SENATE

NOTICE OF MEETING

December 6, 2019

Please be advised that the next regular meeting of Senate will be held on Friday, December 13, 2019, at 2 p.m., in the Norman D. Hébert, LLD Meeting Room (Room EV 2.260) on the SGW Campus.

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

Danielle Tessier
Secretary of Senate
AGENDA OF THE OPEN SESSION
OF THE MEETING OF SENATE

Held on Friday, December 13, 2019, at 2 p.m.
in the Norman D. Hébert, LLD Meeting Room
(Room EV 2.260) on the SGW Campus

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**CONSENT**

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7.1.2 Department of Economics (Document US-2019-7-D7)
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(Document US-2019-7-D9)
7.1.5 Department of Theological Studies (Document US-2019-7-
D10)

7.2 Undergraduate curriculum proposal– Faculty of Fine Arts –
Department of Theatre (Document US-2019-7-D11)

7.3 Undergraduate curriculum proposals – Gina Cody School
of Engineering and Computer Science
7.3.1 Requirements (Document US-2019-7-D12)
7.3.2 Department of Electrical and Computer Engineering
(Document US-2019-7-D13)
7.3.3 Department of Building, Civil and Environmental
Engineering (Document US-2019-7-D14)
7.3.4 Department of Electrical and Computer Engineering
(Document US-2019-7-D15)
7.3.5 Department of Mechanical, Industrial and Aerospace
Engineering (Document US-2019-7-D16)

REGULAR

8. Motion regarding Concordia University Foundation
   (Document US-2019-7-D17) G. Carr Approval

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

10. Graduate curriculum proposal – New program - Faculty of
    Fine Arts – Department of Creative Arts Therapies -
    Graduate Certificate in Play Therapy (Document US-2019-7-
    D20) P. Wood-Adams Approval

11. Research Committee recommendation: University
    Recognition of Research Unit – Thermal Spray and Surface
    Engineering Research Centre (TSSE) (Document US-2019-7-
    D21) C. Guy Approval
12. Presentation on Time and Space  
A. Whitelaw/Information  
S. de Celles

13. Question period (*maximum - 15 minutes*)

14. Other business

15. Adjournment  
G. Carr
MINUTES OF THE OPEN SESSION
OF THE MEETING OF SENATE

Held on Friday, November 8, 2019
immediately following the Closed Session
in the Norman D. Hébert, LLD Meeting Room
(Room EV 2.260) on the SGW Campus

PRESENT

Voting members: Graham Carr (Chair); Ali Akgunduz; Bakry Alsaieq; Leslie Barker; Matthew Barker; Guylaine Beaudry; Arshdeep Singh Bhatia; Pascale Biron; Elizabeth Bloodgood; Catherine Bolton; Sally Cooke; Frank Crooks; Ricardo Dal Farra; Alex De Visscher; Rebecca Duclos; Linda Dyer; Medhi Farashahi; Ariela Freedman; Vince Graziano; Christophe Guy; Jarrad Hass; Chris Kalafatidis; Jooseop Lim (Acting for Anne-Marie Croteau); Esther Morand; Brad Nelson (Acting for Paula Wood-Adams); Helena Osana; Gilles Pelsiherbe; Colin Philip; Martin Pugh; Patrick Quinn; Marguerite Rolland; André Roy; Timir Baran Roy; Bayan Abu Safieh; Reza Soleymani; Robert Soroka; Ron Stern; Alex Stojda; Elizabeth Tasong; Marlena Valenta; Victoria Videira; Jean-Philippe Warren; Anne Whitelaw

Non-voting members: Philippe Beauregard; Johanne Beaudoin; Paul Chesser; Denis Cossette; Stéphanie de Celles; Isabel Dunnigan; Tom Hughes; Candace Jacobs; Melodie Sullivan (Acting for Frederica Jacobs)

ABSENT

Voting members: Shimon Amir; Amir Asif; Christopher Brett; Sue Callender; Mark Corwin; Catherine Russell; Anmol Singh; Matt Soar; Radu Zmeureanu

Non-voting members: Nadia Hardy

1. Call to order

The meeting was called to order at 2:26 p.m.

1.1 Approval of Agenda

Upon motion duly moved and seconded, it was unanimously resolved that the Agenda of the Open Session be approved.
1.2 Approval of the Minutes of the Open Session meeting of October 11, 2019

R-2019-6-7 Upon motion duly moved and seconded, it was unanimously resolved that the Minutes of the Open Session meeting of October 11, 2019, be approved.

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

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

3. President’s remarks

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

- The John Molson MBA, moved up from 94th to 91st spot, one of four Canadian business schools and the only Quebec school in the top 100 in The Economist magazine’s 2019 Which MBA? survey.
- The Saputo Family Foundation donated $10 million to Concordia for the creation of the SHIFT Centre for Social Transformation.
- Concordia’s Institute for Investigative Journalism team worked with Le Devoir and Global News to reveal that the province’s lead-testing method underestimates exposure levels in drinking water.
- The School of Irish Studies celebrated its 10th anniversary.
- The various greening initiatives on the Loyola Campus, including a tree planting ceremony and the transformation of the former AD parking lot into an ecological pedestrian zone.
- He urged Senators to attend one or more of the November 18 Convocation ceremonies as well as to volunteer or donate to the annual Centraide campaign which runs until the end of November.
- The government of Quebec announced modifications to the Programme de l’expérience québécoise (PEQ) on November 4 without consulting the higher education sector. The modifications would severely restrict eligibility for international students planning to use an accelerated pathway for permanent residency in Canada. On November 6, the government added a grandfather clause to exempt students who arrived prior to November 1. The PEQ is an important tool to recruit international students and the entire Quebec university network is actively engaged on this file.


Dr. Whitelaw congratulated the faculty members and librarians who were granted tenure and/or promotions, whose names are listed in her written report.

As complementary information to her written report, she apprised Senate that JMSB placed 24th in the world in the 2019 Corporate Knights Better World MBA Ranking, moving up nine spots from its position last year.
5. Committee reports

5.1 Academic Planning and Priorities (Document US-2019-6-D3)
5.2 Research (Document US-2019-6-D4)

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

CONSENT


R-2019-6-8 That the committee appointments, outlined in Document US-2019-6-D5, be approved.


7.1 Undergraduate curriculum proposals – Faculty of Arts and Science
7.1.1 Honours requirements (Documents US-2019-6-D7 and D8)
7.1.2 Department of Biology (Document US-2019-6-D9)
7.1.4 Department of English (Document US-2019-6-D11)
7.1.5 Liberal Arts College (Document US-2019-6-D12)
7.1.6 Department of Mathematics and Statistics (Document US-2019-6-D13)
7.1.7 Department of Philosophy (Document US-2019-6-D14)
7.1.8 Department of Physics (Document US-2019-6-D15)
7.1.9 Department of Religions and Cultures (Document US-2019-6-D16)
7.1.10 Department of Theology (Document US-2019-6-D17)
7.1.11 Simone de Beauvoir Institute (Document US-2019-6-D18)

R-2019-6-9 That the undergraduate curriculum proposals in the Faculty of Arts and Science be approved.

Consideration of item 7.1.3 regarding the Department of Economics (Document US-2019-6-D10) was removed from the Consent Agenda, since the documentation was incomplete. This dossier will be resubmitted for Senate approval in due course.

7.2 Undergraduate curriculum proposals – Faculty of Fine Arts
7.2.1 Fine Arts Interdisciplinary Studies (Document US-2019-6-D19)
7.2.2 Department of Art History (Document US-2019-6-D20)
7.2.3 Department of Cinema (Document US-2019-6-D21)

R-2019-6-10 That the undergraduate curriculum proposals in the Faculty of Fine Arts be approved.

7.3 Undergraduate curriculum proposal – Institute for Co-operative Education – Requirements (Document US-2019-6-D22)

R-2019-6-11 That the undergraduate curriculum proposals in the Institute for Co-operative Education be approved.
7.4 Undergraduate curriculum proposals – Office of the Registrar – Regulations
(Document US-2019-6-D23 and D24)

R-2019-6-12 That the undergraduate curriculum proposals in the Office of the Registrar be approved.

7.5 Graduate curriculum proposals – John Molson School of Business
7.5.1 Graduate Diploma in Business Administration (Document US-2019-6-D25)
7.5.2 Master of Business Administration (Document US-2019-6-D26)

R-2019-6-13 That the graduate curriculum proposals in the John Molson School of Business be approved.

REGULAR

8. Approval process of graduation list (Document US-2019-6-D27)

Dr. Whitelaw conveyed the reasons for proposing a different way of handling the final approval of the graduation list. She outlined the approval process at Faculty and School Councils, noting that very few Senators over the years have consulted the graduation list made available to Senators prior to the Senate meeting.

The point was made that the delegation of the approval of the graduation list to the Provost would necessarily entail that the revocation of a degree, although a very rare occurrence, would also be delegated to the Provost.

R-2019-6-14 Upon motion duly moved and seconded, it was unanimously resolved that, on recommendation of Steering Committee, Senate delegate to the Provost and Vice-President, Academic the approval of the graduation list, as submitted by the University Registrar following approval of Faculty and School Councils;

That the date of conferral indicated on the diploma be October 15 for the Fall and May 20 for the Spring;

That the approval of Faculty and School Councils must take place before the above dates of conferral; and

That the University Registrar provide to Senate a written report detailing the graduation statistics following each convocation ceremony.

9. Presentation by Concordia University Foundation on sustainable investments
(Document US-2019-6-D28)

Dr. Carr began by updating Senate on the some of the important work that has been going on across the University in the area of sustainability, in keeping with Concordia’s values of environmental responsibility, social responsibility and sustainability. Currently, academic and operational units from across the University are finalizing their work on the sequencing and budgeting of Concordia’s Sustainability Action Plan, which began in the Spring 2019 with public consultations and resulted in the establishment of working
groups for five streams – Food, Waste, Climate, Research and Curriculum -- to consider how best to prioritize and address recommendations on key issues. In addition to studying recommendations, unit leaders have been reviewing operational priorities that will help Concordia reach its carbon neutrality targets – a key element of the Action Plan.

In September, Concordia joined nine other Quebec universities in declaring a climate emergency and committed to becoming carbon neutral by 2050 at the very latest. It is expected that the Sustainability Action Plan will be released in early 2020.

At the May Senate meeting, a commitment was made to invite Howard Davidson, Chair of the Board of Directors of the Concordia University Foundation, to Senate to report on the Foundation’s recent activities in furthering our sustainable investment goals. Dr. Carr introduced Mr. Davidson, an alumnus and Governor Emeritus of the University, and President and Trustee of the Webster Foundation, one of Canada’s leading private grants organizations and one that has been pivotal in helping Concordia achieve its goals.

Mr. Davidson apprised Senate that the Concordia University Foundation acts as the University’s primary investment arm. It is an independent corporation, whose primary purpose is to be the University’s best possible fund management partner, and whose mission is to use its resources exclusively to encourage the advancement and development of Concordia’s teaching, research and charitable programs and initiatives. Concordia transfers certain donations and other funds to the Foundation for investment management.

As of April 30, 2019, the total value of its assets is $243 million, comprised of an Endowment Fund which supports research and scholarship, a Long-Term Debt Fund used to repay the University’s debt, and support for various University initiatives, including group benefits. To allow such annual distributions, we have to generate returns that are at least 6.25% or higher on an annual basis. This is a challenge to meet in a changing world.

Mr. Davidson conveyed the journey towards achieving sustainable investments which began more than six years ago following discussions with student leaders, including adopting a sustainable investment policy which integrates environmental, social and corporate governance (ESG) factors and becoming a signatory of the United Nations Principles for Responsible Investment (PRI). All this work has led to our exposure to the coal, oil and gas sectors being very low, which is at $14 million or 5.7% of the Foundation’s total asset value of $243 million. He explained that one of the ways in which the Foundation fulfils this commitment is through implementing its Impact Investment Policy, whose value is about $4.3 million and provided an example of how the Foundation is engaging in impact investing.

Mr. Cossette outlined the other steps that Concordia has taken in becoming a leader in sustainable investment. In February 2019, Concordia became Canada’s first university to issue a sustainable bond, the proceeds of which will be used to cover Concordia’s $25.3 million share of the $62 million invested into the new Science Hub, the new state-of-the-art scientific facility with the most cutting-edge and appropriate environments to
support Concordia’s research community. He added that in March 2019 Concordia was ranked Quebec’s most energy-efficient campus for the 21st consecutive year, and that Concordia’s leadership in the area of responsible investment is acknowledged, it being called upon to present at many investments conferences and forums.

Looking towards the future, we recognize that the landscape is changing and we must change too. In the five years since the first creation of the sustainable investment fund, the Foundation’s exposure to the coal, oil and gas sector has been reduced to 5.7% or about $14 million, as noted by Mr. Davidson. Clearly, we have been listening and acting accordingly, making the right choices of where to invest. Mr. Cossette made the point that while 5.7% is already very low, if we are to continue to lead by example, we must be prepared to continue to make some bold choices.

Dr. Carr concluded the presentation by proudly announcing the following three important commitments as the next step in the University’s journey within five years:

1. A reduction to zero of our investments in the coal, oil and gas sectors;
2. A commitment to 100% sustainable investments; and
3. A plan to double the portion of the Foundation’s portfolio devoted to impact investment from the current 5% to 10%. In dollar figures, our goal is to be directing $20 million toward impact investment by the year 2025.

He concluded by noting that with today’s announcement, Concordia becomes the first university in Quebec to set a 100% target for sustainable investment that includes a premium on impact investment.

10. Question period

Further to a question from Mr. Quinn regarding the status of the Finance Committee of Senate, Dr. Carr explained that the Finance Committee was originally established in the mid-1990s as an ad hoc committee in a different context. During the past years, its primary mission has been to assess costing of new programs, and more recently Committee members expressed frustrations about its role. The financial information that the Committee was required to review had often already been approved and was presented in an inconsistent manner from one program to another. A new Letter of Intent (LOI) process is being tested for new programs, which includes a more systematic budget process. Therefore, Dr. Carr said that the operations of the Finance Committee have been suspended while the LOI process is being tested.

Pursuant to concerns expressed by Mr. Roy, Dr. Carr reiterated the actions that the University is taking in response to modifications to the Programme de l’expérience québécoise (PEQ).

11. Other business

There were no other business to bring before Senate.
12. **Adjournment**

The meeting adjourned at 3:27 p.m.

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Danielle Tessier  
Secretary of Senate
Internal Memorandum

To: Members of Senate
From: Nadia Hardy, Acting Provost and Vice-President, Academic
Date: December 5, 2019
Re: Academic Update

As the year is winding down, I want to commend the hard work done by the Concordia Community. It’s been a busy semester.

On November 18, more than 1,000 graduates were awarded degrees at the fall 2019 convocation ceremonies. The honorary degree recipients were Pulitzer Prize-winning photojournalist and Montreal native Barbara Davidson (BFA 90), Cape Breton native and business success story Annette Verschuren, and STEM education advocates Rebecca Brent and Richard Felder.

Concordia welcomed a new senior director of Indigenous Directions. Alumna and former Concordia administrator Manon Tremblay (BA 03) has returned to her alma mater to advance the Indigenous Directions Action Plan and support Indigenous Directions. She began her five-year appointment on December 3 and has more than 20 years of experience providing high-level strategic advising on Indigenous education, research and employment initiatives to her role. She previously served as coordinator of Concordia’s Aboriginal Student Resource Centre (formerly the Centre for Native Education) before moving to the University of Ottawa and the Public Service Commission of Canada in senior advisor roles. Most recently, Manon was director of Indigenous research for the Social Sciences and Humanities Research Council of Canada (SSHRC).

Donna Kahérakwas Goodleaf has assumed a new role as director of decolonizing curriculum and pedagogy. In this role, she will be implementing the important changes that need to be made to ensure that Concordia’s teaching and learning practices reflect our commitment to decolonization and Indigenization. We would like to thank Donna for providing seamless continuity while she served as interim senior director of Indigenous Directions.

In November, Concordia announced the launch of its new SHIFT Centre for Social Transformation. The first-of-its-kind multi-stakeholder collaboration centre was made possible by a recent $10 million gift from the Mirella & Lino Saputo Foundation and the Amelia & Lino Saputo Jr. Foundation. On November 25, SHIFT welcomed its first innovator-in-residence, Jodi Calahoo-Stonehouse, for a series of conversations and workshops: Weaving Our Worldviews: Social Transformation and Indigenous Practices. Calahoo-Stonehouse is founder and co-owner of Miyo-Pimatisiwin Productions and co-producer and broadcaster of the award-winning Indigenous radio program Acimowin. Her work centers on sharing positive narratives of Indigenous Peoples and improving the realities of marginalized Indigenous youth. Her interests include Indigenous media, Indigenous legal traditions, Indigenous feminism, social innovation and Indigenous futurisms.
The official launch of the Canada Excellence Research Chair in Smart, Sustainable and Resilient Communities and Cities was held last month at 4TH SPACE. The Chair, Ursula Eicker, and the CERC team of cities experts – Jing Hu (Philosophy), Alice Jarry (Design and Computation Arts), Chunyan Lai (Electrical and Computer Engineering), Mohamed Ouf (Building, Civil and Environmental Engineering), and Carly Ziter (Biology) – presented briefly on their research programs and invited attendees to visit their displays. The event took place in the midst of the 4TH SPACE NextGenCities programming, which highlighted the work of numerous Concordia faculty members from across the university in the field of cities and sustainability.

Staff, faculty and research chairs were honoured at the Faculty of Arts and Science’s 2019 Dean’s Awards for Excellence. Recipients were recognized for excellence in service, teaching and scholarship. A full list of recipients is available here.

On November 27, Concordia announced a three-year partnership with the Court of Quebec, which will allow students in the Law and Society program gain behind-the-scenes access to the province’s judicial system. Spearheaded by Concordia’s jurist-in-residence Morton Minc and the Faculty of Arts and Science, the pilot project will give students access to the Court of Quebec that includes meeting with judges and lawyers, sitting in on trials and touring facilities. The first cohort of students will conclude the experience in May 2020 with a presentation to their peers. Participating students will receive a Certificate of achievement signed by the dean of the Faculty of Arts and Science and a representative from the Court of Quebec.

On December 9, the Faculty of Arts and Science, in collaboration with MIGS, will be welcoming Vincent Rwigamba, Division Manager at the Rwanda Housing Authority and Njeri Cerere, co-founder of Partner Africa. Part of the MTL 2050 activities, this event commemorates the passing of 25 years since the Rwanda genocide, and addresses the rebirth of the city of Kigali as well as the incredible resilience of its people.

Cristian Zaelzer-Perez, Concordia instructor and STE(A)M (science, technology, engineering, arts and mathematics) advisor for the Faculty of Fine Arts, won a major teaching award from the Society of Neuroscience, 2019 Science Educator Award, earning the honour for his innovative course where science and fine arts students come together through the Convergence Initiative. Awarded annually, the honour recognizes one or two neuroscientists who have made significant contributions to educating the public about the field.

Highlights from the Gina Cody School include 3rd Law Meets Engineering lecture on November 27. With 60 guests in attendance, Concordia Jurist-in-Residence Morton Minc hosted a discussion with Me Claudia Desjardins Bélisle and Me Marissa Frishma on various facets of labour law.

Sasan Fazeli, PhD candidate supervised by Maria Elektorowicz (Building, Civil and Environmental Engineering) won the Philip H. Jones Award from the Canadian Association on Water Quality at the 33rd Eastern Canadian Symposium on Water Quality Research. His presentation was entitled "Identification and evolution of sulfamethoxazole transformation products by triple quad LC-MS-MS remediated by UV/H2O2 AOP".

PhD candidate Giuseppe Di Labbio won the 2019 Jury prize in the Natural Sciences and Engineering
Research Council of Canada (NSERC) Science Exposed contest devoted exclusively to images of scientific research. His winning photo is entitled “Laminar healthy vortices and leaking heart valves”.

Nikolaos Tsantalis (Computer Science and Software Engineering) received the IEEE Computer Society TCSE Most Influential Paper Award for the paper "Identification of Extract Method Refactoring Opportunities". The award was given at the 26th IEEE International Conference on Software Analysis, Evolution and Reengineering.

Jeremy Clark (Concordia Institute for Information Systems Engineering) received an Industrial Research Chair supported by Raymond Chabot Grant Thornton, a Canadian leader in assurance, tax, consulting, and recovery and reorganization services, and Catallaxy. The Chair program entitled “NSERC/RCGT/Catallaxy Industrial Research Chair in Blockchain Technologies” aims to investigate applications of underlying Blockchain technology in the following themes: new financial technologies beyond digital cash including corporate lending, currencies with stable exchange rates, and derivatives; auditing tools for firms holding blockchain-based assets and conducting blockchain-based transactions; verifiable election systems for governmental or shareholder elections; and a flexible agenda for addressing new use cases from RCGT/Catallaxy's client base. This five-year IRC has a total cash value of $1,364,390.00 plus $613,600 in-kind.

The PERFORM Centre was selected to host a one-day mini Symposium as part of the Annual Meeting of the Organization for Human Brain Mapping (OHBM) which will bring some 5,000 academics, researchers and practitioners to Montreal this summer. The mini symposium on Advanced brain imaging for the study of health behaviors: sleep, nutrition and physical activity will be held at the Oscar Peterson Concert Hall on June 25, 2020.

The PERFORM Centre and Faculty of Fine Arts hosted the first ever day-long retreat, on November 22, that brought together participants from three Faculties and over 14 units. The event was comprised of 20 presentations, group discussions, and networking opportunities and will lead to two internally funded multidisciplinary projects, as well as collaborative grant applications submitted to external agencies.

Concordia and the School of Graduate Studies hosted the annual Acfas Journées de la relève en recherche on October 24 and 25. This two-day professional development conference brought together over 200 francophone graduate students from across Quebec to develop their research competencies and career preparedness. Our students participated in record numbers, with 23 graduate students and 4 different presenters from GradProSkills, the Library and District 3. Acfas noted Concordia’s leadership role in this important francophone event.

Cristina Barbu and Racha Cheikh-Ibrahim, two team members from GradProSkills, presented their work at the Graduate Professional Development Network annual conference in Halifax in November. Cristina presented the results of an assessment she conducted last winter on the inclusiveness of GradProSkills workshops, while Racha presented the results of a benchmarking survey of best practices in Canada for linking graduate professional development to academic programs. Both sessions were well attended and received positive feedback from participants and organizers.

A group of nine graduate students from the Department of Psychology recently helped launch Concordia’s annual Journal of Accessible Psychology. The journal’s first editor-in-chief is Psychology PhD student Alexa Ruel. The graduate students are “Getting their Hands Dirty” by inviting undergraduate students to submit their thesis work in blog-style posts. The journal’s mission is to teach undergraduate
students about science communication by giving them the opportunity to write about their own psychological research, and to train graduate students on the same topic by giving them experience with the review process. The journal’s founders, including Public Scholars Heather Herriot and Milan Valyear, will run workshops to teach students how to write about their research in a more accessible manner, along with other skills for science communication, like how to use social media effectively to engage the public.

To foster cross-disciplinary and cross-Faculty collaboration around cities, four internal grants were awarded to projects and events that involve faculty members, students, staff from across the university. The two projects receiving support focus on the deconstruction of the Champlain Bridge and on Montréal’s bee populations. The two event awards support efforts to engage Montréal’s black and Arabic-speaking communities. Winning projects will be profiled in NOW stories to be published in early January, and a second call for proposals will be issued around the same time.

This fall, staff members at the Ville de Montréal are working on a series of urban challenges with students in six courses through a pilot program called CityStudio Montréal. CityStudio serves as a bridge between the university and the municipal government, with city staff members proposing projects that are then matched with relevant courses in various disciplines and Faculties. There are currently 150 students and 8 professors from 4 departments working on CityStudio challenges. An end-of-semester showcase of CityStudio projects is happening at Marché Bonsecour on December 4 from 3 to 6 pm.

The 39th annual John Molson MBA International Case Competition will take place between January 6 and 10 at Hotel Bonaventure. The competition will include 36 of the world’s top business schools and is recognized as the largest case competition of its kind.

JMSB has signed a memorandum of understanding with the Centre de transfert d’entreprise du Québec (CTEQ). As part of the agreement, JMSB’s Bob and Raye Briscoe Centre in Business Ownership Studies will collaborate with CTEQ on initiatives to help demystify and facilitate the business acquisition process for students and other Concordia stakeholders.

On November 20, JMSB launched its Buying Your Own Business workshop series, run jointly by the Bob and Raye Briscoe Centre in Business Ownership Studies and John Molson Executive Centre. The series introduces individuals to the possibilities of buying their own business and gives them the skills they need to achieve their business-ownership dreams. The first workshop in the series, “Where do I find a business to buy?” provided tools and strategies to find an appropriate business for acquisition.

District 3 was the leading partner to one of Canada’s largest innovation competitions of the year, the Cooperathon, organized by Desjardins Lab for providing its expertise and open source startup library for participants and workshops. La Presse also recognized District 3 for its diversity with more than 40% of start-ups starting in 2018 with at least one woman co-founder, and 80% of startups having one immigrant co-founder. The story was picked up by the Concordia Now who lauded the organization for setting the standard for diversity in the workplace.
REPORT TO SENATE
FROM THE
LIBRARY COMMITTEE

(Senate Meeting – December 13, 2019)

1. Dr. Beaudry has been nominated for a 3-year term to the Board of Directors of the Canadian Research and Knowledge Network (CRKN) and elected as Chair of the Content Strategy Committee. CRKN is the national consortium of academic libraries for the negotiations of licenses to provide access to journals, books and other library digital resources.

