete doctoral seminars, updating the descriptions of topics courses, and removing notes that are no longer necessary.

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: J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs
E. Shihab, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science

UNIVERSITÉ Concordia UNIVERSITY

GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson
Chair, Graduate Curriculum Committee
School of Graduate Studies

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science

CC: Kristy Clarke
Academic Programs and Development
School of Graduate Studies

DATE: February 15, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (ENCS-106)**
Gina Cody Council of Engineering and Computer Science

At its meeting on February 12, 2021, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, with some corrections, the curriculum changes to the graduate calendar so that it remains an accurate reflection of the current course offerings. Namely, the removal of certain notes that are no longer valid, as well as the replacement of the individual departmental doctoral seminars with a common one (ENCS). No additional resources are required.

Details of the curriculum changes are indicated and explained in the internal memorandums and in the ENCS-106 dossier.

We kindly request that this proposal be placed on the next agenda of the GCC for approval.

Thank you for your consideration of this proposal.

INTERNAL MEMORANDUM

Concordia UNIVERSITY

GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Office of the Dean

TO: Dr. M. Debbabi
Chair of the School Council
Gina Cody School of Engineering and Computer Science

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Gina Cody School of Engineering and Computer Science

DATE: January 12, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (ENCS-106)**
Gina Cody School Departments

At its virtual meeting on December 14, 2020, the GCS Graduate Studies Committee (GCSGSC) reviewed and approved, as presented the proposed graduate curriculum changes to the graduate calendar entry. Namely, these changes are as follows:

1) the removal of the departmental doctoral seminars not offered in the last decade.
2) the removal of some notes that are no longer valid as there no students admitted prior to 1997 who are currently enrolled in the graduate programs or due to the implementation of the new student information system in 2015.

Details of the curriculum changes indicated and explained in the Department's internal memorandum and in the ENCS-106 dossier.

We kindly request that this proposal be placed on the next agenda of the GCS Council for approval.

Thank you for your consideration of this proposal.

INTERNAL MEMORANDUM

Concordia UNIVERSITY

GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Office of the Dean

TO: Gina Cody School Graduate Studies Committee (ECSGSC)

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Gina Cody School of Engineering and Computer Science

DATE: December 1, 2020

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (ENCS-106)**

The Gina Cody School Graduate Studies Committee (GCSGSC) proposed certain editorial changes resulting from the implementation of the new SIS system in 2015. Included changes are the elimination of the letters following a course topics in engineering and/or computer science. In addition, the deletion of courses/notes referring to the students admitted prior to September 1997.

Details of the graduate curriculum proposal are indicated and explained in the internal memorandum and in the ENCS-106 dossier.

We kindly request that this proposal be placed on the next agenda of the GCSGSC for approval.

Thank you for your consideration of this proposal.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

PROGRAM CHANGE: Topic Area E02

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Gina Cody School of Engineering and Computer Science Departments
Program: All graduate programs
Degree: Certificate, Diploma, MEng, MASc, PhD
Calendar Section/Graduate Page Number: List of Courses by Topic Areas

Type of Change:

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

Present Text (from 2020/2021) calendar	**Proposed Text**
E02 – Developments in Engineering Note: ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number, e.g., CIVI 691A, CIVI691B, etc.~~ ENCS 591 Topics in Engineering and Computer Science 4.00 ENCS 691 Topics in Engineering and Computer Science I 4.00 ENGR 691 Topics in Engineering I 4.00 ENGR 791 Topics in Engineering II 4.00 BLDG 691 Topics in Building Engineering II 4.00 BLDG 791 Topics in Engineering II 4.00 CIVI 691 Topics in Civil Engineering I 4.00 CIVI 791 Topics in Civil Engineering Topics II 4.00 COEN 691 Topics in Computer Engineering I 4.00 COEN 791 Topics in Computer Engineering II 4.00 ELEC 691 Topics in Electrical Engineering I 4.00 ELEC 791 Topics in Electrical Engineering II 4.00 INDU 691 Topics in Industrial Engineering I 4.00 INSE 691 Topics in Information Systems Engineering 4.00 MECH 691 Topics in Mechanical Engineering I 4.00 MECH 791 Topics in Mechanical Engineering II 4.00	E02 – Developments in Engineering Note: Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule. ENCS 591 Topics in Engineering and Computer Science 4.00 ENCS 691 Topics in Engineering and Computer Science I 4.00 ENGR 691 Topics in Engineering I 4.00 ENGR 791 Topics in Engineering II 4.00 BLDG 691 Topics in Building Engineering II 4.00 BLDG 791 Topics in Engineering II 4.00 CIVI 691 Topics in Civil Engineering I 4.00 CIVI 791 Topics in Civil Engineering Topics II 4.00 COEN 691 Topics in Computer Engineering I 4.00 COEN 791 Topics in Computer Engineering II 4.00 ELEC 691 Topics in Electrical Engineering I 4.00 ELEC 791 Topics in Electrical Engineering II 4.00 INDU 691 Topics in Industrial Engineering I 4.00 INSE 691 Topics in Information Systems Engineering 4.00 MECH 691 Topics in Mechanical Engineering I 4.00 MECH 791 Topics in Mechanical Engineering II 4.00

Rationale:
The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

PROGRAM CHANGE: Topic Area E02

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Gina Cody School of Engineering and Computer Science Departments
Program: All graduate programs
Degree: Certificate, Diploma, MEng, MASc, PhD
Calendar Section/Graduate Page Number: List of Courses by Topic Areas

Type of Change:

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

Present Text (from 2020/2021) calendar	**Proposed Text**
C01 - Developments in Computer Science COMP 691 Topics In Computer Science I 4.00 COMP 791 Topics In Computer Science II 4.00	C01 - Developments in Computer Science Note: Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule. COMP 691 Topics In Computer Science I 4.00 COMP 791 Topics In Computer Science II 4.00

Rationale:
The note has been added for consistency with the other Topic Area lists.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

PROGRAM CHANGE: Topic Area E61

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Gina Cody School of Engineering and Computer Science Departments
Program: All programs
Degree: Certificate, Diploma, MEng, MASc, PhD
Calendar Section/Graduate Page Number: List of Courses by Topic Areas

Type of Change:

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

Present Text (from 2020/2021) calendar	**Proposed Text**
E61 - Doctoral/Phd Seminar ~~BLDG 8011 Doctoral Seminar in Building Engineering 0.00~~ ~~CIVI 8011 Doctoral Seminar in Civil Engineering 0.00~~ ~~ELEC 8011 Doctoral Seminar in Electrical Engineering 0.00~~ ~~MECH 8011 Doctoral Seminar in Mechanical Engineering 0.00~~ ENCS 8011 PhD Seminar 2.00 ~~*The following courses are available only to students admitted prior to September 1997:*~~ ~~BLDG 8011~~ ~~CIVI 8011~~ ~~ELEC 8011~~ ~~MECH 8011~~ ~~*Students admitted prior to September 1997 are not allowed to substitute ENCS 8011 for an equivalent course work.*~~	E61 - Doctoral/Phd Seminar ENCS 8011 PhD Seminar 2.00

Rationale:
Since 2010, all the individual (BLDG, CIVI, ELEC, MECH) doctoral seminars have been replaced with ENCS 8011.

The notes about students admitted prior to 1997 are no longer valid as there are no students admitted prior to September 1997 who are currently enrolled in the doctoral programs.
In the new style, all asterisks will be replaced by notes placed directly under the topic area.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: BLDG 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Building, Civil and Environmental Engineering (BCEE)
Program: Building Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
BLDG 691 Topics in Building Engineering I (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**BLDG 691 Topics in Building Engineering I** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: BLDG 791 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Building, Civil and Environmental Engineering (BCEE)
Program: Building Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
BLDG 791 Topics in Building Engineering III (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**BLDG 791 Topics in Building Engineering II** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: BLDG 8011 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Building, Civil and Environmental Engineering (BCEE)
Program: Building Engineering
Degree: PhD
Calendar Section/Graduate Page Number: Engineering Courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[ ] Editorial	[ ] New Course	
[X] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
~~**BLDG 8011 Doctoral Seminar in Building Engineering (***)**~~ ~~Grading on a pass/fail basis only. No credit value.~~	
Rationale: This course was replaced with ENCS 8011 PhD Seminar in 2010.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: CIVI 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Building, Civil and Environmental Engineering (BCEE)
Program: Civil Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
CIVI 691 Topics in Civil Engineering I (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**CIVI 691 Topics in Civil Engineering I** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: CIVI 791 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Building, Civil and Environmental Engineering (BCEE)
Program: Civil Engineering
Degree: PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
CIVI 791 Topics in Civil Engineering II (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**CIVI 791 Topics in Civil Engineering II** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: CIVI 8011 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Building, Civil and Environmental Engineering (BCEE)
Program: Civil Engineering
Degree: PhD
Calendar Section/Graduate Page Number: Engineering Courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[ ] Editorial	[ ] New Course	
[x] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
~~**CIVI 8011 Doctoral Seminar in Civil Engineering (***)**~~ ~~Grading on a pass/fail basis only. No credit value.~~	
Rationale: This course was replaced with ENCS 8011 PhD Seminar in 2010.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: COEN 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Electrical & Computer Engineering
Program: Computer Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
COEN 691 Topics In Computer Engineering I (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**COEN 691 Topics In Computer Engineering I** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: COEN 791 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Electrical & Computer Engineering
Program: Computer Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
COEN 791 Topics In Computer Engineering II (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**COEN 791 Topics In Computer Engineering II** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: COMP 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Computer Science and Software Engineering
Program: Computer Science
Degree: MApCompSc, MCompSc. PhD
Calendar Section/Graduate Page Number: Computer Science Courses

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [X] Editorial [ ] New Course
[ ] Course Deletion [ ] Other - Specify: Exclusion note

Present Text (from 2020/2021) calendar	**Proposed Text**
COMP 691 Topics in Computer Science I (4 credits) ~~Subject matter will vary from term to term and from year to year. Students may re-register for this course, providing that course content has changed. Changes in content will be indicated by the letter following the course number, e.g. COMP 791A, COMP 791B, etc.~~	**COMP 691 Topics in Computer Science I** (4 credits) Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: COMP 791 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Computer Science and Software Engineering
Program: Computer Science
Degree: MASc, MEng, PhD
Calendar Section/Graduate Page Number: Computer Science courses

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [X] Editorial [ ] New Course
[ ] Course Deletion [ ] Other - Specify: Exclusion note

Present Text (from 2020/2021) calendar	**Proposed Text**
COMP 791 Topics in Computer Science II (4 credits) ~~Subject matter will vary from term to term and from year to year. Students may re-register for this course, providing that course content has changed. Changes in content will be indicated by the letter following the course number, e.g. COMP 791A, COMP 791B, etc.~~	**COMP 791 Topics in Computer Science II** (4 credits) Note: Subject matter will vary from term to term and from year to year. Students may re-register for this course, providing that course content has changed. Changes in content will be indicated by the title of the topic.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: ELEC 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Electrical & Computer Engineering
Program: Electrical Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
ELEC 691 Topics In Electriacal Engineering I (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**ELEC 691 Topics In Electrical Engineering I** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: ELEC 791 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Electrical & Computer Engineering
Program: Electrical Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
ELEC 791 Topics In Electriacal Engineering II (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**ELEC 791 Topics In Electrical Engineering II** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: ELEC 8011 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Electrical and Computer Engineering
Program: Electrical and Computer Engineering
Degree: PhD
Calendar Section/Graduate Page Number: Engineering Courses

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [ ] Editorial [ ] New Course
[X] Course Deletion [ ] Other - Specify:

Present Text (from 2020/2021) calendar	**Proposed Text**
~~**ELEC 8011 Doctoral Seminar in Electrical Engineering (***)**~~ ~~Grading on a Pass/Fail basis only. No credit value.~~	
Rationale: This course was replaced with ENCS 8011 PhD Seminar in 2010.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: ENCS 5721 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Gina Cody School of Engineering and Computer Science Departments
Program: All programs
Degree: PhD and MASc, Diploma
Calendar Section/Graduate Page Number: Engineering Courses

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [X] Editorial [ ] New Course
[ ] Course Deletion [ ] Other - Specify:

Present Text (from 2020/2021) calendar	**Proposed Text**
ENCS 5721 Composition and Argumentation for Engineers (3 credits) *Description:* Fundamentals of English composition and argumentation: grammar, reasoning and persuasion; persuasive proofs; argumentation; structuring and outlining: the problem statement; the body; and the conclusions. Language and persuasion for effective communication in professional engineering. Cultivation of a writing style firmly based on clear and critical thinking skills. Lectures: three hours per week. *Component(s):* Lecture. *Notes:* • This course cannot be taken within the credit requirements of the program. • ~~Students who have taken ENCS 591A (Composition and Argumentation for Engineers) may not take this course for credit.~~	**ENCS 5721 Composition and Argumentation for Engineers (3 credits)** Description: Fundamentals of English composition and argumentation: grammar, reasoning and persuasion; persuasive proofs; argumentation; structuring and outlining: the problem statement; the body; and the conclusions. Language and persuasion for effective communication in professional engineering. Cultivation of a writing style firmly based on clear and critical thinking skills. Lectures: three hours per week. *Component(s):* Lecture. *Notes*: • This course cannot be taken within the credit requirements of the program.
Rationale:	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: ENCS 591 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Building, Civil and Environmental Engineering (BCEE)
Program: Building Engineering
Degree: MEng, MASc, PhD; Grad Dipl/ Cert
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 20xx/20xx) calendar	**Proposed Text**
ENCS 591 Topics in Engineering and Computer Science (3 credits)	**ENCS 591 Topics in Engineering and Computer Science (3 credits)** **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.

Rationale:
The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added. This is not a new course, as it is currently listed in Topic Area E02. In preparation for the new software, the course description also needs to be listed in the courses section of the calendar.

Resource Implications:
None

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: ENCS 8011 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Gina Cody School of Engineering and Computer Science Departments
Program: All programs
Degree: PhD
Calendar Section/Graduate Page Number: Engineering Courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
ENCS 8011 PhD Seminar ~~**(****)**~~ (2 credits) *Prerequisite:* ENCS 8511 Doctoral Research Proposal. The PhD Seminar is designed to train students to communicate the results of their research projects to the community and participate in research discussions. This is done when the students have sufficiently progressed into their research, normally after 6 (12 for part-time students) months of being admitted to candidacy, which is normally after 24 (48 for part-time students) months of residency, and must be completed before the submission of the thesis. The student's evaluation, reflected by either a pass or fail grade, is based upon attendance in all seminars, a report on the student's thesis research under the direction of the thesis supervisor(s), and a presentation. ~~**Note:** Students who have completed ENCS 8011 prior to September 2005 may not take this Seminar for credit.~~	**ENCS 8011 PhD Seminar** (2 credits) *Prerequisite:* ENCS 8511 Doctoral Research Proposal. The PhD Seminar is designed to train students to communicate the results of their research projects to the community and participate in research discussions. This is done when the students have sufficiently progressed into their research, normally after 6 (12 for part-time students) months of being admitted to candidacy, which is normally after 24 (48 for part-time students) months of residency, and must be completed before the submission of the thesis. The student's evaluation, reflected by either a pass or fail grade, is based upon attendance in all seminars, a report on the student's thesis research under the direction of the thesis supervisor(s), and a presentation.

Rationale:
This note and the asterisk *** are no longer valid as there are no students admitted prior to 2010 who are currently registered in the doctoral programs.

Resource Implications:
None

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: ENCS 8511 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Gina Cody School of Engineering and Computer Science Departments
Program: All programs
Degree: PhD
Calendar Section/Graduate Page Number: Description of courses

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [X] Editorial [ ] New Course
[ ] Course Deletion [ ] Other - Specify: exclusive note

Present Text (from 2020/2021) calendar	**Proposed Text**
ENCS 8511 Doctoral Research Proposal (6 credits) *Prerequisite:* Successful completion of ENCS 8501 Comprehensive Examination. The goal of the doctoral research proposal is to focus the student's PhD research. The proposal ~~must~~ include an extensive critical review of previous ~~work~~ on the subject of the thesis, and a detailed research plan of action and expected milestones. Students ~~are required to~~ defend their doctoral research proposal before a committee that will normally be comprised of the same members as the comprehensive examination committee. ~~Note: Students admitted prior to September 1997 are not allowed to substitute ENCS8511 for an equivalent course work.~~	**ENCS 8511 Doctoral Research Proposal** (6 credits) *Prerequisite:* Successful completion of ENCS 8501 Comprehensive Examination. The goal of the doctoral research proposal is to focus the student's PhD research for the dissertation. The proposal includes an extensive critical review of previous research on the subjectof the thesis, and a detailed research plan of action and expected milestones. Students defend their doctoral research proposal before a committee that will normally be comprised of the same members as the comprehensive examination committee.

Rationale:
This note is no longer valid as there are no students admitted prior to 1997 who are currently registered in the doctoral programs.