2. BCI Partnership

Concordia is a member of the Partnership of Quebec University Libraries, officially launched October 11, 2019. There are three major projects under the Partnership so far, GéoIndex (geospatial data), Dataverse (research data management), and the shared library services platform (LSP). The solution selected for the LSP is WorldShare Management Services (WMS) from OCLC, a global library cooperative. WMS handles all library functions for acquiring, describing, discovering, lending and managing library collections in print and digital formats. The system is cloud-based, and the software is maintained remotely by the vendor. The shared system will be bilingual and will provide a single site from which to explore the collections of all Quebec university libraries. Work towards implementation started in April 2019, once the contract was signed, and progress is on-track for implementation by all sites in June 2020.

3. Concordia University Press Update

- First book: Everything is Relevant: Writings on Art and Life has been printed and will be available in January 2020.
- Second book: Les religions de la Route de la Soie will be printed and open digital version will be published simultaneously for January 2020.

Respectfully submitted,
Dr. Guylaine Beaudry
Vice-Provost, Digital Strategy and University Librarian
26 November 2019
Meeting of November 22, 2019

1. Renewal of Recognition of Research Units

The Committee reviewed the renewal dossiers received from:

- **Concordia Institute for Water, Energy and Sustainable Systems (CIWESS) - Established Research Centre – Renewal for 6 years**
- **Centre for Applied Synthetic Biology (CASB) - Established Research Centre (with an Established Infrastructure Platform) – Renewal for 6 years**

Committee members agreed that the two above-mentioned units met the renewal criteria outlined in the *Policy on Research Units and Infrastructure Platforms* (VPRGS-8) and “under the authority of Senate, through the Senate Research Committee”, unanimously approved the renewal of **University-recognized status** for years indicated above.

2. New Recognition of Research Unit

Documents submitted to Senate for approval.
## COMMITTEE APPOINTMENTS

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<td>Esther Morand (CSU)</td>
<td>2019/2020</td>
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<tr>
<td>Research</td>
<td>Chris Salter (FA)</td>
<td>2019/2020</td>
</tr>
</tbody>
</table>

### Appointments requiring Senate ratification

<table>
<thead>
<tr>
<th>Appointee</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Tribunal Pool</td>
<td>2019/2021</td>
</tr>
</tbody>
</table>

*December 4, 2019*
The Academic Programs Committee requests that Senate consider the following undergraduate changes for the 2020-21 Undergraduate Calendar:

Following approval of Faculty Councils, on **October 15 and November 12, 2019**, APC members reviewed the undergraduate curriculum submissions from the Faculty of Arts and Science, the Faculty of Fine Arts, the Gina Cody School of Engineering and Computer Science, and the Office of the Registrar. As a result of discussions, APC resolved that the following undergraduate curriculum proposals be forwarded to Senate for approval:

**Faculty of Arts and Science**
Department of Applied Human Sciences
AHSC-32 v2; APC-2019-7-D1 (For May 2020 Implementation)
[The proposal involves a modification to the title of the ‘Family Science’ concentration under the Specialization in Human Relation to ‘Family Science and Youth.’]
- Requirements

Department of Economics
ECON-28 v4; APC-2019-6-D5 (For May 2020 Implementation)
[The proposal involves the introduction of seven new courses and updates to several existing courses in response to recommendations outlined in the most recent UAC report, as well as the removal of COMP 201 from the program requirements as the course is no longer offered.]
- Requirements
- Courses

Department of Health, Kinesiology and Applied Physiology
EXCI-25 v11; APC-2019-7-D2 (For May 2020 Implementation)
[The proposal involves the addition of EXCI 415 to the electives for the Athletic Therapy; Exercise Science; and Kinesiology and Clinical Exercise Physiology programs; as well as updates to the prerequisites for several courses and an increase in the required internship hours for courses CATA 475 and 485.]
- Requirements
- Courses

Department of Geography, Planning and Environment
GEOG-48 v4; APC-2019-7-D3 (For September 2020 Implementation)
[The proposal involves updates to requirements for all Human Environment programs and the Major and Minor in Environmental Geography, the deletion of GEOG 300, the creation of new course GEOG 485, and updates to course descriptions, titles, prerequisites and exclusion notes for several courses.]
- Requirements
- Courses
Department of Theological Studies
THEO-23 v4; APC-2019-7-D4 (For May 2020 Implementation)- **Program Title Change**

The proposal involves closing the Certificate in Christian Spirituality, a title change for the ‘Certificate in Pastoral Ministry’ to ‘Certificate in Pastoral Care’, and updates to the program requirements for the Certificate in Pastoral Care.

- Requirements
- Courses

**Faculty of Fine Arts**
Department of Theatre
THEA-26 v7; APC-2019-7-D5 (For September 2020 Implementation)

The proposal involves adjustments to course numbers to reflect a stronger three-year trajectory, the addition of a new course, and updates to the program requirements for the Specialization in Performance Creation.

- Requirements
- Courses

Gina Cody School of Engineering and Computer Science
ENCS-97 v3; APC-2019-7-D6 (For May 2020 Implementation)

The proposal involves the removal of SCPA 201 from Section 71.110, as it is a closed course reserved for SCPA students, and an update to the title of GEOG 202 in Section 71.110 to align with the course title change approved by the Department of Geography, Planning and Environment in dossier GEOG-48.

- Requirements

Department of Electrical and Computer Engineering
ENCS-98 v4; APC-2019-7-D7 (For May 2020 Implementation)

The proposal involves the cross-listing of COEN 433 with BIOL 475 and COEN 434 with BIOL 476.

- Courses

Department of Department of Building, Civil and Environmental Engineering.
BLDG-86 v5; APC-2019-7-D8 (For May 2020 Implementation)

The proposal involves modifications to the Building Engineering Core and Option Elective Lists, the addition of ENGR 490 to the Building Engineer Core as an alternative to BLDG 490 and to the Civil Engineer Core as an alternative to CIVI 490, the creation of new courses, course code changes, and prerequisite and editorial changes for several courses.

- Requirements
- Courses

Department of Electrical and Computer Engineering
ELEC-109 v5; APC-2019-7-D9 (For May 2020 Implementation)

The proposal involves modifications to the Computer Engineering Core, Options and Elective List, the addition of ENGR 490 to the Computer Engineering Core as an alternative to COEN 490, changes to course prerequisites and course descriptions, and the deletion of ELEC 353.

- Requirements
- Courses
The proposal involves editorial changes and changes to prerequisites, exclusion notes, and codes for several courses where the new code MIAE replaces MECH; the deletion of AERO 444; and updates to the core and elective lists for Aerospace Engineering, Mechanical Engineering and Industrial Engineering.

- Requirements
- Courses

Office of the Registrar

The proposal involves changes to the regulations to allow for the possibility of a Baccalaureate degree to be completed through the accumulation of three certificates, where the admissions and graduate criteria established by the Faculties permit this.

- Regulations

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

Following approval of Faculty Councils and the Graduate Curriculum Committee, on November 12, 2019, APC members reviewed the graduate curriculum submission from the Faculty of Fine Arts. As a result of discussions, APC resolved that the following graduate curriculum proposal be forwarded to Senate for approval:

Faculty of Fine Arts

Department of Creative Arts Therapies

The proposal involves the introduction of a new 15-credit Graduate Certificate in Play Therapy, to be offered in the summer term.

- Requirements
- Courses

Sandra Gabriele, PhD
Vice-Provost, Innovation in Teaching and Learning
November 25, 2019
INTERNAL MEMORANDUM

TO: Dr Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
    Office of the Provost and Vice-President, Academic Affairs
    Chair, Academic Programs Committee

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

DATE: September 20, 2019

SUBJECT: 2020-21 Undergraduate Calendar Curriculum Changes
          Department of Applied Human Sciences
          AHSC-32
          Family Science concentration modified to Family Science and Youth

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

The Department of Applied Human Sciences is modifying the title of the Family Science
concentration under the Specialization in Human Relations to Family Science and Youth. Adding
the ‘Youth’ to the title is “more consistent with what is emphasized in the program and
provides a clearer indication of potential academic and career trajectories.”

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

Reference documents:
FCC 2019.1_AHSC-32
ASFC 2019-5M-G
Department of Applied Human Sciences

AHSC-32

Memo from Associate Dean

Program concentration name change

BA Specialization in Human Relations (Family Science and Youth Concentration)
INTERNAL MEMORANDUM

TO: Richard Courtemanche, Associate Dean, Academic Programs, L-AD 225
FROM: Peter Morden, Chair, Applied Human Sciences, L-VE223-02
DATE: September 2, 2019
SUBJECT: Curriculum Proposal: Change name of concentration under the BA Specialization in Human Relations

Following the approval by the Full-time Faculty Committee at its meeting on May 2, 2019, the Department of Applied Human Sciences is submitting the following undergraduate curriculum proposal for your consideration:

1. Change the name of the Family Science concentration to Family Science and Youth, in the BA Specialization in Human Relations:

The proposed title change is more consistent with what is emphasized in the program and provides a clearer indication of potential academic and career trajectories.

Peter Morden
Chair, Department of Applied Human Sciences
L-VE- 223.02
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: AHSC-32 VERSION: 2

PROGRAM CHANGE: Specialization in Human Relations

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Applied Human Sciences
Program: Specialization in Human Relations
Degree: BA
Calendar Section/Graduate Page Number: 31.010

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
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<tbody>
<tr>
<td>60 BA Specialization in Human Relations</td>
<td>60 BA Specialization in Human Relations</td>
</tr>
<tr>
<td>15 AHSC 220(^3), 230(^3), 232(^3), 260(^3), 270(^3)</td>
<td>15 AHSC 220(^3), 230(^3), 232(^3), 260(^3), 270(^3)</td>
</tr>
<tr>
<td>15 AHSC 311(^3), 330(^6), 380(^3), 382(^3)</td>
<td>15 AHSC 311(^3), 330(^6), 380(^3), 382(^3)</td>
</tr>
</tbody>
</table>

Students must follow one of the following concentrations: Individual and Small Group Processes; Family Science; Community Development; or Organization Development and Change.

... Family Science Concentration

18 AHSC 312\(^3\), 313\(^3\), 320\(^3\), 355\(^3\), 456\(^3\), 465\(^3\) | 18 AHSC 312\(^3\), 313\(^3\), 320\(^3\), 355\(^3\), 456\(^3\), 465\(^3\) |
| 6 AHSC 436\(^6\) | 6 AHSC 436\(^6\) |
| 6 Elective credits chosen from AHSC 314\(^3\), 316\(^3\), 319\(^3\), 322\(^3\), 398\(^3\), 400\(^3\) | 6 Elective credits chosen from AHSC 314\(^3\), 316\(^3\), 319\(^3\), 322\(^3\), 398\(^3\), 400\(^3\) |

Rationale:
The title Family Science and Youth better reflects the content of the program and the lifespan approach.

Resource Implications:
n/a
Dear Dr. Gabriele and members of the APC,

Please excuse my absence. It was my intention to be present for any questions that may arise, but Mother Nature seems to have other ideas. Please accept the following as my attempt to answer questions related to APC-2019-7-D1. I accept that your inability to pose additional questions may impair the committee’s ability to make a decision, and that my presence may be required at a later date.

The rationale I provided in support of the concentration name-change from Family Science to Family Science and Youth was:

The proposed title change is more consistent with what is emphasized in the program and provides a clearer indication of potential academic and career trajectories.

To expand upon this a bit, within the Family Science curriculum there are a number of courses with “youth” or “adolescence” explicitly in the title; for instance, Adolescence: Issues and Intervention, Family and Youth Legislation, and Fundamentals of Child- and Youth-Care Work. However, many courses make no explicit reference in the title, yet youth are a minor or major focus. For example, Parent-Child Relations, Family Communication, Foundations of Family Life Education and Advanced Family Life Education, and Sexuality in Human Relations. Consequently, our programmatic coverage of adolescence is somewhat understated. This, in turn, leads to students failing to recognize potential academic and career pathways relevant to adolescence. It is our hope that by highlighting Youth in the concentration name, it will more clearly indicate a significant curricular focus and attract students interested in youth.

We considered many different options in order to reduce the lack of parallelism in the title (e.g., Family Science and Youth Work, Family and Youth Science, Youth and Family Science) and rejected each. There was significant resistance to names that changed the priority (e.g., Youth and Family Science) or integrity (e.g., Family and Youth Science) of Family Science, which is the standard disciplinary nomenclature. As well, names that modified “youth” (e.g., Family Science and Youth Work) created the false impression of the extent of such specific content within the curriculum.

Thus, a change to Family Science and Youth was unanimously supported in AHSC in order to increase the visibility of this part of the curriculum, provide students with a clearer indication of the nature of the program and the future opportunities it affords, and maintain the integrity of the Family Science name.

Thank you for your consideration,

Peter Morden, Chair
INTERNAL MEMORANDUM

TO: Dr Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
    Office of the Provost and Vice-President, Academic Affairs
    Chair, Academic Programs Committee

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

DATE: September 20, 2019

SUBJECT: 2020-21 Undergraduate Calendar Curriculum Changes
          Department of Economics
          ECON-28
          New courses ECON 200, 330, 332, 333, 340, 430, 440 and various
          course description changes; COMP 201 removed from all programs

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

The Department of Economics is updating several course offerings further to feedback
obtained from the latest department appraisal and in response, is also introducing seven new
courses. At the 200-level they are proposing one course, ECON 200 Economics and Social Issues;
at the 300-level, four courses including ECON 330 Economics in Practice, the courses on
financial economics ECON 332 Introduction to Financial Economics I and ECON 333 Introduction
to Financial Economics II, as well as the course ECON 340 Population Economics; and at the 400-
level two courses, ECON 430 Transportation Economics, ECON 440 Market Design. Overall,
these courses reflect recent developments in economics, multidisciplinary content, workplace-
oriented applications, geographical and transport-related economical developments and are
filling voids in financial curricular offerings. These updates and additions follow a careful plan:
the department carefully considered student feedback and recommendations from the
University Appraisals Committee (UAC) in devising these courses. Of note, a number of these
courses have been given on a trial basis in the Special Topics courses offered by the department
(ECON 398 and 498).

Also, further to Senate approved changes submitted by the Gina Cody School of Engineering
and Computer Science and removal of COMP 201 from their curriculum, the Department of
Economics is subsequently removing COMP 201 from the Specialization, Major and Minor in Economics and the Minor in Analytical Economics.

Thank you for your consideration of this proposal for which there are no additional resource implications. The eight new courses will come from the department’s current allotment.

Reference documents:
FCC 2019.1_ECON-28
ASFC 2019-5M-K
Department of Economics

ECON-28

Memo from Chair

Program Changes

BA Specialization in Economics

BA Major in Economics

Minor in Economics

Minor in Analytical Economics

New course

ECON 200  Economics and Social Issues

ECON 330  Economics in Practice

ECON 332  Introduction to Financial Economics I

ECON 333  Introduction to Financial Economics II

ECON 340  Population Economics

ECON 430  Transportation Economics

ECON 440  Market Design

Course description change

ECON 325  Mathematics for Economists I

ECON 326  Mathematics for Economists II

ECON 377  The Asia-Pacific Rim Economies
INTERNAL MEMORANDUM

TO: Dr. Paul Joyce, Associate Dean of Academic Affairs, Faculty of Arts and Science
FROM: Dr. Jorgen Hansen, Chair, Department of Economics
DATE: January 28, 2019; revised May 7, 2019, November 12, 2019

SUBJECT: Revisions to Course Descriptions and Additions of New Courses

In response to the recommendations outlined in the most recent University Appraisal Committee (UAC) report as well as to changes in our faculty complement, the Department’s Undergraduate Program Committee reviewed and unanimously supported the proposed changes to some of our undergraduate courses. The approvals were obtained electronically between January 16th and January 22nd, 2019. The changes were also approved by the Department Council at its meeting on April 17th, 2019. They include revisions to the course descriptions for three existing courses (ECON 325, 326 and 377) in the Undergraduate calendar and the addition of seven new courses (ECON 200, 330, 332, 333, 340, 430 and 440). The course content updates in ECON 325, 326 and 377 are to reflect recent developments in economics. Further to student feedback and recommendations from the UAC, seven new courses are also added. ECON 332 and 333 are courses created due to student demand for financial economics. ECON 200, 330, 340, 430 and 440 are created due to the UAC’s recommendation for multidisciplinary studies. ECON 200, 330, 332, 340, 430 and 440 have been successfully offered under 398 and 498 numbers with healthy enrolments. There are no additional resource implications as these courses will be offered as part of the Department's annual allotment. These courses will be offered on rotation with other courses.

Based on the recommendation of the UAC to incorporate multidisciplinary studies in our programs, we previously revised our curriculum to allow our program students to complete COMP 201 Introduction to Computing in lieu of an economics course. This revision affected our Major, Specialization, Minor and Analytical Minor. In 2019, the Gina Cody School of Engineering and Computer Science deleted this course under the senate resolution number US-2019-3-D26. As a result, we would like to delete COMP 201 from our aforementioned programs.

Please do not hesitate to contact me should you have any questions.

Regards,

Dr. Jorgen Hansen
Chair and Professor
Department of Economics
**Program Change:** Specialization in Economics

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

**Faculty/School:** Arts and Science  
**Department:** Economics  
**Program:** Specialization in Economics  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.080

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

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<tr>
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<th>Proposed Text</th>
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<tbody>
<tr>
<td><strong>60</strong> BA Specialization in Economics</td>
<td><strong>60</strong> BA Specialization in Economics</td>
</tr>
<tr>
<td>Stage I</td>
<td>Stage I</td>
</tr>
<tr>
<td>6 *ECON 201³, 203³</td>
<td>6 *ECON 201³, 203³</td>
</tr>
<tr>
<td>6 **ECON 221³, 222³ Stage II</td>
<td>6 **ECON 221³, 222³ Stage II</td>
</tr>
<tr>
<td>6 ECON 301³, 302³</td>
<td>6 ECON 301³, 302³</td>
</tr>
<tr>
<td>6 ECON 303³, 304³</td>
<td>6 ECON 303³, 304³</td>
</tr>
<tr>
<td>3 Chosen from ECON 318³, 319³</td>
<td>3 Chosen from ECON 318³, 319³</td>
</tr>
<tr>
<td>6 ECON 324³, 325³</td>
<td>6 ECON 324³, 325³</td>
</tr>
<tr>
<td>3 Chosen from 300-level ECON elective credits; GEOG 380³, COMP 201³, 218³ Stage III</td>
<td>3 Chosen from 300-level ECON elective credits; GEOG 380³, COMP 218³ Stage III</td>
</tr>
<tr>
<td>3 ECON 421³ or 423³</td>
<td>3 ECON 421³ or 423³</td>
</tr>
<tr>
<td>21 400-level ECON elective credits</td>
<td>21 400-level ECON elective credits</td>
</tr>
</tbody>
</table>

**Rationale:**  
The Gina Cody School of Engineering and Computer Science removed COMP 201 under the Senate document US-2019-3-D26 on May 17, 2019. It is therefore being removed from all programs in the Department of Economics.

**Resource Implications:**  
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ECON-28 VERSION: 4

PROGRAM CHANGE: Major in Economics

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Economics
Program: Major in Economics
Degree: BA
Calendar Section/Graduate Page Number: 31.080

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

<table>
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<tr>
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<th>Proposed Text</th>
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<tbody>
<tr>
<td>42 BA Major in Economics</td>
<td>42 BA Major in Economics</td>
</tr>
<tr>
<td>Stage I</td>
<td>Stage I</td>
</tr>
<tr>
<td>6 *ECON 201, 203</td>
<td>6 *ECON 201, 203</td>
</tr>
<tr>
<td>6 **ECON 221, 222</td>
<td>6 **ECON 221, 222</td>
</tr>
<tr>
<td>Stage II</td>
<td>Stage II</td>
</tr>
<tr>
<td>6 ECON 301, 302</td>
<td>6 ECON 301, 302</td>
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<tr>
<td>6 ECON 303, 304</td>
<td>6 ECON 303, 304</td>
</tr>
<tr>
<td>3 Chosen from ECON 318, 319, 324</td>
<td>3 Chosen from ECON 318, 319, 324</td>
</tr>
<tr>
<td>3 Chosen from 300-level ECON elective credits; GEOG 380; COMP 201, 218</td>
<td>3 Chosen from 300-level ECON elective credits; GEOG 380; COMP 218</td>
</tr>
<tr>
<td>Stage III</td>
<td>Stage III</td>
</tr>
<tr>
<td>12 400-level ECON credits</td>
<td>12 400-level ECON credits</td>
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</table>

Rationale:
The Gina Cody School of Engineering and Computer Science removed COMP 201 under the Senate document US-2019-3-D26 on May 17, 2019. It is therefore being removed from all programs in the Department of Economics.

Resource Implications:
None.
PROGRAM CHANGE: Minor in Economics

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Economics
Program: Minor in Economics
Degree:

Calendar Section/Graduate Page Number: 31.080

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

Present Text (from 2019/2020) calendar

<table>
<thead>
<tr>
<th>Stage I</th>
<th>Stage II</th>
<th>Stage III</th>
</tr>
</thead>
<tbody>
<tr>
<td>6  *ECON 201(^3), 203(^3)</td>
<td>6  ECON 318(^3), 319(^3)</td>
<td>6  200- or 300-level ECON elective credits</td>
</tr>
<tr>
<td>*Students exempted from ECON 201 and/or 203 are required to replace these courses with ECON elective credits or GEOG 380(^3) or COMP 218(^3).</td>
<td>*Students exempted from ECON 201 and/or 203 are required to replace these courses with ECON elective credits or GEOG 380(^3) or COMP 218(^3).</td>
<td>*Students exempted from ECON 201 and/or 203 are required to replace these courses with ECON elective credits or GEOG 380(^3) or COMP 218(^3).</td>
</tr>
</tbody>
</table>

**Any equivalent six credits satisfy this component of the program.**

Rationale:
The Gina Cody School of Engineering and Computer Science removed COMP 201 under the Senate document US-2019-3-D26 on May 17, 2019. It is therefore being removed from all programs in the Department of Economics.

Resource Implications:
None.
PROGRAM CHANGE: Minor in Analytical Economics

Faculty/School: Arts and Science
Department: Economics
Program: Minor in Analytical Economics
Degree:
Calendar Section/Graduate Page Number: 31.080

Type of Change:
[X] Requirements

Present Text (from 2019/2020) calendar

<table>
<thead>
<tr>
<th>24 Minor in Analytical Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE: MATH 203 or 209; MAST 221; or equivalent are prerequisites for this program. ECON 201, 203, and 325 are waived as prerequisites only for those courses which are taken as part of the minor.</td>
</tr>
<tr>
<td>3 Chosen from ECON 222³; GEOG 380³; COMP 201³, 218³</td>
</tr>
<tr>
<td>12 ECON 301³, 302³, 303³, 304³</td>
</tr>
<tr>
<td>3 Chosen from ECON 318³, 319³</td>
</tr>
<tr>
<td>3 ECON 324³</td>
</tr>
<tr>
<td>3 Chosen from ECON 421³, 423³</td>
</tr>
</tbody>
</table>

NOTE: This program is intended for students in Science, Mathematics/Statistics, or Engineering.

Proposed Text

<table>
<thead>
<tr>
<th>24 Minor in Analytical Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE: MATH 203 or 209; MAST 221; or equivalent are prerequisites for this program. ECON 201, 203, and 325 are waived as prerequisites only for those courses which are taken as part of the minor.</td>
</tr>
<tr>
<td>3 Chosen from ECON 222³; GEOG 380³; COMP 218³</td>
</tr>
<tr>
<td>12 ECON 301³, 302³, 303³, 304³</td>
</tr>
<tr>
<td>3 Chosen from ECON 318³, 319³</td>
</tr>
<tr>
<td>3 ECON 324³</td>
</tr>
<tr>
<td>3 Chosen from ECON 421³, 423³</td>
</tr>
</tbody>
</table>

NOTE: This program is intended for students in Science, Mathematics/Statistics, or Engineering.

Rationale:
The Gina Cody School of Engineering and Computer Science removed COMP 201 under the Senate document US-2019-3-D26 on May 17, 2019. It is therefore being removed from all programs in the Department of Economics.

Resource Implications:
None.
**COURSE CHANGE:** ECON 200  

New Course Number:  

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

**Faculty/School:** Arts and Science  
**Department:** Economics  
**Program:** BA  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.080  

<table>
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<tr>
<th>Type of Change</th>
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<tr>
<td>[ ] Course Number</td>
<td>[ ] Course Title</td>
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<tr>
<td>[ ] Course Description</td>
<td>[ ] Editorial</td>
<td>[ ] Credit Value</td>
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<tr>
<td>[ ] Course Deletion</td>
<td>[ ] Other - Specify</td>
<td>[ ] Prerequisite</td>
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</tbody>
</table>

**Present Text (from 20xx/20xx) calendar**  

**Proposed Text**  

**ECON 200  Economics and Social Issues** (3 credits)  

This course is intended to introduce students to economics. This course demonstrates how economics can be used to examine various social issues such as immigration, crime, addiction and pollution. The course also examines the data and policies associated with each issue as well as the insights and empirical findings offered by economics. Students are introduced to the economic way of thinking when examining each issue. No previous knowledge of economic concepts, graphs or mathematics is required.

*NOTE: Students who have received credit for ECON 302 or 304 or for this topic under an ECON 298 number may not take this course for credit.*

**Rationale:**  
The University Appraisal Committee 2017 report recommended offering courses that incorporate multi-disciplinary content. This course covers economic and social issues such as immigration, crime, addiction, pollution and other topics that link with other social science disciplines. This course has no prerequisites, and is meant to attract students who have no previous knowledge in economics.