Resource Implications:
None

Other Programs within which course is listed:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: INDU 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Industrial Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
INDU 691 Topics in Industrial Engineering (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**INDU 691 Topics in Industrial Engineering** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: INSE 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2021/2022
Implementation Month/Year: January 20221

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: CIISE
Program: All CIISE graduate programs
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
INSE 691 Topics in Information Systems Engineering (4 credits) **Note:** Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the ~~letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**INSE 691 Topics in Information Systems Engineering** (4 credits) **Note:** Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the title of the topic.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: MECH 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace
Program: Mechanical Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
MECH 691 Topics In Mechanical Engineering I (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**MECH 691 Topics In Mechanical Engineering I** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: MECH 791 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace
Program: Mechanical Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[X] Editorial	[ ] New Course	
[ ] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
MECH 791 Topics In Mechanical Engineering II (4 credits) **Note:** ~~Subject matter will vary from term to term and from year to year. Students may re-register for these courses, providing that the course content has changed. Changes in content will be indicated by the letter following the course number. e.g. CIVI 691A, CIVI 691B, etc.~~	**MECH 791 Topics In Mechanical Engineering II** (4 credits) **Note:** Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: MECH 8011 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical Engineering
Degree: PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number	[ ] Course Title	[ ] Credit Value	[ ] Prerequisite
[ ] Course Description	[ ] Editorial	[ ] New Course	
[X] Course Deletion	[ ] Other - Specify:		

Present Text (from 2020/2021) calendar	**Proposed Text**
~~**MECH 8011 Doctoral Seminar in Mechanical Engineering (***)**~~ ~~Grading on a pass/fail basis only. No credit value.~~	
Rationale: This course was replaced with ENCS 8011 PhD Seminar in 2010.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: SOEN 691 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Computer Science and Software Engineering
Program: Software Engineering
Degree: MASc, MEng, PhD
Calendar Section/Graduate Page Number: Engineering courses

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [X] Editorial [ ] New Course
[ ] Course Deletion [ ] Other - Specify: Exclusion note

Present Text (from 2020/2021) calendar	**Proposed Text**
SOEN 691 Topics in Software Engineering (4 credits) ~~Subject matter will vary from term to term and from year to year. Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by the letter following the course number, e.g. SOEN 691A, SOEN 691B, etc.~~	**SOEN 691 Topics in Software Engineering I** (4 credits) **Note**:Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
Resource Implications: None	
Other Programs within which course is listed: None.	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **ENCS-106** VERSION: 5

COURSE CHANGE: SOEN 791 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Computer Science and Software Engineering
Program: Software Engineering
Degree: MASc, MEng, PhD
Calendar Section/Graduate Page Number: Engineering Courses

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[ ] Course Description [X] Editorial [ ] New Course
[ ] Course Deletion [ ] Other - Specify: Exclusion note

Present Text (from 2020/2021) calendar	**Proposed Text**
SOEN 791 Topics in Software Engineering II (4 credits) ~~Subject matter will vary from term to term and from year to year. Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by the letter following the course number, e.g. SOEN 791A, SOEN 791B, etc.~~	**SOEN 791 Topics in Software Engineering II** (4 credits) Note: Students may re-register for this course, providing that the course content has changed. Changes in content will be indicated by changes to the course title in the graduate class schedule.
Rationale: The grade letter (A, B, C, ...) following a 3-digit course topics in engineering was abolished with the implementation of the new SIS system in 2015. Also, the note has been revised and a new standardized wording has been added.	
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: March 30, 2021

SUBJECT: **GRADUATE CURRICULUM CHANGES (BLDG-94)**
(CALENDAR – 2021/2022)
DEPARTMENT OF BUILDING, CIVIL AND ENVIRONMENTAL ENGINEERING

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Gina Cody School of Engineering and Computer Science.

The Department of Building, Civil and Environmental Engineering is proposing to streamline the research themes of the MASC degrees in Building Engineering and in Civil Engineering.

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

cc: J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs
E. Shihab, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science

UNIVERSITÉ Concordia UNIVERSITY

GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson
Chair, Graduate Curriculum Committee
School of Graduate Studies

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science

CC: Kristy Clarke
Academic Programs and Development
School of Graduate Studies

DATE: March 12, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (BLDG-94)**
Gina Cody Council of Engineering and Computer Science

At its meeting on March 12, 2021, the Faculty Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, as presented, the graduate curriculum changes proposed by the Building, Civil and Environmental Engineering (BCEE). Namely, the Department proposes to streamline its MASc programs (Building Engineering, Civil Engineering,) based on research in major themes. No additional resources are required for these changes.

Details of the curriculum changes are indicated and explained in the internal memorandums and in the BLDG-94 dossier.

Thank you for your consideration of this proposal.

INTERNAL MEMORANDUM

Concordia UNIVERSITY

GINA CODY
SCHOOL OF ENGINEERING
AND COMPUTER SCIENCE Office of the Dean

TO: Dr. M. Debbabi
Chair of the School Council
Gina Cody School of Engineering and Computer Science

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Gina Cody School of Engineering and Computer Science

DATE: February 23, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (BLDG-94)**
Department of Building, Civil & Environmental Engineering (BCEE)

At its virtual meeting on February 22, 2021, the Gina Cody School Graduate Studies Committee (GCSGSC) reviewed and approved, as presented, the changes to the degree requirements for the MASc in Building Engineering and MASc in Civil Engineering. No additional resources are required.

Details of the curriculum changes are indicated and explained in the Department's internal memorandum and in the BLDG-94 dossier.

We kindly request that this proposal be placed on the next agenda of the GCS Faculty Council for approval.

Thank you for your consideration of this proposal.

Université Concordia University
GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
Department of Building, Civil & Environmental Engineering

TO: Dr. Emad Shihab (Chair, ECSGCS)

FROM: Dr. Ashutosh Bagchi (Chair, BCEE)

DATE: February 15, 2021

RE: Graduate Curriculum Dossier BLDG-94

Attached please find the dossier BLDG-94 which proposes minor changes to the two MASc degrees offered in BCEE. The text is changed to more accurately reflect the MASc Building is based on research in 4 major themes and the MASc Civil Engineering is based on research in 6 major themes rather than listing course topic areas. This dossier passed the BCEE Departmental Council on February 15, 2021.

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Tel. 514-848-2424 ext. 3200 concordia.ca/ginacody

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **BLDG-94** VERSION: 3

PROGRAM CHANGE: MASc Building

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: MASc Building
Degree: MASc
Calendar Section/Graduate Page Number: Building Engineering MASc Description

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

Present Text (from 2020/2021) calendar	**Proposed Text**
Building Engineering MASc The Department offers ~~two 45-credit programs leading to the MASc in Building Engineering or the MEng in~~ Building Engineering with specialization in one of the following four branches: Building Science (~~E21 - Integrative Studies for Building Engineering; E22 - Building Science)~~ Building Environment ~~(E07 - Energy Conversion, E21 Integrative Studies for Building Engineering, E23 - Building Environment)~~ Construction Management ~~(E21 - Integrative Studies for Building Engineering, E24 - Construction Management)~~ Building Structures ~~(E06 - Structural Mechanics, E21 - Integrative Studies for Building Engineering, E31 - Structural Engineering)~~ Applicants lacking the appropriate engineering background will be required to enrol in an extended program of specified courses. These courses are in addition to the regular 45-credit program. **Degree Requirements** 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. Fully-qualified candidates are required to complete a minimum of 45 credits. Please see the Engineering Courses page for course descriptions. Building Engineering MASc (45 credits) 16 *Credits of coursework, with 4 courses chosen from the Engineering Courses section, approved by the student's supervisor and either the Graduate Program Director or the Chair of the Department.* 29 *Credits*: ENGR 8901 Master of Applied Science Research and Thesis 29.00	**Building Engineering MASc** The Department offers a research-based degree (MASc) with specialization in one of thefollowing four branches: Building Science Building Environment Building Construction and Facility Management Building Structures **Degree Requirements** The requirements described here are in addition to the general degree requirements forthe Master's programs in the Gina Cody School of Engineering and Computer Science. Fully-qualified candidates are required to complete a minimum of 45 credits. Please see the Engineering Courses page for course descriptions. Building Engineering MASc (45 credits) 16 *Credits of coursework, with 4 courses chosen from the Engineering Courses section, approved by the student's supervisor and either the Graduate Program Director or the Chair of the Department.* 29 *Credits*: ENGR 8901 Master of Applied Science Research and Thesis 29.00

Rationale:
The text is changed to more accurately reflect the MASc Building Engineering is based on research in 4 major themes.

Extended program information is in main GCS section for MASc.

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **BLDG-94** VERSION: 3

PROGRAM CHANGE: MASc Civil

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: MASc Civil
Degree: MASc
Calendar Section/Graduate Page Number: Civil Engineering MASc

Type of Change:

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

Present Text (from 2020/2021) calendar	**Proposed Text**
Civil Engineering MASc The Department offers ~~two 45-credit programs leading to the MASc or MEng degrees~~ with specialization in one of the following six branches: Structural Engineering ~~(E06, E31, E32)~~ Water Resources ~~(E04, E33)~~ Geotechnical Engineering ~~(E35)~~ Transportation ~~(E03, E34)~~ Environmental Engineering ~~(E36, E37)~~ Construction Management ~~(E21, E24)~~ Applicants lacking the appropriate background will be required to enrol in an extended program of specified courses. These courses are in addition to the regular 45-credit program. **Degree Requirements** 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 Scienc e. Fully-qualified candidates are required to complete a minimum of 45 credits. Please see the Engineering Courses page for course descriptions. Civil Engineering MASc (45 credits) 16 *Credits of coursework, with four courses chosen from the Engineering Courses section, approved by the student'ssupervisor and either the Graduate Program Director or the Chair of the Department.* 29 *Credits:* ENGR 8901 Master of Applied Science Research and Thesis 29.00	**Civil Engineering MASc** The Department offers a research-based degree (MASc) with specialization in one of the following six branches: Structural and Infrastructure Engineering Water Resources Engineering Geotechnical Engineering Transportation Engineering Environmental Engineering Construction Engineering and Management **Degree Requirements** 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. Fully-qualified candidates are required to complete a minimum of 45 credits. Please see the Engineering Courses page for course descriptions. Civil Engineering MASc (45 credits) 16 *Credits of coursework, with four courses chosen from the Engineering Courses section, approved by the student'ssupervisor and either the Graduate Program Director or the Chair of the Department.* 29 *Credits:* ENGR 8901 Master of Applied Science Research and Thesis 29.00

Rationale:

The text is changed to more accurately reflect the MASc Civil Engineering is based on research in 6 major themes.

Extended program requirements given in main GCS MASc section

Resource Implications:

None

UNIVERSITÉ Concordia UNIVERSITY

SCHOOL OF GRADUATE STUDIES

US-2021-4-D13

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

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

DATE: March 30, 2021

SUBJECT: **GRADUATE CURRICULUM CHANGES (CIISE-70)**
(CALENDAR – 2021/2022)
CONCORDIA INSTITUTE FOR INFORMATION SYSTEMS ENGINEERING (CIISE)

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 a new course INSE 6615 *Blockchain Technology* within the Information Systems Security elective course grouping of the MEng and MASc programs.

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: J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs
E. Shihab, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science

UNIVERSITÉ Concordia UNIVERSITY

GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson
Chair, Graduate Curriculum Committee
School of Graduate Studies

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science

CC: Kristy Clarke
Academic Programs and Development
School of Graduate Studies

DATE: March 12, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (CIISE-70)**
Gina Cody Council of Engineering and Computer Science

At its meeting on March 12, 2021, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, as presented, the creation of a new permanent course INSE 6615 Blockchain Technology. This course examines different emerging technologies in the rapidly changing world of blockchain technology such as blockchain, and/or cryptocurrencies adopted recently by many companies/central banks moving towards a digital currency. The only additional resource required will be covered by existing faculty members as part of their teaching load.

Details of the course proposal are indicated and explained in the internal memorandums and in the CIISE-70 dossier.

We kindly request that this proposal be placed on the next agenda of the GCC for approval.

Concordia UNIVERSITY

GINA CODY
SCHOOL OF ENGINEERING
AND COMPUTER SCIENCE

Office of the Dean

INTERNAL MEMORANDUM

TO: Dr. M. Debbabi
Chair of the School Council
Gina Cody School of Engineering and Computer Science

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Gina Cody School of Engineering and Computer Science

DATE: February 23, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (CIISE-70)**
Concordia Institute for Information Systems Engineering (CIISE)

At its virtual meeting on February 22, 2021, the Gina Cody School Graduate Studies Committee (GCSGSC) reviewed and approved, with some corrections, the creation of a new permanent course *INSE 6615 Blockchain Technology*. This course examines different emerging technologies in the rapidly changing world of blockchain technology such as blockchain, and/or cryptocurrencies adopted recently by many companies/central banks moving towards a digital currency. The only additional resource required will be covered by existing faculty members as part of their teaching load.

Details of the course proposal are indicated and explained in the Department's internal memorandum and in the CIISE-70 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.

Concordia
GINA CODY
SCHOOL OF ENGINEERING
AND COMPUTER SCIENCE
Concordia Institute for
Information Systems Engineering

INTERNAL MEMORANDUM

DATE: February 1, 2021

TO: Dr. Emad Shihab, 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: New Course: INSE 6615 Blockchain Technology

Please find Dossier # 70 submitted by the Concordia Institute for Information Systems Engineering.

INSE 6615 Blockchain Technology

We have included a course change to reflect the addition of this new course with the goal of introducing students to blockchain technology, which has become a focus of government and industry, with many job opportunities for developing smart contracts. While blockchain may seem like a niche topic, the pedagogical value of this course is enhanced by the breadth of knowledge students must learn to understand it, including advanced cryptography, programmable currency and contracts, and Bitcoin protocols.

This course shall be listed under Topic Area E69 – Information Systems Security.

These curriculum changes have been approved by the Department Curriculum Committee and at the CIISE Department Council meeting held on December 9, 2020.

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

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **CIISE-70** VERSION: 4

PROGRAM CHANGE: Topic Area E69

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Concordia Institute for Information Systems Engr.
Program: Information Systems Security
Degree: MEng, MASc
Calendar Section/Graduate Page Number: List by Topic Areas

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

Present Text (from 2020/2021) calendar			**Proposed Text**		
E69 – Information Systems Security			**E69 – Information Systems Security**		
INSE 6110	Foundations of Cryptography	4.00	INSE 6110	Foundations of Cryptography	4.00
INSE 6120	Crypto-Protocol and Network Security	4.00	INSE 6120	Crypto-Protocol and Network Security	4.00
INSE 6130	Operating Systems Security	4.00	INSE 6130	Operating Systems Security	4.00
INSE 6140	Malware Defenses and Application Security	4.00	INSE 6140	Malware Defenses and Application Security	4.00
INSE 6150	Security Evaluation Methodologies	4.00	INSE 6150	Security Evaluation Methodologies	4.00
INSE 6160	Database Security and Privacy	4.00	INSE 6160	Database Security and Privacy	4.00
INSE 6170	Network Security Architecture and Management	4.00	INSE 6170	Network Security Architecture and Management	4.00
INSE 6180	Security and Privacy Implications of Data Mining	4.00	INSE 6180	Security and Privacy Implications of Data Mining	4.00
INSE 6190	Wireless Network Security	4.00	INSE 6190	Wireless Network Security	4.00
INSE 6610	Cybercrime Investigations	4.00	INSE 6610	Cybercrime Investigations	4.00
INSE 6620	Cloud Computing Security and Privacy	4.00	INSE 6615	Blockchain Technology	4.00
INSE 6630	Recent Developments in Information Systems Security	4.00	INSE 6620	Cloud Computing Security and Privacy	4.00

INSE 6640	Smart Grids and Control System Security	4.00
INSE 6650	Trusted Computing	4.00
INSE 6660	Secure Programming	4.00
INSE 6670	Embedded Systems Security	4.00
INSE 6680	Systems Physical Security	4.00

INSE 6630	Recent Developments in Information Systems Security	4.00
INSE 6640	Smart Grids and Control System Security	4.00
INSE 6650	Trusted Computing	4.00
INSE 6660	Secure Programming	4.00
INSE 6670	Embedded Systems Security	4.00
INSE 6680	Systems Physical Security	4.00

Rationale:
The change reflects the addition of a new course

Resource Implications:
None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **CIISE-70** VERSION: 4

COURSE CHANGE: INSE 6615 BLOCKCHAIN TECHNOLOGY New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Concordia Institute for Information Systems Engr.
Program: Information Systems Security
Degree: MEng, MASc
Calendar Section/Graduate Page Number: Engineering Course Descriptions

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**
	INSE 6615 Blockchain Technology (4 credits) *Description:* The course covers blockchain technology with an emphasis on its application to finance. Starting with the Bitcoin cryptocurrency, it covers the requisite cryptographic primitives (hash functions, digital signatures, commitments, accumulators, Merkle trees, proof of work) and explains the Bitcoin protocol (including transactions, blocks, network and software). It then focuses on programmable currency and contracts, explaining Bitcoin's scripting feature and the Ethereum blockchain. It covers the Solidity programming language, highlighting specific features that were added for the blockchain context (and don't exist in other object-oriented programming languages). Finally, the course covers blockchain use-cases in including financial technology and government use. Assignments will include deploying an actual contract to Ethereum's testnet. A project is required. *Component(s):* Lecture.

Rationale:
Blockchain technology has become a focus of government and industry, with many job opportunities for developing smart contracts. Numerous top global universities (e.g., MIT, Stanford, CMU, etc.) offer technical courses on Bitcoin, blockchain, and/or cryptocurrencies, as well as universities in Canada (e.g., University of Waterloo). While blockchain may seem like a niche topic, the pedagogical value of this course is enhanced by the breadth of knowledge students must learn to understand it: advanced cryptography, distributed systems and fault tolerance, networking, and programming language features. Financial technology on Ethereum is a serious industry involving billions of dollars in crypto-assets. Blockchain also stands to play an increasing role in our future, including the prospect of a central bank digital currency (i.e., blockchain-based Canadian dollar issued by the Bank of Canada).

This course shall be listed under Topic Area E69 - Information Systems Security.

Resource Implications:
This course will be part of a faculty member's teaching load.

Other Programs within which course is listed:

None

INSE 6615: Blockchain Technology

(4 credits)

General Information

Instructor: _____

Contact Info: _____

Course website: _____

Office Hours: _____

The course webpage will contain announcements related to the class, the final schedule, assignments, the project description, and other resources.

Course Description

The course covers blockchain technology, with an emphasis on its application to finance. Starting with the Bitcoin cryptocurrency, it will cover the requisite cryptographic primitives (hash functions, digital signatures, commitments, accumulators, Merkle trees, proof of work) and explain the Bitcoin protocol (including transactions, blocks, network and software). It will then focus on programmable currency and contracts, explaining Bitcoin's scripting feature and the Ethereum blockchain. It covers the Solidity programming language, highlighting specific features that were added for the blockchain context (and don't exist in other object oriented programming languages). Finally, the course will cover blockchain use-cases in including financial technology and government use. Assignments will include deploying an actual contract to Ethereum's testnet. A project is required.

Prerequisites: None. (INSE 6110 is useful but not required.)

Tentative Schedule

- Week 1: Introduction, overview, motivation, use-cases of blockchain
- Week 2: Crypto I: Hash functions, security properties, key derivation
- Week 3: Crypto II: Digital signatures, security properties, hash-and-sign, ECDSA and random nonces, zero knowledge proofs
- Week 4: Crypto III: Commitments, accumulators, Merkle trees, linked timestamping, proof of work protocols
- Week 5: The blockchain protocol, consensus in distributed systems, and sybil attacks
- Week 6: Bitcoin I: Transaction structure, block structure, block exploration, gossip networks
- Week 7: Bitcoin II: Mempool, UTXO pool, block difficulty, re-organizations, user experience, inflation
- Week 8: Midterm Test (in class)

- Week 9: Ethereum I: Scripting in Bitcoin, decentralized applications (DApps) in Ethereum, state transitions, gas
- Week 10: Ethereum II: Solidity programming language, constructors, modifiers, fallback functions, ETH transfers
- Week 11: Ethereum III: Deploying contracts, running functions, re-entrancy attacks
- Week 12: FinTech Applications I: Central bank digital currency, stablecoins, decentralized finance (DeFi)
- Week 13: FinTech Applications II: Orderbooks and exchanges, flash loans, front-running attacks

Course Materials

Textbook: Bitcoin and Cryptocurrency Technology (Narayanan et al), Princeton University Press, 2015.

This textbook is available for free as a PDF or can be purchased from the Concordia bookstore. It covers Bitcoin in detail (Weeks 1-7). Ethereum (Weeks 9-11) will be based on the free Solidity Developer Guide. Fintech applications (Weeks 12-13) will be based on current research papers.

Lecture notes: Students are responsible for attending the lectures and taking notes.

Assignments & Grading

Midterm Exam:	15%
Final Exam:	40%
Team Project:	35%
Assignments:	10%

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

Academic Conduct

Any form of cheating, plagiarism, personation, falsification of a document as well as any other form of dishonest behaviour related to the obtention of academic gain or the avoidance of evaluative exercises committed by a student is an academic offence under the Academic Code of Conduct and may lead to severe penalties up to and including suspension and expulsion.

As examples only, you are not permitted to:
- Copy from anywhere without indicating where it came from
- Let another student copy your work and then submit it as his/her own
- Hand in the same assignment/project in more than one class

- Have unauthorized material or devices in an exam. Note that you do not have to be caught using them – just having them is an offence
- Copy from someone's else exam
- Communicate with another student during an exam
- Add or remove pages from an examination booklet or take the booklet out of an exam room
- Acquire exam or assignment answers or questions
- Write an exam for someone else or have someone write an exam for you
- Submit false documents such as medical notes or student records
- Falsify data or research results

You are subject to the Academic Code of Conduct. Take the time to learn more at: http://www.concordia.ca/programs-and-courses/academic-integrity/

Student's Responsibilities

Students are expected to attend every class. Some material may only be covered in class and not made available on the course website. Students are expected to read the assigned materials and to actively participate in class discussions.

Students are expected to be respectful of other people's opinions and to express their own views in a calm and reasonable way. Disruptive behaviour will not be tolerated. Students are expected to be familiar with the Code of Rights and Responsibilities: http://rights.concordia.ca

If you cannot attend class for any reason, unforeseen or not, you should talk or write to me as soon as possible.

Student Services

Concordia Counselling and Development offers career services, psychological services, student learning services, etc.
http://cdev.concordia.ca

The Concordia Library Citation and Cycle Guides:
http://library.concordia.ca/help/howto/citations.html

Advocacy and Support Services:
http://supportservices.concordia.ca

Student Transition Centre:
http://stc.concordia.ca

New Student Program:
http://newstudent.concordia.ca

Office for Students with Disabilities:
http://supportservices.concordia.ca/disabilities/

The Academic Integrity Website:
http://provost.concordia.ca/academicintegrity/

SCHOOL OF GRADUATE STUDIES

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

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

DATE: March 30, 2021

SUBJECT: **GRADUATE CURRICULUM CHANGES (CME-4)**
(CALENDAR – 2021/2022)
DEPARTMENT OF CHEMICAL AND MATERIALS ENGINEERING

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Gina Cody School of Engineering and Computer Science.

The Department of Chemical and Materials Engineering is proposing to update the requirements of the Graduate Diploma in Chemical Engineering. The changes, which have become necessary after running the program, now allow students more flexibility in completing the components by reducing the number of required courses and expanding the choice of technical electives. Additionally, students will now complete a course in Materials Engineering specifically.

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: J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs
E. Shihab, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science

UNIVERSITÉ Concordia UNIVERSITY

GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson
Chair, Graduate Curriculum Committee
School of Graduate Studies

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science

CC: Kristy Clarke
Academic Programs and Development
School of Graduate Studies

DATE: March 12, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (CME-4)**
Gina Cody Council of Engineering and Computer Science

At its meeting on March 12, 2021, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, with some corrections, the curriculum changes to the requirements for the Graduate Diploma program in Chemical Engineering. No additional resources are required.

Details of the curriculum changes are indicated and explained in the internal memorandums and in the CME-4 dossier.

We kindly request that this proposal be placed on the next agenda of the GCC for approval.

Thank you for your consideration of this proposal.

INTERNAL MEMORANDUM

Concordia UNIVERSITY

GINA CODY
SCHOOL OF ENGINEERING
AND COMPUTER SCIENCE Office of the Dean

TO: Dr. M. Debbabi
Chair of the School Council
Gina Cody School of Engineering and Computer Science

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Gina Cody School of Engineering and Computer Science

DATE: February 23, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (CME-4)**
Department of Chemical and Materials Engineering (CME)

At its virtual meeting on February 22, 2021, the Gina Cody School Graduate Studies Committee (GCSGSC) reviewed and approved, as presented, the changes to the degree requirements for the Graduate Diploma program in Chemical Engineering. No additional resources are required.

Details of the curriculum changes are indicated and explained in the Department's internal memorandum and in the CME-4 dossier.

We kindly request that this proposal be placed on the next agenda of the GCS Faculty Council for approval.

Thank you for your consideration of this proposal.

Université Concordia University
GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
Department of Chemical and Materials Engineering

Alex De Visscher
Professor and Chair

alex.devisscher@concordia.ca
Tel.: 514-848-2424 ext. 3488
EV 2.285

INTERNAL MEMORANDUM

TO: Dr. Emad Shihab, Associate Dean, Research and Graduate Studies

FROM: Dr. Alex De Visscher
Chair, Department of Chemical and Materials Engineering

RE: Program changes to the Graduate Diploma in Chemical Engineering (CME-4)

DATE: February 5, 2021

Dear Dr. Shihab,

The Department of Chemical and Materials Engineering recommends a program change for the Graduate Diploma program in Chemical Engineering (CME-4). The objective of the change is to fine tune the program and to remove unintended consequences of some of the decisions that were made in the design of the program. In particular, it was difficult for students to fulfill the technical elective course requirements.

The changes are the following:

- We reduced the number of required courses from five to four and replaced the fifth with a course to be selected from a list of two.
- We broadened the choice of one technical elective from a limited list to any graduate course in Engineering, Computer Science, Chemistry, Physics, or Biology.
- We no longer require one course to be taken from a list of courses offered outside the Department of Chemical and Materials Engineering. Instead, we require one course to be taken from a list of Materials Engineering courses.

There are no resource implications for these changes.

I would greatly appreciate it if you could discuss this proposal at the next meeting of the Gina Cody School Engineering and Computer Science Graduate Studies Committee.

Feel free to contact me if you have any questions or comments.

Best regards,

Alex De Visscher

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **CME-4** VERSION: 3

PROGRAM CHANGE: Change of program requirements

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Chemical and Materials Engineering (CME)
Program: Chemical Engineering
Degree: Graduate Diploma
Calendar Section/Graduate Page Number: Graduate Diploma Description

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

Present Text (from 2020/2021) calendar	**Proposed Text**
# Chemical Engineering Graduate Diploma ## Admission Requirements • Bachelor's degree (or equivalent) in engineering or the sciences with the Concordia equivalent of a GPA of at least 2.70 on a scale of 4.30. The Department Graduate Studies Committee will determine the acceptability of an applicant for admission to the program and may require the applicant to do specific remedial coursework, including the bridge course CHME 401 Principles of Chemical Engineering, and/or other course(s) to meet the program requirements. ~~Credible academic reference letters and a statement of purpose should be included in the application.~~	# Chemical Engineering Graduate Diploma ## Admission Requirements • Bachelor's degree (or equivalent) in engineering or the sciences with the Concordia equivalent of a GPA of at least 2.70 on a scale of 4.30. The Department Graduate Studies Committee will determine the acceptability of an applicant for admission to the program and may require the applicant to do specific remedial coursework, including the bridge course CHME 401 Principles of Chemical Engineering, and/or other course(s) to meet the program requirements.

Degree Requirements

Fully-qualified candidates are required to complete a minimum of 30 credits.

Please see the Engineering Courses page for course descriptions.

Chemical Engineering Graduate Diploma (30 credits)

20 *Credits from the* Chemical Engineering Graduate Diploma Core

10 *Credits (minimum) chosen from the* Chemical Engineering Graduate Diploma Electives

Chemical Engineering Graduate Diploma Core (20 credits)

20 *Credits:*

CHME 6011	Advanced Transport Phenomena	4.00
CHME 6021	Advanced Chemical Engineering Thermodynamics	4.00
CHME 6031	Chemical Kinetics and Reaction Engineering	4.00
~~CHME 6041~~	~~Chemical Engineering Process Dynamics and Control~~	~~4.00~~
ENCS 6021	Engineering Analysis	4.00

Chemical Engineering Graduate Diploma Electives (10 credits)

10 *Credits minimum chosen from the following:*

~~*Elective 1: 3 or 4 credits from* Chemical Engineering Graduate Diploma List 1 *or any core MEng or MASc course in Chemical Engineering not included in the* Diploma Core *course list.*~~

Elective 2: ~~*3 or 4 credits from* Chemical Engineering Graduate Diploma List 2.~~

Elective 3: 3 or 4 credits from ~~Chemical Engineering Graduate Diploma List 3.~~

Students may take an elective course outside the elective list with permission of the Graduate Program Director.

Degree Requirements

Fully-qualified candidates are required to complete a minimum of 30 credits.

Please see the Engineering Courses page for course descriptions.

Chemical Engineering Graduate Diploma (30 credits)

20 *Credits from the* Chemical Engineering Graduate Diploma Core

10 *Credits (minimum) chosen from the* Chemical Engineering Graduate Diploma Electives

.

Chemical Engineering Graduate Diploma Core (20 credits)

16 *Credits:*

CHME 6011	Advanced Transport Phenomena	4.00
CHME 6021	Advanced Chemical Engineering Thermodynamics	4.00
CHME 6031	Chemical Kinetics and Reaction Engineering	4.00
ENCS 6021	Engineering Analysis	4.00

4 *Credits chosen from one of the following courses:*

CHME 6041	Chemical Engineering Process Dynamics and Control	4.00
CHME 6051	Chemical Process Engineering and Design	4.00

Chemical Engineering Graduate Diploma Electives (10 credits)

10 *Credits minimum chosen from the following:*

Elective 1
4 credits chosen from any courses listed in Topic Area E57 Composite Materials *or from the following list of Materials Engineering graduate courses:*

CHME 6101	Advanced Battery Materials and Technologies	4.00
CHME 6071	Materials Science and Engineering	4.00
CHME 6111	Polymer Chemistry and Engineering	4.00
CHME 6121	Nanomaterials Science and Engineering	
CHME 6131	Advanced Colloid and Interface Science and Engineering	4.00
CHME 7911	Topics in Chemical Engineering II	4.00
ENGR 6601	Principles of Solar Engineering	4.00
MECH 6431	Introduction to Tribology (Wear, Friction, and Lubrication)	4.00
MECH 6571	Corrosion and Oxidation of Metals	4.00

Elective 2:
3 to 4 credits (one course) technical elective chosen from Chemical Engineering or from any other Engineering and Computer Science graduate program, or from the Chemistry, Physics, or Biology graduate programs.

~~Chemical Engineering Graduate Diploma List 1~~

~~CHME 6061~~	~~Advanced Biochemical Engineering~~	~~4.00~~
~~CHME 6081~~	~~Advanced Separation Processes~~	~~4.00~~
~~CHME 6091~~	~~Statistics for Chemical Engineering~~	~~4.00~~
~~CHME 6101~~	~~Advanced Battery Materials and Technologies~~	~~4.00~~
~~CHME 6111~~	~~Polymer Chemistry and Engineering~~	~~4.00~~
~~CHME 6131~~	~~Advanced Colloid and Interface Science and Engineering~~	~~4.00~~
~~CHME 6911~~	~~Topics in Chemical Engineering I~~	~~4.00~~
~~ENCS 6111~~	~~Numerical Methods~~	~~4.00~~
~~ENGR 6201~~	~~Fluid Mechanics~~	~~4.00~~
~~MECH 6131~~	~~Conduction and Radiation Heat Transfer~~	~~4.00~~
~~MECH 6141~~	~~Heat Exchanger Design~~	~~4.00~~
~~MECH 7101~~	~~Convection Heat Transfer~~	~~4.00~~

~~Chemical Engineering Graduate Diploma List 2~~

~~CHME 7911~~	~~Topics in Chemical Engineering II~~	~~4.00~~
~~ENGR 6601~~	~~Principles of Solar Engineering~~	~~4.00~~
~~MECH 6571~~	~~Corrosion and Oxidation of Metals~~	~~4.00~~

~~*Any courses listed in the following Topic Areas, not included in the core course list of the MEng in Chemical Engineering or in* Chemical Engineering Graduate Diploma List 1.~~
~~E03 – Systems and Control, Corrosion and Oxidation of Metals~~
~~E07 – Energy Conversion, E37 – Environmental Engineering~~
~~E52 – Thermodynamics and Heat Transfer~~
~~E57 – Composite Materials~~

~~Chemical Engineering Graduate Diploma List 3~~

~~*Any course(s) listed in Topic Areas E08 – Academic Communication Skills and E09 – Professional Leadership Skills.*~~

Students who hold a Certificate in Chemical Engineering must complete at least 15 credits in this program to qualify with a Diploma in Chemical Engineering. According to the University regulations on transfer of credits, students who have completed a Certificate in a different discipline may have credits transferred into a Diploma. Please refer to the Transfer Credits section of the Graduate Calendar for further information.

Students transferring from a Master's to the Diploma in a similar area of study are granted a time limit of 2 years, less the number of years in the Master's, or 1 year, whichever is greater; or the equivalent for part-time study.

Elective 3:
3 or 4 credits from the following list of Complementary Courses:
Any 6000-level course(s) listed in Topic Areas E08 – Academic Communication Skills *and* E09 – Professional Leadership Skills.
Students may take an elective course outside the elective list with permission of the Graduate Program Director.

Students who hold a Certificate in Chemical Engineering must complete at least 15 credits in this program to qualify with a Diploma in Chemical Engineering. According to the University regulations on transfer of credits, students who have completed a Certificate in a different discipline may have credits transferred into a Diploma. Please refer to the Transfer Credits section of the Graduate Calendar for further information.

Students transferring from a Master's to the Diploma in a similar area of study are granted a time limit of 2 years, less the number of years in the Master's, or 1 year, whichever is greater; or the equivalent for part-time study.

## Academic Regulations 1. Academic Standing. Please refer to the Academic Standing section of the Calendar for a detailed review of the Academic Regulations. Program Specific Requirements. An Assessment Grade Point Average (AGPA) of at least 2.70, based on a minimum of 8 credits is required. 2. Time limit. Please refer to the Academic Regulation page for further details regarding the Time Limit requirements. 3. Graduation. To be eligible to graduate, students must have obtained a CGPA of at least 2.70.	## Academic Regulations 1. Academic Standing. Please refer to the Academic Standing section of the Calendar for a detailed review of the Academic Regulations. Program Specific Requirements. An Assessment Grade Point Average (AGPA) of at least 2.70, based on a minimum of 8 credits is required. 2. Time limit. Please refer to the Academic Regulation page for further details regarding the Time Limit requirements. 3. Graduation. To be eligible to graduate, students must have obtained a CGPA of at least 2.70.
Rationale: The Graduate Diploma has been in existence for over two years. This program change addresses a number of unintended consequences of the choices made in the design of the program. The current program has five required courses, typically two in Fall and Three in Winter. As a result, students cannot take any elective course offered in Winter term. By relaxing the CHME 6041 course requirement to either CHME 6041 or CHME 6051, students can choose which term has three core courses. The current program requires students to take one course outside the Chemical Engineering program (Elective 2). Students have been unable to register for these courses due to oversubscription and the proposed revision is the de facto current practice. The choice for Elective 1 was broadened so that students will still be able to take a technical course outside the Department of Chemical and Materials Engineering. To encourage interdisciplinary research, the programs Chemistry, Physics, and Biology were added to the choice for Elective 1. A number of courses were added to the course list for Elective 2 because they cover relevant Materials Engineering subjects.	
Resource Implications: None. The change involves only existing courses currently being offered.	

SCHOOL OF GRADUATE STUDIES

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

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

DATE: March 30, 2021

SUBJECT: **GRADUATE CURRICULUM CHANGES (MECH-129)**
(CALENDAR – 2021/2022)
DEPARTMENT OF MECHANICAL, INDUSTRIAL AND AEROSPACE ENGINEERING

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Gina Cody School of Engineering and Computer Science.