**Enrolment:**  
Winter 2019: 38/40

**Resource Implications:**  
None. This course will be offered in rotation with the department annual allotment.

**Other Programs within which course is listed:**  
None.
**COURSE CHANGE: ECON 325**

**New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Economics  
**Program:** Honours, Specialization in Economics; Minor in Analytical Economics  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.080

**Type of Change:**  
[X] Course Description  
[ ] Course Number  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:

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

**ECON 325** *Mathematics for Economists I* (3 credits)  
Prerequisite: ECON 201, 203; MATH 203 or 209 or equivalent. This course introduces students to core topics in algebra and optimization techniques. The topics covered include vector spaces and linear transformations; matrix operations; characteristic values and vectors; matrix differentiation. In addition, the course covers a review of constrained and unconstrained optimization with economic applications; Taylor series representation, implicit function theorem, and related topics.  
**NOTE:** Students who have received credit for MAST 234 or MATH 251 may not take this course for credit.

**Proposed Text**

**ECON 325** *Mathematics for Economists I* (3 credits)  
Prerequisite: ECON 201, 203; MATH 203 or 209 or equivalent. This course provides students with the fundamental mathematical tools necessary for economic studies and helps them develop a set of problem-solving and analytical skills. Topics may include linear models and basic matrix algebra, univariate calculus, exponential and logarithmic functions, comparative static analysis, and constrained and unconstrained optimization problems.  
**NOTE:** Students who have received credit for MAST 234 or MATH 251 may not take this course for credit.

**Rationale:**
The course content is updated based on the needs of 400-level economics courses and recent developments in economics.

**Resource Implications:**
None.

**Other Programs within which course is listed:**
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ECON-28 VERSION: 4

COURSE CHANGE: ECON 326 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Economics
Program: Honours in Economics
Degree: BA
Calendar Section/Graduate Page Number: 31.080

Type of Change:
[X] Course Description

Present Text (from 2019/2020) calendar
ECON 326  Mathematics for Economists II (3 credits)
Prerequisite: ECON 325. This course covers more advanced topics in optimization methods and introduces students to techniques in economics dynamics, as well as applications of integration. Topics include quadratic forms and second-order conditions, Kuhn-Tucker theory, the maximum principle, difference and differential equations, discounting and the rudiments of probability theory.
NOTE: Students who have received credit for MAST 235, MATH 252 or 283 may not take this course for credit.

Resource Implications:
None.

Other Programs within which course is listed:
None.

Proposed Text
ECON 326  Mathematics for Economists II (3 credits)
Prerequisite: ECON 325. This course covers mathematical tools necessary for advanced economic studies and provides students with a set of problem-solving and analytical skills. Topics may include implicit function theorem, multivariate calculus, constrained optimization with inequality constraints, envelope theorem and dynamic analysis.
NOTE: Students who have received credit for MAST 235, MATH 252 or 283 may not take this course for credit.

Rationale:
The course content is updated based on the needs of 400-level economics courses and recent developments in economics.

Calendar for academic year: 2020/2021
Implementation Month/Year: May 2020
**COURSE CHANGE:** ECON 330  
**New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Economics  
**Program:** Economics  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.080

**Type of Change:**

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**Present Text (from 20xx/20xx) calendar**

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| ECON 330 *Economics in Practice* (3 credits)  
Prerequisite: ECON 201, 203. This course relies on concepts used in managerial economics, applied microeconomics, public economics, applied statistics, and industrial organization to examine how economists approach and think about real-world problems. The course is organized around the setting that students are employees of a consulting firm hired to provide timely advice on pressing issues.  
NOTE: Students who have received credit for this topic under an ECON 398 number may not take this course for credit. |

**Rationale:**

The University Appraisal Committee report 2017 recommended offering more workplace-oriented courses. This course shows students how to apply economic concepts to examine various economic issues and formulate policy recommendations. Students will be required to gather data, conduct analysis, present their findings to their peers and submit written reports to their fictitious employer - the professor.

**Enrolment:**

Fall 2018 = 34/40

**Resource Implications:**

None. This course will be offered in rotation with the department annual allotment.

**Other Programs within which course is listed:**

None.
**COURSE CHANGE: ECON 332**

New Course Number: 

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

**Calendar for academic year:** 2020/2021

**Implementation Month/Year:** May 2020

**Faculty/School:** Arts and Science

**Department:** Economics

**Program:** Economics

**Degree:** BA

**Calendar Section/Graduate Page Number:** 31.080

**Type of Change:**

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**Present Text (from 20xx/20xx) calendar**

**Proposed Text**

**ECON 332 Introductory Financial Economics I (3 credits)**

Prerequisite: ECON 201, 203; MATH 203 or 209 or equivalent. This course is an introduction to investment issues. Topics may include consumption-savings decision under uncertainty, the allocation of savings from a portfolio perspective, securities markets, the historical record on risk and return, asset-pricing models, fixed income securities and behavioural finance. 

NOTE: Students who have received credit for this topic under for COMM 308 or for an ECON 398 number may not take this course for credit.

**Rationale:**

We surveyed our students and they overwhelmingly would like to take courses in financial economics. This course responds to student interest and fills an important niche in our curriculum. Our department is also planning to introduce an elective group tentatively named Money and Finance, and this course is a component in this elective group. JMSB does not offer any elective group in finance and their finance minor is reserved for JMSB students. We plan to fill this void. The University Appraisal Committee 2017 report recommended offering multi-disciplinary and inter-disciplinary programs. This planned elective group incorporates courses in JMSB such as FINA 200 and 210 and in ENCS such as COMP 218.

As the content of this course is similar to that of COMM 308 Introduction to Finance, an exclusion note is added. COMM 308 is reserved for JMSB students. Because of the similarities of these two courses, students should earn only three credits for either COMM 308 or ECON 332.

**Enrolment:**

Fall 2018: 32/35
Winter 2019: 30/35

**Resource Implications:**

None. This course will be offered in rotation with the department annual allotment.

**Other Programs within which course is listed:**

None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ECON-28 VERSION: 4

COURSE CHANGE: ECON 333

New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

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

Faculty/School: Arts and Science
Department: Economics
Program: Economics
Degree: BA
Calendar Section/Graduate Page Number: 31.080

Type of Change:
[ ] Course Number
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[ ] Credit Value
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<tr>
<td>ECON 333 Introductory Financial Economics II (3 credits)</td>
<td>Prerequisite: ECON 332. This course is the continuation of ECON 332 with an emphasis on derivative products and risk management. Topics may include the role of derivatives in financial markets, binomial model of stock prices, Black-Scholes pricing model, risk-neutral pricing, exotic derivatives, regulatory environment for financial markets, Basel Accords, models of risk and recent financial crisis. NOTE: Students who have received credit for this topic under an ECON 398 number may not take this course for credit.</td>
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Rationale:
We surveyed our students and they overwhelmingly would like to take courses in financial economics. This course responds to student interest and fills an important niche in our curriculum. Our department is also planning to introduce an elective group tentatively named Money and Finance, and this course is a component in this elective group. JMSB does not offer any elective group in finance and their Finance Minor is reserved for JMSB students. We plan to fill this void. The University Appraisal Committee 2017 report recommended offering multi-disciplinary and inter-disciplinary programs. This planned elective group incorporates courses in JMSB such as FINA 200 and 210 and in ENCS such as COMP 218. Given that this course requires the completion of ECON 332 as prerequisite, we have not offered this course in the past. We will be offering this course under a 398 number in Winter 2020.

Resource Implications:
None. This course will be offered in rotation with the department annual allotment.

Other Programs within which course is listed:
None.
**COURSE CHANGE:** ECON 340  
New Course Number: 

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<td>ECON 340 Population Economics (3 credits) Prerequisite: ECON 201, 203. This is a course in the field of applied economics, with a focus on population economics. Topics may include the demographic transition, economic growth, population aging (and its impact on financial markets), health care and pension financing, labour migration, microfinance, environmental consequences, and optimal policy approaches. NOTE: Students who have received credit for this topic under an ECON 398 number may not take this course for credit.</td>
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**Rationale:**

The University Appraisal Committee report 2017 recommended offering courses that incorporate multi-disciplinary content. Population growth and aging population are pressing issues for economists, urban planners, sociologists and environmentalists.

**Enrolments:**

- Fall 2016: 39/40
- Winter 2017: 27/40
- Fall 2017: 37/40
- Winter 2019: 37/40

**Resource Implications:**

None.

**Other Programs within which course is listed:**

None.
**COURSE CHANGE: ECON 377**  
**New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Economics  
**Program:** BA  
**Calendar Section/Graduate Page Number:** 31.080

**Type of Change:**  
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[ ] Credit Value  
[ ] Prerequisite

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| **ECON 377** *The Asia-Pacific Rim Economies* (3 credits)  
Prerequisite: ECON 201, 203. This course focuses primarily on those Asia-Pacific Rim countries that have achieved relatively high growth, and have undergone significant economic transformations over the past two decades. Among other things, it investigates China’s transformation towards a market economy, Japanese industrial development strategies, and economic development in Taiwan and South Korea. As well, institutions and associations that reinforce these trends will be studied.  
Rationale:  
The course content is updated based on recent events, and the modification to cover selected Asian economies allows instructors to choose from a variety of Asian economies to examine, without being restricted to China, Japan, Korea and Taiwan.  
Resource Implications:  
None.  
Other Programs within which course is listed:  
None. | **ECON 377** *The Asia-Pacific Rim Economies* (3 credits)  
Prerequisite: ECON 201, 203. This course analyzes the economic growth, industrial policies and crisis experiences of selected Asian economies. It provides an analysis of the policies and factors that have contributed to the economic transformation of these economies since World War II. It examines how these economies were affected by the Asian financial crisis in 1997 and their economic performance since then. The economic challenges that these economies are likely to face in the future may also be explored.  
Rationale:  
The course content is updated based on recent events, and the modification to cover selected Asian economies allows instructors to choose from a variety of Asian economies to examine, without being restricted to China, Japan, Korea and Taiwan.  
Resource Implications:  
None.  
Other Programs within which course is listed:  
None. |
**COURSE CHANGE:** ECON 430  
*New Course Number:*

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

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**Faculty/School:** Arts and Science  
**Department:** Economics  
**Program:** Economics  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.080

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**Present Text (from 20xx/20xx) calendar**

ECON 430  
*Transportation Economics* (3 credits)  
Prerequisite: ECON 222, 302, 304. This is a course in the field of applied economics, with a focus on transportation economics. Topics may include the evaluation of the economic benefits of various transportation systems, the social costs of transportation, road pricing, government participation in transportation finance and urban planning, the redistributive and other economic effects of transportation investment.  
*NOTE:* Students who have received credit for this topic under an ECON 498 number may not take this course for credit.  

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**Rationale:**

The University Appraisal Committee report 2017 recommended offering courses that incorporate multi-disciplinary content.

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**Enrolments:**

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<td>Fall 2016</td>
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<td>Winter 2017</td>
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<td>Fall 2017</td>
<td>58/60</td>
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<tr>
<td>Fall 2018</td>
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**Resource Implications:**

None. This course will be offered in rotation with the department annual allotment.

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**Other Programs within which course is listed:**

None.
**COURSE CHANGE**: ECON 440  
New Course Number:  

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

- **Faculty/School**: Arts and Science  
- **Department**: Economics  
- **Program**: BA  
- **Degree**: BA  
- **Calendar Section/Graduate Page Number**: 31.080

**Type of Change**:

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| ECON 440  
*Market Design* (3 credits)  
Prerequisite: ECON 222, 302, 304. This course focuses on the design and analysis of market mechanisms, which are concerned with how to construct rules for allocating resources and how to structure successful marketplaces. It draws on tools of game theory to identify why certain market rules or institutions succeed and why others fail. Topics may include matching markets, auctions, contracts, economic platforms and network effects. The main objectives of this course are to introduce students to some of the fundamental concepts and ideas in the theory of market design and to connect this theory to real-life markets and to practical aspects of market design policy.  
*NOTE:* Students who have received credit for this topic under an ECON 498 number may not take this course for credit. |

**Rationale:**  
Game theory is a popular field in economics and amongst students. This course shows how game theory covered in ECON 464 (Game Theory, Information, and Economic Modelling) can be applied in policy design. This course responds to student interest and fills an important niche in our curriculum.

**Enrolments:**  
Fall 2016: 28/40  
Winter 2019: 41/50

**Resource Implications:**  
None. This course will be offered in rotation with the department annual allotment.

**Other Programs within which course is listed:**  
None.
Course objectives
This course will examine various economic and social issues in Canada and around the world. Some microeconomic issues that may be examined include minimum wage, immigration, education, health, addiction, crime, firm competition strategies, voting and pollution. Macroeconomic issues that may also be discussed include government debt and deficits, inflation management, economic crisis and industrial policies. For each issue, we will begin with an overview of the relevant data and policies, followed by discussions on the insights and empirical findings that economists have made. Each issue is also linked to various sources of additional readings. Such readings could range from news articles that are brief and simple to academic publications that provide a more comprehensive discussion of the associated issue. Some aforementioned issues may not be covered due to time constraint, and new issues may be added based on class interest.

There are no prerequisites for this course. Minimum graphs and mathematics will be needed. Our emphasis is on examining the insights economists have made on various issues. Our course will cover a vast amount of readings.

Course Material
No textbook is required. Lecture notes and study problems are posted at http://mypage.concordia.ca/alcor/clau/

Grading Policy
Midterm Exam: 25%, February 21st Thursday, class time, in H539.
Policy Brief Presentation: total 25%, class time, in H539, the last three/four classes (to be determined after DISC date).
Final Exam: 50%, all topics and presentation slides, to be scheduled by the Examination’s Office.

Important Dates: http://www.concordia.ca/events/academic-dates.html
Jan 21st – Add/drop (DNE) deadline with no academic or financial impact on the student’s academic record.
Feb 21st – Midterm – Coverage: Sections A and B.
March 18th – Withdrawal deadline (DISC), no tuition refund and with “DISC” on the student’s academic record.
March 18th – Last day to sign up for group project.
March 22nd – Outline of presentation due.
March 29th – Presentation slides due.
April 2nd to 11th – Presentations (subject to change).
April 11th – Last class for our course.
April 15th – Policy brief due.
April 16th to May 5th – Final examination, schedule to be set by the Examination’s Office.

Important Notes
1. The Department of Economics does not offer supplemental exams.
2. If a student misses the midterm, please contact the instructor prior to the exam date. Documented reasons, such as a valid medical note, have to accompany any request for an extension. The validity of the reason(s) is at the discretion of the instructor. The instructor may contact the information on the note(s) for verification. If a student misses the midterm, the weight of the midterm will be added to the final exam. If a student misses the final exam, please go to the Examinations Office, FB 8th floor, to apply for a deferral.
Concordia University  
Department of Economics

Economics in practice  
ECON 398 - Fall 2018  
(proposed as ECON 330)

Instructor: Christian Sigouin  
Office: H 1155.41  
Phone: 848-2424, ext 3916  
Email: christian.sigouin@concordia.ca  
Office hours: Tuesday and Thursday 13:00 to 14:00, or by appointment

Description
This course aims to help student understand how economic theory can be applied to various issues encountered in real life situations. Simple tools from an economist’s toolbox are used to analyse government policy and business decisions. The emphasis is put on the type of problems that economics graduates may be asked to analyse once they enter the job market.

Textbook
Chapters from the following textbook will be used throughout the semester:

Other material will be supplied on the course’s moodle page.

Evaluation
Briefs (short written reports) [2]: 25%
Quizzes [4]: 20%
In-class team work: 20%
End-of-term team project: 35%

***
Note that quizzes and in-class team work might not be announced in advance. ***
Miss a class at your own risk. Class attendance is mandatory.
Concordia University
Department of Economics
ECON 398
(proposed as ECON 332 Introduction to Financial Economics I)
MW 10:15-11:30

Franck Y. Goussanou, Ph.D., CFA
Phone: (438) 880-8236
franck.goussanou@concordia.ca

Course Objectives
This course is an introduction to financial economics with a focus on investment management issues. We will learn
1. the different asset classes and financial instruments,
2. how investors make their investment decisions,
3. modern portfolio theory and practices,
4. how to price fixed income securities.

The course website on moodle should be consulted on regular basis for information relating to the course. Assignments and solutions will be made available through it.

There are no supplemental privileges for this course.

Textbook and Class Material
Students are required to purchase Investments by Zvi Bodie, Alex Kane, Alan Marcus, Stylianos Perrakis, Peter Ryan, 8th Edition, McGraw-Hill. Supplementary course materiel will be made available on the moodle site.

Evaluation
The components of the final grade:
• Two assignments 20%

The course has two assignments: before and after the mid-term. The assignments will involve problems and some computer work [EXCEL].

• Mid-term exam 30%
• Final exam 50%

The final exam will cover all the material presented in the course. Calculators only are permitted for the exams; no study aides are allowed.
Framework

PART A Investment Landscape
   Chapters 1-3

PART B Portfolio Theory
   Chapters 4-6

Part C Equilibrium in Financial Markets
   Chapters 7-11

Part D Fixed-Income Securities
   Chapters 12-14
Course Objectives:

This course is an introduction to financial economics with a focus on Corporate Finance, Derivatives, and Risk Management. Major topics include Equity Valuation, Cost of Capital, Leverage and Capital Structure, Modigliani-Miller Theorem, Forwards, Futures, Swaps, Options, Put-call Parity, the Black-Scholes Model, Options and Risk management, Market Risk and Regulation including Post Financial Crisis Changes.

Learning Outcomes:

The emphasis throughout the course will be on intuition and understanding. Upon completion of this course, students will be familiar with core concepts of Corporate Finance, Derivatives, and Risk Management, which are currently used in the financial sector, working knowledge of how to implement these techniques, as well as their advantages and disadvantages.

Registration and Prerequisite Note:

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses.

The course assumes that students have taken ECON 201 and 203.

Course Materials:

The required textbook for this course is:


The following complementary texts are highly recommended:

Supplementary materials will be posted which will serve as a guide or addition to the parts of the topics that are covered in the class.

**Grading:**

Your grade in this course will be determined by following assessments:

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<th>Assessment</th>
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<th>Weighting</th>
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<tr>
<td>Four Assignments</td>
<td>TBA</td>
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<td>One Quiz</td>
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<td>10%</td>
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<td>Mid-term</td>
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<td>Final Exam</td>
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**Notes Regarding Exams and Assignment Submission**

The midterm exam account for 25% of your grade. If you miss the midterm exams for valid reasons (doctor’s note or similar) there will be no make-up exam and your midterm exam weight will shift to the final exam.

The final exam accounts for 45% of your grade. The material for this exam is that covered during the whole semester and all readings assigned by the instructor. In case of absence at the final exam for medical reasons, please refer to the University Regulations Concerning Final Examinations. Be sure to review all the Final Examination Regulations in section 16.3.7 in the undergraduate calendar at https://www.concordia.ca/students/exams/regulations.html.

Assignments are due in class at the end of the lecture on the due date. Late assignments are forfeited. If you are unable to attend class on a day when an assignment is due, you should make arrangements to submit the homework prior to the due date. Exceptions will be made to this rule only if you can provide documentation of unusual circumstances (i.e. illness) which prevented you from submitting the assignment on time. In such a case, you should contact your instructor within 2 working days of the due date to make alternative arrangements.

Each student is expected to do his or her own work on assignments. Although you are encouraged to discuss the problems and their solutions with classmates, you must write-up (or type) your answers independently. You should indicate at the top of your homework any students with whom you discussed the homework. Students who hand in identical assignments will receive a grade of zero on the assignment.
Instructor: Anca Alecsandru  
Office: Hall Building 1150  
Class Webpage: Moodle  
E-mail: Anca.Alecsandru@concordia.ca

Office hours:  
M-F 10:00-12:30, or by appointment
Students are strongly encouraged to submit their questions or inquiries by email, whenever appropriate. Past experience shows email communication to provide the fastest turnaround for short questions.

Course Description:  
This course will examine various socio-economic determinants and consequences of changes in population structure and dynamics in an international context. Topics include, but are not limited to: demographic transition, optimum population, the role of population in models of economic growth, environmental consequences of population growth, optimal policy approaches.

Student Outcome Objectives:  
1. To understand and apply economic analysis to evaluate real-life, everyday problems.  
2. To understand how to use data and statistical indicators to evaluate an economic argument.  
3. Formulate and communicate in written, spoken, analytical form about economic issues related to changes in population structure and dynamics.
Textbook:
There is no textbook for the course. However, we will use articles published in various economics journals. Reading material will be available on Moodle, along with class announcements and discussion questions. Class attendance is very important, as there may be material included in lectures, but not in the readings assigned.

Web Resources:
MOODLE: available through MyConcordia Portal (source of course information)  
Statistics Canada: www.statcan.ca  
Canadian Economy Online: www.canadianeconomy.gc.ca (provincial & territorial economic indicators)  
World Bank: www.worldbank.org (important general economic data and article source)  
The Economist: http://www.economist.com/markets/indicators (weekly international financial and economic indicators)  
Additional sources of economics articles are included in the Reading List. Also, Moodle offers a comprehensive list of Economics Resources.

Evaluation and Exams:
There are 2 assignments, each worth 10% of the final grade for the course. The midterm exam is worth 30%. The final exam is comprehensive and it is worth 50% of the final grade. These weights are not negotiable. The midterm exam and assignment cannot be replaced or supplemented by any other/additional work. Students who miss the midterm exam for valid reasons (such as physician-documented illness) must contact the instructor immediately. The exam questions are based on the lectures. Short problem sets and sample questions will be available and discussed throughout the term.

Course Outline: (a detailed Reading List is provided)
1. Introduction: motivation, definitions, measurement, world population growth  
2. Determinants and consequences of population growth  
3. Population growth, employment, labour supply in developing countries  
4. Key forms of Human Capital Investment (schooling, migration, population health)  
5. Demographic transition, population aging, fertility, mortality  
6. Migration, labour markets, trade, technology; the urbanization of population  
7. Government impact on population growth and population aging  
8. The impact of population aging on financial markets  
9. Environmental consequences of population growth
Office hours:
Mon 12:00-14:30, Th 12:00-14:30, or by appointment
Students are strongly encouraged to submit their questions or inquiries by email, whenever appropriate. Past experience shows email communication to provide the fastest turnaround for short questions.

Course Description:
This is a course in the field applied economics, with focus on transportation economics: urban sustainable development, contemporary transportation problems and policy issues relating to transportation.
In a macroeconomic sense, transportation activities are part of the aggregate economic product and determine the development of the national economy.
In a microeconomic sense, transportation determines the relations between firms and individual consumers.
Applicable topics include benefit-cost analysis, cost-effectiveness analysis, and redistributive and other economic effects of transportation investment, pricing, regulation, cost allocation, and other public policies.

Student Outcome Objectives:
1. To better understand the complex interface between transportation and the wider economy.
2. To understand the processes by which transportation is funded and understand the roles of different government levels.
3. To understand how to use data and statistical indicators to estimate the development economic impacts of transportation projects (costs, travel time savings, safety, environmental damage, employment and income growth)
4. Formulate and communicate in written, spoken, analytical form about economic issues and matters of current interest in transportation finance and policy.
Market Design

Instructor: Szilvia Papai

E-mail: szilvia.papai@concordia.ca

Office: H-1155-67

Office hours: Tuesday 4:30-5:30 p.m.

Class: Thursday 6:00-8:15 p.m., H-619

Course description and objectives

This course is about the study and design of market mechanisms. The field of market design is concerned with how to construct rules for allocating resources and how to structure successful marketplaces. It draws on the tools of game theory and mechanism design to identify why certain market rules or institutions succeed and why others fail.

In this course we will focus on matching markets, which typically consist of the allocation of scarce indivisible and heterogeneous resources to be allocated among people who would like to receive these resources. The goal is to design an economic mechanism that gives people an opportunity to express their preferences and achieves a desirable (such as efficient, stable, fair, etc.) outcome. We analyze settings where there is no money, and instead of using prices we have to ask people about their preferences and allocate the limited amount of resources based on their reported preferences.

Examples of matching markets include, among many others, placing doctors in residency positions, assigning students to public schools, allocating courses to students, matching couples on dating websites, or exchanging donated kidneys to transplant patients. We will study algorithms with desirable theoretical properties as well as algorithms used in practice to solve these problems.

The main objectives of this course are to introduce students to some of the tools of game theory and mechanism design in the context of matching markets, and to connect matching theory to some of the practical applications. Lectures will be devoted to theoretical models as well as to relevant applications, and we will also discuss some computational and empirical evidence and results from laboratory or field experiments. The goal is to familiarize you with these ideas, so that you will be able to apply your knowledge to settings where matching market design ideas are relevant and useful.
Should you take this course?

This class is designed primarily for Graduate Diploma students in Economics and for senior students majoring in Economics, but any student with a strong quantitative background who is interested in the subject matter is welcome. While the formal prerequisites are Econ 222, Econ 302 and Econ 304, it is most important for students to be comfortable with mathematical and logical arguments. Some knowledge of game theory is useful, although not necessary. There will be a good deal of economic theory discussed, and you should expect to see theoretical arguments in every class. Note that Econ 464/564: Game Theory is a complementary course to this one, which is a course on the foundations of game theory. Although our course uses some game theoretical concepts, it focuses specifically on matching theory and its main applications. I hope that you will enjoy the course and your feedback is always welcome.

Requirements

You are expected to attend classes and to participate in all class activities. In order to get the most out of each class, you may find it useful to read ahead. A weekly schedule of topics and readings will be posted in Moodle.

There will be three problem sets posted in Moodle, together with their solutions. The problem sets will not be turned in or graded, but there will be a one-hour exam based on each problem set. The exams are scheduled for February 7, March 14, and April 4, from 6 to 7 p.m.

The main requirement beyond the exams is a short term paper, which is due on April 16 (no exceptions). You will also need to submit a brief proposal or outline of your term paper by March 28 (maximum one page). Term papers can be written individually or by a team of at most three students. The topic should be closely related to the course, and the maximum length of the paper is 8 pages (with an expectation that papers written by a team will be closer to this upper limit). An alternative to submitting a term paper is to present your term project to the class, using slides, in the last class on April 11th. This can also be done by a team of at most three students, with each team member's participation. Since we will only have time for a limited number of presentations, please let me know as soon as you decide that you are interested in presenting, since the presentation slots will be allocated on a first-come first-served basis. A separate document (posted in Moodle) describes the paper and the required proposal in more detail. Note that there is no final exam in the course.

Grading:

Class participation (attendance and class exercises) 5%
Exam 1 (February 7) 20%
Exam 2 (March 14) 20%
Exam 3 (April 4) 20%
Term paper (due by April 16) 35%

Note: If you miss an exam for a legitimate reason (e.g., illness, certified by a doctor's note) then you will be scheduled for a make-up exam at the end of the term.
Textbook and readings

We don't have a required textbook for this course, but you may consult the following optional book for more details on the discussed topics:

Market Design: Auctions and Matching, by Guillaume Haeringer (MIT Press, 2018)

I will most likely present a set of slides in each class and the slides will be posted online in Moodle, but I may make adjustments to this method during the term. Further optional reading materials will be posted in Moodle, and you may also search the presented subject matter online and find your own readings. This will be especially useful when deciding about your term paper topic.

Tentative course contents

(You will find the details in Moodle as the term progresses.)

- Entry-level labor markets; the medical match
- Assignment markets
- Probabilistic assignments
- School choice
- Kidney exchange
- Course allocation
INTERNAL MEMORANDUM

TO: Dr Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
Office of the Provost and Vice-President, Academic Affairs
Chair, Academic Programs Committee

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

DATE: April 26, 2019

SUBJECT: 2020-21 Undergraduate Calendar Curriculum Changes
Department of Health, Kinesiology, and Applied Physiology
EXCI-25
Global changes to KCEP, BScAt, Athletic Therapy programs

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of March 29, 2019. We request that this proposal be considered at the next meeting of APC.

The Department of Health, Kinesiology, and Applied Physiology proposes adding a new course, EXCI 415 Behaviour Change and Interventions, as a program elective to its Athletic Therapy, Exercise Science, and Kinesiology and Clinical Exercise Physiology programs. This course will provide students with an opportunity to learn skills associated with behavior change and interventions that are important in the practice of kinesiology.

In addition, they propose increasing the number of internship hours from 120 hours to 200 hours. The increased complexity of the medical conditions to which the students are exposed and the new concepts and competencies that they must master makes it necessary to increase the internship hours such that the students can be exposed to these concepts and also apply what they have learned in working with the patients/clients. These hours are consistent with those at other universities and will provide enhanced practical training to better prepare the students for their future careers in kinesiology.

Finally, with the recent introduction of honours programs in Athletic Therapy and Kinesiology and Clinical Exercise Physiology, the prerequisite requirements for a number of courses are updated to reflect these new programs. Also, stage notes are removed from individual course listings as they already appear under the program descriptions. Any other stage notes remaining in course descriptions in the calendar will be removed by the prior to the publishing of the 2020-21 Undergraduate Calendar.

Thank you for your consideration of this proposal for which there are no additional resource implications. The new course will be incorporated into existing faculty workloads.

Reference documents:
FCC 2018.5_EXCI-25
ASFC 2019-3M-B
Memo from Chair

Memo from Department Curriculum Committee

Department Objectives

Program changes

- BSc in Kinesiology and Clinical Exercise Physiology
- BSc Major in Exercise Science
- BSc in Athletic Therapy (BScAT)
- BSc Honours in Kinesiology and Clinical Exercise Physiology
- BSc Honours in Athletic Therapy
- BSc Honours in Exercise Science

Note change

- CATA 262  *Emergency Care in Sport and Exercise*

Prerequisite change and/or stage note removed

- CATA 337  *Assessment of the Upper and Lower Extremities*
- CATA 339  *Rehabilitation of the Upper and Lower Extremities*
- CATA 348  *Therapeutic Modalities in Sports Medicine*
- CATA 365  *Athletic Therapy Field Internship I* (6 credits)
- CATA 437  *Assessment of the Hip, Spine and Pelvis*
- CATA 439  *Rehabilitation of the Hip, Spine and Pelvis*
- CATA 441  Concepts in Manual Therapy
<table>
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<tr>
<th>Course Code</th>
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<tr>
<td>CATA 447</td>
<td>Special Topics in Athletic Therapy</td>
</tr>
<tr>
<td>CATA 462</td>
<td>Advanced Emergency Care</td>
</tr>
<tr>
<td>CATA 485</td>
<td>Athletic Therapy Field Internship II</td>
</tr>
<tr>
<td>CATA 495</td>
<td>Athletic Therapy Clinical Internship II</td>
</tr>
<tr>
<td>EXCI 322</td>
<td>Statistics for Exercise Science</td>
</tr>
<tr>
<td>EXCI 420</td>
<td>Physical Activity Epidemiology</td>
</tr>
<tr>
<td>EXCI 421</td>
<td>Honours Seminar: Current Topics in Health and Exercise Science</td>
</tr>
<tr>
<td>EXCI 426</td>
<td>Honours Thesis (6 credits)</td>
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<tr>
<td>EXCI 440</td>
<td>Current Developments in the Biochemistry of Exercise</td>
</tr>
<tr>
<td>EXCI 445</td>
<td>Nutrition in Exercise and Sport</td>
</tr>
<tr>
<td>EXCI 451</td>
<td>Clinical Biomechanics</td>
</tr>
<tr>
<td>EXCI 453</td>
<td>Stress, Health and Disease</td>
</tr>
<tr>
<td>EXCI 455</td>
<td>Physical Activity, Health and Aging</td>
</tr>
<tr>
<td>EXCI 458</td>
<td>Pediatric Exercise Science</td>
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<td>EXCI 460</td>
<td>Integrative Human Physiology</td>
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<td>EXCI 471</td>
<td>Pain Management Strategies</td>
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<tr>
<td>EXCI 492</td>
<td>Independent Study in Exercise Science</td>
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<td>KCEP 311</td>
<td>Pathophysiology in Clinical Exercise Science I</td>
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<tr>
<td>KCEP 349</td>
<td>Assessment, Interpretation, and Rehabilitation in Neuromuscular Physiology</td>
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<tr>
<td>KCEP 411</td>
<td>Pathophysiology in Clinical Exercise Science II</td>
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<tr>
<td>KCEP 449</td>
<td>Physical Fitness Assessment, Exercise Prescription and Rehabilitation in Special Populations</td>
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</table>
Prerequisite and course description change; stage note removed

CATA 475  Athletic Therapy Clinical Internship I (6 credits)
EXCI 461  Pharmacology for Sport and Exercise
KCEP 383  Kinesiology and Clinical Exercise Physiology Internship I
KCEP 483  Kinesiology and Clinical Exercise Physiology Internship II

New course

EXCI 415  Behaviour Change and Interventions
Dear Richard,

The Department of Health, Kinesiology, and Applied Physiology submits for consideration the attached dossier (EXCI-25), which includes the following propositions:

- Increase in the number of Kinesiology and Clinical Exercise Physiology (KCEP) internship hours
- Addition of a new course to the Health, Kinesiology, and Applied Physiology (HKAP) curriculum
- Clarifications to calendar course descriptions

A summary of our requests and the rationale underlying them can be found in the attached memo from our Department Curriculum Committee.

Of note, the proposal to increase KCEP internship hours came from the Department's KCEP Group, a group that is mandated by the unit to oversee the KCEP specialization program (continual quality assessment and proposals for curriculum revisions as needed). There were three (3) KCEP students sitting on the KCEP Group when the increase in internship hours was proposed, and they all supported with this change.

There are no direct resource implications related to the requested changes.

Thank you for your consideration of this proposal.

Regards,

Véronique Pepin, Ph.D.
Associate Professor and Chair
Department of Health, Kinesiology, and Applied Physiology
Concordia University
Phone: 514-848-2424 x 5806, E-mail: veronique.pepin@concordia.ca
Memorandum

To: The Members of the Faculty Curriculum Committee
From: The Health, Kinesiology, and Applied Physiology Curriculum Committee
Date: December 21st, 2018
Re: EXCI-25

- Increase in the number of Kinesiology and Clinical Exercise Physiology (KCEP) internship hours
- Addition of a new course to the Health, Kinesiology, and Applied Physiology (HKAP) curriculum
- Clarifications to calendar course descriptions

Request
To increase the number of KCEP internship hours to a minimum of 200 hours for each of the internship courses (KCEP 383 and KCEP 483), to add a Behaviour Change and Interventions course (EXCI 415) to the list of courses to choose from for all HKAP programs, to clarify pre-requisites for courses in the Honours stream in the calendar course descriptions.

The overall changes
1. We wish to increase the number of internship hours following a recommendation received from site supervisors. Increasing the number hours will make our students better equipped to tackle KCEP professional activities that have grown in scope and complexity.
2. We also wish to add a Behaviour Change and Interventions course to all HKAP programs. This course will allow our students to be better prepared to work with clients and patients.
3. We modified the calendar descriptions to include the prerequisites to courses in the Honours stream. Those prerequisites were always implied and are required following the implementation of the Honours in KCEP and Honours in AT programs.

The proposed changes were presented, discussed, and approved at KCEP group and faculty meetings.

The rationale
Increasing the number of internship hours
Since internship hours were imbedded in the CEP program (1999) the number of hours to complete each internship has been 120 hours. Previously, 120 hours allowed the students to be exposed to a variety of practical scenarios. Recently, this situation has changed. The professional activities have grown in scope and complexity, and therefore more time is required for students to be exposed to all the new concepts pertaining to Kinesiology and Clinical Exercise Physiology. For instance, motivational interviewing techniques and completing documentation notes, are examples of additional competencies required by the students. Another important factor concerns the patient populations with which the students work. Students are now exposed to more complex medical conditions (e.g. cancer, chronic obstructive pulmonary disease, stroke, Parkinson’s disease, multiple sclerosis, chronic pain etc.) in a variety of hospital settings, rehabilitation centers, private clinics and community centers. The monitoring and implementation of exercise programming in individuals with these medical conditions requires more time to become familiar with than previously required.
Several internship sites have requested and supported increasing the number of hours for the students. Site supervisors have recommended that we increase the number of hours to a minimum of 200 hours per internship course (i.e. KCEP 383 and KCEP 483). A common reason expressed is that 120 hours is enough time for students to observe and be exposed to the concepts, but not enough time to start applying the knowledge and to become confident in working with the patients/clients. Additionally, if the program does not increase the current hours, several well-established internship sites (i.e. St-Justine Hospital, Centre EPIC, CIUSS de la Montérégie, etc.) will cease to accept our students for internships. When comparing our number of hours with the ones of other Quebec universities offering clinical opportunities in Kinesiology, we are the program with the lowest number of hours (see the Table below). The total number of hours vary from 270 at UQAC to up to 360 at McGill and Laval University.

Based on the reasons presented above, the department strongly believes that the number of internship hours should be increased to a minimum of 200 hours for KCEP 383 and 200 hours for KCEP 483. This would allow us to maintain and strengthen a link with more internship sites, as well as enhance the practical training of the students and better prepare them for their future career as a kinesiologist.

<table>
<thead>
<tr>
<th>UNIVERSITY</th>
<th>NAME OF INTERNSHIP COURSE</th>
<th>CREDITS</th>
<th>HOURS</th>
<th>TOTAL HOURS</th>
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<tr>
<td>Concordia</td>
<td>KCEP 383: Kinesiology and Clinical Exercise Physiology Internship I</td>
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<td>KCEP 483: Kinesiology and Clinical Exercise Physiology Internship II</td>
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<td>UQAM</td>
<td>KIN 2900: Intervention</td>
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<td></td>
<td>KIN 3901: Perfectionnement 1</td>
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<td></td>
<td>KIN 3902: Perfectionnement 2</td>
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<td></td>
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<td></td>
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<td></td>
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<td>KIN 3102: Stage 2: Concentration en activité physique et santé</td>
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<td>UQAC</td>
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<td>270</td>
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<td></td>
<td>PPK1079: Externat en kinésiologie</td>
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</table>
A new course, EXCI 415: Behaviour Change and Interventions

Students in the HKAP programs but primarily those in the KCEP and KCEP honours programs are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Fédération des Kinésiologues du Québec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include the course in the list of chosen courses to take in Stage III of all HKAP programs.

Honours courses descriptions

Following the implementation of the two new Honours programs: Honours in KCEP and Honours in AT, clarifications to prerequisites for courses in the Honours stream are needed. Those clarifications mainly involve adding the required completion of a stage of the BSc Honours in the AT program for CATA courses, completion of a stage of the BSc Honours in the KCEP program for KCEP courses, or completion of a stage in any Honours program for EXCI courses. A list of courses involved in the required stages was also added to the course descriptions.

Resource implications

There are no direct resource implications related to the changes requested. The increase in the number of internship hours will take place at the internship sites, and the resources for EXCI 415 will be incorporated in existing faculty workloads.

Kind regards,

Nancy St-Onge, Ph.D.
Chair, DCC

Robert D. Kilgour, Ph.D., FACSM
Co-chair, DCC

Andreas Bergdahl, Ph.D.

Jacqueline Camley, M.Sc., CAT(C), ATC

Robert Panenic, M.A.
Memorandum

To: The Members of the Faculty Curriculum Committee
From: The Health, Kinesiology, and Applied Physiology Curriculum Committee
Date: February 20th, 2019
Re: EXCI-25, response to question about increasing the number of internship hours

Request

In this memo, the Department of Health, Kinesiology, and Applied Physiology is providing further information concerning the requested increase in the number of Kinesiology and Clinical Exercise Physiology (KCEP) internship hours to a minimum of 200 hours for each of the internship courses (KCEP 383 and KCEP 483).

The most substantive point that came back to the department on February 11th, 2019 is with respect to how we arrived at 200 hours/internship. Internships at other institutions in the examples provided in the memo sent on December 21st, 2019 range from 270 hours to 360 hours. Of the other kinesiology programs available in the province, the one that is closest to our KCEP specialization is the one offered at Université Laval involving clinical populations with complex chronic diseases with frequent co-morbid conditions, which increases the training needs. The program at Université Laval offers two internships of 180 hours each, for a total of 360 hours. Our rationale when increasing the number of hours to 200 per internship, for a total of 400 hours, was to offer slightly more than Université Laval to make our students better.

There are no direct resource implications related to the changes requested. The increase in the number of internship hours will take place at the internship sites. It should also be noted that increasing the number of internship hours would not have financial impacts if internships are paid for a block rather than per hour.

We hope that this clarifies our rationale for increasing the number of internship hours in the KCEP program.

Kind regards,

Nancy St-Onge, Ph.D.
Chair, DCC

Andreas Bergdahl, Ph.D.

Robert Panenic, M.A.

Robert D. Kilgour, Ph.D., FACSM
Co-chair, DCC

Jacqueline Camley, M.Sc., CAT(C), ATC
**Program and Courses Change Forms for Document: EXCI-25 Version: 11**

**Program Change:** Intro Paragraph

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

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<th>Faculty/School:</th>
<th>Arts and Science</th>
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<td>Health, Kinesiology, and Applied Physiology</td>
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<td>Program:</td>
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<td>Degree:</td>
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<td>Calendar Section/Graduate Page Number:</td>
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**Type of Change:**

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

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<th>Proposed Text</th>
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<tbody>
<tr>
<td>Department Objectives ...</td>
<td>Department Objectives ...</td>
</tr>
<tr>
<td>The BSc Honours, Specialization, and Major programs in Exercise Science and the Bachelor of/Baccalaureate in Science in Athletic Therapy (BScAT) provide students with the opportunity to acquire essential knowledge and a strong foundation in the field of exercise science. Students are exposed to a concentrated series of courses that incorporate the application of biological sciences to exercise, physical activity, and health-related areas including athletic therapy and kinesiology and clinical exercise physiology.</td>
<td>The BSc Honours in Athletic Therapy, BSc in Athletic Therapy, BSc Honours in Exercise Science, BSc Major in Exercise Science, BSc Honours in Kinesiology and Clinical Exercise Physiology and BSc in Kinesiology and Clinical Exercise Physiology provide students with the opportunity to acquire essential knowledge and a strong foundation in the field of exercise science. Students are exposed to a concentrated series of courses that incorporate the application of biological sciences to exercise, physical activity, and health-related areas including athletic therapy and kinesiology and clinical exercise physiology.</td>
</tr>
</tbody>
</table>

**Rationale:**

The Specialization no longer exists. It was replaced by the BSc in KCEP. We also added the two new honours programs (KCEP and AT).

**Resource Implications:**

None
**PROGRAM CHANGE:** BSc in Kinesiology and Clinical Exercise Physiology

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

**Faculty/School:** Arts and Science
**Department:** Health, Kinesiology, and Applied Physiology
**Program:** Kinesiology and Clinical Exercise Physiology
**Degree:** BSc
**Calendar Section/Graduate Page Number:** 31.120

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<td><strong>69 BSc in Kinesiology and Clinical Exercise Physiology</strong></td>
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**Rationale:**
Students in the HKAP programs but primarily those in the KCEP and KCEP Honours programs are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Fédération des Kinésiologues du Québec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include EXCI 415 in the list of chosen courses to take in Stage III of the KCEP program.

**Resource Implications:**
Incorporated into existing faculty workloads.
**PROGRAM CHANGE: BSc Major in Exercise Science**

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Major in Exercise Science  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

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

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**Rationale:**  
Students in the HKAP programs including those in the Major in Exercise Science are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Fédération des Kinésiologues du Québec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include EXCI 415 in the list of chosen courses to take in Stage III of the Major in Exercise Science program.

**Resource Implications:**  
Incorporated into existing Faculty workloads.
**Program Change:** BSc in Athletic Therapy (BScAT)

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy  
**Degree:** BScAT  
**Calendar Section/Graduate Page Number:** 31.120

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

**Present Text (from 2019/2020) calendar**  
**Proposed Text**

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**Rationale:**
Students in the HKAP programs including those in the Athletic Therapy profile are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Fédération des Kinésiologues du Québec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include EXCI 415 in the list of chosen courses to take in Stage III of the Athletic Therapy program.

**Resource Implications:**  
Incorporated into existing faculty workloads.
PROGRAM CHANGE: BSc Honours in Kinesiology and Clinical Exercise Physiology

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Honours in Kinesiology and Clinical Exercise Physiology
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[X] Requirements

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NOTE: Students seeking admission to the honours program must apply to the Department Honours Committee normally following the completion of 24 program credits. Students must meet the Faculty of Arts and Science regulations concerning the honours program. For additional information concerning programs and courses, students should consult the Department.

Rationale:
Students in the HKAP programs including those in Honours in Kinesiology and Clinical Exercise Physiology are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Federation des Kinesiologues du Quebec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include EXCI 415 in the list of chosen courses to take in Stage III of the Honours in Kinesiology and Clinical Exercise Physiology program.

Resource Implications:
Incorporated into existing faculty workloads.
PROGRAM CHANGE: BSc Honours in Athletic Therapy

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Honours in Athletic Therapy
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

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

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Rationale:
Students in the HKAP programs including those in the Honours in Athletic Therapy are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Fédération des Kinésiologues du Québec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include EXCI 415 in the list of chosen courses to take in Stage III of the Honours in Athletic Therapy program.

Resource Implications:
Incorporated into existing faculty workloads.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: EXCI-25 VERSION: 11

PROGRAM CHANGE: BSc Honours in Exercise Science

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Honours in Exercise Science
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

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

Present Text (from 2019/2020) calendar

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Stage I
Stage II
Stage III

NOTE: Students seeking admission to the honours program must apply to the Department Honours Committee normally following the completion of 24 program credits. Students must meet the Faculty of Arts and Science regulations concerning the honours program. For additional information concerning programs and courses, students should consult the Department.

Proposed Text

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Stage I
Stage II
Stage III

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NOTE: Students seeking admission to the honours program must apply to the Department Honours Committee normally following the completion of 24 program credits. Students must meet the Faculty of Arts and Science regulations concerning the honours program. For additional information concerning programs and courses, students should consult the Department.

Rationale:
Students in the HKAP programs including those in the Honours in Exercise Science are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Fédération des Kinésiologues du Québec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include EXCI 415 in the list of chosen courses to take in Stage III of the Honours in Exercise Science program.

Resource Implications:
Incorporated into existing faculty workloads.
COURSE CHANGE: CATA 262

New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: All programs
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

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

Present Text (from 2019/2020) calendar

CATA 262 Emergency Care in Sport and Exercise (3 credits)
Prerequisite: EXCI 253 previously or concurrently; enrolment in an Exercise Science program. This course identifies common emergency situations in the athletic environment, and provides theoretical and practical components of management skills to safely deal with these situations. Specific signs and symptoms of basic emergency conditions are discussed. Planning of events to prepare for sport-related emergencies and administration of initial emergency techniques are included. Lectures and laboratory.

Rationale:
This is no longer applicable as the Canadian Athletic Therapists Association (CATA) is in charge of checking for the first aid certification of their members. The Heart and Stroke or Canadian Red Cross are external agencies that certify individuals for first aid and Cardio Pulmonary Resuscitation. Members of CATA and CTSQ must have a valid Basic Life Support certification.

Resource Implications:
None

Other Programs within which course is listed:
None

Proposed Text

CATA 262 Emergency Care in Sport and Exercise (3 credits)
Prerequisite: EXCI 253 previously or concurrently; enrolment in a Health, Kinesiology, and Applied Physiology program. This course identifies common emergency situations in the athletic environment, and provides theoretical and practical components of management skills to safely deal with these situations. Specific signs and symptoms of basic emergency conditions are discussed. Planning of events to prepare for sport-related emergencies and administration of initial emergency techniques are included. Lectures and laboratory.

Rationale:

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: CATA 337

New Course Number:

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

**Faculty/School:** Arts and Science

**Department:** Health, Kinesiology, and Applied Physiology

**Program:** Athletic Therapy; Honours in Athletic Therapy

**Degree:** BSc

**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**

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<td>[ ] New Course</td>
<td>[X] Other - Specify: Note</td>
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**Present Text (from 2019/2020) calendar**

CATA 337  **Assessment of the Upper and Lower Extremities** (3 credits)

Prerequisite: Successful completion of Stage I* in the major; enrolment in the BScAT.

This course examines normal function of the upper and lower extremities of the human body. Abnormal function and various pathologies of these structures are addressed in depth. Making use of principles based on applied anatomy and physiology, students learn about clinical assessment procedures and implementation of evaluation methods addressing orthopaedic dysfunction. Types of surgical procedures are discussed. Lectures and laboratory.

NOTE: Students who have received credit for CATA 338 may not take this course for credit.

*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.

**Proposed Text**

CATA 337  **Assessment of the Upper and Lower Extremities** (3 credits)

Prerequisite: Enrolment in the BScAT or Honours in Athletic Therapy. This course examines normal function of the upper and lower extremities of the human body. Abnormal function and various pathologies of these structures are addressed in depth. Making use of principles based on applied anatomy and physiology, students learn about clinical assessment procedures and implementation of evaluation methods addressing orthopaedic dysfunction. Types of surgical procedures are discussed. Lectures and laboratory.

NOTE: Students who have received credit for CATA 338 may not take this course for credit.