The Department of Mechanical, Industrial and Aerospace Engineering is proposing to modify the degree requirements of the MEng in Industrial Engineering in an effort to simplify the Area Courses thereby facilitating scheduling and improving students' accessibility to courses. Additionally, the course description of MECH 6761 *Vehicular Internal Combustion Engines* has been updated.

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: J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs
E. Shihab, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science

UNIVERSITÉ Concordia UNIVERSITY

GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson
Chair, Graduate Curriculum Committee
School of Graduate Studies

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science

CC: Kristy Clarke
Academic Programs and Development
School of Graduate Studies

DATE: February 15, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (MECH-129)**
Gina Cody Council of Engineering and Computer Science

At its meeting on February 12, 2021, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, with some corrections, the curriculum changes to the requirements of the MEng program in Industrial Engineering. Namely, the MIAE Department wants to streamline all the options of its MEng in Industrial engineering, except the Engineering Management option which is a joint option with the JMSB. All the options have now common core courses, courses to specific areas, and common elective courses. In addition, an updated course description for MECH 6761 is provided, reflecting the current course content and training.

Details of the curriculum changes are indicated and explained in the internal memorandums and in the MECH-129 dossier.

We kindly request that this proposal be placed on the next agenda of the GCC for approval.

Thank you for your consideration of this proposal.

INTERNAL MEMORANDUM

Concordia University
GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
Office of the Dean

TO: Dr. M. Debbabi
Chair of the School Council
Gina Cody School of Engineering and Computer Science

FROM: Dr. E. Shihab
Associate Dean, Graduate Programs and Research
Gina Cody School of Engineering and Computer Science

DATE: January 12, 2021

RE: **Graduate Curriculum Proposal for the 2021-22 Academic Year (MECH-129)**
Department of Mechanical, Industrial and Aerospace Engineering (MIAE)

At its virtual meeting on December 14, 2020, the GCS Graduate Studies Committee (GCSGSC) reviewed and approved, with minor corrections, the proposed changes to the requirements of the *MEng program in Industrial Engineering*, as well as to the course description of *MECH 6761 Vehicular Internal Combustion Engines* to reflect current teaching content and practice.

Details of the curriculum changes indicated and explained in the Department's internal memorandum and in the MECH-129 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.

Concordia UNIVERSITY
GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
Department of Mechanical, Industrial & Aerospace Engineering

INTERNAL MEMORANDUM

TO: Dr. Emad Shihab, Associate Dean, Research and Graduate Studies

FROM: Dr. Ivan Contreras, Graduate Program Director of PhD programs, MIAE

DATE: December 9, 2020

SUBJECT: Proposed graduate curriculum changes to MEng program in Industrial Engineering and one MECH graduate course.

In what follows, we provide details on two proposals for graduate curriculum changes. The first proposal relates to several changes to the MEng program in Industrial Engineering. The second one relates to changes on the content of a MECH graduate courses. Attached are the Calendar Update From and course description, formatted as per the university's guidelines.

Proposed changes to MEng Program in Industrial Engineering

The first part of the proposed changes updates the list of core area courses and area elective courses of the different options of the program. In the current structure, there are different quantities in Area Courses in Option II, III, IV, and V. The proposal is to simplify these Options by offering the same number of Area Courses (4) in every single Option. This will help alleviate scheduling problems, problems with keeping courses open, and problems with students not graduating on time. Students will also be permitted to take their elective courses from any Option.

Proposed changes to MECH 6761 Vehicular Internal Combustion Engines

The graduate calendar course description for MECH 6761 is updated as it no longer reflects exactly the topics covered in the course. There is also a demonstration that is no longer performed within the course.

1455 De Maisonneuve Blvd. W., EV-4.139, Montreal, Quebec, Canada H3G 1M8
Tel. 514-848-2424 ext. 3175 concordia.ca/ginacody

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **MECH-129** VERSION: 4

PROGRAM CHANGE: Changes to the MEng in Indu

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Industrial Engineering
Degree: MEng
Calendar Section/Graduate Page Number: Degree Requirements

Type of Change:

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

Present Text (from 2020/2021) calendar	**Proposed Text**
# Degree Requirements The requirements described here are in addition to the general degree requirements forthe Master's Programs in the Gina Cody School of Engineering and Computer Science. Fully-qualified candidates are required to complete a minimum of 45 credits. Please see the Engineering Courses page for course descriptions and prerequisites. Students may choose one of the following options: 1. Engineering Management 2. Lean Systems Engineering 3. Supply Chain Engineering. 4. Industrial Optimization and Systems Analytics 5. Reliability and Maintenance Management If no option is selected, students must follow the industrial engineering general stream. Courses must be selected as follows:	# Degree Requirements The requirements described here are in addition to the general degree requirements forthe Master's Programs in the Gina Cody School of Engineering and Computer Science. Fully-qualified candidates are required to complete a minimum of 45 credits. Please see the Engineering Courses page for course descriptions and prerequisites. Students may choose one of the following options: 1. Engineering Management 2. Lean Systems Engineering 3. Supply Chain Engineering. 4. Industrial Optimization and Systems Analytics 5. Reliability and Maintenance Management If no option is selected, students must follow the industrial engineering general stream. Courses must be selected as follows: D1

Option I: Engineering Management (45 credits)

20 *Credits minimum chosen from Industrial Engineering Area Courses:*

INDU 6121	Applied Optimization	4.00
INDU 6151	Decision Models in Service Sector	4.00
INDU 6211	Production Systems and Inventory Control	4.00
INDU 6241	Lean Manufacturing	4.00
INDU 6310	Applied Probability and Statistics for Engineers	4.00
INDU 6311	Discrete System Simulation	4.00
INDU 6321	Introduction to Six Sigma	4.00
INDU 6391	Reliability and Maintenance for Design and Manufacturing	4.00
INSE 6230	Total Quality Project Management	4.00

3 *Credits of Management Area Core Courses*

MBA 640	On-Ramp	0.00
MBA 641	Responsible Manager	3.00

6 *Credits minimum chosen from Management Area Elective Courses*

MBA 642	Financial Reporting for Responsible Decision Making	3.00
MBA 643	Managerial Analytics	3.00
MBA 645	Economics for Organizational Decision Making	3.00

16 *Credits Industrial Stage, Project and Report*

INDU 6991	Engineering Management Industrial Stage I	8.00
INDU 6992	Engineering Management Industrial Stage II	8.00

Industrial stages must be completed with a company, governmental organization or a non-government organization (NGO). Students are responsible for finding their projects. An industry supervisor is highly recommended. The course coordinator serves as the main academic supervisor.

Option I: Engineering Management (45 credits)

20 *Credits minimum chosen from Industrial Engineering Area Courses:*

INDU 6121	Applied Optimization	4.00
INDU 6151	Decision Models in Service Sector	4.00
INDU 6211	Production Systems and Inventory Control	4.00
INDU 6241	Lean Manufacturing	4.00
INDU 6310	Applied Probability and Statistics for Engineers	4.00
INDU 6311	Discrete System Simulation	4.00
INDU 6321	Introduction to Six Sigma	4.00
INDU 6391	Reliability and Maintenance for Design and Manufacturing	4.00
INSE 6230	Total Quality Project Management	4.00

3 *Credits of Management Area Core Courses*

MBA 640	On-Ramp	0.00
MBA 641	Responsible Manager	3.00

6 *Credits minimum chosen from Management Area Elective Courses*

MBA 642	Financial Reporting for Responsible Decision Making	3.00
MBA 643	Managerial Analytics	3.00
MBA 645	Economics for Organizational Decision Making	3.00

16 *Credits Industrial Stage, Project and Report*

INDU 6991	Engineering Management Industrial Stage I	8.00
INDU 6992	Engineering Management Industrial Stage II	8.00

Industrial stages must be completed with a company, governmental organization or a non-government organization (NGO). Students are responsible for finding their projects. An industry supervisor is highly recommended. The course coordinator serves as the main academic supervisor.

Option II: Lean Systems Engineering (45 credits)

25	*Credits of Industrial Engineering Core Courses:*		
	INDU 6121	Applied Optimization	4.00
	INDU 6211	Production Systems and Inventory Control	4.00
	INDU 6310	Applied Probability and Statistics for Engineers	4.00
	INDU 6311	Discrete System Simulation	4.00
	INDU 6990	Industrial Engineering Capstone	9.00
16	*Credits ~~minimum chosen from~~ Area Courses:*		
	INDU 6221	Lean Enterprise	4.00
	INDU 6241	Lean Manufacturing	4.00
	~~INDU 6251~~	~~Facilities Planning and Warehouse Operations~~	~~4.00~~
	INDU 6321	Introduction to Six Sigma	4.00
4	*Credits ~~maximum chosen from Area~~ Elective Courses:*		
	~~INDU 6151~~	~~Decision Models in Service Sector~~	~~4.00~~
	~~INDU 6351~~	~~System Reliability~~	~~4.00~~
	~~INDU 6381~~	~~Applications of Reliability Engineering~~	~~4.00~~
	~~INDU 6391~~	~~Reliability and Maintenance for Design and Manufacturing~~	~~4.00~~
	~~INDU 6421~~	~~Systems Safety Engineering and Management~~	~~4.00~~
	~~INDU 6411~~	~~Human Factors Engineering~~	~~4.00~~
	~~INDU 6521~~	~~Quantitative Methods in Healthcare Systems~~	~~4.00~~

Option III. Supply Chain Engineering (45 credits)

25	*Credits of Industrial Engineering Core Courses*		
	INDU 6121	Applied Optimization	4.00
	INDU 6211	Production Systems and Inventory Control	4.00
	INDU 6310	Applied Probability and Statistics for Engineers	4.00
	INDU 6311	Discrete System Simulation	4.00
	INDU 6990	Industrial Engineering Capstone	9.00
16	*Credits minimum chosen from Area Courses*		
	INDU 6141	Logistics Network Models	4.00
	INDU 6151	Decision Models in Service Sector	4.00
	INDU 6161	Design and Operations of Supply Chain Networks	4.00
	~~INDU 6231~~	~~Scheduling Theory~~	~~4.00~~
	INDU 6251	Facilities Planning and Warehouse Operations	4.00
	~~INSE 6290~~	~~Quality in Supply Chain Design~~	~~4.00~~
	~~INSE 6300~~	~~Quality Assurance in Supply Chain Management~~	~~4.00~~
4	*Credits ~~maximum chosen from Area~~ Elective Courses*		
	~~INDU 6351~~	~~System Reliability~~	~~4.00~~
	~~INDU 6361~~	~~Discrete Optimization~~	~~4.00~~
	~~INDU 6371~~	~~Stochastic Optimization~~	~~4.00~~
	~~INDU 6391~~	~~Reliability and Maintenance for Design and Manufacturing~~	~~4.00~~

Option II: Lean Systems Engineering (45 credits)

25	*Credits of Industrial Engineering Core Courses:*		
	INDU 6121	Applied Optimization	4.00
	INDU 6211	Production Systems and Inventory Control	4.00
	INDU 6310	Applied Probability and Statistics for Engineers	4.00
	INDU 6311	Discrete System Simulation	4.00
	INDU 6990	Industrial Engineering Capstone	9.00
16	*Credits Area Courses:*		
	INDU 6221	Lean Enterprise	4.00
	INDU 6241	Lean Manufacturing	4.00
	INDU 6321	Introduction to Six Sigma	4.00
	INDU 6341	Advanced Concepts in Quality	4.00
4	*Credits of Elective Courses:*		
	INDU courses (Topic Area E12 – Industrial Engineering)		
	MECH courses		
	ENCS courses (Topic Area E01 - Mathematical Methods)		

Option III. Supply Chain Engineering (45 credits)

25	*Credits of Industrial Engineering Core Courses*		
	INDU 6121	Applied Optimization	4.00
	INDU 6211	Production Systems and Inventory Control	4.00
	INDU 6310	Applied Probability and Statistics for Engineers	4.00
	INDU 6311	Discrete System Simulation	4.00
	INDU 6990	Industrial Engineering Capstone	9.00
16	*Credits minimum chosen from Area Courses:*		
	INDU 6141	Logistics Network Models	4.00
	INDU 6151	Decision Models in Service Sector	4.00
	INDU 6161	Design and Operations of Supply Chain Networks	4.00
	INDU 6251	Facilities Planning and Warehouse Operations	4.00
4	*Credits of Elective Courses:*		
	INDU courses (Topic Area E12 – Industrial Engineering)		
	MECH courses		
	ENCS courses (Topic Area E01 - Mathematical Methods)		

Option IV. Industrial Optimization and Systems Analytics (45 credits)

25	*Credits chosen from Industrial Engineering Core Courses*		
	INDU 6121	Applied Optimization	4.00
	INDU 6211	Production Systems and Inventory Control	4.00
	INDU 6310	Applied Probability and Statistics for Engineers	4.00
	INDU 6311	Discrete System Simulation	4.00
	INDU 6990	Industrial Engineering Capstone	9.00
16	*Credits ~~minimum chosen from~~ Area Courses:*		
	~~INDU 6151~~	~~Decision Models in Service Sector~~	~~4.00~~
	INDU 6361	Discrete Optimization	4.00
	INDU 6371	Stochastic Optimization	4.00
	~~INDU 6521~~	~~Quantitative Methods in Healthcare Systems~~	~~4.00~~
	INDU 6611	Applied Industrial Systems Analytics	4.00
	~~COMP 6321~~	~~Machine Learning~~	~~4.00~~
4	*Credits ~~maximum~~ chosen from ~~Area~~ Elective Courses ~~chosen from the Engineering and Computer Science Courses section.~~*		

Option V. Reliability and Maintenance Engineering (45 credits)

~~The reliability and maintenance option aims at training engineers and computer scientistswho have a desire to explore a career in the reliability and maintenance management area. Students in this option must select their elective courses from the department mostclosely relevant to their undergraduate studies.~~

~~41~~	*~~Credits of Area Core Courses~~*		
	~~INDU 6310~~	~~Applied Probability and Statistics for Engineers~~	~~4.00~~
	~~INDU 6321~~	~~Introduction to Six Sigma~~	~~4.00~~
	~~INDU 6331~~	~~Advanced Quality control~~	~~4.00~~
	~~INDU 6351~~	~~System Reliability~~	~~4.00~~
	~~INDU 6381~~	~~Applications of Reliability Engineering~~	~~4.00~~
	~~INDU 6391~~	~~Reliability and Maintenance for Design and Manufacturing~~	~~4.00~~
	~~INDU 6421~~	~~Systems Safety Engineering and Management~~	~~4.00~~
	~~INDU 6341~~	~~Advanced Concepts in Quality Improvement~~	~~4.00~~
	INDU 6990	Industrial Engineering Capstone	9.00
4	*Credits ~~maximum of Area~~ Elective Courses ~~from the Engineering and Computer Science Courses section~~*		

Option IV. Industrial Optimization and Systems Analytics (45 credits)

25	*Credits chosen from Industrial Engineering Core Courses*		
	INDU 6121	Applied Optimization	4.00
	INDU 6211	Production Systems and Inventory Control	4.00
	INDU 6310	Applied Probability and Statistics for Engineers	4.00
	INDU 6311	Discrete System Simulation	4.00
	INDU 6990	Industrial Engineering Capstone	9.00
16	*Credits of Area Courses:*		
	INDU 6111	Theory of Operations Research	4.00
	INDU 6361	Discrete Optimization	4.00
	INDU 6371	Stochastic Optimization	4.00
	INDU 6611	Applied Industrial Systems Analytics	4.00
4	*Credits chosen from Elective Courses :*		
	INDU courses (Topic Area E12 – Industrial Engineering)		
	MECH courses		
	ENCS courses (Topic Area E01 - Mathematical Methods)		

Option V. Reliability and Maintenance Engineering (45 credits)

25	*Credits of Industrial Engineering Core Courses:*		
	INDU 6121	Applied Optimization	4.00
	INDU 6211	Production Systems and Inventory Control	4.00
	INDU 6310	Applied Probability and Statistics for Engineers	4.00
	INDU 6311	Discrete System Simulation	4.00
	INDU 6990	Industrial Engineering Capstone	9.00
16	*Credits of Area Courses:*		
	INDU 6351	System Reliability	4.00
	INDU 6381	Applications of Reliability Engineering	4.00
	INDU 6391	Reliability and Maintenance for Design and Manufacturing	4.00
	INDU 6421	Systems Safety Engineering and Management	4.00
4	*Credits chosen from Elective Courses :*		
	INDU courses (Topic Area E12 – Industrial Engineering)		
	MECH courses		
	ENCS courses (Topic Area E01 - Mathematical Methods)		

Option VI. Industrial Engineering General Stream (45 credits) 25 *Credits of Industrial Engineering Core Courses* INDU 6121 Applied Optimization 4.00 INDU 6211 Production Systems and Inventory Control 4.00 INDU 6310 Applied Probability and Statistics for Engineers 4.00 INDU 6311 Discrete System Simulation 4.00 INDU 6990 Industrial Engineering Capstone 9.00 ~~16~~ ~~*Credits minimum chosen from Area Electives from courses listed under Topics Area* E12 – Industrial Engineering~~ ~~4~~ ~~*Credits maximum of General Electives chosen from courses listed under the topics areas in the Engineering Courses andComputer Science Courses sections*~~	Option VI. Industrial Engineering General Stream (45 credits) 25 *Credits of Industrial Engineering Core Courses* INDU 6121 Applied Optimization 4.00 INDU 6211 Production Systems and Inventory Control 4.00 INDU 6310 Applied Probability and Statistics for Engineers 4.00 INDU 6311 Discrete System Simulation 4.00 INDU 6990 Industrial Engineering Capstone 9.00 20 *Credits chosen from Elective Courses :* *INDU courses (Topic Area* E12 – Industrial Engineering) *MECH courses* *ENCS courses (Topic* Area E01 - Mathematical Methods)
Rationale: The proposed changes update the list of core area courses and area elective courses of the different options of the MEng program in Industrial Engineering. The main goal is to provide more flexibility to students when some of the required courses are not offered on a regular basis or there is not enough space to register in them.	
Resource Implications: None	

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **MECH-129** VERSION: 4

COURSE CHANGE: MECH 6761 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical Engineering
Degree: MEng, MASc, PhD
Calendar Section/Graduate Page Number: Engineering course descriptions

Type of Change:

[ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite
[X] Course Description [ ] Editorial [ ] New Course
[ ] Course Deletion [ ] Other - Specify:

Present Text (from 2020/2021) calendar	**Proposed Text**
MECH 6761 Vehicular Internal Combustion Engines (4.00 credits) *Description:* Mechanical design of vehicular engines; gas exchange and combustion engine processes; combustion chambers design; fuels and fuel supply; ignition and control systems; cooling and lubrication of engines; emissions formation and control; engine operational characteristics - matching with vehicles; enhancement of engine performance; engine testing; environmental impact of vehicular engines; recent developments ~~in energy- efficient and "clean" engines. Design of calculation project of vehicular engine. Project work on alternative fuel delivering systems and emissions control for combusion engines. Modelling and simulation. Demonstration of alternative fuel injection system on diesel engine in lab.~~ *Component(s):* Lecture. *Notes:* ▪ This is a cross-listed course.	MECH 6761 Vehicular Internal Combustion Engines (4.00 credits) *Description:* This course focuses on analysis and design principles surrounding the mechanical design of vehicular engines. The specific topics covered include: basic thermodynamic cycle analysis, gas exchange and combustion engine processes, combustion chambers design,fuels and fuel supply, ignition and control systems, cooling and lubrication of engines, emissions formation and control, engine operational characteristics - matching with vehicles, enhancement of engine performance, engine testing, environmental impact of vehicular engines, hybrid systems, and new developments and new trends in internal combustion engines. Students simulate a real internal combustion engine using models of the different processes covered. Students complete a project on the design of a vehicular engine. *Component(s):* Lecture. *Notes:* ▪ This is a cross-listed course.