**Rationale:**

The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**

None

**Other Programs within which course is listed:**

None
**COURSE CHANGE: CATA 339**

**New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy; Honours in Athletic Therapy  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[X] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[ ] Credit Value  
[ ] Editorial  
[ ] New Course  
[X] Prerequisite  
[ ] Other - Specify: Note

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020 calendar)</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| **CATA 339** Rehabilitation of the Upper and Lower Extremities (3 credits)  
Prerequisite: CATA 337 previously or concurrently; successful completion of Stage I* in the major; enrolment in the BScAT. This course examines concepts in the rehabilitation process including tissue healing, and introduces students to various exercise protocols and manual techniques specific to the upper and lower extremities. Students learn how to implement safe and effective rehabilitation protocols to address orthopaedic dysfunction of these areas. Patient education to facilitate rehabilitation, documentation treatment plans and treatment outcomes are addressed. Lectures and laboratory.  
NOTE: Students who have received credit for CATA 338 may not take this course for credit.  
*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210. | **CATA 339** Rehabilitation of the Upper and Lower Extremities (3 credits)  
Prerequisite: CATA 337 previously or concurrently; enrolment in the BScAT or Honours in Athletic Therapy. This course examines concepts in the rehabilitation process including tissue healing, and introduces students to various exercise protocols and manual techniques specific to the upper and lower extremities. Students learn how to implement safe and effective rehabilitation protocols to address orthopaedic dysfunction of these areas. Patient education to facilitate rehabilitation, documentation treatment plans and treatment outcomes are addressed. Lectures and laboratory.  
NOTE: Students who have received credit for CATA 338 may not take this course for credit. |

**Rationale:**
The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**
None

**Other Programs within which course is listed:**
None.
**COURSE CHANGE: CATA 348**

**New Course Number:**

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

---

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy; Honours in Athletic Therapy  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

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**Type of Change:**

[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Editorial  
[ ] Course Deletion  
[X] Other - Specify: Note

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Value</th>
<th>Prerequisite</th>
</tr>
</thead>
</table>
| CATA 348    | Therapeutic Modalities in Sports Medicine (3 credits) |             | CATA 337, 339; successful completion of Stage I in the major; enrolment in the BScAT. Students are introduced to the parameters of therapeutic modalities and their physiological effects. Various modalities such as heat, cold, ultrasound, muscle stimulation, interferential current and Transcutaneous Electrical Nerve Stimulation (T.E.N.S.) are examined. For each modality, topics include instrumentation, set-up, and practical application. Basic concepts of manual treatment approaches, such as mobilizations, myofascial release, traction, and massage, are introduced. Indications and contraindications and precautions for all treatments are presented. Lectures and laboratory.  
_Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210._  
_Students who have received credit for EXCI 348 or 448 may not take this course for credit._ |

**Proposed Text**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Value</th>
<th>Prerequisite</th>
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</thead>
</table>
| CATA 348    | Therapeutic Modalities in Sports Medicine (3 credits) |             | CATA 337, 339; enrolment in the BScAT or Honours in Athletic Therapy. Students are introduced to the parameters of therapeutic modalities and their physiological effects. Various modalities such as heat, cold, ultrasound, muscle stimulation, interferential current and Transcutaneous Electrical Nerve Stimulation (T.E.N.S.) are examined. For each modality, topics include instrumentation, set-up, and practical application. Basic concepts of manual treatment approaches, such as mobilizations, myofascial release, traction, and massage, are introduced. Indications and contraindications and precautions for all treatments are presented. Lectures and laboratory.  
_Students who have received credit for EXCI 348 or 448 may not take this course for credit._ |

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**Rationale:**

The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

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**Resource Implications:**

None

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**Other Programs within which course is listed:**

None.
COURSE CHANGE: CATA 365  

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy; Honours in Athletic Therapy  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

<table>
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<th>Type of Change:</th>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
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<tbody>
<tr>
<td>[ ] Course Number</td>
<td>CATA 365 Athletic Therapy Field Internship I (6 credits)</td>
<td>CATA 365 Athletic Therapy Field Internship I (6 credits)</td>
</tr>
<tr>
<td>[ ] Course Title</td>
<td>Prerequisite: Successful completion of Stage I* in the major; enrolment in the BScAT; permission of the Department. This course offers students the opportunity to work in an emergency or preventive setting with a sports team, although some clinical component may be introduced. Students must be certification candidates of the Canadian Athletic Therapists Association (CATA) and the Corporation des thérapeutes du sport du Québec (CTSQ). This course involves a commitment of 400 hours over two terms. Weekly seminars with agency supervisors are mandatory. <strong>NOTE:</strong> Students who have received credit for CATA 390 may not take this course for credit.</td>
<td></td>
</tr>
<tr>
<td>[ ] Course Description</td>
<td>*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.</td>
<td>*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.</td>
</tr>
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<td>[ ] Course Deletion</td>
<td>Rationale: The inclusion of &quot;Honours&quot; within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.</td>
<td></td>
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<tr>
<td>[X] Other - Specify: stage note removed</td>
<td>Resource Implications: None.</td>
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<td></td>
<td>Other Programs within which course is listed:</td>
<td>None.</td>
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**Calendar for academic year:** 2020/2021  
**Implementation Month/Year:** May 2020
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: EXCI-25 VERSION: 11

COURSE CHANGE: CATA 437  
New Course Number:  

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Athletic Therapy; Honours in Athletic Therapy
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[ ] Course Number  [ ] Course Title  [ ] Credit Value  [X] Prerequisite  
[ ] Course Description  [ ] Editorial  [ ] New Course  [X] Other - Specify: Note

Present Text (from 2019/2020) calendar

CATA 437  Assessment of the Hip, Spine and Pelvis  (3 credits)
Prerequisite: Completion of Stage II* in the BScAT; CATA 337, 339; enrolment in BScAT. This course examines normal function of the hip, spine, and pelvis of the human body. Abnormal function and various pathologies of these structures are addressed in depth. Making use of principles based on applied anatomy and physiology, students learn about clinical assessment procedures and implementation of evaluation methods addressing orthopaedic dysfunction. Surgical procedures are discussed. Lectures and laboratory. 

*Stage II consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.

Proposed Text

CATA 437  Assessment of the Hip, Spine and Pelvis  (3 credits)
Prerequisite: Enrolment in BScAT or Honours in Athletic Therapy; successful completion of Stage II in the BScAT or Honours in Athletic Therapy. This course examines normal function of the hip, spine, and pelvis of the human body. Abnormal function and various pathologies of these structures are addressed in depth. Making use of principles based on applied anatomy and physiology, students learn about clinical assessment procedures and implementation of evaluation methods addressing orthopaedic dysfunction. Surgical procedures are discussed. Lectures and laboratory.

Rationale:

The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:

None

Other Programs within which course is listed:

None
COURSE CHANGE: CATA 439  New Course Number:

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

Faculty/School: Arts and Science  
Department: Health, Kinesiology, and Applied Physiology  
Program: Athletic Therapy; Honours in Athletic Therapy  
Degree: BSc  
Calendar Section/Graduate Page Number: 31.120

Type of Change:  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[ ] Credit Value  
[X] Prerequisite

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</table>
| **CATA 439 Rehabilitation of the Hip, Spine and Pelvis** (3 credits)  
Prerequisite: CATA 437 previously or concurrently; completion of Stage II in the BScAT.  
This course examines concepts in rehabilitation, introducing the students to various exercise protocols and manual techniques specific to hip, spine, and pelvis. Students learn how to implement advanced, safe, and effective rehabilitation protocols to address orthopaedic dysfunction of these areas. Lectures and laboratory.  
**NOTE:** Students who have received credit for CATA 438 may not take this course for credit.  

*Stage II consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.*  

--- | CATA 439 Rehabilitation of the Hip, Spine and Pelvis (3 credits)  
Prerequisite: CATA 437 previously or concurrently: enrolment in the BScAT or Honours in Athletic Therapy; successful completion of Stage II in the BScAT or Honours in Athletic Therapy. This course examines concepts in rehabilitation, introducing the students to various exercise protocols and manual techniques specific to hip, spine, and pelvis. Students learn how to implement advanced, safe, and effective rehabilitation protocols to address orthopaedic dysfunction of these areas. Lectures and laboratory.  
**NOTE:** Students who have received credit for CATA 438 may not take this course for credit.  

Rationale:  
The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:  
None

Other Programs within which course is listed:  
None
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: EXCI-25 VERSION: 11**

**COURSE CHANGE:** CATA 441  
**New Course Number:**

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

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy; Honours in Athletic Therapy  
**Degree:** BSc

**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Editorial  
[ ] Credit Value  
[ ] New Course  
[X] Prerequisite  
[ ] Other - Specify: Note

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

**CATA 441 Concepts in Manual Therapy** (3 credits)  
**Prerequisite:** Completion of Stage III\(^2\) in the BScAT. This course provides students with an understanding of the fundamental theory and practical basis for using various manual therapy techniques to keep athletes competition-ready, to help in their recovery from injury, and to improve their performance. The course explains various techniques in detail and describes the procedures involved in conducting effective treatment sessions. Muscle Energy, Active Release, Myofascial Release, and Sports Massage are some of the techniques discussed, demonstrated, and practised. Determining goals and organization of a treatment session, and the choice and application of techniques are also discussed. The goal of the course is to help athletic therapists determine the most appropriate manual therapy techniques for a variety of orthopaedic pathologies. Lectures and laboratory.  
\(^2\)Stage III consists of CATA 437, 439, 462, 475; EXCI 460 and two chosen from EXCI 420, 440, 451, 453, 461; KCEP 311, 411.

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**Proposed Text**

**CATA 441 Concepts in Manual Therapy** (3 credits)  
**Prerequisite:** Enrolment in the BScAT or Honours in Athletic Therapy; successful completion of Stage III in the BScAT or Honours in Athletic Therapy. This course provides students with an understanding of the fundamental theory and practical basis for using various manual therapy techniques to keep athletes competition-ready, to help in their recovery from injury, and to improve their performance. The course explains various techniques in detail and describes the procedures involved in conducting effective treatment sessions. Muscle Energy, Active Release, Myofascial Release, and Sports Massage are some of the techniques discussed, demonstrated, and practised. Determining goals and organization of a treatment session, and the choice and application of techniques are also discussed. The goal of the course is to help athletic therapists determine the most appropriate manual therapy techniques for a variety of orthopaedic pathologies. Lectures and laboratory.

---

**Rationale:**  
The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**  
None.

**Other Programs within which course is listed:**  
None.
**COURSE CHANGE**: CATA 447  
New Course Number:

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy; Honours in Athletic Therapy  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**

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<tr>
<td>[ ] Course Number</td>
<td>[ ] Course Title</td>
<td>[ ] Credit Value</td>
<td>[X] Prerequisite</td>
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<tr>
<td>[ ] Course Description</td>
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<tr>
<td>[ ] Course Deletion</td>
<td>[X] Other - Specify: Note</td>
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**Present Text (from 2019/2020) calendar**

<table>
<thead>
<tr>
<th><strong>CATA 447 Special Topics in Athletic Therapy</strong> (3 credits)</th>
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</thead>
<tbody>
<tr>
<td>Prerequisite: Completion of Stage II(^1) in the BScAT. This course focuses on recent research outcomes and new issues in athletic therapy specific to prevention, assessment, and rehabilitation of athletic injuries. The course content varies within the domains of the Canadian Athletic Therapists Association depending upon the most current issues such as surgical techniques, new medications, advanced assessment and modality techniques, and issues related to professional development and the workplace environment. Information is presented from a variety of courses and disciplines to enhance the knowledge base received from core Athletic Therapy courses. Lectures only.</td>
</tr>
<tr>
<td>(^1)Stage II consists of CATA 337, 339, 348, 365, EXCI 310, 351, 352, 360.</td>
</tr>
</tbody>
</table>

**Proposed Text**

<table>
<thead>
<tr>
<th><strong>CATA 447 Special Topics in Athletic Therapy</strong> (3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: Enrolment in the BScAT or Honours in Athletic Therapy; successful completion of Stage II in the BScAT or Honours in Athletic Therapy. This course focuses on recent research outcomes and new issues in athletic therapy specific to prevention, assessment, and rehabilitation of athletic injuries. The course content varies within the domains of the Canadian Athletic Therapists Association depending upon the most current issues such as surgical techniques, new medications, advanced assessment and modality techniques, and issues related to professional development and the workplace environment. Information is presented from a variety of courses and disciplines to enhance the knowledge base received from core Athletic Therapy courses. Lectures only.</td>
</tr>
</tbody>
</table>

**Rationale:**
The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**
None

**Other Programs within which course is listed:**
None
**COURSE CHANGE:** CATA 462

**New Course Number:**

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

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**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy; Honours in Athletic Therapy  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**

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

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

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<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
<tbody>
<tr>
<td><strong>CATA 462 Advanced Emergency Care</strong> (3 credits)</td>
<td><strong>CATA 462 Advanced Emergency Care</strong> (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: Completion of Stage II* in the BScAT. This course completes the preparation of Athletic Therapy students in the area of emergency care of sports-related injury. It identifies the less common and more complicated emergency situations experienced in the athletic therapy setting. Advanced theoretical and practical components are presented. This course develops the ability of the student to care for the athlete beyond the initial stages of emergency management and towards advanced life support. Lectures and laboratory.</td>
<td>Prerequisite: Enrolment in the BScAT or Honours in Athletic Therapy; successful completion of Stage II in the BScAT or Honours in Athletic Therapy. This course completes the preparation of Athletic Therapy students in the area of emergency care of sports-related injury. It identifies the less common and more complicated emergency situations experienced in the athletic therapy setting. Advanced theoretical and practical components are presented. This course develops the ability of the student to care for the athlete beyond the initial stages of emergency management and towards advanced life support. Lectures and laboratory.</td>
</tr>
</tbody>
</table>

*Stage II consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.

**Rationale:**
The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**
None

**Other Programs within which course is listed:**
None
**COURSE CHANGE: CATA 475**

**New Course Number:**

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

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<tr>
<td>Department:</td>
<td>Health, Kinesiology, and Applied Physiology</td>
</tr>
<tr>
<td>Program:</td>
<td>Athletic Therapy; Honours in Athletic Therapy</td>
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<tr>
<td>Degree:</td>
<td>BSc</td>
</tr>
<tr>
<td>Calendar Section/Graduate Page Number:</td>
<td>31.120</td>
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**Type of Change:**

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

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

[X] Course Deletion [X] Other - Specify: Note

<table>
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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</table>
| **CATA 475 Athletic Therapy Clinical Internship I** (6 credits)  
Prerequisite: Completion of Stage II in the BScAT. Students must be certification candidates of the Canadian Athletic Therapists Association and the Corporation des thérapeutes du sport du Québec. The course offers a minimum 400-hour supervised work opportunity. Under the supervision of a Certified Athletic Therapist, students are shown basic administrative skills as seen in private rehabilitation clinics or within the Department of Health, Kinesiology, and Applied Physiology.  
**NOTE:** Students who have received credit for CATA 480 may not take this course for credit.  
*Stage II consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.* | **CATA 475 Athletic Therapy Clinical Internship I** (6 credits)  
Prerequisite: Enrolment in the BScAT or Honours in Athletic Therapy: successful completion of Stage II in the BScAT or Honours in Athletic Therapy. Students must be certification candidates of the Canadian Athletic Therapists Association and the Corporation des thérapeutes du sport du Québec. The course offers a minimum 400-hour supervised work opportunity. Under the supervision of a Certified Athletic Therapist, students are shown basic administrative skills as seen in private rehabilitation clinics or within the Department of Health, Kinesiology, and Applied Physiology.  
**NOTE:** Students who have received credit for CATA 480 may not take this course for credit. |

Rationale:
The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). The course description is updated to reflect the correct name of the department.  
Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: CATA 485

New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Athletic Therapy; Honours in Athletic Therapy
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[X] Course Number
[X] Course Title
[ ] Course Description
[ ] Editorial
[ ] Course Deletion
[X] Other - Specify: Note

Present Text (from 2019/2020) calendar

CATA 485 Athletic Therapy Field Internship II (3 credits)
Prerequisite: Completion of Stage III* in the BScAT. This course offers students the opportunity to work in an emergency or preventive setting with a sports team, although some clinical component may be introduced. Students must be certification candidates of the Canadian Athletic Therapists Association (CATA) and the Corporation des thérapeutes du sport du Québec (CTSQ). This course involves a minimum commitment of 200 hours over one or two terms. Weekly seminars with agency supervisors are mandatory.
NOTE: Students who have received credit for CATA 390 may not take this course for credit.

*Stage III consists of CATA 437, 439, 462, 475; EXCI 460 and two chosen from EXCI 420, 440, 451, 453, 461; KCEP 311, 411.

Proposed Text

CATA 485 Athletic Therapy Field Internship II (3 credits)
Prerequisite: Enrolment in the BScAT or Honours in Athletic Therapy: successful completion of Stage III in the BScAT or Honours in Athletic Therapy. This course offers students the opportunity to work in an emergency or preventive setting with a sports team, although some clinical component may be introduced. Students must be certification candidates of the Canadian Athletic Therapists Association (CATA) and the Corporation des thérapeutes du sport du Québec (CTSQ). This course involves a minimum commitment of 200 hours over one or two terms. Weekly seminars with agency supervisors are mandatory.
NOTE: Students who have received credit for CATA 390 may not take this course for credit.

Rationale:
The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: CATA 495

New Course Number:

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

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Athletic Therapy; Honours Athletic Therapy
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[ ] Course Number  [ ] Course Title  [ ] Credit Value  [X] Prerequisite
[ ] Course Description  [ ] Editorial  [ ] New Course  [X] Other - Specify: Note

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<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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<tbody>
<tr>
<td>CATA 495 Athletic Therapy Clinical Internship II (3 credits)</td>
<td>CATA 495 Athletic Therapy Clinical Internship II (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: Completion of Stage III in the BScAT. Students must be certification candidates of the CATA and the CTSQ. The course offers a supervised period of work in a rehabilitation or athletic therapy clinic, for a minimum of 200 hours including a weekly seminar. <strong>NOTE:</strong> Students who have received credit for CATA 480 may not take this course for credit.</td>
<td>Prerequisite: Enrolment in the BScAT or Honours in Athletic Therapy; successful completion of Stage III in the BScAT or Honours in Athletic Therapy. Students must be certification candidates of the CATA and the CTSQ. The course offers a supervised period of work in a rehabilitation or athletic therapy clinic, for a minimum of 200 hours including a weekly seminar. <strong>NOTE:</strong> Students who have received credit for CATA 480 may not take this course for credit.</td>
</tr>
<tr>
<td>Stage III consists of CATA 437, 439, 462, 475; EXCI 460 and two chosen from EXCI 420, 440, 451, 453, 461, KCEP 311, 411.</td>
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Rationale:
The inclusion of "Honours" within the required prerequisites was accidentally omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: EXCI 310  

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: All Honours programs, BScAT, KCEP, BSc Major in Exercise Science
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[X] Course Number  [ ] Course Description
[X] Course Deletion  [ ] Editorial
[X] Other - Specify: Stage note removed

Present Text (from 2019/2020) calendar

EXCI 310  Research Methods (3 credits)
Prerequisite: Completion of Stage I* in the major. This course provides students with a general overview of investigative research and the nature of scientific inquiry. Students receive instruction in critical inquiry and appraisal, research design, research ethics, and the role research plays in the development of professional practice/skills. Finally, this course provides the necessary knowledge and practical experience to enable students to plan and run an experimental project, including an understanding of the process of data collection, analysis, interpretation, and presentation. Lectures only.
**NOTE:** Students who have received credit for EXCI 250 may not take this course for credit.

*RStage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.

Proposed Text

EXCI 310  Research Methods (3 credits)
Prerequisite: Successful completion of Stage I in a Health, Kinesiology, and Applied Physiology program. This course provides students with a general overview of investigative research and the nature of scientific inquiry. Students receive instruction in critical inquiry and appraisal, research design, research ethics, and the role research plays in the development of professional practice/skills. Finally, this course provides the necessary knowledge and practical experience to enable students to plan and run an experimental project, including an understanding of the process of data collection, analysis, interpretation, and presentation. Lectures only.
**NOTE:** Students who have received credit for EXCI 250 may not take this course for credit.

Rationale:
Students can register for this course if they have completed Stage I in any HKAP program. The prerequisite change clarifies this.

Resource Implications:
None.

Other Programs within which course is listed:
None
COURSE CHANGE: EXCI 322  

New Course Number:

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** All Honours programs  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**

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

[ ] Course Description  [ ] Editorial  [ ] New Course  [ ] Other - Specify:

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<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
</table>
| **EXCI 322 Statistics for Exercise Science** (3 credits)  
Prerequisite: EXCI 310 previously or concurrently; successful completion of Stage I* of the major; enrolment in the honours; or permission of the Department. This course builds on students’ experience derived from EXCI 310 to advance their knowledge of the research process by providing details of statistical techniques and methods that are common in exercise science. Lectures only. |
| **EXCI 322 Statistics for Exercise Science** (3 credits)  
Prerequisite: EXCI 310 previously or concurrently; enrolment in a Health, Kinesiology, and Applied Physiology honours program; or permission of the Department. This course builds on students’ experience derived from EXCI 310 to advance their knowledge of the research process by providing details of statistical techniques and methods that are common in exercise science. Lectures only. |

**Rationale:**
There are several honours programs so this editorial change is necessary.

**Resource Implications:**
None.

**Other Programs within which course is listed:**
None.

Calendar for academic year: 2020/2021  
Implementation Month/Year: May 2020
**COURSE CHANGE: EXCI 351**

New Course Number: [X] Undergraduate or [ ] Graduate Curriculum Changes

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** All Honours programs, BScAT, KCEP, BSc Major in Exercise Science  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[O] Other - Specify: stage note removed

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<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
<tbody>
<tr>
<td>EXCI 351 Introduction to the Biomechanics of Human Movement (3 credits)</td>
<td>EXCI 351 Introduction to the Biomechanics of Human Movement (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: PHYS 204, 224 or equivalent; completion of Stage I* of the major. The primary focus of this course concentrates on the mechanical principles of human movement. Fundamental principles of kinematics and kinetics are examined in a theoretical and practical context. Lectures and laboratory.</td>
<td>Prerequisite: PHYS 204, 224 or equivalent; successful completion of Stage I in a Health, Kinesiology, and Applied Physiology program. The primary focus of this course concentrates on the mechanical principles of human movement. Fundamental principles of kinematics and kinetics are examined in a theoretical and practical context. Lectures and laboratory.</td>
</tr>
</tbody>
</table>

*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.

**Rationale:**
Students can register for this course if they have completed Stage I in any HKAP program. The prerequisite change clarifies this.

**Resource Implications:**
None.

**Other Programs within which course is listed:**
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: EXCI-25 VERSION: 11

COURSE CHANGE: EXCI 352 New Course Number:

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

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** All Honours programs, BScAT, KCEP, BSc Major in Exercise Science  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[ ] Credit Value  
[ ] New Course  
[ ] Prerequisite

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</table>
| EXCI 352 *Essentials of Exercise Testing and Training in Athletic Populations* (3 credits)  
Prerequisite: Completion of Stage I in the major. This course utilizes the students’ background knowledge of anatomy, physiology, biomechanics, exercise physiology, and exercise programming to design pre-season, in-season, and post-season conditioning programs for elite athletes in a variety of sports. Most importantly, this course focuses on the importance of applying scientific principles of training in the design of exercise programs for elite athletes. The importance of skill-related (i.e. speed, agility, and power) and health-related components (i.e. cardio-respiratory endurance, and muscle strength) of physical fitness relative to performance is emphasized in this course. Some of the topics covered include ergogenic aids, regulation of skeletal muscle mass, periodization, aerobic endurance and resistance exercise training, and plyometrics. Lectures and laboratory.  
NOTE: Students who have received credit for EXCI 452 may not take this course for credit.  
*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.* | EXCI 352 *Essentials of Exercise Testing and Training in Athletic Populations* (3 credits)  
Prerequisite: Successful completion of Stage I in a Health, Kinesiology, and Applied Physiology program. This course utilizes the students’ background knowledge of anatomy, physiology, biomechanics, exercise physiology, and exercise programming to design pre-season, in-season, and post-season conditioning programs for elite athletes in a variety of sports. Most importantly, this course focuses on the importance of applying scientific principles of training in the design of exercise programs for elite athletes. The importance of skill-related (i.e. speed, agility, and power) and health-related components (i.e. cardio-respiratory endurance, and muscle strength) of physical fitness relative to performance is emphasized in this course. Some of the topics covered include ergogenic aids, regulation of skeletal muscle mass, periodization, aerobic endurance and resistance exercise training, and plyometrics. Lectures and laboratory.  
NOTE: Students who have received credit for EXCI 452 may not take this course for credit. |

**Rationale:**  
Students can register for this course if they have completed Stage I in any HKAP program. The prerequisite change clarifies this.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
**COURSE CHANGE: EXCI 360**

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** All Honours programs, BScAT, KCEP, BSc Major in Exercise Science  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120  
**Implementation Month/Year:** May 2020  

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

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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| **EXCI 360  Neural and Hormonal Control of Human Systems** (3 credits)  
Prerequisite: Completion of Stage I in the major. Basic principles of the neural control of human movement, including reference to the sensory systems (visual, auditory, vestibular, proprioceptive and kinesthetic) are discussed. Topics of hormonal influences affecting musculoskeletal, cardiovascular, respiratory systems and metabolism are included. Lectures only.  
NOTE: Students who have received credit for EXCI 355 may not take this course for credit.  
*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.* | **EXCI 360  Neural and Hormonal Control of Human Systems** (3 credits)  
Prerequisite: Successful completion of Stage I in a Health, Kinesiology, and Applied Physiology program. Basic principles of the neural control of human movement, including reference to the sensory systems (visual, auditory, vestibular, proprioceptive and kinesthetic) are discussed. Topics of hormonal influences affecting musculoskeletal, cardiovascular, respiratory systems and metabolism are included. Lectures only.  
NOTE: Students who have received credit for EXCI 355 may not take this course for credit.  
*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.* |

**Rationale:**  
Students can register for this course if they have completed Stage I in any HKAP program. The prerequisite change clarifies this.

**Resource Implications:**  
None.

**Other Programs within which course is listed:**  
None.
**COURSE CHANGE:** EXCI 415  
**New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** All HKAP programs and Honours  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**
- [ ] Course Number  
- [ ] Course Description  
- [ ] Course Deletion  
- [ ] Course Title  
- [ ] Editorial  
- [X] New Course  
- [ ] Credit Value  
- [ ] Prerequisite

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<tr>
<th>Present Text (from 20xx/20xx) calendar</th>
<th>Proposed Text</th>
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</table>
| **EXCI 415  Behaviour Change and Interventions** (3 credits)  
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in a Health, Kinesiology, and Applied Physiology program. Building on a theoretical background, this course includes practical aspects of health behaviour change in individuals. Using physical activity and eating habits as the main behaviours of interest, the topics discussed include understanding and assessing motivation, readiness to change, assessment of behaviours, barriers to change, changing multiple behaviours, adherence and compliance, and motivational communication. Students develop skills and knowledge to aid others in changing adverse behaviours. Lectures only. | |

**Rationale:**
Students in the HKAP programs but primarily those in the KCEP and KCEP Honours programs are required to work with clients and patients to actively change their health behaviours. Behavioural changes and interventions are important components for becoming a practicing kinesiologist as recommended by the Fédération des Kinésiologues du Québec (FKQ) and Canadian Society for Exercise Physiology (CSEP). However, our current HKAP programs do not include any course where students are taught the skills associated with behaviour change and interventions. As such, we are proposing to include EXCI 415 in the list of chosen courses to take in Stage III of all HKAP programs.

**Resource Implications:**
This course will be offered from our current course allotment and will be incorporated into existing faculty workloads.