Rationale:
The current course outline (1) indicates activities that no longer are taking place in the course (the demonstration of alternative fuel injection system), (2) specifics the topic of the project, which is no longer current, and (3) is not in phase with the cross-listed undergraduate course MECH 454. Moreover, the form of the course outline is outdated and should be changed from a list of topics separated by semi-colons to a set of full sentences. There is also a typo in the word "combustion".

Resource Implications:
None.

Other Programs within which course is listed:

None.

OFFICE OF THE VICE-PRESIDENT,
RESEARCH AND GRADUATE STUDIES

INTERNAL MEMORANDUM

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

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

Date: May 04, 2021

Subject: **University Recognition of Research Unit –**
Concordia Materials Characterization Platform (CMCP)

The Research Committee (of Senate) met on April 23, 2021 to review the submission dossier of the ***Concordia Materials Characterization Platform (CMCP),*** for University recognition. A research unit, recognized by the University, is expected to meet a set of criteria before it can be deemed "recognized". Committee members agreed that CMCP met the criteria outlined in the Policy for Research Units.

Research Unit	Category	Director	Faculty
Concordia Materials Characterization Platform (CMCP)	Emerging Infrastructure Platform	Dr. Mamoun Medraj (Mechanical, Industrial & Aerospace Engineering)	Gina Cody School of Engineering and Computer Science

The Research Committee is therefore pleased to recommend to Senate that it grant University-recognized status to the ***Concordia Materials Characterization Platform (CMCP)*** in accordance with the Policy on Research Units (VPRGS-8).

The director will be informed of the Senate decision and will be reminded of the requirement to submit an annual report describing its operations and financial status to the VPRGS, as set out in the *Procedures* document accompanying VPRGS-8.

Thank you.

Université Concordia University
GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
Office of the Dean

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

April 19, 2021

Dear Dr. Wood-Adams,

The Gina Cody School of Engineering and Computer Science (GCS) conveys its strongest support to the application for instating the Concordia Materials Characterization Platform (CMCP) as an emerging University Platform.

The request to establish a university-wide materials characterization platform fits perfectly into two of the university's fastest developing research areas; advanced materials and nontechnology, and environmental sustainability. The research activities in these areas are heavily dependent on analytical and experimental tools for materials characterization. This new infrastructure platform is crucial for future research and development in the aforementioned areas.

This platform will host cutting-edge research facilities that cover a wide spectrum of materials characterization. Twenty-eight professors and their HQPs are the principal users of the platform's equipment, along with fifteen external users. The platform will provide the necessary environment for the training and education of HQPs at the edge of characterization research tools related to their research areas and projects. Its mandate is to provide a grouping of the instruments related to advanced materials and nanotechnology and environmental sustainability, with the aim of hiring a full-time Materials Characterization Specialist will maximise the use of equipment, promote the training of students, perpetuate the expertise within Concordia University and give access to resources and expertise to the scientific community, along with industrial users. The equipment in this platform are located in very close proximity which facilitates access, utilization and management.

The nature of this platform is perfectly aligned with the *Concordia University Infrastructure Platform Program* criteria. The scope of the proposed platform is too broad and large to fit some of the governmental research funding programs. Combining the existing equipment pool in addition to the soon-to-arrive ultra-high resolution STEM, is very cost efficient and the investments by Concordia is proof of the University's commitment to support and enhance research and HQP training.

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The CMCP will enable the advancement of research on complex materials. The CMCP incorporates key equipment, which include:

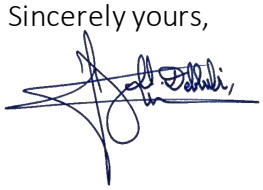
- X-Ray Diffractometer (XRD)
- Environmental Scanning Electron Microscope (ESEM)
- Scanning Transmission Electron Microscope (STEM)
- Ultra high temp. Differential Thermal Analyzer (TGA)
- Differential Scanning Calorimeters (DSC)
- Confocal microscope
- Atomic Force Microscope (AFM)
- Vickers micro-hardness tester
- Sum Frequency Generation (SFG) spectroscope
- Inductive Coupled Plasma (ICP-OES)
- Wetting behavior of different surfaces
- Pressure-Composition-Temperature (PCT) instrument
- Porositometer

The CMCP was unanimously recommended by the GCS Faculty Research Committee on November 25, 2019. Dr. Mamoun Medraj is the designated Director of the Platform for a three-year term. He is strongly supported by the members of the platform, the advisory committee, the involved academic units and the Gina Cody School of Engineering and Computer Science. The recognition of the CMCP as an emerging university platform will provide critical support to the Concordia researchers in upholding a world-class experimental and training environment with additional research funds, collaborations, co-supervisions and leadership at both provincial and national levels.

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

In the light of these major achievement and the exceptional opportunity this would provide the GCS and indeed the University community, I committedly express my strongest support to the recognition of the Concordia Materials Characterization Platform as an emerging university platform.

Sincerely yours,



Mourad Debbabi, PhD.
Professor and Interim Dean,
Gina Cody School of Engineering and Computer Science

Concordia Materials Characterization Platform (CMCP)

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

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

Evaluation Criteria Requirements

Infrastructure Platform Mission and Objectives:

- The Concordia Materials Characterization Platform (CMCP) hosts cutting-edge research instruments that support a wide spectrum of materials characterization activities. The CMCP equipment is used mostly for research in the fields of advanced materials and environment sustainability.
- The CMCP aims to provide a robust and comprehensive research platform for studying the structural and chemical characteristics of materials with the objective of improving mechanical, thermal and electrical properties of materials such as polymer, metal, ceramic, semiconductors, composites, etc.
- The combination of characterization tools in the platform enables researchers and HQP to answer complex materials structure questions, on all length scales and concentration levels, from bulk to surface samples and from the macroscopic to the nanoscopic range.
- The platform instruments complement one another, and administering these in one consolidated infrastructure platform helps maximize the use of the equipment, promote the training of students, perpetuate expertise within the university, and give access to resources and expertise to the scientific community and industrial users.
- The equipment systems within the CMCP are currently installed in various individual laboratories on the SGW campus, meaning that access to the equipment for its use by the researchers is not optimal nor is the support that can be provided for training, operation and maintenance. However, the CMCP is now centralizing several pieces of equipment used for materials characterization in one location. This will consolidate instrumentation in a central common space and have it supported by full-time platform staff, which will help concentrate, maintain, evolve and make materials characterization expertise available while promoting and improving HQP training activities.

Directorship:

- Director: Dr. Mamoun Medraj (Mechanical, Industrial & Aerospace Engineering).
- Initial term length of three years, renewable.

Infrastructure Platform Resources:

- Physical resources:
    - The CMCP infrastructure includes analytical and imaging instrumentation to help carry out novel research in many areas such as advanced materials, coatings and surface treatments, environmental studies, and nanotechnology.
    - All equipment is currently located on the SGW campus in individual laboratories: some instruments will soon be moved and installed in the new Materials Characterization Laboratory that is currently being renovated in the 2nd basement of the EV building.
    - The main platform instruments are the following:
        - X-Ray Diffractometer (XRD) – acquired in 2010

        - Environmental Scanning Electron Microscope (ESEM) – acquired in 2013
        - Ultra High Resolution Scanning Transmission Electron Microscope (STEM) – NEW (2021)
        - Ultra High Temperature Differential Thermal Analyzer (TGA) – acquired in 2012
        - Differential Scanning Calorimeters (DSC) – acquired in 2004
        - Confocal Microscope – acquired in 2017
        - Atomic Force Microscope (AFM) – acquired in 2003
        - Vickers Micro-Hardness Tester – acquired in 1990
        - Sum Frequency Generation (SFG) Spectroscope – acquired in 2006
        - Inductive Coupled Plasma (ICP-OES) – acquired in 2006
        - Pressure-Composition-Temperature (PCT) Instrument – acquired in 2011
        - Porositometer – acquired in 2018
        - Equipment for Wetting behaviour of various surfaces – acquired in 2015
- Human resources:
    - Platform Manager (part-time): the platform manager provides logistical support to the platform, including scheduling and providing access to the equipment to users and students, receiving and processing internal and external requests for usage of infrastructure, arranging for payment of user fees and other costs, coordinating maintenance activities, maintaining equipment documentation and procedures, usage of consumables and supplies, etc.
    - Materials Characterization Specialist (full-time): the Material Characterization Specialist will support users of all platform instruments (with 50% of time to be spent on STEM operation), expertly helping researchers, students and other users to maximize capabilities of equipment for their research needs (acquiring the necessary data and analyzing results).
- Funding:
    - The platform benefits from funding through the RQMEM CFI project for part of the Materials Characterization Specialist salary. User fees are already generated for some of the equipment to help support other platform costs.
    - The OVPRGS Infrastructure Platform funding would be used to help cover the balance of the remuneration costs for the Materials Characterization Specialist.

Infrastructure Platform Users and Research Productivity:

- As listed in the application documents, the CMCP has twenty-five Concordia users and eighteen external users (about half from other institutions and half from industry). Twenty-two Concordia users come from academic units within the Gina Cody School of Engineering and Computer Science, and three Concordia users come from departments in the Faculty of Arts and Science.
    - In the Gina Cody School of Engineering and Computer Science, users are from the Departments of Mechanical, Industrial and Aerospace Engineering (Basenga Kiyenda, Drew, Hoa, Hojjati, Kwok, Medraj, Moreau, Narayanswamy, Packirisamy, Pugh, Shadmehri, Stiharu and Wuthrich); Building, Civil and Environmental Engineering (Elektorowicz, Haghighat, Mulligan, Nokken, Rahaman, Ramamurthy and Soliman), Chemical and Materials Engineering (Wood-Adams and Ye), Electrical and Computer Engineering (Kahrizi and Zhang). Two users have joint appointments with Chemical and Materials Engineering (Moreau and Wuthrich).
    - In the Faculty of Arts and Science, users are from the Departments of Biology (Whiteway), Chemistry and Biochemistry (Capobianco) and Physics (Vo-Van).
- Concordia users include two T1 Canada Research Chairs (Moreau and Whiteway) and four T1 Concordia University Research Chairs (Capobianco, Haghighat, Mulligan and Wuthrich).
- In addition, the platform users have significant operating funding from individual and collaborative external research grants and contracts, from CFI Infrastructure Operating Funds, and from various internal programs.

Highly Qualified Personnel (HQP) Training:

- The CMCP provides the necessary environment for the training of graduate students and other highly qualified personnel on materials characterization research tools related to their research projects.
- The approximate number of HQP that have used the platform infrastructure in 2019 was estimated to be between 300 and 350, based on the number of hours of use of the infrastructure and the number of reserved sessions. With the addition of the full-time Materials Characterization Specialist, this number is expected to grow significantly with the equipment becoming more accessible in relation to the development of the platform.

External Research Partnerships and Cooperation with Scholars from Outside Concordia:

- Existing external equipment users come from various Québec universities (École de Technologie Supérieure, Polytechnique Montréal, McGill University), from the National Research Council of Canada, and from industry partners such as Rolls Royce Canada, Alstom, EthosEnergy, EnviroSpace, Thermoceramix and Eutectic Canada.
- The infrastructure platform will serve as the Concordia node for the *Réseau Québécois de microscopie électronique des matériaux* (RQMEM). This network, established in relation to a CFI Innovation Fund project and to which Concordia is a founding member, regroups researchers from various disciplines that use electronic microscopy tools and techniques for research of advanced materials. The network shares the equipment available in its various nodes for the greater benefit of the research community.
- Discussions have also begun with a similar laboratory at École de Technologie Supérieure to potentially establish partnerships and maximize complementarity.

Governance Structure:

- Director: The Director coordinates the Infrastructure Platform and is responsible for the day to day administration of the equipment in the platform in consultation with the assembly of the CMCP users. The Director will oversee the coordination of the activities including student training, outreach and special events, as well as managing communications both within the Platform and externally to other users. The Director has the day-to-day responsibility for staff operations as well as ensuring that the Platform conforms to the relevant Collective Agreements and policies in effect within the University, and is responsible for the budget, annual reports and other review materials.
- Management Committee: The operations and budget of the CMCP is overseen by its Management Committee (assembly of original owners of the instruments in the platform – Drs. Drew, Medraj, Moreau, Pugh and Wood-Adams). The Committee will meet two times per year to discuss and review the operations and budget of the CMCP. It also plans for acquisition of new equipment and upgrades.
- Advisory Committee: While there is currently no formal Advisory Committee for the CMCP, the Management Committee is expected to function as an informal Advisory Committee for the first year of operation as a university-recognized infrastructure platform. It is expected that, after that initial period, the Management Committee will either be modified to become a formal Advisory Committee with external representation or that such a committee will be formally created.

CMCP Development Plan (2021-2025):

- In addition to formally establishing the Advisory Committee structure for the CMCP, it is expected that the following development activities will take place in the first four years of operation as a university-recognized emerging infrastructure platform:

    - The current equipment included in the platform is considered a nucleus for a much larger group of instruments. Additional researchers will be contacted in the coming months to further advertise the platform and improve its instrumentation complement.
    - NSERC RTI, MEI and CFI applications are expected to further contribute to development of the platform (e.g. an RTI application for a state-of-the-art High-temperature Fretting Apparatus for engine-relevant conditions was recently submitted – equipment would be managed by the CMCP if successful).
    - Additional planning is taking place to acquire or develop grant applications to fund the acquisition of the following items:
        - *In situ* tribometer to obtain direct visualization of the dynamic mechanical and chemical changes within the sliding interfaces;
        - ASTM G65 abrasion testing equipment used notably for pre-screening of thermal spray coatings;
        - Scratch tester to measure adhesion of thin film coatings;
        - Abradable rig to measure clearance materials in gas turbine engines;
        - XRD dedicated for residual stress measurements.
    - New hires joining the University will be encouraged to use the infrastructure platform and, when pertinent, additional equipment that they manage can be added to the platform.
- Training plans will be developed for platform equipment, to benefit researchers and HQP. These will vary from basic introductory training on various equipment capabilities to more detailed training on operation and data analysis, to be tailored to the users' needs.
- A 20% annual increase in usage of the platform equipment by students and other highly qualified personnel is expected in the first four years of operation, notably because of the presence of full-time staff that can help maximize the usage of the existing equipment and the improved visibility that the university recognition of CMCP will provide.
- The CMCP will also explore the potential for collaboration with researchers located at Loyola, notably those that are members of CeNSR.

UNIVERSITÉ Concordia UNIVERSITY

OFFICE OF THE VICE-PRESIDENT,
RESEARCH AND GRADUATE STUDIES

US-2021-4-D17

INTERNAL MEMORANDUM

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

From: Anne Whitelaw, Interim Provost and Vice-President, Academic
Paula Wood-Adams, Interim Vice-President, Research and Graduate Studies

Date: May 04, 2021

Subject: Senate approval of the new proposed **School of Health**

We are pleased to submit for Senate approval a proposal for a new School of Health.

Overview of Process

The background and consultative process for the new School of Health is provided in detail in the attached proposal document. On March 1, 2021, a joint Senate Research Committee/Academic Planning and Priorities Committee meeting took place to review a draft document proposing the creation of a School of Health at Concordia University. The joint committee approved that the draft be sent to Faculty Councils and Council of School of Graduate Studies, for consultation and input. The consultation period also included visits and presentations with different academic units, including presentations to specific departments who had reached out for more information, and wanted to provide additional feedback. In addition, two Town Halls were held for the entire University research community – inviting members to submit feedback and comments through an email specifically created for this purpose. The Office of the Vice-President, Research and Graduate Studies, and the Office of the Provost then compiled and reviewed all feedback, producing an updated proposal document, which was brought back to a joint Senate Research Committee/Academic Planning and Priorities Committee meeting on April 23, 2021. The joint committee reviewed the updated document, providing some final remarks and feedback, to finalize the document; a *majority* of members of the joint committee recommended that the updated document be sent to Senate for approval. Following Senate approval, the proposal will be submitted to the Board of Governors.