**Other Programs within which course is listed:**
None
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: EXCI-25 VERSION: 11

COURSE CHANGE: EXCI 420  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

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

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Honours, Major in Exercise Science, KCEP, BScAT
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

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

Present Text (from 2019/2020) calendar
EXCI 420 Physical Activity Epidemiology (3 credits)
Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course surveys the health-related aspects of exercise, physical activity, and physical fitness from the perspective of epidemiology. Topics include an introduction to the epidemiological process, the relationship between physical activity and disease (e.g. cardiovascular disease, obesity, cancer, mental illness), the biological mechanisms for healthy adaptations to physical activity, the behavioural determinants of physical activity, and public policy implications of the current literature.
NOTE: Students who have received credit for this topic under an EXCI 498 number may not take this course for credit.

Stage II of major consists of EXCI 310, 351, 352, 360.
Stage II of honours consists of EXCI 310, 322, 351, 352, 360.
Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.
Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.

EXCI 420 Physical Activity Epidemiology (3 credits)
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in a Health, Kinesiology, and Applied Physiology program. This course surveys the health-related aspects of exercise, physical activity, and physical fitness from the perspective of epidemiology. Topics include an introduction to the epidemiological process, the relationship between physical activity and disease (e.g. cardiovascular disease, obesity, cancer, mental illness), the biological mechanisms for healthy adaptations to physical activity, the behavioural determinants of physical activity, and public policy implications of the current literature.
NOTE: Students who have received credit for this topic under an EXCI 498 number may not take this course for credit.

Rationale:
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None

D27
COURSE CHANGE: EXCI 421

New Course Number: 

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

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<td>Department:</td>
<td>Health, Kinesiology, and Applied Physiology</td>
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<tr>
<td>Program:</td>
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<td>Degree:</td>
<td>BSc</td>
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<td>Calendar Section/Graduate Page Number:</td>
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**Type of Change:**

- [ ] Course Number
- [ ] Course Title
- [ ] Course Description
- [ ] Editorial
- [X] Prerequisite

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<tbody>
<tr>
<td>EXCI 421 Honours Seminar: Current Topics in Health and Exercise Science (3 credits)</td>
<td>EXCI 421 Honours Seminar: Current Topics in Health and Exercise Science (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: EXCI 322; enrolment in an honours program or permission of the Department. Using a combination of guest speakers and student presentations, this seminar is geared to critically examining current issues and methods in health and exercise science. Its emphasis is on theoretical and/or methodological issues as they relate to selected topics from these areas. Examples of topics include ethical issues and new emerging theories in health and exercise science, and utility of a particular research technique or methodology. Lectures only. NOTE: Students who have received credit for EXCI 424 or 425 may not take this course for credit.</td>
<td>Prerequisite: EXCI 322; enrolment in a Health, Kinesiology, and Applied Physiology honours program; and successful completion of Stage II in an honours program; or permission of the Department. Using a combination of guest speakers and student presentations, this seminar is geared to critically examining current issues and methods in health and exercise science. Its emphasis is on theoretical and/or methodological issues as they relate to selected topics from these areas. Examples of topics include ethical issues and new emerging theories in health and exercise science, and utility of a particular research technique or methodology. Lectures only. NOTE: Students who have received credit for EXCI 424 or 425 may not take this course for credit.</td>
</tr>
</tbody>
</table>

**Rationale:**
The prerequisite was modified to clarify that Stage II of any honours program needs to be completed.

**Resource Implications:**
None.

**Other Programs within which course is listed:**
None
COURSE CHANGE: EXCI 426  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: All Honours programs
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[X] Course Number
[ ] Course Description
[ ] Course Deletion
[ ] Course Title
[ ] Editorial
[ ] Credit Value
[X] Prerequisite

Present Text (from 2019/2020) calendar

EXCI 426 Honours Thesis (6 credits)
Prerequisite: EXCI 421 previously or concurrently; enrolment in an honours program and completion of Stage II in the honours. This course requires the student to propose and conduct a study and submit a thesis according to a recognized and approved scientific journal format. The work is supervised by a thesis chair selected by the student from within the Department.

Stage II consists of EXCI 310, 322, 351, 352, 360.

Proposed Text

EXCI 426 Honours Thesis (6 credits)
Prerequisite: EXCI 421 previously or concurrently; enrolment in a Health, Kinesiology, and Applied Physiology honours program; successful completion of Stage II in an honours program. This course requires the student to propose and conduct a study and submit a thesis according to a recognized and approved scientific journal format. The work is supervised by a thesis chair selected by the student from within the Department.

Rationale:
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite.
Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None
**COURSE CHANGE: EXCI 440**

New Course Number: Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Honours in Kinesiology and Clinical Exercise Physiology: BSc Major  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120  
**Type of Change:** [ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Credit Value  
[ ] New Course  
[ ] Prerequisite  
[ ] Other - Specify: stage notes removed

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</table>
| **EXCI 440 Current Developments in the Biochemistry of Exercise** (3 credits)  
Prerequisite: Completion of Stage II* in the major, honours, KCEP or BScAT. This course offers an in-depth examination of the current topics and literature in biochemistry, cellular and molecular biology, and physiology as they relate to the adaptations associated with physical activity, exercise training, or disease. The course is designed to integrate knowledge from the disciplines of Exercise Science, Biochemistry, and Biology, to facilitate the synthesis and evaluation of new ideas, and to promote the effective oral and written communication of these ideas.  
**NOTE:** Students who have received credit for this topic under an EXCI 498 number may not take this course for credit.  

*Stage II of major consists of EXCI 310, 351, 352, 360.  
Stage II of honours consists of EXCI 310, 322, 351, 352, 360.  
Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.  
Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.  

| EXCI 440 **Current Developments in the Biochemistry of Exercise** (3 credits)  
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in a Health, Kinesiology, and Applied Physiology program. This course offers an in-depth examination of the current topics and literature in biochemistry, cellular and molecular biology, and physiology as they relate to the adaptations associated with physical activity, exercise training, or disease. The course is designed to integrate knowledge from the disciplines of Exercise Science, Biochemistry, and Biology, to facilitate the synthesis and evaluation of new ideas, and to promote the effective oral and written communication of these ideas.  
**NOTE:** Students who have received credit for this topic under an EXCI 498 number may not take this course for credit.  

Rationale: The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.  

Resource Implications: None

Other Programs within which course is listed: None

Calendar for academic year: 2020/2021  
Implementation Month/Year: May 2020
**COURSE CHANGE:** EXCI 445  
New Course Number: 

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

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<td>Department:</td>
<td>Health, Kinesiology, and Applied Physiology</td>
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**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Editorial  
[ ] Credit Value  
[X] Prerequisite  
[ ] New Course  
[ ] Other - Specify: Note

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

**EXCI 445 Nutrition in Exercise and Sport (3 credits)**  
Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course provides an overview of the anatomy and in-depth study of the physiology of the digestive system prior to examining the significance of carbohydrates, lipids, and proteins as essential nutritional requirements for physical activity and optimal performance. The importance of trace minerals and vitamins is also discussed. Specific issues such as the use of nutritional beverages, ergogenic aids, eating disorders, and nutritional concerns of athletes are some of the topics presented. Lectures only.  

*Stage II of major consists of EXCI 310, 351, 352, 360.*  
*Stage II of honours consists of EXCI 310, 322, 351, 352, 360.*  
*Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.*  
*Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.*

### Proposed Text

**EXCI 445 Nutrition in Exercise and Sport (3 credits)**  
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in a Health, Kinesiology, and Applied Physiology program. This course provides an overview of the anatomy and in-depth study of the physiology of the digestive system prior to examining the significance of carbohydrates, lipids, and proteins as essential nutritional requirements for physical activity and optimal performance. The importance of trace minerals and vitamins is also discussed. Specific issues such as the use of nutritional beverages, ergogenic aids, eating disorders, and nutritional concerns of athletes are some of the topics presented. Lectures only.

### Rationale:

The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.

### Resource Implications:

None

### Other Programs within which course is listed:

None
**COURSE CHANGE: EXCI 451**  
New Course Number:

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** All HKAP and Honours programs  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[ ] Credit Value  
[ ] New Course  
[X] Prerequisite

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

**EXCI 451 Clinical Biomechanics** (3 credits)  
Prerequisite: Completion of Stage II* in the major, honours, KCEP or BScAT. This course addresses biomechanical aspects of the most common structural and neurological abnormalities of the spine resulting in pathological gait. It also addresses the mechanics of tissue and joint injury of the head, neck, torso, and extremities. Lectures only.  
*Stage II of major consists of EXCI 310, 351, 352, 360.  
Stage II of honours consists of EXCI 310, 322, 351, 352, 360.  
Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.  
Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.

**Proposed Text**

**EXCI 451 Clinical Biomechanics** (3 credits)  
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in a Health, Kinesiology, and Applied Physiology program. This course addresses biomechanical aspects of the most common structural and neurological abnormalities of the spine resulting in pathological gait. It also addresses the mechanics of tissue and joint injury of the head, neck, torso, and extremities. Lectures only.

**Rationale:**  
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None

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Calendar for academic year: 2020/2021  
Implementation Month/Year: May 2020
COURSE CHANGE: EXCI 453  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: Kinesiology and Clinical Exercise Physiology; Honours programs
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[ ] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] New Course
[ ] Course Description [ ] Editorial [X] Other - Specify: Note

Present Text (from 2019/2020) calendar

**EXCI 453 Stress, Health and Disease** (3 credits)
Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course is an introduction to the role stress plays in health and disease. Topics dealt with in this seminar-based course include defining and measuring stress, the relationship between stress and disease (e.g. cardiovascular disease, asthma, cancer, infectious illness), the pathophysiology of stress, and current issues and controversies in behavioural medicine.
NOTE: Students who have received credit for EXCI 320 or for this topic under an EXCI 398 number may not take this course for credit.
*Stage II of major consists of EXCI 310, 351, 352, 360.*
*Stage II of honours consists of EXCI 310, 322, 351, 352, 360.*
*Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.*
*Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.*

Proposed Text

**EXCI 453 Stress, Health and Disease** (3 credits)
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in a Health, Kinesiology, and Applied Physiology program. This course is an introduction to the role stress plays in health and disease. Topics dealt with in this seminar-based course include defining and measuring stress, the relationship between stress and disease (e.g. cardiovascular disease, asthma, cancer, infectious illness), the pathophysiology of stress, and current issues and controversies in behavioural medicine.
NOTE: Students who have received credit for EXCI 320 or for this topic under an EXCI 398 number may not take this course for credit.

Rationale:
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite.

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: EXCI 455  
New Course Number: 

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

Faculty/School: Arts and Science  
Department: Health, Kinesiology, and Applied Physiology  
Program: All programs  
Degree: BSc  
Calendar Section/Graduate Page Number: 31.120

Type of Change: 
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[X] Prerequisite  
[ ] Credit Value  
[ ] New Course  
[X] Other - Specify: Note

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<tr>
<td><strong>EXCI 455 Physical Activity, Health and Aging</strong> (3 credits)</td>
<td><strong>EXCI 455 Physical Activity, Health and Aging</strong> (3 credits)</td>
</tr>
</tbody>
</table>
| Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course addresses the health status, physical fitness, exercise patterns, and effectiveness of exercise prescription for the well elderly and those exhibiting symptoms of chronic diseases which commonly accompany the aging process. Lectures and laboratory. *Stage II of major consists of EXCI 310, 351, 352, 360.*  
*Stage II of honours consists of EXCI 310, 322, 351, 352, 360.*  
*Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.*  
*Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.* | Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in the Major in Exercise Science, Honours in Exercise Science, KCEP or Honours in KCEP, or of Stage III in the BScAT or Honours in Athletic Therapy. This course addresses the health status, physical fitness, exercise patterns, and effectiveness of exercise prescription for the well elderly and those exhibiting symptoms of chronic diseases which commonly accompany the aging process. Lectures and laboratory. |

Rationale:  
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite.  
Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:  
None

Other Programs within which course is listed:  
None
COURSE CHANGE: EXCI 458  
New Course Number:

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

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

<table>
<thead>
<tr>
<th>Faculty/School:</th>
<th>Arts and Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Health, Kinesiology, and Applied Physiology</td>
</tr>
<tr>
<td>Program:</td>
<td>All programs</td>
</tr>
<tr>
<td>Degree:</td>
<td>BSc</td>
</tr>
<tr>
<td>Calendar Section/Graduate Page Number:</td>
<td>31.120</td>
</tr>
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</table>

**Type of Change:**

- [ ] Course Number
- [ ] Course Title
- [ ] Course Description
- [ ] Editorial
- [ ] Course Deletion
- [X] Other - Specify: stage notes removed

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXCI 458 Pediatric Exercise Science</strong> (3 credits)</td>
<td><strong>EXCI 458 Pediatric Exercise Science</strong> (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course introduces students to the anatomical, physiological, and psychosocial issues related to exercise and physical activity in children. Topics include influence on growth and health, injury potential, endurance exercise, weight training, youth in sport, competitive and collaborative play, stress in childhood, and the strategies for improving exercise habits of children. Lectures only.</td>
<td>Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in the Major in Exercise Science, Honours in Exercise Science, KCEP, or Honours in KCEP, or of Stage III in the BScAT or Honours in Athletic Therapy. This course introduces students to the anatomical, physiological, and psychosocial issues related to exercise and physical activity in children. Topics include influence on growth and health, injury potential, endurance exercise, weight training, youth in sport, competitive and collaborative play, stress in childhood, and the strategies for improving exercise habits of children. Lectures only.</td>
</tr>
<tr>
<td>Stage II of major consists of EXCI 310, 351, 352, 360.</td>
<td></td>
</tr>
<tr>
<td>Stage II of honours consists of EXCI 310, 322, 351, 352, 360.</td>
<td></td>
</tr>
<tr>
<td>Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.</td>
<td></td>
</tr>
<tr>
<td>Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.</td>
<td></td>
</tr>
</tbody>
</table>

Rationale:
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: EXCI 460  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science  
Department: Health, Kinesiology, and Applied Physiology  
Program: All programs  
Degree: BSc  
Calendar Section/Graduate Page Number: 31.120

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| **EXCI 460 Integrative Human Physiology** (3 credits)  
Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course uses physiological homeostasis and the function of major organ systems as its basis. Students learn how the different systems act in an integrative fashion and how the body adjusts to various challenges to the maintenance of homeostasis. The focus is on five specific organ systems — the neural, muscular, cardiovascular, respiratory and renal systems. Students learn how these systems interactively function during health, exercise and disease.
*Stage II of major consists of EXCI 310, 351, 352, 360.
Stage II of honours consists of EXCI 310, 322, 351, 352, 360.
Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.
Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.  

Rationale:
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None

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

D36
**COURSE CHANGE: EXCI 461**  
New Course Number:

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

<table>
<thead>
<tr>
<th>Faculty/School:</th>
<th>Arts and Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Health, Kinesiology, and Applied Physiology</td>
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<tr>
<td>Program:</td>
<td>All programs</td>
</tr>
<tr>
<td>Degree:</td>
<td>BSc</td>
</tr>
<tr>
<td>Calendar Section/Graduate Page Number:</td>
<td>31.120</td>
</tr>
</tbody>
</table>

**Type of Change:**

[ ] Course Number  
[ ] Course Title  
[X] Course Description  
[ ] Editorial  
[ ] Course Deletion  
[X] Other - Specify: Note

---

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

**EXCI 461 Pharmacology for Sport and Exercise** (3 credits)  
Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course provides the latest information on over-the-counter and prescription medications commonly used in sport. It offers a sound review of pharmacology and pharmacokinetic principles and explores the latest practice implications for certified athletic therapists and exercise specialists. The course includes indications, contraindications, and side effects of common therapeutic medications used in sport. Class discussions also cover natural products and the effects of their interactions with prescription and non-prescription pharmaceuticals.

---

**Proposed Text**

**EXCI 461 Pharmacology for Sport and Exercise** (3 credits)  
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in a Health, Kinesiology, and Applied Physiology program. This course provides the latest information on over-the-counter and prescription medications commonly used in sport. It offers a sound review of pharmacology and pharmacokinetic principles and explores the latest practice implications for certified athletic therapists and exercise specialists. The course includes indications, contraindications, and side effects of common therapeutic medications used in sport. Class discussions also cover natural products and the effects of their interactions with prescription and non-prescription pharmaceuticals.

**Rationale:**
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. The word pharmacokinetic is also modified in the course description to reflect the correct spelling. Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**
None

**Other Programs within which course is listed:**
None
**COURSE CHANGE: EXCI 471**

New Course Number: Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** Athletic Therapy; Honours Athletic Therapy  
**Degree:** BScAT, BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Credit Value  
[X] Prerequisite

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| EXCI 471 *Pain Management Strategies* (3 credits)  
Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course relates theory and research to the practical experiences of client/athletic-practitioner interactions, relationships, and interventions. It addresses pain management principles as they relate to illness, injury, and rehabilitation. Lectures only.  
*Stage II of major consists of EXCI 310, 351, 352, 360.*  
*Stage II of honours consists of EXCI 310, 322, 351, 352, 360.*  
*Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.*  
*Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.*  
Rationale:  
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.  
Resource Implications:  
None  
Other Programs within which course is listed:  
None |

<table>
<thead>
<tr>
<th>Proposed Text</th>
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</table>
| EXCI 471 *Pain Management Strategies* (3 credits)  
Prerequisite: Enrolment in a Health, Kinesiology, and Applied Physiology program; successful completion of Stage II in the Major in Exercise Science, Honours in Exercise Science, KCEP, or Honours in KCEP, or of Stage III of the BScAT or Honours in Athletic Therapy. This course relates theory and research to the practical experiences of client/athletic-practitioner interactions, relationships, and interventions. It addresses pain management principles as they relate to illness, injury, and rehabilitation. Lectures only.  
Rationale:  
The prerequisite was modified to include the completion of Stage II in any Honours program as an acceptable prerequisite. Stage notes are removed from individual course listings as they already appear under the program descriptions.  
Resource Implications:  
None  
Other Programs within which course is listed:  
None |
COURSE CHANGE: EXCI 492  

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science  
Department: Health, Kinesiology, and Applied Physiology  
Program:  
Degree: BSc

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

Type of Change:
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Other - Specify: Note

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| EXCI 492 Independent Study in Exercise Science (3 credits)  
Prerequisite: Completion of Stage II in the major, honours, KCEP or BScAT. This course provides an opportunity to conduct a small-scale scientific research project under the supervision of a faculty member from the Department. In consultation with a faculty member, the student selects a topic, formulates a research methodology, collects data, analyzes the results, and writes a formal research report. NOTE: Students who have received credit for EXCI 491 may not take this course for credit.  
Stage II of major consists of EXCI 310, 351, 352, 360.  
Stage II of honours consists of EXCI 310, 322, 351, 352, 360.  
Stage II of KCEP consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.  
Stage II of BScAT consists of CATA 337, 339, 348, 365; EXCI 310, 351, 352, 360.  
| EXCI 492 Independent Study in Exercise Science (3 credits)  
Prerequisite: Enrolment in the Major in Exercise Science, KCEP, or BScAT; successful completion of Stage II in the Major in Exercise Science or KCEP, or of Stage III of the BScAT. This course provides an opportunity to conduct a small-scale scientific research project under the supervision of a faculty member from the Department. In consultation with a faculty member, the student selects a topic, formulates a research methodology, collects data, analyzes the results, and writes a formal research report.  
NOTE: Students who have received credit for EXCI 491 may not take this course for credit.  

Rationale:  
This course is no longer an option for students registered in an honours program.  
Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:  
None

Other Programs within which course is listed:  
None
COURSE CHANGE: KCEP 311  New Course Number: 

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

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

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: KCEP and Honours
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[X] Course Number
[ ] Course Description
[ ] Course Deletion
[ ] Course Title
[ ] Editorial
[ ] Credit Value
[ ] New Course
[X] Prerequisite

Present Text (from 2019/2020) calendar

KCEP 311 Pathophysiology in Clinical Exercise Science I (3 credits)
Prerequisite: Successful completion of Stage I in the major; enrolment in the KCEP. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common neuromuscular and orthopaedic diseases and disabilities. Lectures only.
NOTE: Students who have received credit for EXCI 423 may not take this course for credit.
*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.

Proposed Text

KCEP 311 Pathophysiology in Clinical Exercise Science I (3 credits)
Prerequisite: Enrolment in the KCEP, KCEP Honours, BScAT or Honours in Athletic Therapy; successful completion of Stage I in the KCEP or Honours in KCEP, or of Stage III in the BScAT or Honours in Athletic Therapy. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common neuromuscular and orthopaedic diseases and disabilities. Lectures only.
NOTE: Students who have received credit for EXCI 423 may not take this course for credit.

Rationale:
The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None
**COURSE CHANGE: KCEP 349**

**New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** KCEP and Honours  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**

[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[X] Other - Specify: Note

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020 calendar)</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KCEP 349</strong> Assessment, Interpretation, and Rehabilitation in Neuromuscular Physiology (3 credits)</td>
<td><strong>KCEP 349</strong> Assessment, Interpretation, and Rehabilitation in Neuromuscular Physiology (3 credits)</td>
</tr>
</tbody>
</table>
| Prerequisite: KCEP 311 previously or concurrently; successful completion of Stage I in the major, enrolment in the KCEP. This course focuses on the assessment and rehabilitation of neurological, neuromuscular, and musculoskeletal fitness in the clinical setting. Measurement and interpretation of normal and abnormal responses for individuals with common neurological, neuromuscular and musculoskeletal diseases and disabilities are discussed and performed. Lectures and laboratory.  
*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.*  
**NOTE:** Students who have received credit for EXCI 380 may not take this course for credit. | Prerequisite: KCEP 311 previously or concurrently; enrolment in the KCEP or Honours in KCEP. This course focuses on the assessment and rehabilitation of neurological, neuromuscular, and musculoskeletal fitness in the clinical setting. Measurement and interpretation of normal and abnormal responses for individuals with common neurological, neuromuscular and musculoskeletal diseases and disabilities are discussed and performed. Lectures and laboratory.  
*Stage I consists of CATA 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.*  
**NOTE:** Students who have received credit for EXCI 380 may not take this course for credit. |

**Rationale:**  
The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: EXCI-25 VERSION: 11**

**COURSE CHANGE: KCEP 383  New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** KCEP and Honours  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**

- [ ] Course Number
- [X] Course Description
- [ ] Course Deletion
- [X] Editorial
- [ ] Credit Value
- [ ] New Course
- [X] Prerequisite

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KCEP 383 Kinesiology and Clinical Exercise Physiology Internship I</strong> (3 credits)</td>
</tr>
<tr>
<td>Prerequisites: Successful completion of Stage I* in the major: enrolment in the KCEP. This course provides students the opportunity to observe and participate in physical activity programming offered for special populations (i.e. persons with neurological and physical impairments) in a supervised setting. This course involves a commitment of <strong>420</strong> hours including a weekly seminar.</td>
</tr>
<tr>
<td>NOTE: Students who have received credit for EXCI 383 may not take this course for credit.</td>
</tr>
<tr>
<td>*Stage I consists of CAT 262, 263; EXCI 252, 253, 254, 258, 259; KCEP 210.</td>
</tr>
</tbody>
</table>

**Proposed Text**

<table>
<thead>
<tr>
<th>Proposed Text</th>
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</thead>
<tbody>
<tr>
<td><strong>KCEP 383 Kinesiology and Clinical Exercise Physiology Internship I</strong> (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: Enrolment in the KCEP or Honours in KCEP. This course provides students the opportunity to observe and participate in physical activity programming offered for special populations (i.e. persons with neurological and physical impairments) in a supervised setting. This course involves a commitment of <strong>at least 200</strong> hours including a weekly seminar.</td>
</tr>
<tr>
<td>NOTE: Students who have received credit for EXCI 383 may not take this course for credit.</td>
</tr>
</tbody>
</table>

**Rationale:**

The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Also a request to increase the number of required internship hours has been submitted in the current dossier. The professional activities have grown in scope and complexity, and therefore more time is required for students to be exposed to all the new concepts pertaining to Kinesiology and Clinical Exercise Physiology. Site supervisors have recommended that we increase the number of hours to a minimum of 200 hours per internship course (i.e. KCEP 383 and KCEP 483). Increasing the number of hours would allow us to maintain and strengthen a link with more internship sites, as well as enhance the practical training of the students and better prepare them for their future career as a kinesiologist.

Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**

None

**Other Programs within which course is listed:**

None

**Calendar for academic year:** 2020/2021  
**Implementation Month/Year:** May 2020
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: EXCI-25 VERSION: 11

COURSE CHANGE: KCEP 411 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Health, Kinesiology, and Applied Physiology
Program: KCEP and Honours
Degree: BSc
Calendar Section/Graduate Page Number: 31.120

Type of Change:
[ ] Course Number [ ] Course Title
[ ] Course Description [ ] Editorial
[ ] Course Deletion [X] Other - Specify: Note

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
</table>
| KCEP 411 *Pathophysiology in Clinical Exercise Science II* (3 credits)  
Prerequisite: Completion of Stage II in the KCEP. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common cardiovascular, respiratory, oncologic and metabolic diseases. Lectures only.  
*Stage II consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.*  
NOTE: Students who have received credit for EXCI 422 may not take this course for credit. | KCEP 411 *Pathophysiology in Clinical Exercise Science II* (3 credits)  
Prerequisite: Enrolment in the KCEP, Honours in KCEP, BScAT, or Honours in Athletic Therapy; successful completion of Stage II in the KCEP, Honours in KCEP, BScAT, or Honours in Athletic Therapy. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common cardiovascular, respiratory, oncologic and metabolic diseases. Lectures only.  
NOTE: Students who have received credit for EXCI 422 may not take this course for credit. |

Rationale:
The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

Resource Implications:
None

Other Programs within which course is listed:
None
**COURSE CHANGE: KCEP 449  New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** KCEP and Honours  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Credit Value  
[ ] New Course  
[ X] Prerequisite

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

**KCEP 449 Physical Fitness Assessment, Exercise Prescription and Rehabilitation in Special Populations (3 credits)**  
Prerequisite: Completion of Stage II in the KCEP. This course focuses on the assessment of cardiorespiratory fitness and body composition in a clinical setting. Measurement and interpretation of normal and abnormal responses for individuals with the most common cardiovascular, respiratory, oncologic, and metabolic diseases are performed and discussed. Lectures and laboratory.  
*Stage II consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.*  

**NOTE:** Students who have received credit for EXCI 450 may not take this course for credit.

### Proposed Text

**KCEP 449 Physical Fitness Assessment, Exercise Prescription and Rehabilitation in Special Populations (3 credits)**  
Prerequisite: Enrollment in the KCEP or Honours in KCEP: successful completion of Stage II in the KCEP or Honours in KCEP. This course focuses on the assessment of cardiorespiratory fitness and body composition in a clinical setting. Measurement and interpretation of normal and abnormal responses for individuals with the most common cardiovascular, respiratory, oncologic, and metabolic diseases are performed and discussed. Lectures and laboratory.  
*Stage II consists of EXCI 310, 351, 352, 360; KCEP 311, 349, 383.*  

**NOTE:** Students who have received credit for EXCI 450 may not take this course for credit.

### Rationale:

The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). Stage notes are removed from individual course listings as they already appear under the program descriptions.

### Resource Implications:

None

### Other Programs within which course is listed:

None
**COURSE CHANGE: KCEP 483**

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

**Faculty/School:** Arts and Science  
**Department:** Health, Kinesiology, and Applied Physiology  
**Program:** KCEP and Honours  
**Degree:** BSc  
**Calendar Section/Graduate Page Number:** 31.120

**Type of Change:**  
[ ] Course Number  
[X] Course Description  
[ ] Course Deletion  
[X] Editorial  
[ ] Other - Specify: Note  
[ ] Credit Value  
[ ] Prerequisite  
[ ] New Course

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</table>
| **KCEP 483 Kinesiology and Clinical Exercise Physiology Internship II** (3 credits)  
Prerequisite: Completion of Stage II* in the KCEP. The course offers a supervised period of work as activity leader/exercise specialist in a hospital or rehabilitation centre assisting in performing physiological evaluations, designing exercise programs, and animating physical activities. The course involves a commitment of 420 hours including a weekly seminar.  
NOTE: Students who have received credit for EXCI 483 may not take this course for credit.  
*Stage II consists of EXCI 483, 484, 485, 486, 487, 488.* | **KCEP 483 Kinesiology and Clinical Exercise Physiology Internship II** (3 credits)  
Prerequisite: Enrolment in the KCEP or Honours in KCEP; successful completion of Stage II in the KCEP or Honours in KCEP. The course offers a supervised period of work as activity leader/exercise specialist in a hospital or rehabilitation centre assisting in performing physiological evaluations, designing exercise programs, and animating physical activities. The course involves a commitment of at least 200 hours including a weekly seminar.  
NOTE: Students who have received credit for EXCI 483 may not take this course for credit. |

**Rationale:**
The inclusion of "Honours" within the required prerequisites was accidently omitted in previous curriculum submissions US-2017-4-D20 (EXCI 20) and US-2017-7-D12 (EXCI 21). The reference to Stage II has also been updated to reflect the inclusion of Stage II of the KCEP honours program as a prerequisite. Additionally, a request to increase the number of required internship hours has been submitted in the current dossier. The professional activities have grown in scope and complexity, and therefore more time is required for students to be exposed to all the new concepts pertaining to Kinesiology and Clinical Exercise Physiology. Site supervisors have recommended that we increase the number of hours to a minimum of 200 hours per internship course (i.e. KCEP 383 and KCEP 483). Increasing the number of hours would allow us to maintain and strengthen a link with more internship sites, as well as enhance the practical training of the students and better prepare them for their future career as a kinesiologist. Stage notes are removed from individual course listings as they already appear under the program descriptions.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
INTERNAL MEMORANDUM

TO: Dr Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
Office of the Provost and Vice-President, Academic Affairs
Chair, Academic Programs Committee

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

DATE: September 20, 2019

SUBJECT: 2020-21 Undergraduate Calendar Curriculum Changes
Department of Geography, Planning and Environment
GEOG-48
Changes to Human Environment and Environmental Geography programs; course changes

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

The Department of Geography, Planning and Environment is updating their offerings in Human Environment to reflect how these programs have evolved in the 20 years since their inception. These changes also will impact the Major and Minor in Environmental Geography as some of the courses being modified are common to both areas. Specifically, GEOG 300 Environment: Historical and Cultural Perspectives will be deleted and its relevant content covered in GEOG 290 Environment and Society and in a new course, GEOG 315 Social and Cultural Geographies. In addition, GEOG 485 Feminist Geographies will be added to the list of regular courses.

Finally, a number of courses course descriptions, titles, prerequisites and/or exclusion notes are changed to reflect the content of these courses and ensure consistency with the modifications to the programs discussed above.

Thank you for your consideration of this proposal for which there are no additional resource implications. The two new courses will come from the department’s current allotment.

Reference documents:
FCC 2018.7/U_GEOG-48
ASFC 2019-5M-M
Department of Geography, Planning and Environment

GEOG-48

Memo from Chair

Program changes

Honours in the Human Environment
Specialization in the Human Environment
Major in the Human Environment
Major in Environmental Geography
Minor in the Human Environment
Minor in Environmental Geography

Course title and description change

GEOG 220  Place, Space, and Identity

Prerequisite, description and exclusion note change

GEOG 290  Environment and Society

Course deleted

GEOG 300  Environment: Historical and Cultural Perspectives

New course

GEOG 315  Social and Cultural Geographies
GEOG 485  Feminist Geographies

Course title change (cross-listing added)

GEOG 323  (also listed as URBS 337) Urban Agriculture
GEOG 333  (also listed as URBS 310) Urban Transportation
GEOG 363  (also listed as URBS 335) Geographic Information Systems
GEOG 431  (also listed as URBS 481) Urban Planning in the Developing World
GEOG 450  (also listed as URBS 450) Economic Restructuring
URBS 310  (also listed as GEOG 333) Urban Transportation
URBS 335  (also listed as GEOG 363) Geographic Information Systems
URBS 337  (also listed as GEOG 323) Urban Agriculture
URBS 450  (also listed as GEOG 450) Economic Restructuring
URBS 481  (also listed as GEOG 431) Urban Planning in the Developing World

Prerequisite change
GEOG 407  Indigenous Peoples and the Environment
GEOG 464  Programming for Geospatial Technologies

Prerequisite and editorial change to course description
GEOG 418  Geographies of Postcolonialism

Title, prerequisite and exclusion note change
GEOG 430  (also listed as URBS 420) Social Geographies of Montreal

Title and prerequisite change
URBS 420  (also listed as GEOG 430) Social Geographies of Montreal
TO: Faculty of Arts and Science Curriculum Committee (FCC)  
FROM: Pascale Biron, Chair, Geography Planning and Environment  
DATE: 27 May 2019  
RE: Undergraduate Curriculum Proposal 2020-21 (updated memo)

The attached curriculum proposal was formulated by Geography, Planning and Environment’s academic units, submitted to and vetted by the Departmental Curriculum Committee. The proposal was ratified at the Departmental Assembly of March 22 and is now put forth to the FCC.

The BA Human Environment programs were developed at the end of the 1990s and, with the exception of minor changes to add or remove a few courses related to the areas of specialty of new or retiring faculty members, they have not been modified as they have proven very successful programs in the department. However, some key concepts related to the Human Environment have evolved in the last 20 years, which we feel should be reflected in the programs, in particular in the core courses.

For example, we feel that the pivotal course GEOG 290 (Environment and Society), which is compulsory for not only the BA Human Environment but also the BSc Environmental Geography and Environmental Science, could better introduce key concepts and frameworks for examining environment-society relations. This is particularly important as this course is also compulsory in the Senate-approved BSc Environmental and Sustainability Science (with the departments of Biology and Chemistry and Biochemistry) and in the BA Major in Leadership in Sustainability (MiLiS), which will be submitted to APC for review. We also propose to introduce a new course, GEOG 315 (Social and Cultural Geographies) to replace the existing GEOG 300 (Environment: Historical and Cultural Perspectives).

The overall purpose of these changes is 1) to expose students to theories of the social roots of environmental problems in early part of their programs, 2) to strengthen our social and cultural offering at the 300 level and (3) to eliminate overlap between courses.

The proposal consists of the following changes:

**Major Changes**

**BA Major, Specialization and Honours in Human Environment**

- Deletion: GEOG 300 Environment: Historical and Cultural Perspectives
We propose eliminating GEOG 300, with some of its material moved to the revised GEOG 290 and some of its material moved to the new GEOG 315. In the last decade, GEOG 300 has been taught as an introduction to critical approaches to human environment relations, what is known in the geography literature as political ecology. The emphasis of the course has been on the history and geography of western conception of nature and on struggles over resources and meaning at multiple spatial scales. Given that critical environmental approaches are central to many 300- and 400-level courses, this material is better placed in the introductory 200-level course (GEOG 290 Environment and Society). Some material from GEOG 300 Environment: Historical and Cultural Perspectives will be incorporated into GEOG 315 Social and Cultural Geographies which provides better preparation for 400-level GEOG courses such as GEOG 407, 418 and 430.

New course: GEOG 315 Social and Cultural Geographies

- GEOG 315 will replace GEOG 300 in the curriculum. GEOG 315 will become the core required social-cultural course at the 300-level, bridging the gap between GEOG 220 (The Human Environment: Place, Space, and Identity) — our introductory social-cultural offering which will have a shorter title (see below) — and advanced courses such as GEOG 407 (Indigenous Peoples and the Environment), GEOG 418 (Geographies of Postcolonialism), GEOG 430 (Social and Cultural Geographies of Montreal – which as indicated below will be revised to Social Geographies of Montreal) and the proposed GEOG 485 (Feminist Geographies). GEOG 315 absorbs material regarding social and cultural geographies from the deleted GEOG 300. This course insures that all BA students have a solid foundation in the root causes of environmental problems in the social and cultural fields before they move on to the more advanced courses.

Revision: GEOG 290 Environment and society

- GEOG 290 continues to be a pivotal course in the program, required of all students, and including writing tutorials (put in place in the winter 2018 as a pilot project). Drawing partially from GEOG 300 content, this course will now present students with an analysis of the root social causes of environmental problems. The course is brought up to date, shifting from a case-study approach to an introduction of key concepts and frameworks for examining environment-society relations. This shift in approach also allows us to remove the three prerequisites (GEOG 220, 272 and 274) which were complex to manage, particularly for the BSc students. This revision supplements the human ecology approach with core concepts of political ecology, providing a foundation for later courses such as GEOG 355 (Resource analysis and Management) and GEOG 380 (Ecological Economics).

Program structure and prerequisites

- GEOG 315 replaces GEOG 300 in the curriculum, as a required 300-level course.
GEOG 290 will no longer have prerequisites, but will be open to program students only as the course includes writing tutorials which are resource intensive. Removing prerequisites facilitates access to students in our BSc programs and (future) MiLiS students (see below).

GEOG 290 will be a prerequisite for GEOG 315, to ensure students have completed enough 200-level work before moving on to 300-level courses.

GEOG 315 will become the prerequisite for GEOG 407, 418 and 430, replacing GEOG 300 in this function. The content of GEOG 315 is better preparation for those courses than the deleted GEOG 300.

BSc Major and Minor Environmental Geography

- GEOG 290: This course has been revised keeping in mind that it is the one course all Human Environment, BSc and future MiLiS students take. For BSc students it is the one course that exposes them to social perspectives on the environment. The revisions bring the course up to date, stressing key concepts and frameworks rather than focusing on case studies.

- Program structure
  - BSc Major:
    - As GEOG 300 will be removed from the calendar, relevant content related to cultural and historical perspectives on the environment from GEOG 300 will be incorporated into the revised GEOG 290, which BSc students already take. Environmental Geography majors would take an additional 300 or 400 level course chosen from the BSc Geography/Geology list in the place of GEOG 300.
  - BSc Minor:
    - Environmental Geography minors would now take GEOG 290, which is not currently part of the minor. This would add a required social environment course to the minor, bringing it in line with the major and the specialization. To make room for GEOG 290, students in the minor would now choose 6 credits among GEOG 272, 274 and GEOL 210, like Environmental Science students, rather than taking all three. GEOG 406 (Tropical Forests) is no longer taught and will be removed from the Minor. It will also be permanently deleted from the Calendar. GEOG 467 is designed for Honours students and should not have been part of the list of elective courses for the BSc Minor. It will therefore be deleted from the list of electives.

BSc Specialization and Honours Environmental Science

- GEOG 300 has not been part of Environmental Science, and so these programs are not affected by the elimination of GEOG 300. Note that this is also the case in the Senate-approved BSc Specialization and Honours in Environmental and Sustainability Science, which will replace this program once approved by the Quebec government (likely by 2020-2021). The revisions to GEOG 290 bring the course up to date, stressing key concepts and frameworks rather than focusing on case studies, making the course more relevant for Environmental Science students.
In the past we have had to waive the prerequisite of GEOG 220 for Environmental Science students to take GEOG 290. The proposed changes eliminate that prerequisite.

**BA Major in Leadership in Sustainability (MiLiS)**

- GEOG 290 has been updated keeping in mind that it is a core course for the proposed BA MiLiS. Removing the prerequisites ensures easier access to the course for MiLiS students.

**Minor Changes**

**BA Major, Specialization and Honours in Human Environment**

- New elective course: GEOG 485 – Feminist Geographies. The field of feminist geographies is an established sub-field in human geography, which is increasingly informing analyses of inequality and difference. This course has already been taught successfully twice as GEOG 498. Fall 2017: 32 students enrolled; Fall 2018: 21 students enrolled.
- Flexibility in choosing 300-level electives: Specialization and Honours students will be given more flexibility in choosing the mix of human geography and physical geography courses they take in Stage II, so they may focus on their interests, all the while ensuring that they take at least one course from each group.
- Adding GEOG 321 (A World of Food) and 323 (Urban Agriculture) to the curriculum as elective courses: GEOG 321 and 323 are long-standing popular courses, which we have allowed students to use to fulfill a 300-level elective requirement. This change would bring the calendar up to date with advising practice.
- Changing title and course description of GEOG 220: The course title has been shortened from “The Human Environment: Place, Space, and Identity” to “Place, Space and Identity” for convenience and to allow the current sub-title (which reflects the focus of the course) to appear on student transcripts. The course description has been amended to improve its readability and more accurately reflect the approach taken in the course.

**BA Major and Minor Urban Studies; Specialization and Honours Urban Planning**

- Changing title of URBS 420 (cross-listed GEOG 430) from “The Social and Cultural Geographies of Montreal” to “Social Geographies of Montreal” to better reflect the content of the course and to avoid confusion with the new GEOG 315 Social and Cultural Geographies. URBS 420 is an URBS class focusing on the social geographies of Montreal as they relate to urban planning and public policy. GEOG 315 is a foundational course in social and cultural geography more broadly, not necessarily focused on the urban.
- Changing the prerequisites for URBS 420 (GEOG 430). In reviewing this course, we feel the new GEOG 315 Social and Cultural Geographies or GEOG 330 Urban Geography would be a more appropriate prerequisite than GEOG 361 Research Design and Qualitative Methods, URBS 360 Qualitative and Quantitative Research Methods (now defunct), or URBS 362 Quantitative
Research Methods. GEOG 330 is a program elective for all BA Urban Studies, Urban Planning and Human Environment programs, so this change will not prevent Urban studies/planning students from taking URBS 420. The prerequisite would change from “GEOG 361 or URBS 360 or 362“ to “GEOG 315 or 330 or permission of the department”.

**BA Minor and Certificate in Geospatial Technologies**

- GEOG 264 “Programming for Environmental Sciences” will become a prerequisite for GEOG 464 “Programming for Geospatial Technologies” in addition to GEOG 363 “Geographic Information Systems”. This was an omission when the course GEOG 464 was first created for the Minor/Certificate in Geospatial Technologies.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: GEOG-48 VERSION: 4

PROGRAM CHANGE: Honours in the Human Environment

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Honours in the Human Environment
Degree: BA
Calendar Section/Graduate Page Number: 31.130

Type of Change:
[X] Requirements

Present Text (from 2019/2020) calendar

### Stage I
15 GEOG 220<sup>3</sup>, 260<sup>3</sup>, 272<sup>3</sup>, 274<sup>3</sup>, 290<sup>3</sup>
3 Chosen from GEOG 210<sup>3</sup>, GEOL 210<sup>3</sup>; URBS 230<sup>3</sup>

### Stage II
12 GEOG 300<sup>3</sup>–361<sup>3</sup>, 362<sup>3</sup>, 363<sup>3</sup>
6 Chosen from GEOG 310<sup>3</sup>, 330<sup>3</sup>, 355<sup>3</sup>, 380<sup>3</sup>
6 Chosen from GEOG 371<sup>3</sup>, 374<sup>3</sup>, 375<sup>3</sup>, 377<sup>3</sup>, 378<sup>3</sup>

### Stage III
12 Elective credits in Geography at the 400 level
6 GEOG 491<sup>6</sup>’s students.

Proposed Text

### Stage I
15 GEOG 220<sup>3</sup>, 260<sup>3</sup>, 272<sup>3</sup>, 274<sup>3</sup>, 290<sup>3</sup>
3 Chosen from GEOG 210<sup>3</sup>, GEOL 210<sup>3</sup>; URBS 230<sup>3</sup>

### Stage II
12 GEOG 315<sup>3</sup>, 361<sup>3</sup>, 362<sup>3</sup>, 363<sup>3</sup>
12 Chosen from two groups of electives (with at least three credits from each group)
   - **Group 1:** GEOG 310<sup>3</sup>, 321<sup>3</sup>, 323<sup>3</sup>, 330<sup>3</sup>, 355<sup>3</sup>, 380<sup>3</sup>
   - **Group 2:** GEOG 371<sup>3</sup>, 374<sup>3</sup>, 375<sup>3</sup>, 377<sup>3</sup>, 378<sup>3</sup>

### Stage III
12 Elective credits in Geography at the 400 level
6 GEOG 491<sup>6</sup>

Rationale:
Replacing GEOG 300 with GEOG 315: Social environment has come to be taught in a number of GEOG courses with unnecessary overlap in some cases. In the proposed restructuring some of the material from the deleted GEOG 300 will move to the revised GEOG 290, exposing students to certain ideas, such as the social construction of nature, earlier in their studies. Other material from the deleted GEOG 300, such as the role of duality in Western thought, will be moved to the proposed GEOG 315, which replaces GEOG 300 in the curriculum. GEOG 315 *Social and Cultural Geographies* has been developed to communicate the importance of social difference in shaping the Human Environment broadly defined.

Flexibility in choosing 300-level electives: Honours students are given more flexibility in choosing the mix of human geography and physical geography courses they choose in Stage II, so they may focus on their interests, all the while ensuring that they take at least one course from each group.

Adding GEOG 321 and 323 to the curriculum: GEOG 321 *A World of Food* and GEOG 323 *Urban Agriculture* are long-standing popular courses, which we have long allowed students to use to fulfill a 300-level elective requirement. This change would bring the calendar up to date with advising practice.

Resource Implications:
None
**PROGRAM CHANGE:** Specialization in the Human Environment

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

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<tr>
<td>Program:</td>
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<td>Calendar Section/Graduate Page Number:</td>
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**Type of Change:**

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

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<td>3 Chosen from GEOG 210$^3$, GEOL 210$^3$; URBS 230$^3$</td>
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<td>12 Elective credits in Geography at the 400 level</td>
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**Rationale:**
Replacing GEOG 300 with GEOG 315: Social environment has come to be taught in a number of GEOG courses with unnecessary overlap in some cases. In the proposed restructuring some of the material from the deleted GEOG 300 will move to the revised GEOG 290, exposing students to certain ideas, such as the social construction of nature, earlier in their studies. Other material from the deleted GEOG 300, such as the role of duality in Western thought, will be moved to the proposed GEOG 315, which replaces GEOG 300 in the curriculum. GEOG 315 *Social and Cultural Geographies* has been developed to communicate the importance of social difference in shaping the Human Environment broadly defined.

Flexibility in choosing 300-level electives: Specialization students are given more flexibility in choosing the mix of human geography and physical geography courses they choose in Stage II, so they may focus on their interests, all the while ensuring that they take at least one course from each group.

Adding GEOG 321 and 323 to the curriculum: GEOG 321 *A World of Food* and GEOG 323 *Urban Agriculture* are long-standing popular courses, which we have long allowed students to use to fulfill a 300-level elective requirement. This change would bring the calendar up to date with advising practice.

**Resource Implications:**
None
**Program and Courses Change Forms for Document: GEOG-48 Version: 4**

**Program Change:** Major in the Human Environment

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

**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Major in the Human Environment  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.130

**Implementation Month/Year:** September 2020

**Calendar for academic year:** 2020/2021

### Proposed Text

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| **42 BA Major in the Human Environment**  
  **Stage I**  
  15 GEOG 220\(^3\), 260\(^3\), 272\(^3\), 274\(^3\), 290\(^3\)  
  3 Chosen from GEOG 210\(^3\); GEOL 210\(^3\); URBS 230\(^3\)  
  **Stage II**  
  12 GEOG 300\(^3\)-361\(^3\), 362\(^3\), 363\(^3\)  
  3 Chosen from GEOG 310\(^3\), 330\(^3\), 355\(^3\), 380\(^3\)  
  3 Chosen from GEOG 371\(^3\), 374\(^3\), 375\(^3\), 377\(^3\), 378\(^3\)  
  **Stage III**  
  6 Elective credits in Geography at the 400 level | **42 BA Major in the Human Environment**  
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  3 Chosen from GEOG 371\(^3\), 374\(^3\), 375\(^3\), 377\(^3\), 378\(^3\)  
  **Stage III**  
  6 Elective credits in Geography at the 400 level |

**Rationale:**  
Replacing GEOG 300 with GEOG 315: Social environment has come to be taught in a number of GEOG courses with unnecessary overlap in some cases. In the proposed restructuring some of the material from the deleted GEOG 300 will move to the revised GEOG 290, exposing students to certain ideas, such as the social construction of nature, earlier in their studies. Other material from the deleted GEOG 300, such as the role of duality in Western thought, will be moved to the proposed GEOG 315, which replaces GEOG 300 in the curriculum. GEOG 315 *Social and Cultural Geographies* has been developed to communicate the importance of social difference in shaping the Human Environment broadly defined.

Adding GEOG 321 and 323 to the curriculum: GEOG 321 A World of Food and GEOG 323 Urban Agriculture are long-standing popular courses, which we have long allowed students to use to fulfill a 300-level elective requirement. This change would bring the calendar up to date with advising practice.

**Resource Implications:**  
None
Program Change: Major in Environmental Geography

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Major in Environmental Geography
Degree: BSc
Calendar Section/Graduate Page Number: 31.130

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

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<td>42 300- or 400-level credits chosen from the BSc Geography/Geology course list or in consultation with the appropriate departmental advisor. At least three credits must be at the 400 level.</td>
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Rationale:
GEOG 300 will be removed from the calendar. Relevant content related to cultural and historical perspectives on the environment from GEOG 300 will be incorporated into the revised GEOG 290, which BSc students already take. Environmental Geography Majors would take an additional 300 or 400 level course chosen from the BSc Geography/Geology list in the place of GEOG 300.

Resource Implications:
None
**Program Change:** Minor in the Human Environment

**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Minor in the Human Environment  
**Degree:**  
**Calendar Section/Graduate Page Number:** 31.130

**Type of Change:** [X] Requirements  

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<td>3  GEOG 300(^3)</td>
<td>3  GEOG 315(^3)</td>
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<td>12  GEOG elective credits at the 300 or 400 level</td>
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<tr>
<td>NOTE: This minor is intended for Arts students.</td>
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**Rationale:** Replacing GEOG 300 with GEOG 315: Social environment has come to be taught in a number of GEOG courses with unnecessary overlap in some cases. In the proposed restructuring some of the material from the deleted GEOG 300 will move to the revised GEOG 290, exposing students to certain ideas, such as the social construction of nature, earlier in their studies. Other material from the deleted GEOG 300, such as the role of duality in Western thought, will be moved to the proposed GEOG 315, which replaces GEOG 300 in the curriculum. GEOG 315 Social and Cultural Geographies has been developed to communicate the importance of social difference in shaping the Human Environment broadly defined.

**Resource Implications:** None
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: GEOG-48 VERSION: 4

PROGRAM CHANGE: Minor in Environmental Geography

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Minor in Environmental Geography
Degree: 
Calendar Section/Graduate Page Number: 31.130

Type of Change:

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

Present Text (from 2019/2020) calendar

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<td>6</td>
<td>GEOG 272&lt;sup&gt;3&lt;/sup&gt;, 274&lt;sup&gt;3&lt;/sup&gt;</td>
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NOTE: This minor is intended for Science students.

Proposed Text

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<th>24</th>
<th>Minor in Environmental Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Chosen from GEOG 272&lt;sup&gt;3&lt;/sup&gt;, 274&lt;sup&gt;3&lt;/sup&gt;, GEOL 210&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>3</td>
<td>GEOG 290&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>9</td>
<td>Chosen from GEOG 363&lt;sup&gt;3&lt;/sup&gt;, 371&lt;sup&gt;3&lt;/sup&gt;, 374&lt;sup&gt;3&lt;/sup&gt;, 375&lt;sup&gt;3&lt;/sup&gt;, 377&lt;sup&gt;3&lt;/sup&gt;, 378&lt;sup&gt;3&lt;/sup&gt;, GEOL 302&lt;sup&gt;3&lt;/sup&gt;, 331&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>6</td>
<td>Chosen from GEOG 458&lt;sup&gt;3&lt;/sup&gt;, 463&lt;sup&gt;3&lt;/sup&gt;, 466&lt;sup&gt;3&lt;/sup&gt;, 470&lt;sup&gt;3&lt;/sup&gt;, 474&lt;sup&gt;3&lt;/sup&gt;, 475&lt;sup&gt;3&lt;/sup&gt;, 478&lt;sup&gt;3&lt;/sup&gt;; GEOL 415&lt;sup&gt;3&lt;/sup&gt;, 440&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

NOTE: This minor is intended for Science students.