Highlights of the new proposed School of Health

- The School of Health will be led by a dean with dual reporting to the Vice-President, Research and Graduate Studies and the Provost and Vice-President, Academic. The School will not have departments; faculty will be affiliate members of the School.
- The School proposes a structure built around three transversal Hubs, reflecting existing research strengths across the university: **Community Health Hub/ Clinical Research and Prevention Hub/ Biomedical Science and Engineering Research Hub.** The Hubs are designed to facilitate interdisciplinary research within and across them. Seed research funding and other activities will be available to encourage collaborations across Hubs.
- The School of Health will support existing PhD programs in the Faculties including (but not limited to) the PhD in Psychology and the PhD in Health and Exercise Science. Building on the strengths of the research supported by the School, interdisciplinary PhD programs will be developed to support the training of HQP.
- The School of Health is expected to have a major impact on Concordia's recruitment efforts of highly-talented students, faculty and personnel. It is expected to have an extraordinary impact externally by creating new opportunities for meaningful partnerships, and strengthening existing relationships with the health sector.

Concordia University's Proposed School of Health

Executive summary

Concordia University has a long history of high-impact research and training in a wide array of health areas and is uniquely positioned to pioneer new approaches to health research and education through the creation of an interdisciplinary **School of Health.** The following proposal outlines the background and consultation process around the original Health Initiative leading to the School's proposed areas of concentration, which are based on existing strengths and capacity in a wide range of health fields and focuses on a proposed structure and governance model.

The School will build on, leverage, and enhance our existing base of high-quality and wide-ranging research expertise that has resulted in federal, provincial, and philanthropic funding. The School will focus on and benefit from federating our existing areas of health research expertise. The School proposes the creation of three Hubs in order to promote and enhance collaboration across multiple fields. These Hubs would be: (1) **Community Health Hub**, (2) **Clinical Research and Prevention Hub** and (3) **Biomedical Science and Engineering Research Hub**. A sampling of Now stories about health-related research activities are included in Appendix B.

Of Concordia's 24 university-recognized research units, nine are in health (see attached org chart for list), or health-related, fields. Additionally, 27 active research chairs (CRC, CURC, Professorships) and five Honorary CURCs identify with health fields. The proposed structure anticipates the active involvement of these units and chairs in order to leverage the opportunity for additional collaborations, funding, and benefit from the School's resources. Further, affiliating or aligning with the proposed School will in no way impact the current university resources devoted to supporting any research centre or academic unit. In addition to recruiting some new research support personnel, the School will also leverage the important staff expertise and outstanding infrastructure capacity at the PERFORM Centre so that these resources can be more widely deployed in support of all health researchers at Concordia.

The School will focus on training the next generation of researchers while empowering individuals and stakeholders with new knowledge in order to be valued as solutions-oriented partners in community and user-centred approaches to addressing health challenges. Further, the School will be a leader in core fundamental health sciences, medical technology development and will influence health policy to the benefit of our health-care system and ultimately our society and economy.

Background and consultative process

The proposal to create a Health Institute was a key recommendation linked to the "Double our Research" Strategic Direction in 2015. An extensive consultation was started in 2016 and led by the Office of the Vice-President, Research and Graduate Studies. Building on the known research excellence and capacity of departments such as Psychology and Health, Kinesiology and Applied Physiology (then Exercise Science), a wider net was cast through both individual and group meetings with researchers

who identified as having health-related research interests across all four Faculties. The health research community grew to more than 100 faculty members and ongoing conversations amongst those researchers and with the OVPRGS resulted in 11 possible research themes for an Institute. We examined comparable structures at other universities and found that the Institute, as conceived by Concordia, had few comparators. The University of Northern British Columbia Health Research Institute and the McGill University Health Centre Research Institute, both outlined in Appendix A, were the closest.

These initial meetings were then followed by mapping exercises, focus groups and networking opportunities all designed to identify Concordia's research and teaching strengths in health across all four of the university's Faculties. These consultations resulted in the identification of over 150 faculty members and consensus on six transdisciplinary clusters, under the umbrella of the Health Initiative, that best represented Concordia's expertise: **Biomedical Fundamentals, Preventive Health, Health and Technology, Health Policy and Governance**, **Health and Wellbeing,** and **Health Interventions.** The Health Initiative's primary focus was to capitalize on the interdisciplinary nature of the clusters in order to showcase expertise and build new collaborations.

Momentum to continue building the Initiative into the more formal Institute led to more informal consultations, with approximately 20 of the university's leading and most heavily-funded health researchers. These consultations were useful in further refining and narrowing the vision for health research at Concordia. This consultation also reinforced the enthusiasm within the community for a major Concordia initiative around health linked to the six themes previously identified but with a bolder vision and structure. In summer and fall of 2020, the Interim Provost and Vice-President, Academic and the Interim Vice-President, Research and Graduate Studies led a series of meetings with the Deans of the four Faculties, the Dean of the School of Graduate Studies and the University Librarian at Academic Cabinet. These discussions produced a strong consensus across the university's academic leadership team in favour of the creation of a School of Health led by a Dean.

In February 2021, a broad community wide consultation process was launched about the concept of creating a School of Health. This consultation process included 2 town halls, joint meetings of Senate Research Committee and Academic Planning and Priorities Committee, all faculty councils and the council of SGS as well as special meetings requested by the departments of Psychology, Biology and Health, Kinesiology and Applied Physiology. A web site was available with the original proposal document and an email address was available for sending feedback. Feedback from all of these activities was compiled, synthesized and then incorporated into this proposal where appropriate. Throughout these consultations we heard both support for the proposed School of Health as well as concerns around structure, financial sustainability, research and administrative support, and the consultation process itself. The current document reflects, and has been enriched by these discussions, as well as the questions and comments received over the past three months.

Orientation and Structure

Considering the contrasting depth of expertise associated with each of the six proposed clusters, the important investments that the university has made to build capacity in targeted areas of health

research, and the value of having a focused approach, the School proposes a structure built around three transversal Hubs:

Community Health Hub

This hub examines factors that contribute to healthy lives and healthy living, along with research that evaluates the effects and impact of public policies that address health issues.

This Hub will play to Concordia's demonstrated strengths around community-based research work that takes place in all four Faculties and many research centres and will promote collaboration with the newly-launched Next Generation Cities Institute as well as the Sustainability Action Plan and the UN Sustainable Development Goals. This Hub will include researchers from a wide range of disciplines in the social sciences, humanities and fine arts as well as business and some science and engineering researchers..

Clinical Research and Prevention Hub

This hub will focus on interdisciplinary research that improves and sustains long-term health, including the study of measures to prevent disease as well as research that investigates specific health problems and behaviours, mechanisms and interventions, in order to assess and intervene to improve them.

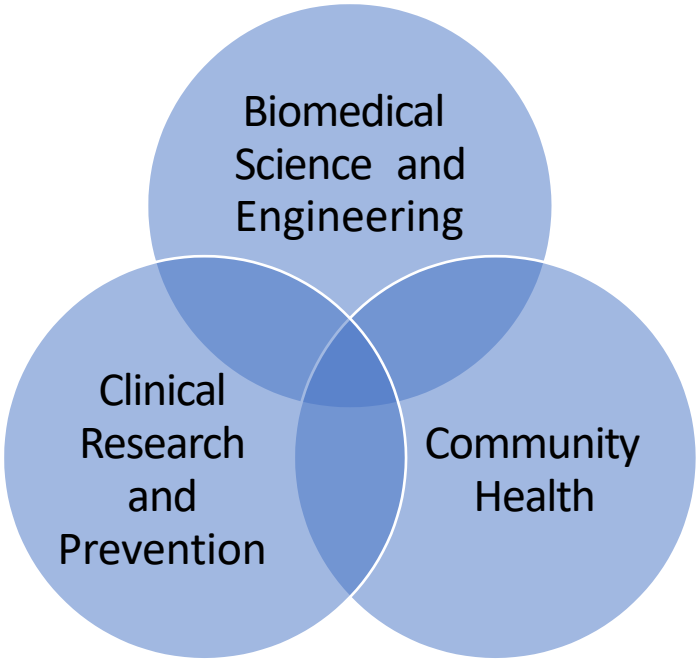
This Hub will build on the success of PERFORM, which has prevention-related research at its core while also benefiting from the outstanding research and training of centres such as CCRH and CRDH and of the Department of Health, Kinesiology and Applied Physiology. Researchers linked to this Hub will be from departments such as HKAP, Psychology, Applied Human Sciences, Biology, Chemistry and Biochemistry, Physics, Creative Arts Therapies, Electrical and Computer Engineering, Computer Science and Software Engineering, and CIISE.

Biomedical Science and Engineering Research Hub

The research in this hub examines the underlying health mechanisms to inform and guide health research and research that advances new technologies to optimize health care and health research.

This Hub will give visibility to the importance of Concordia's fundamental science and technology research in the health sphere. It will greatly facilitate external communication to stakeholders about the scope and depth of the university's profile in biomedical science and engineering, as well as entrepreneurship. This Hub will include researchers from departments such as Psychology, Biology, Physics, Chemistry and Biochemistry, Electrical and Computer Engineering, Computer Science and Software Engineering, Mechanical, Industrial and Aerospace Engineering, CIISE, Design and Computational Arts, Studio Arts, Music, and Finance.

The Hubs are designed such that overlap in potential research areas exists and should be pictured as a Venn diagram. Seed research funding and other activities will be available to encourage collaborations across Hubs.



Academic Programs

The School of Health will support existing PhD programs in the Faculties including the PhD in Psychology and the PhD in Health and Exercise Science. The School will develop and offer its own PhD programs. Programs that have emerged as the most likely interdisciplinary programs to be hosted at the School include: a PhD in Biomedical Sciences and Engineering, and a PhD in Community Health. Following approval of the School, a full analysis and mapping will be conducted in order to develop the most appropriate programs with the regular curriculum approval process to follow. Well-designed PhD programs in the specific areas of the three Hubs are essential in order to bring new FTE funding to the university and to allow the research activities of the School to flourish. Biomedical Sciences and Engineering and Community Health have been initially identified as areas where there is an important niche opportunity for Concordia to develop new PhD programs that can adequately train the next generation of researchers and scholars in health. Combined with existing PhD programs in the Faculties, Concordia will then be able to provide a comprehensive suite of options for future students. In addition, a new pool of Horizon postdoc positions will be created to support talent recruitment and research. Conservatively, we anticipate each PhD program to operate with a cohort of 10 incoming students per year. Students will take core courses delivered by each program within the School as well as elective courses from departments outside the School. For revenue-generating purposes, we will also take advantage of the ability to allow registrations to Senate-approved programs while the government approval process is ongoing.

Administrative, operations and governance

The goal is to keep the School of Health administratively light and nimble. The School of Health will be led by a dean with dual reporting to the Vice-President, Research and Graduate Studies and the Provost and Vice-President, Academic without departments or its own faculty members. Models at York University and Simon Fraser University were reviewed and both are led by a dean, however, SFU has no departments and most closely represents how Concordia's School of Health is envisioned (see Appendix A). The proposal to create a new dean is not made lightly and is meant to emphasize the critical importance of health in both research and training. The dean will have a voice at Academic Cabinet along with the Faculty deans, the Dean of Graduate Studies, and the University Librarian and increase the visibility of health research at that level.

The creation of the School of Health means that the PERFORM Centre as a separate operational unit will cease to exist as it is absorbed into the School. This includes the current position of Scientific Director as each of the Hubs will have a dedicated scientific director appointed and its own coordinator. All current structures and processes in place at PERFORM, including membership and application to conduct research, will be reviewed and assessed in order to retain what is most advantageous to the School's operations. PERFORM's staff and infrastructure will be maintained as the foundation of the School and will be available to all School of Health members as additional resources to existing departmental and research centre infrastructure and personnel.

The responsibilities of the current staff complement of PERFORM will be assessed and reassigned, as appropriate, to support the overall operations of the School. While the PERFORM Centre infrastructure will be available for all researchers who choose affiliation with the School of Health, the Hubs are expected to operate virtually and without walls as the interdisciplinary and cross-Faculty nature of the research and collaborations will be one of the School's greatest strengths. Additionally, all existing support offered to academic programs will be maintained.

Operationally, the PERFORM Centre's infrastructure platforms and staff are key resources for the successful implementation of a new School of Health. While PERFORM's existing platforms naturally lend themselves to specific Hubs, they can nevertheless benefit the research that will emerge from all three Hubs. The same is true of the existing staff who already support the research of faculty members from all four Faculties and several research units. Further, the six research clusters are naturally interdisciplinary and fluid and the expectation is increased collaboration promoted through consolidation in the School.

The School will benefit from a health-specific research mobilization platform, which at first will involve assessing the capacity and expanding the current mandates of existing staff in several units to include support to the School. An assessment will be conducted in order to determine where new positions should be added. These will be staffed by individuals with health and/or medical backgrounds and expertise. They will support both the research operations of the School and its new PhD programs. Areas currently identified include business and research development, knowledge mobilization, and fundraising. The School expects to also take advantage of closer collaboration with units such as the Office of Community Engagement, SHIFT and District 3.

The proposed structure includes support and guidance by both an Executive Committee and an External Advisory Board. The Executive committee would be composed of the dean, the scientific directors of each hub, the graduate program directors as well as cluster and graduate student representation. This will be a critical body to ensure that the interdisciplinary activities, directions, and goals of the School are mapped out and monitored. The External Advisory Board will include senior administrators and the scientific directors, and be complemented by external leaders in various aspects of the health ecosystem. The exact composition of both bodies would be decided following the appointment of the dean. More details on the proposed structure can be found in the attached organizational chart.

Financial implications

The start-up phase of the School will be supported through PERFORM's existing operating budget. There are substantial human resources and research support envelopes available to support the School. The main new cost will come with the appointment of the dean and appropriate compensation to administrative appointments. Expected financial support will come from increased enrolments and the overhead from increased success in research funding.

The academic and research missions of the School will be supported by faculty members who will maintain their home departments in our existing Faculties while becoming affiliates in the School. To avoid the perception that the School is negatively affecting existing programs, the home departments with faculty members teaching in the School will be compensated financially for teaching activities that occur outside the department. In addition, a portion of the FTEs associated with graduate supervision will be assigned to the home departments of the supervisors. Researchers will be compensated for their graduate student supervision in the School by their faculty consistent with their own practices.

The full assessment of the operational needs and related costs will start following approval and will be further developed with the arrival of the dean. We can expect costs related to the School to come from several quarters, including enhanced Library resources. However, the overarching goal is to respect the autonomy of existing departments and research units as well as their resources. A summary of the provisional budget is presented in an appendix to this document.

Ambition and objectives

The goal of the proposed School of Health is to sustainably enhance the quality of life for people and communities by innovating collaboration-driven, high impact health research and training that harnesses Concordia's unique transdisciplinary strengths and rich, cross-sector partnerships. The School is an important manifestation of Concordia's commitments to the UN Sustainable Development Goals and its efforts to deliver well-being and social justice for all. In particular, the School of Health will contribute directly to the 3rd, 4th, 5th and 10th sustainable development goals, respectively Good Health and Wellbeing, Quality Education, Gender Equity and Reduced Inequalities.

The School is to be a global reference point for next-generation approaches to health research and training focused on enhancing the quality of human life and the innovative design of healthy communities, including for the majority of the world's population who live in urban areas and those who live in more remote locals. In this way, the orientation of the School is complementary to another important Concordia initiative, the Next-Generation Cities Institute.

The School of Health is expected to have a major impact on Concordia's recruitment efforts of highly-talented students, faculty and personnel and is expected to have an extraordinary impact externally by helping Concordia to become a real presence in the health sphere, creating new opportunities to develop meaningful partnerships and take existing ones to a new level.

Next Steps

Senate and Board of Governors approval of the structure and the position of dean is the first step in the School's development. Following approval, critical consultations with the research community will be conducted that will start to build a robust vision and mission for the School.

To guide this next phase, interim scientific directors will be named from within the Concordia health research community for initial mandates of two years. This allows the dean to join Concordia with a stable team in place as well as provide continuity at the start of the dean's appointment. The interim scientific directors will create and lead working groups tasked with driving the School's priorities and fully-defining its goals and how these are best-represented structurally. As these groups work to define and demonstrate the interdisciplinarity of the School, the traditional, linear structure may be replaced by a more graphic image such as the Venn diagram presented earlier symbolizing the fluidity of the School's activities.

The initial consultation period that resulted in the six clusters was extremely useful in identifying the range of Concordia's health expertise. We fully expect this next phase to further build on this as increased interest has become apparent from additional faculty members in JMSB, Fine Arts and the Social Sciences and Humanities in Arts and Science. It is expected that the existing clusters may be expanded or refined and that new research themes, or potential research centres, will be identified that more fully incorporate all faculty members who see the benefits of affiliating with the School of Health.

The approval also means that the search for the dean, following the provisions of the Policy on Senior Administrative Appointments (BD-5), may begin. The search committee will most likely be modeled on that for the Dean of Graduate Studies, which has cross-institutional representation, thus ensuring the interdisciplinary nature of the School is top-of-mind in the search process and would begin sometime in Fall 2021.

The strong support of the university's academic leadership team, including the President, Provost, Vice-President, Research and Graduate Studies, all Faculty Deans, the Dean of Graduate Studies, and University Librarian, is an important impetus behind this project, which has the potential to become one of the most transformative initiatives Concordia has undertaken in its history.

Appendix A: Institute and School Models

University of Northern British Columbia Health Research Institute (https://www.unbc.ca/health-research-institute)

The UNBC Health Research Institute (HRI) is designed to enable UNBC's health researchers to join together for the purpose of furthering health research and innovation. The Institute provides a venue for collaboration among this diverse of group of researchers from many disciplines, who undertake various forms of health research, including research on the determinants of health. The Institute encompasses researchers working in the areas identified in the UNBC Strategic Research Plan (Determinants of Health, Health Services and Policy, Population and Public Health, Aboriginal Health, Health and Environment), as well as others who engage in health research at UNBC.

McGill University Health Centre Research Institute (http://rimuhc.ca/)

Our Vision

- bridge the gap between **biomedical research and clinical medicine**
- **speed up innovation** and **accelerate the translation of basic discoveries** to public uses
- bring together **pediatric and adult research programs**
- focus on **improving the health of individual patients** throughout their life cycle
- set the stage for the **transition to patient-centred medicine**

York University Faculty of Health (https://www.yorku.ca/health/)

The Faculty was created in 2006 and is led by a dean. It regroups four existing schools and departments (eg: nursing, health policy & management, psychology, kinesiology) with a health focus into a separate faculty that offers six undergraduate degree programs. The Faculty clusters 6 areas of research linked to various research units and infrastructure labs under the banner 'Healthy Lives, Healthy Communities.'

Simon Fraser University Faculty of Health Sciences (https://www.sfu.ca/fhs.html)

The Faculty is led by a dean but has no departments. The Faculty has its own tenure-track lines and new recruits become designated as members of the Faculty in terms of affiliation. The Faculty of Health Sciences offers five academic programs: PhD in Health Sciences; MSc in Health Sciences; Master of Public Health; Bachelor of Arts in Health Sciences; Bachelor of Science in Health Sciences. The research orientation of the Faculty is defined by three themes and six challenge areas across a wide spectrum. Various research units and infrastructure labs are listed in the faculty.

There are also a number of departments and a few **Schools of Public Health** in Canada, including Université de Montréal, and at University of Alberta. Indeed, they are the only two accredited schools in Canada. The accreditation unit is the Council on Education for Public Health (CEPH)**.** SFU has the only Canadian program in public health which is accredited by CEPH.

George Mason University created a **College of Health and Human Services** by bringing together six academic units (nursing, social work, health admin and policy, global and community health, nutrition and food studies, rehabilitation science). GMU is now transitioning to become a College of Public Health.

Appendix B: NOW stories related to health research (2018-2021 ytd)

2021 ytd

Concordia undergrad student develops an app to ease the anxiety of living with multiple sclerosis
Donya Meshgin is using augmented reality to alleviate the stress of self-administered medication
https://www.concordia.ca/news/stories/2021/04/01/concordia-undergrad-student-develops-an-app-to-ease-the-anxiety-of-living-with-multiple-sclerosis.html?c=/news/archive

Land-based learning reconnects Indigenous youth to their cultures, says Elizabeth Fast
A 4-day retreat emphasizing knowledge-sharing, survival skills, ceremony and inclusivity builds a sense of belonging

https://www.concordia.ca/news/stories/2021/03/30/land-based-learning-offers-indigenous-youth-ways-of-reconnecting-to-their-cultures-says-concordia-prof-elizabeth-fast.html?c=/news/archive

Psychology professor plays a key role in a new study of severe COVID-19 cases in Quebec long-term care facilities
Jean-Philippe Gouin will examine psychosocial issues
https://www.concordia.ca/news/stories/2021/03/11/psychology-professor-plays-a-key-role-in-a-new-study-of-severe-covid-19-cases-in-quebec-long-term-care-facilities0.html?c=/news/archive

Problematic internet use and teen depression are closely linked, new Concordia study finds
Horizon postdoc István Tóth-Király says adolescents who spend too much time online might be at risk of depressive symptoms, substance abuse and poor grades
https://www.concordia.ca/news/stories/2021/03/09/problematic-internet-use-and-teen-depression-are-closely-linked-new-concordia-study-finds.html?c=/news/archive

Nursing home staff responses to the pandemic reveal resilience and shortcomings, new Concordia study shows
Patrik Marier and PhD student Daniel Dickson compare how U.S. and Canadian workers handled outbreaks in long-term care facilities
https://www.concordia.ca/news/stories/2021/02/16/nursing-home-staff-responses-to-the-pandemic-reveal-resilience-and-shortcomings-new-concordia-study-shows.html?c=/news/topic

Concordia researchers find hormone treatment can be effective against polycystic kidney disease
Melatonin can help reduce cysts in fruit fly renal tubules, according to Cassandra Millet-Boureima and Chiara Gamberi
https://www.concordia.ca/news/stories/2021/01/26/concordia-researchers-find-hormone-treatment-can-be-effective-against-polycystic-kidney-disease.html?c=/news/topic

2020

Wearable technology offers a promising avenue for pain treatment in childhood cancer survivors, new Concordia paper shows
A study led by Nicole Alberts suggests small devices could have a big impact on remote therapy in the future
https://www.concordia.ca/news/stories/2020/12/15/wearable-technology-offers-a-promising-avenue-for-pain-treatment-in-childhood-cancer-survivors-new-concordia-paper-shows.html?c=/news/topic

Intelligent buildings will make us healthier, more productive and greener, according to Concordia researcher
Hashem Akbari says the technology exists but policies need to catch up
https://www.concordia.ca/news/stories/2020/10/27/intelligent-buildings-will-make-us-healthier-more-productive-and-greener-according-to-concordia-researcher.html?c=/news/topic

Naomi Azar is awarded the $100K Miriam Aaron Roland Graduate Fellowship
The PhD student in clinical psychology is researching the impacts of prenatal exposure to chemicals in our daily environment on child development and mental health
https://www.concordia.ca/cunews/main/stories/2020/10/09/naomi-azar-is-awarded-the-miriam-aaron-roland-graduate-fellowship-worth-100-k.html?c=/news/topic

Global COVID-19 study finds a strong link between health messaging and behaviour
Montreal researchers say data can help authorities reach certain groups to improve safety guideline adherence
https://www.concordia.ca/news/stories/2020/09/15/global-covid-19-study-finds-a-strong-link-between-health-messaging-and-behaviour.html?c=/news/topic

Concordia researcher discovers more natural compounds that could reduce the effects of aging
Biology professor Vladimir Titorenko hopes his work will help bring down the incidence of diseases like cancer and Alzheimer's
https://www.concordia.ca/news/stories/2020/09/09/concordia-researcher-discovers-more-natural-compounds-that-could-reduce-the-effects-of-aging.html?c=/news/topic

Concordia's Natalie Phillips examines the link between sensory acuity and cognition in aging
Social factors do not explain how they are connected, new research shows
https://www.concordia.ca/news/stories/2020/08/11/concordias-natalie-phillips-examines-the-link-between-sensory-acuity-and-cognition-in-aging.html?c=/news/topic

Two international postdocs are finding ways to defeat the virus that has left them stranded in Montreal
MITACS scholars Gurudeeban Selvaraj and Satyavani Kaliamurthi switched the focus of their studies from cancer to COVID-19
https://www.concordia.ca/news/stories/2020/07/24/two-international-postdocs-are-finding-ways-to-defeat-the-virus-that-has-left-them-stranded-in-montreal.html?c=/news/topic

Concordia master's student investigates the health risks posed by e-cigarettes
Florent Larue wants the public to realize just how much researchers still don't know about vaping
https://www.concordia.ca/news/stories/2020/06/04/concordia-masters-student-investigates-the-truth-behind-e-cigarettes-and-associated-health-risks.html?c=/news/topic

Concordia engineers help develop an emergency response drone
APRIL 15: Learn how Ambular could save lives during a pandemic
https://www.concordia.ca/news/stories/2020/04/14/concordia-engineers-help-develop-an-emergency-response-drone.html?c=/news/topic

Montreal researchers lead an international study of global prevention behaviours and responses to COVID-19
Concordia's Simon Bacon says data will be used to improve strategies and messaging to help flatten the curve
https://www.concordia.ca/news/stories/2020/04/09/montreal-researchers-lead-an-international-study-of-global-prevention-behaviours-and-responses-to-covid-19.html?c=/news/topic

Concordia PhD candidate uses AI techniques for improved ultrasound imaging
Bahareh Behboodi aims to make tumor detection and segmentation faster and more accurate
https://www.concordia.ca/news/stories/2020/03/04/concordia-phd-candidate-uses-ai-techniques-for-improved-ultrasound-imaging.html?c=/news/topic

Concordia-led researchers study pathological hand tremors in patients to develop a machine learning-based treatment framework
People suffering from Parkinson's and other neurodegenerative diseases will benefit from smarter, more accurate technology
https://www.concordia.ca/news/stories/2020/03/03/concordia-led-researchers-study-pathological-hand-tremors-in-patients-to-develop-a-machine-learning-based-treatment-framework.html?c=/news/topic

New study shows the effects of obesity mirror those of aging
Concordia researchers identify a shared list of health issues, from DNA damage to cognitive decline
https://www.concordia.ca/news/stories/2020/02/25/effects-of-obesity-mirror-those-of-aging-new-study-shows.html?c=/news/topic

Researcher Maryse Fortin investigates cause and treatment of lower back pain
The alumna returns to Concordia to advance her studies using PERFORM Centre technology
https://www.concordia.ca/news/stories/2020/02/21/researcher-maryse-fortin-investigates-the-cause-and-treatment-of-lower-back-pain.html?c=/news/topic

Concordia researchers develop a noise measuring framework for modular construction factories
Smart sound management can improve off-site worker safety, health and productivity
https://www.concordia.ca/news/stories/2020/02/18/concordia-researchers-develop-a-noise-measuring-framework-for-modular-construction-factories.html?c=/news/topic

Concordia researcher leads a team of 94 undergrads to explore gut health
Professor Chiara Gamberi co-wrote a published study on intestinal microbiota with her entire biology class
https://www.concordia.ca/news/stories/2020/02/04/concordia-researcher-leads-a-team-of-94-undergrads-to-explore-gut-health.html?c=/news/topic

Concordia's Natalie Phillips examines the link between cognition and hearing or vision loss
Social factors do not explain how they are connected, new research shows
https://www.concordia.ca/news/stories/2020/01/28/concordias-natalie-phillips-examines-the-link-between-between-cognition-and-hearing-or-vision-loss.html?c=/news/topic

Concordia's engAGE Centre launches the Creative Living Lab at a local storefront
The grand opening of the interactive space for collaborative research with older adults is January 16 at the Cavendish Mall
https://www.concordia.ca/news/stories/2020/01/13/concordias-engage-centre-launches-the-creative-living-lab-at-a-local-storefront.html?c=/news/topic

Size, shape and charge matter when it comes to nanoparticle drug delivery, new Concordia research shows
Montreal scientists identify properties that could help nanoscopic vehicles enter cancer cells using light
https://www.concordia.ca/news/stories/2020/01/07/size-shape-and-charge-matter-when-it-comes-to-nanoparticle-drug-delivery-new-concordia-research-shows.html?c=/news/topic

2019

Concordia grad student researches secondary lymphedema among breast cancer patients
Jesse Whyte compares the results of healthy women with those who have developed the side effect following treatment
https://www.concordia.ca/news/stories/2019/12/05/concordia-grad-student-researches-secondary-lymphedema-among-breast-cancer-patients.html?c=/news/topic

Concordia researchers use deep learning to detect anorexia in social media posts
Algorithms can sift through the online chatter to get help where it is needed fast, says computational linguist Leila Kosseim
https://www.concordia.ca/news/stories/2019/10/29/concordia-researchers-use-deep-learning-to-detect-anorexia-in-social-media-posts.html?c=/news/topic

Concordia researcher investigates how cannabinoids affect the immune system
Master's student Norhan Mehrez studies the impact of the drug on healthy T cells
https://www.concordia.ca/news/stories/2019/10/02/concordia-researcher-investigates-how-cannabinoids-affect-the-immune-system.html?c=/news/topic

Concordia researcher investigates the real risks of e-cigarette use
Master's student Tasfia Tasbih is studying the prevalence of cardiorespiratory illnesses among men and women who vape
https://www.concordia.ca/news/stories/2019/10/01/concordia-researcher-investigates-the-real-risks-of-e-cigarette-use.html?c=/news/topic

Concordia researcher investigates lower back pain in hockey players
Maryse Fortin recommends preseason screening to assist teams with their injury prevention programs
https://www.concordia.ca/news/stories/2019/09/25/concordia-researcher-investigates-lower-back-pain-in-hockey-players.html?c=/news/topic

Music helps women survivors of violence heal and challenge sexism, Concordia professor says
Sandi Curtis caps off her career as a researcher and music therapist with a new interactive eBook
https://www.concordia.ca/news/stories/2019/09/10/music-helps-women-survivors-of-violence-heal-and-challenge-sexism-concordia-professor-says.html?c=/news/topic

Stress and screen time are closely connected, new Concordia research shows
A wide-ranging survey reveals a complex relationship between addiction to technology and mental health
https://www.concordia.ca/news/stories/2019/08/27/stress-and-screen-time-are-closely-connected-new-concordia-research-shows.html?c=/news/topic

Concordia researcher uses radiomics to improve cancer prediction and prognosis models
Parnian Afshar hopes her data analysis will help physicians get more from their medical imaging
https://www.concordia.ca/news/stories/2019/08/27/concordia-researcher-uses-radiomics-to-improve-cancer-prediction-and-prognosis-models.html?c=/news/topic

Concordia researcher uses gold ash to uncover means for slowing the progression of cancer cells
Subhathirai Subramaniyan looks to 'bridge the gap between traditional and modern medicine'
https://www.concordia.ca/news/stories/2019/08/07/concordia-researcher-uses-gold-ash-to-uncover-means-for-slowing-the-progression-of-cancer-cells.html?c=/news/topic

Concordia researchers receive more than $1 million for interdisciplinary explorations on aging
Support from the Fonds de recherche du Québec goes toward studies on sleep, memory and creative community engagement
https://www.concordia.ca/news/stories/2019/08/01/concordia-researchers-receive-more-than-1-million-for-interdisciplinary-explorations-on-aging.html?c=/news/topic

Concordia professor investigates how microbubbles can improve drug delivery
Brandon Helfield's groundbreaking research is supported by a $500,000 (USD) grant from the Burroughs Wellcome Fund
https://www.concordia.ca/news/stories/2019/07/24/concordia-professor-investigates-how-microbubbles-can-improve-drug-delivery.html?c=/news/topic

Concordia researchers develop a new method to evaluate the health of artificial heart valves
The technique can help physicians detect blood flow blockages in recipients
https://www.concordia.ca/news/stories/2019/06/19/concordia-researchers-develop-a-new-method-to-evaluate-the-health-of-artificial-heart-valves.html?c=/news/topic

Concordia PhD candidate is developing a way to improve hospital care in Canada
Zahra Yousefli's research identifies more cost-effective and efficient maintenance management scenarios
https://www.concordia.ca/news/stories/2019/06/12/concordia-phd-candidate-is-developing-a-way-to-improve-hospital-care-in-canada.html?c=/news/topic

Memories are strengthened via brainwaves produced during sleep, new study shows
Concordia's Thanh Dang-Vu and his team use medical imaging to map areas involved in recalling learned information while we slumber
https://www.concordia.ca/news/stories/2019/05/15/memories-are-strengthened-via-brainwaves-produced-during-sleep-new-study-shows.html?c=/news/topic

Growing up in poverty doubles diagnoses of psychosis-spectrum illnesses like schizophrenia, research says
A study by Concordia and UC Davis followed families across 3 decades
https://www.concordia.ca/news/stories/2019/04/26/growing-up-in-poverty-doubles-diagnoses-of-psychosis-spectrum-illnesses-like-schizophrenia-research-says.html?c=/news/topic

Researchers investigate the benefits of sleep on memory, mental health and overall quality of life
From insomnia to narcolepsy, the Sleep Lab team at Concordia is getting to the bottom of common problems
https://www.concordia.ca/news/stories/2019/03/12/Researchers-investigate-the-benefits-of-sleep-on-memory-mental-health-and-overall-quality-of-life.html?c=/news/topic

Making Toronto more friendly to seniors is a big-city challenge, new study says
Concordia researcher Meghan Joy finds that municipal policies toward aging populations often come up short
https://www.concordia.ca/news/stories/2019/01/22/making-toronto-more-friendly-to-seniors-is-a-big-city-challenge-new-study-says.html?c=/news/topic

Anxiety about close relationships can affect your health, new research shows
A Concordia study involving international students reveals that insecure attachment can lead to harmful physical side effects
https://www.concordia.ca/news/stories/2019/01/15/anxiety-about-close-relationships-can-affect-your-health-new-research-shows.html?c=/news/topic

Antibiotics and E. coli: Concordians publish research with major implications for public health
Undergrad students Nour Ghaddar and Mona Hashemidahaj co-authored the paper with their professor, Brandon Findlay, detailing a new technique for testing drug resistance
https://www.concordia.ca/news/stories/2019/01/04/antibiotics-and-e-coli-concordians-publish-research-with-major-implications-for-public-health.html?c=/news/topic

2018

Prize-winning PhD candidates examine Fascist cinema in Ethiopia and heart valve diseases
Giuseppe Di Labbio and Giuseppe Fidotta are the latest recipients of the Concordia Stand-Out Graduate Research Award
https://www.concordia.ca/news/stories/2018/12/04/prize-winning-phd-candidates-examine-fascist-cinema-in-ethiopia-and-heart-valve-diseases.html?c=/news/topic

New autism-related research expands our understanding of cognitive function in preschoolers
Young children who prefer social stimuli have better "mind-reading" skills, a new study shows
https://www.concordia.ca/news/stories/2018/11/27/new-autism-related-research-expands-our-understanding-of-cognitive-function-in-preschoolers.html?c=/news/topic

Stressed out seniors cope better by practicing self-compassion, new research shows
A Concordia study finds that treating oneself kindly leads to lower cortisol levels in older adults facing challenges
https://www.concordia.ca/news/stories/2018/11/21/stressed-out-seniors-cope-better-by-practicing-self-compassion-new-research-shows.html?c=/news/topic

Indoor play keeps child obesity away, new research shows
Organized sports are not the only activities that benefit children's health, according to PERFORM Centre researcher Caroline Fitzpatrick
https://www.concordia.ca/news/stories/2018/11/13/indoor-play-keeps-child-obesity-away-new-research-shows.html?c=/news/topic

Measuring metabolites at the molecular level can have profound implications on patient care, says a Concordia researcher
Analytical chemist Dajana Vuckovic is guiding the young field of metabolomics through its growing pains
https://www.concordia.ca/news/stories/2018/11/06/measuring-metabolites-at-the-molecular-level-can-have-profound-implications-on-patient-care-according-to-concordia-researcher.html?c=/news/topic

Concordia researcher Aurore Perrault explains how to minimize the effect of turning back our clocks
The neuroscientist says we can adapt relatively quickly to the time change
https://www.concordia.ca/news/stories/2018/10/31/concordia-researcher-aurore-perrault-explains-how-to-minimize-the-effect-of-turning-back-our-clocks.html?c=/news/topic

Concordia master's student is developing treatment protocols for breast cancer patients
Researcher Jesse Whyte works with patients to understand the effects of secondary lymphedema
https://www.concordia.ca/news/stories/2018/10/16/concordia-masters-student-is-developing-treatment-protocols-for-breast-cancer-patients.html?c=/news/topic

The Concordian who researches your fight-or-flight response
Ghazal Mohammadi measures how people's immune systems react when their hands are placed in cold water.
https://www.concordia.ca/cunews/main/stories/2018/10/09/the-concordian-who-researches-your-fight-or-flight-response.html?c=/news/topic

Concordia researcher investigates how diabetes leads to vascular disease
Master's student Dana-Rae Yadao looks at how exercise can protect patients' cardiovascular systems
https://www.concordia.ca/news/stories/2018/10/01/concordia-researcher-investigates-how-diabetes-leads-to-vascular-disease.html?c=/news/topic

Concordia PhD student lands $100,000+ scholarship from CIHR to study eating disorders in adolescents
Concordia researcher Jessica Di Sante investigates the physical and mental health factors that may contribute, including early adversity
https://www.concordia.ca/news/stories/2018/09/11/concordia-phd-student-lands-100000-scholarship-from-cihr-to-study-eating-disorders-in-adolescents.html?c=/news/topic

Senate report on obesity uses inappropriate terminology, according to recent critical review
Concordia researcher argues not enough focus on "foundational and fundamental" determinants instead of lifestyle choices
https://www.concordia.ca/news/stories/2018/09/11/senate-report-on-obesity-uses-inappropriate-terminology-according-to-recent-critical-review.html?c=/news/topic

Concordia researchers create a miniaturized cancer killer
Professor Steve Shih and his team developed a method to fight the disease at the genetic level — one that may lead to a revolution in patient care
https://www.concordia.ca/news/stories/2018/09/05/concordia-researchers-create-a-miniaturized-cancer-killer.html?c=/news/topic

Concordia grad researcher Kerri Delaney sheds light on obesity and diabetes
STEM SIGHTS: The PhD student studies the connection between metabolic diseases and fat cells
https://www.concordia.ca/cunews/main/stories/2018/09/04/concordia-grad-researcher-kerri-delaney-sheds-light-on-obesity-and-diabetes.html?c=/news/topic

A new literature review may help reveal the mechanisms behind kidney disease
Concordia researchers spotlight how Drosophila melanogaster – aka the common fruit fly – can be used to model human renal function
https://www.concordia.ca/news/stories/2018/08/30/a-new-literature-review-may-help-reveal-the-mechanisms-behind-kidney-disease.html?c=/news/topic

Three Concordians land $1.8 million in federal health research funding
Christophe Grova, Lisa Kakinami and Michael Sacher investigate issues related to epilepsy, health inequality and membrane trafficking diseases
https://www.concordia.ca/news/stories/2018/08/13/three-concordians-land-1-8-million-in-federal-health-research-funding.html?c=/news/topic

Students' depressive symptoms peak at certain times of the year, new research shows
A Concordia study will help universities identify and assist young people at risk
https://www.concordia.ca/news/stories/2018/06/13/students-depressive-symptoms-peak-at-certain-times-of-the-year-new-research-shows.html?c=/news/topic

$2.4 million for Canada Research Chairs at Concordia
Federal funding supports areas of biology, psychology, management and Indigenous visuals arts
https://www.concordia.ca/news/stories/2018/05/03/2-4-million-for-canada-research-chairs-at-concordia.html?c=/news/topic

NEW PUBLICATION: How little-known cells tie into mental health
Concordia researchers shine the spotlight on the role of glia in depression and anxiety disorders
https://www.concordia.ca/cunews/main/stories/2018/04/24/new-research-how-the-nervous-system-ties-into-mental-health.html?c=/news/topic

New research shows light smokers aren't as concerned about health risks
Concordia study ranks reasons to quit among young adults
https://www.concordia.ca/news/stories/2018/04/10/new-research-shows-light-smokers-arent-as-concerned-about-health-risks.html?c=/news/topic

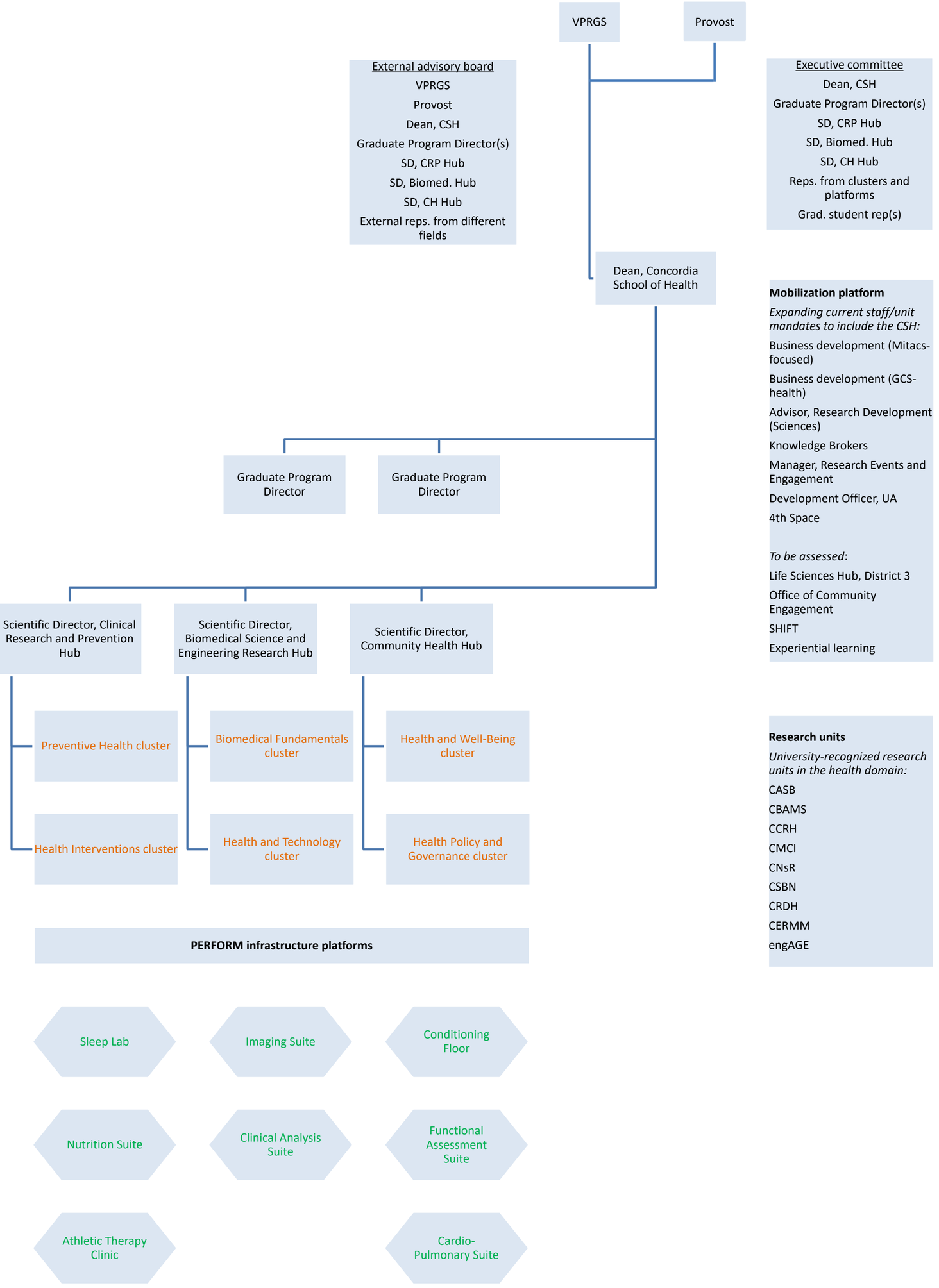
STE(A)M SIGHTS: The Concordian who uses art to reinterpret illness
Grad student Darian Stahl examines how our sense of self changes when we interact with medical technology
https://www.concordia.ca/cunews/main/stories/2018/03/19/stem-sights-Darian-Stahl-grad-research-art-reinterpret-illness-MRIs.html?c=/news/topic

Grad student automates gene editing to detect indications of cancer
Concordian Hugo Sinha has created a fast and affordable tool to study the disease
https://www.concordia.ca/news/stories/2018/02/14/grad-student-automates-gene-editing-to-detect-indications-of-cancer.html?c=/news/topic

Interdisciplinary study finds Ayurvedic medicine may improve chemotherapy
Gold ash, known as swarma bhasma, has potential as a drug-delivery vehicle
https://www.concordia.ca/news/stories/2018/01/31/interdisciplinary-study-finds-ayurvedic-medicine-may-improve-chemotherapy.html?c=/news/topic

Cancer-patient wait times could be reduced by 44%, new research shows
A Concordia-Jewish General Hospital collaboration improves the flow in oncology treatment centres
https://www.concordia.ca/news/stories/2018/01/16/cancer-patient-wait-times-could-be-reduced-by-44-percent.html?c=/news/topic

Concordia School of Health



Legend:
Health themes (clusters)
Affiliated existing PERFORM platforms (infrastructure support)

Explanation of costing analysis for School of Health

The following explains the items in the costing table starting from the top.

Perform Operating Budget

- In this section, Perform's current operating budget is presented in terms of (1) HR costs, (2) other costs and (3) revenues associated mainly with gym memberships (shared with R&A) and community programs.
- The HR costs are projected to increase by 2.5% annually while the other costs and revenues are projected to increase by 3% annually.

Projected Costs for School of Health

Incremental positions

- In this section, the additional HR costs that would be associated with the School after redeployment of existing Perform personnel are detailed.
- For the Dean and all new staff positions the costs include salary and benefits, increasing annually at 2.5%.
- For the scientific and graduate program directors the costs include either a stipend and a course remission or simply a course remission.
- At the bottom of this section the total costs associated with new positions are highlighted in yellow and below that we find the total HR costs (sum of Perform HR costs and costs of new positions) again highlighted in yellow.

Other incremental costs

- In this section other incremental costs are detailed including: seed research grants, student scholarships and international fee remissions, teaching and supervision related remissions.
- An annual budget of $500k for seed research grants is included to encourage new collaborative projects (highlighted in light orange).
- In order to estimate the student funding needs we have assumed that each incoming cohort of 20 PhD students would consist of 10 domestic and 10 international students. This is consistent with our current population. For the domestic students a PhD fellowship valued at $14k per year for 4 years is included. For the international students the package includes a tuition remission ($40k total over 4 years) and a PhD fellowship valued at $14k per year for 4 years is included. The total costs for student funding max out at $1.52M annually (highlighted in light orange). Note that additional funding not included here, will need to be provided for these students in the form of RAs.
- The cost of buying teaching time from the departments is equal to 6 courses at $12.5k per year. This assumes that between the two PhD programs 6 course offerings per year would be sufficient to cover the core courses and 1 or 2 electives. Given the typical course load of PhD programs this seems appropriate. It is also possible that some departmental courses will be open to students from the School as electives.
- The incremental costs of supervision related to the PhD students in the school was estimated using a methodology developed by SGS based on current workload policies in each

faculty/department. We assumed that each year 25% of the students would be supervised by GCS professors, 25% by science professors, and 50% by social sciences, humanities, Fine Arts or JMSB professors. The supervisory costs max out at $59,000.

Summary of overall costs and revenues

- The first line in this section (highlighted in yellow) shows the total projected costs for the School of Health: Perform's operating budget less Perform revenue plus incremental HR costs plus other incremental costs.
- The revenues associated with PhD student enrollment are calculated given that we receive approximately $18.6k per semester for 8 semesters for each PhD student. Revenues thus max out at $2.977M in the third year. Here again we are assuming an incoming annual cohort of 20 students.
- Below that we find the net costs for the School of Health (highlighted in yellow) which are equal to the total projected costs minus the projected revenues.
- Finally, highlighted in green, we see the incremental net costs which are the net costs for the School of Health minus Perform's operating budget. This line represents the additional cash that would need to be injected to sustain the School.

		Base Amount (Year 1)	Year 2	Year 3	Year 4	Year 5	5 Year Total
PERFORM OPERATING BUDGET							
PERFORM: Current Salary +Benefits	2.50%	$2,530,981	$ 2,594,256	$ 2,659,112	$ 2,725,590	$ 2,793,729	$13,303,668
Non-Salary Expenses	3%	$699,009	$ 719,979	$ 741,579	$ 763,826	$ 786,741	$3,711,134
Revenue	3%	$675,839	$ 696,114	$ 716,998	$ 738,508	$ 760,663	$3,588,121
PROJECTED COSTS FOR SCHOOL OF HEALTH							
Incremental Positions	Nature of Costs						
Dean	salary+benefits	$283,275	$290,357	$297,616	$305,056	$312,683	$1,488,986
Graduate Program Director	Course Remission	$12,500	$12,500	$12,500	$12,500	$12,500	$62,500
Graduate Program Director	Course Remission	$12,500	$12,500	$12,500	$12,500	$12,500	$62,500
Director of Administration	Salary	140,757	$ 144,276	$ 147,883	$ 151,580	$ 155,369	$739,865
SD Clinical Research & Prevention Hub	Stipend + Course Remission	$27,000	$27,000	$27,000	$27,000	$27,000	$135,000
SD Biomediacal Science & Engineering Hub	Stipend + Course Remission	$27,000	$27,000	$27,000	$27,000	$27,000	$135,000
SD Community Health Hub	Stipend + Course Remission	$27,000	$27,000	$27,000	$27,000	$27,000	$135,000
Coordinator PERFORM and Clinical Research and Prevention Hub	Salary + benefits	$110,367	$113,126	$115,954	$118,853	$121,825	$580,125
Coodinator Biomedical Science and Engineering Research Hub	Salary + benefits	$110,367	$113,126	$115,954	$118,853	$121,825	$580,125
Coodinator Community Health Hub	Salary + benefits	$110,367	$113,126	$115,954	$118,853	$121,825	$580,125
Manager, Administrative Operations	Salary + benefits	$110,367	$ 113,126	$ 115,954	$ 118,853	$ 121,825	$580,125
Aministrative Assistant	Salary + benefits	$69,453	$ 71,189	$ 72,969	$ 74,793	$ 76,663	$365,068
Service Assistant	Salary + benefits	$27,602	$27,602	$27,602	$27,602	$27,602	$138,010
Communications Advisor	Salary + benefits	$110,367	$ 113,126	$ 115,954	$ 118,853	$ 121,825	$580,125
Total Incremental HR Expenses		$1,178,922	$1,205,055	$1,231,841	$1,259,297	$1,287,440	$6,162,555

Total All HR + Benefits (Perform + incremental)	$3,709,903	$3,799,311	$3,890,953	$3,984,887	$4,081,169	$19,466,223
Other incremental costs						
RESEARCH SEED FUNDING	$500,000	$500,000	$500,000	$500,000	$500,000	$2,500,000
Number of International PhD Students	10	20	30	40	40	
International Student Tution waiver + Living Support Package	$24,000	$24,000	$24,000	$24,000	$24,000	
Number of Domestic PhD Students	10	20	30	40	40	
Domestic Student Support Package	$ 14,000	$ 14,000	$ 14,000	$ 14,000	$ 14,000	
Total Graduate Student Support Cost	$380,000	$760,000	$1,140,000	$1,520,000	$1,520,000	$5,320,000
Cost of "Buying" Course Teaching time	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 375,000
Approximate cost of remissions for supervision	$ 14,750	$ 29,500	$ 44,250	$ 59,000	$ 59,000	$ 206,500
Overall summary of costs and revenues						
Total Projected Costs (School of Health)	$ 4,702,823	$ 5,187,676	$ 5,674,784	$ 6,164,206	$ 6,261,247	$27,990,736
Fall Revenue / student	$ 18,616.23					
Winter Revenue / student	$ 18,616.23					
Summer Revenue / student	$ 18,586.64					
Total Above	$ 55,819.10					
Total Projected PhD Student Revenues	$ 1,116,382	$ 2,232,764	$ 2,977,413	$ 2,977,413	$ 2,977,413	$ 12,281,386
Net Costs (School of Health)	$ 3,586,441	$ 2,954,912	$ 2,697,371	$ 3,186,792	$ 3,283,834	$ 15,709,350
Incremental net costs (School of Health)	$ 1,032,290	$ 336,791	$ 13,678	$ 435,884	$ 464,026	$ 2,282,670
Proposed library collections expansion to support School of Health	$1,340,000	$ 1,386,900	$ 1,435,442	$ 1,485,682	$ 1,537,681	$ 7,185,704

Note:
Post Doc positions will be added at a later date and costs will be addressed accordingly