Rationale:
GEOG 300 will be removed from the calendar. Relevant content related to cultural and historical perspectives on the environment from GEOG 300 will be incorporated into the revised GEOG 290. To make room for GEOG 290, students in the Minor would now choose 6 credits among GEOG 272, 274 and GEOL 210, like Environmental Science students, rather than taking all three. GEOG 406 will no longer be taught and will be removed from the Minor. GEOG 467 is designed for Honours students and is not appropriate for the BSc Minor.

Resource Implications:
None
COURSE CHANGE: GEOG 220

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Honours, Specialization, Major, Minor Human Env; Major in Env Geography
Degree: BA
Calendar Section/Graduate Page Number: 31.130

Type of Change:
[ ] Course Number [X] Course Title
[X] Course Description [ ] Editorial
[ ] Course Deletion [ ] Other - Specify:

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<th>Present Text (from 2019/2020) calendar</th>
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</table>
| GEOG 220 *The Human Environment: Place, Space, and Identity* (3 credits)  
This course examines how geographers construct the meaning of place, the unique identity of places, the contexts over identity of place, and how space is socially constructed. The ways in which these have been affected by migration and globalization are then examined within the context of an already constituted social and geographical unevenness (political, economic, environmental, and cultural). | GEOG 220 *Place, Space, and Identity* (3 credits)  
This course examines how place is constructed through subjective encounters of humans with each other and with the non-human world. This focus reveals how the unique and contested identities of places are created and how space itself is socially constructed. The ways in which place, space and identity affect and are affected by political, economic, cultural and environmental changes are then examined within the context of existing patterns of geographical unevenness. |

Rationale:
The course description has been amended to improve its readability and more accurately reflects the approach taken in the course.
The course title has been shortened for convenience and to allow the current sub-title (which reflects the focus of the course) to appear on student records/transcripts.

Note to calendar editor: GEOG 220 appears under the list of complementary courses offered to students in Engineering and Computer Science (Section 71.110). Changes to the course title are therefore submitted under ENCS-97 for update the title.

Resource Implications:
None

Other Programs within which course is listed:
BSc Major and Minor in Environmental Geography  
Complementary Studies for Engineering and Computer Science Students
**COURSE CHANGE: GEOG 290**

New Course Number:

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

**Faculty/School:** Arts and Science

**Department:** Geography, Planning and Environment

**Program:** Honours, Specialization, Major in Human Env; Major, Minor in Env Geography

**Degree:** BA

**Calendar Section/Graduate Page Number:** 31.130

**Type of Change:***

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

[ ] Course Description  [ ] Editorial  [ ] New Course  [X] Other - Specify: Removal of note

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</table>
| GEOG 290 **Environment and Society** (3 credits)  
Prerequisite: GEOG 220, 272, 274 concurrently.* This course integrates human and physical geography into a holistic view of human-environment relations. It focuses on a few key environmental issues through case studies operating at a variety of scales (global, national, regional, local), and in different places and time periods. It examines how humans interact with the environment; how they, as members of societies and bearers of culture, perceive, use, transform, and manage the physical environment in different ways and are in turn impacted by changes to that environment. Each case study highlights a specific method and tool of geographic analysis and introduces students to the value of different approaches to environmental issues.  
*NOTE: Students enrolled in either the BSc Honours or Specialization in Environmental Science are not required to have the GEOG 220 prerequisite, and may substitute GEOL 210 for either GEOG 272 or 274. | GEOG 290 **Environment and Society** (3 credits)  
Prerequisite: Enrolment in a BA Human Environment or BSc Environmental Geography or BSc Environmental Science program, or permission of the Department. Relations between the environment and society both preserve and threaten our more-than-human world. Drawing on vibrant contributions from geographical and interdisciplinary fields, this course introduces concepts and frameworks for clarifying and interrogating existing environment-society relations and for imagining possible alternatives. Topics may include nature/culture divide, alternative ideas of nature, historical dimensions of current environment-society relations, the role of experts and expertise in contemporary society, the impact of unequal distributions of political power on people and the environment, and possibilities for hope in troubled times. Writing tutorials linked to the course assignments help students learn university-level academic writing and critical thinking skills. Lectures and tutorials. |

Rationale:
The description was revised to reflect a reworking of this course away from particular case studies of environmental issues to key concepts and frameworks for examining environment-society relations, including an analysis of the western conception of nature and an introduction to critical environmental approaches previously introduced in GEOG 300. This shift responds to the role this course will play as a foundational level offering within the BA in Human-Environment as well as within the BSc in Environmental Studies and the proposed Major in Leadership in Sustainability. The course will be open to program students only, without the existing prerequisites which were complicated to manage, particularly for BSc and MiLiS students.

The note is removed as the prerequisites are removed.

**Resource Implications:**

None

**Other Programs within which course is listed:**

None.
COURSE CHANGE: GEOG 300  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Honours, Specialization, Major in Human Env; Major, Minor in Env Geography
Degree: BA
Calendar Section/Graduate Page Number: 31.130

Type of Change:
[X] Course Deletion

Present Text (from 2019/2020) calendar
GEOG 300 — Environment: Historical and Cultural Perspectives (3 credits)
Prerequisite: GEOG 290 or permission of the Department. This course explores selected aspects of nature and culture in Western thought. It focuses on four overlapping themes: 1) it presents a broad historical overview of the questions that humans have posed concerning the habitable Earth and their relationships to it; 2) it looks in more detail at one of those questions, namely, the extent to which human agency has transformed the Earth; 3) it explores the relations between attitudes, values and behaviour, focusing mainly on the idea of wilderness; and 4) it traces the roots and describes the main characteristics of contemporary environmentalism.

Proposed Text

Rationale:
Social environment has come to be taught in a number of GEOG courses with unnecessary overlap in some cases. In the proposed restructuring some of the material from the deleted GEOG 300 will move to the revised GEOG 290, exposing students to certain ideas earlier in their studies. Other material from the deleted GEOG 300 will be moved to the proposed GEOG 315, which will replace GEOG 300 in the curriculum.

Note to calendar editor: The Department of Political Science is removing GEOG 300 as a prerequisite for POLI 410 under POLI-43 (Track A).

Resource Implications:
None

Other Programs within which course is listed:
Political Science

Calendar for academic year: 2020/2021
Implementation Month/Year: September 2020
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: GEOG-48 VERSION: 4

COURSE CHANGE: GEOG 315  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Major, Specialization, Honours in Human Environment
Degree: BA
Calendar Section/Graduate Page Number: 31.130

Type of Change:

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

Present Text (from 2019/2020) calendar

GEOG 315 Social and Cultural Geographies (3 credits)
Prerequisite: GEOG 220, 290. The field of social and cultural geography explores how social difference (e.g. race, gender, sexuality, class, disability, migrant status), and cultural representations (e.g. ideas of heritage, consumerism, colonialism, arts, aesthetics, or home) interact with space and place. This course examines processes such as the legitimation of social structures and experience, struggles over identity and memory, contestations of cultural meaning, and resistance to power. This is a field that asks -- how does geography help imagine an alternative future?

NOTE: Students who have received credit for GEOG 300 may not take this course for credit.

Rationale:
This new course has been developed to communicate the importance of social difference in shaping the Human Environment broadly defined. The course is built on social and cultural approaches introduced in GEOG 220 and GEOG 290, and prepares students for advanced courses addressing related themes (GEOG 407, GEOG 418, GEOG 430 and the proposed GEOG 485 Feminist Geographies). This course replaces the deleted GEOG 300 in the curriculum, and adopts some of the deleted course’s material.

Resource Implications:
None, as it replaces GEOG 300, which will be deleted.

Other Programs within which course is listed:

None
**Program and Courses Change Form for Document: GEOG-48 Version: 4**

**Course Change:** GEOG 323  
New Course Number:

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

**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Honours, Specialization, Major in the Human Environment  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.130

**Type of Change:**  
[X] Course Title

**Present Text (from 2019/2020) Calendar**  
**GEOG 323** *Urban Agriculture* (3 credits)  
Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the history and practice of producing food in cities. Students will explore the tensions between the politics, economies and ecologies that organize urban food production and the everyday ways people raise and access food in varied urban contexts. The course also critically evaluates food-based social movements: their limits, possibilities and connections to wider struggles for socio-economic justice.  
*NOTE:* Students who have received credit for URBS 337 or for this topic under a GEOG 398 or URBS 398 number may not take this course for credit.

**Proposed Text**  
**GEOG 323** *(also listed as URBS 337)*  
*Urban Agriculture* (3 credits)  
Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the history and practice of producing food in cities. Students will explore the tensions between the politics, economies and ecologies that organize urban food production and the everyday ways people raise and access food in varied urban contexts. The course also critically evaluates food-based social movements: their limits, possibilities and connections to wider struggles for socio-economic justice.  
*NOTE:* Students who have received credit for URBS 337 or for this topic under a GEOG 398 or URBS 398 number may not take this course for credit.

**Rationale:**  
In practice, GEOG 323/URBS 337 *Urban Agriculture* have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: GEOG-48 VERSION: 4

COURSE CHANGE: GEOG 333  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

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

Faculty/School: Arts and Science  
Department: Geography, Planning and Environment  
Program: Spec, Minor in the Human Environment; Major in Environmental Geography  
Degree: BA  
Calendar Section/Graduate Page Number: 31.130

Type of Change:  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[X] Course Title  
[ ] Editorial  
[ ] Other - Specify:

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<tr>
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<tbody>
<tr>
<td>GEOG 333  <em>Urban Transportation</em> (3 credits)</td>
<td>GEOG 333  <em>(<em>also listed as URBS 310</em>) Urban Transportation</em> (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the past</td>
<td>Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the past evolution and recent functioning of various transport modes in cities</td>
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<tr>
<td>evolution and recent functioning of various transport modes in cities around the world. Recent</td>
<td>around the world. Recent debates about desirable levels of car, transit, and non-motorized options are considered in light of burgeoning concerns about sustainable development and the worldwide growth of motorization.</td>
</tr>
<tr>
<td>debates about desirable levels of car, transit, and non-motorized modes feature prominently.</td>
<td>NOTE: Students who have received credit for URBS 310 may not take this course for credit.</td>
</tr>
<tr>
<td>Techniques of analyzing urban transport and public policy options are considered in light of</td>
<td></td>
</tr>
<tr>
<td>burgeoning concerns about sustainable development and the worldwide growth of motorization.</td>
<td></td>
</tr>
<tr>
<td>NOTE: Students who have received credit for URBS 310 may not take this course for credit.</td>
<td></td>
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</tbody>
</table>

Rationale:  
In practice, GEOG 333/URBS 310 *Urban Transportation* have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

Resource Implications:  
None

Other Programs within which course is listed:  
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: GEOG-48 VERSION: 4

COURSE CHANGE: GEOG 363  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Honours, Specialization, Major in the Human Env; Major, Minor in Env. Geography
Degree: BA
Calendar Section/Graduate Page Number: 31.130

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

Present Text (from 2019/2020) calendar
GEOG 363  Geographic Information Systems (3 credits)
Prerequisite: GEOG 260 or permission of the Department. This course is an introduction to current theoretical and practical approaches to Geographic Information Systems (GIS) through which students acquire basic skills and understanding in the use of GIS for spatial analysis. Training is centred on a series of practical assignments using ArcGIS software and for the term project, students explore the potential of GIS for addressing a real-world problem. Lectures and laboratory.
NOTE: Students who have received credit for URBS 335, 387, or 487 may not take this course for credit.

Proposed Text
GEOG 363  (also listed as URBS 335)  Geographic Information Systems (3 credits)
Prerequisite: GEOG 260 or permission of the Department. This course is an introduction to current theoretical and practical approaches to Geographic Information Systems (GIS) through which students acquire basic skills and understanding in the use of GIS for spatial analysis. Training is centred on a series of practical assignments using ArcGIS software and for the term project, students explore the potential of GIS for addressing a real-world problem. Lectures and laboratory.
NOTE: Students who have received credit for URBS 335, 387, or 487 may not take this course for credit.

Rationale:
In practice, GEOG 363/URBS 335 Geographic Information Systems have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: GEOG 407

New Course Number: [X] Proposed

[ ] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Honours, Spec, Major, Minor in the Human Env.; Major in Environmental Geography
Degree: BA
Calendar Section/Graduate Page Number: 31.130

Type of Change:

[ ] Course Number
[ ] Course Title
[ ] Course Description
[ ] Course Deletion
[ ] Editorial
[X] Credit Value
[X] Prerequisite
[X] New Course

Present Text (from 2019/2020) calendar

GEOG 407  Indigenous Peoples and the Environment (3 credits)
Prerequisite: GEOG 300 or permission of the Department. This course provides an extended, in-depth exploration of the relationships and roles of Indigenous peoples with respect to their traditional territories and natural resources. Indigenous ontologies and epistemologies are highlighted in addition to Indigenous aspirations and approaches for use and stewardship of the environment. The course examines theoretical and case-study literature, with a broad regional focus on Aboriginal peoples in Canada while also drawing from comparative international experiences of Indigenous peoples.

Proposed Text

GEOG 407  Indigenous Peoples and the Environment (3 credits)
Prerequisite: GEOG 315 or permission of the Department. This course provides an extended, in-depth exploration of the relationships and roles of Indigenous peoples with respect to their traditional territories and natural resources. Indigenous ontologies and epistemologies are highlighted in addition to Indigenous aspirations and approaches for use and stewardship of the environment. The course examines theoretical and case-study literature, with a broad regional focus on Aboriginal peoples in Canada while also drawing from comparative international experiences of Indigenous peoples.

Rationale:
We are proposing to replace GEOG 300 with GEOG 315 Social and Cultural Geographies in the curriculum. GEOG 315’s focus on social and cultural geography provides an important preparation for this course.

Resource Implications:
None

Other Programs within which course is listed:

Minor in Human Rights Studies (Department of Political Science)
COURSE CHANGE: GEOG 418

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

**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Honours, Spec, Major, Minor in the Human Env.; Major in Environmental Geography  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.130

**Type of Change:**  
[X] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[ ] Course Number  
[ ] Credit Value  
[ ] Prerequisite  
[ ] Other - Specify:

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<th>Present Text (from 2019/2020) calendar</th>
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</table>
| GEOG 418  *Geographies of Postcolonialism* (3 credits)  
Prerequisite: GEOG 300 or permission of the Department. Based largely on scholarship about the Americas, this course introduces students to theories of the colonial present and trace geographies of a variety of contemporary colonial processes and anti-colonial struggles.  
*NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit* | GEOG 418  *Geographies of Postcolonialism* (3 credits)  
Prerequisite: GEOG 315 or permission of the Department. Based largely on scholarship about the Americas, this course introduces students to theories of the colonial present and trace geographies of a variety of contemporary colonial processes and anti-colonial struggles.  
*NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit* |

**Rationale:**  
The role of GEOG 300 as a prerequisite was to ensure students have achieved sufficient geography training with which to approach the course. We are proposing to replace GEOG 300 with GEOG 315 in the curriculum. The content of GEOG 315 Social and Cultural Geographies provides a better base for students taking GEOG 418 than did GEOG 300, while fulfilling the same role of ensuring a sufficient geography background in general.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
**COURSE CHANGE: GEOG 430**

**New Course Number:**

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

**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Honours, Spec, Major, Minor in the Human Env.; Major in Environmental Geography  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.130

**Type of Change:**  
[X] Course Title  
[ ] Course Number  
[ ] Course Description  
[ ] Editorial  
[ ] Credit Value  
[ ] New Course  
[X] Prerequisite  
[ ] Course Deletion  
[X] Other - Specify: exclusion note

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<th>Present Text (from 2019/2020) calendar</th>
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</table>
| GEOG 430 *The Social and Cultural Geographies of Montreal* (3 credits)  
Prerequisite: GEOG 361 or URBS 360 or 362. This course explores the social and cultural geographies of Montreal to examine how the spatial distribution of communities influences urban planning and public policy at the local and regional levels. Complex webs of identities and solidarities informed by socio-economic, linguistic, ethno-cultural, and sexual orientation factors shape the city living experience of individuals and populations alike. Through lectures, discussions, assignments and field trips, students are introduced to a variety of analytical perspectives that investigate the socio-cultural dynamics that contribute to shaping urban settlements, human-environment interactions and local social networks.  
*NOTE: Students who have received credit for URBS 320 or 420 may not take this course for credit.* | GEOG 430 *(also listed as URBS 420)*  
*Social Geographies of Montreal* (3 credits)  
Prerequisite: GEOG 315 or 330; or permission of the Department. This course explores the social and cultural geographies of Montreal with particular emphasis on how the spatial distribution of communities influences urban planning and public policy at the local and regional levels. Complex webs of identities and solidarities informed by socio-economic, linguistic, ethno-cultural, and sexual orientation factors shape the city living experience of individuals and populations alike. Through lectures, discussions, assignments and field trips, students are introduced to a variety of analytical perspectives that investigate the socio-cultural dynamics that contribute to shaping urban settlements, human-environment interactions and local social networks.  
*NOTE: Students who have received credit for URBS 420 may not take this course for credit.* |

**Rationale:**
The change in course title is to better reflect the content of the course and to avoid confusion with the new GEOG 315 Social and Cultural Geographies. GEOG 315 Social and Cultural Geographies or 330 Urban Geography are considered a more appropriate prerequisite than GEOG 361 Research Design and Quantitative Methods, URBS 360 Qualitative and Quantitative Research Methods (now defunct), or URBS 362 Quantitative Research Methods. In practice, GEOG 430/URBS 420 have been offered as cross-listed courses. We are formalizing the cross-listing in the calendar entry.

The exclusion note is outdated and removes URBS 320 as it has not been offered in many years.

**Resource Implications:**

None

**Other Programs within which course is listed:**

None.
### COURSE CHANGE: GEOG 431

**New Course Number:**

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

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<td>Department:</td>
<td>Geography, Planning and Environment</td>
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<tr>
<td>Program:</td>
<td>Honours, Spec, Major, Minor in the Human Env.; Major in Environmental Geography</td>
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<tr>
<td>Degree:</td>
<td>BA</td>
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<td>Calendar Section/Graduate Page Number:</td>
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**Calendar for academic year: 2020/2021**  
**Implementation Month/Year:** September 2020

**Type of Change:**

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

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<th>Present Text (from 2019/2020) calendar</th>
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| GEOG 431  *Urban Planning in the Developing World* (3 credits)  
Prerequisite: GEOG 330 or URBS 380 or permission of the Department. This course explores the growth and planning of large metropolitan areas in developing nations. Issues and problems associated with recent urbanization are examined along with potential solutions offered by urban planning and public policies. The planning roles of institutions, including governments, multilateral development agencies, and non-governmental organizations, are reviewed.  
*NOTE:* Students who have received credit for URBS 481 may not take this course for credit. | GEOG 431  *(also listed as URBS 481)*  *Urban Planning in the Developing World* (3 credits)  
Prerequisite: GEOG 330 or URBS 380 or permission of the Department. This course explores the growth and planning of large metropolitan areas in developing nations. Issues and problems associated with recent urbanization are examined along with potential solutions offered by urban planning and public policies. The planning roles of institutions, including governments, multilateral development agencies, and non-governmental organizations, are reviewed.  
*NOTE:* Students who have received credit for URBS 481 may not take this course for credit. |

**Rationale:**  
In practice, GEOG 431/URBS 481 *Urban Planning in the Developing World* have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: GEOG-48 VERSION: 4**

**COURSE CHANGE: GEOG 450**

**New Course Number:**

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

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**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Honours, Spec, Major, Minor in the Human Env.; Major in Environmental Geography  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.130

**Type of Change:**

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

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<tbody>
<tr>
<td>GEOG 450 <em>Economic Restructuring</em> (3 credits)</td>
<td>GEOG 450 <em>(also listed as URBS 450)</em> <em>Economic Restructuring</em> (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: GEOG 330 or GEOG 380 or URBS 380 or permission of the Department. This course examines the nature of economic restructuring in late capitalism and the implications that industrial restructuring trends are having for the geography of industries, the structure of firms, workplace relations and workers’ rights. It examines the new challenges that restructuring presents for both economic development prospects and labour market policies, as well as looking at contemporary initiatives to promote more socially and environmentally sustainable development paths. <em>NOTE: Students who have received credit for URBS 450 may not take this course for credit.</em></td>
<td>Prerequisite: GEOG 330 or GEOG 380 or URBS 380 or permission of the Department. This course examines the nature of economic restructuring in late capitalism and the implications that industrial restructuring trends are having for the geography of industries, the structure of firms, workplace relations and workers’ rights. It examines the new challenges that restructuring presents for both economic development prospects and labour market policies, as well as looking at contemporary initiatives to promote more socially and environmentally sustainable development paths. <em>NOTE: Students who have received credit for URBS 450 may not take this course for credit.</em></td>
</tr>
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</table>

**Rationale:**

In practice, GEOG 450/URBS 450 *Economic Restructuring* have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

**Resource Implications:**

None

**Other Programs within which course is listed:**

None
COURSE CHANGE: GEOG 464  

New Course Number:  

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science  
Department: Geography, Planning and Environment  
Program: Minor, Certificate in Geospatial Technologies  
Degree: Minor, Certificate  
Calendar Section/Graduate Page Number: 31.130

Type of Change:  
[X] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:  
[X] Prerequisite

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<tr>
<td>GEOG 464  Programming for Geospatial Technologies  (3 credits)</td>
<td>GEOG 464  Programming for Geospatial Technologies  (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: GEOG 363 or permission of the Department. This course introduces students to the world of programming for geospatial technologies and web mapping. Through a review of the main concepts, techniques, standards, libraries and languages, students learn how to use programming to improve the geospatial data analysis process and to design maps that enhance the user’s experience. Training is centred on programming languages for Geographical Information System (GIS) applications (e.g. Python) as well as for web mapping (e.g. HTML, CSS and JavaScript). These languages are used to automate workflows for GIS analysis and customize stylistic and meaningful online maps. Lectures and Laboratory.</td>
<td>Prerequisite: GEOG 264, 363; or permission of the Department. This course introduces students to the world of programming for geospatial technologies and web mapping. Through a review of the main concepts, techniques, standards, libraries and languages, students learn how to use programming to improve the geospatial data analysis process and to design maps that enhance the user’s experience. Training is centred on programming languages for Geographical Information System (GIS) applications (e.g. Python) as well as for web mapping (e.g. HTML, CSS and JavaScript). These languages are used to automate workflows for GIS analysis and customize stylistic and meaningful online maps. Lectures and Laboratory.</td>
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</table>

Rationale:  
The 200-level programming course GEOG 264 (Programming for Environmental Sciences), which is compulsory in the new Minor and Certificate programs in Geospatial Technologies, should have been specified as a prerequisite for this upper-level course in programming.  

Note to calendar editor: course description reflects changes approved under US-2019-3-D17 (GEOG-47).

Resource Implications:  
None

Other Programs within which course is listed:  
None
**COURSE CHANGE:** GEOG 485  
**New Course Number:**

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

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

| Faculty/School: | Arts and Science |
| Department: | Geography, Planning and Environment |
| Program: | Honours, Spec, Major, Minor in the Human Env.; Major in Environmental Geography |
| Degree: | BA |
| Calendar Section/Graduate Page Number: | 31.130 |

**Type of Change:**

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

**Present Text (from 20xx/20xx) calendar**

| GEOG 485 Feminist Geographies (3 credits) |
| Prerequisite: GEOG 315 or permission of the Department. This course analyzes gender and socio-spatial relations of power. Specifically, this course engages with feminist thought through its intersections with anti-racist, queer, and emancipatory geographies. This is a discussion-based seminar which includes personal reflection on space, identity and difference, resistance and agency, as well as broader global and historical contexts. NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit. |

**Rationale:**
The field of feminist geographies is an established sub-field in human geography, which is increasingly informing analyses of inequality and difference. The course builds on the new GEOG 315 Social and Cultural Geographies. It has been taught twice successfully as GEOG 498 (32/30 and 21/30 enrolled students in 2017 and 2018, respectively).

**Resource Implications:**
None. This course is already taught as a GEOG 498. It will be taught in rotation with the department's regular allotment.

**Other Programs within which course is listed:**
None
COURSE CHANGE: URBS 310  
New Course Number:

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

**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Honours, Specialization in Urban Planning; Major, Minor in Urban Studies  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.130

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

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<th>Present Text (from 2019/2020) calendar</th>
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| **URBS 310**  
Urban Transportation  
(3 credits)  
Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the past evolution and recent functioning of various transport modes in cities around the world. Recent debates about desirable levels of car, transit, and non-motorized modes feature prominently. Techniques of analyzing urban transport and public policy options are considered in light of burgeoning concerns about sustainable development and the worldwide growth of motorization.  
NOTE: Students who have received credit for GEOG 333 may not take this course for credit. | **URBS 310**  
(also listed as GEOG 333)  
Urban Transportation  
(3 credits)  
Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the past evolution and recent functioning of various transport modes in cities around the world. Recent debates about desirable levels of car, transit, and non-motorized modes feature prominently. Techniques of analyzing urban transport and public policy options are considered in light of burgeoning concerns about sustainable development and the worldwide growth of motorization.  
NOTE: Students who have received credit for GEOG 333 may not take this course for credit. |

**Rationale:**  
In practice, GEOG 333/URBS 310 Urban Transportation have been offered as cross-listed courses. We are formalizing the cross-listing in the calendar entry.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
COURSE CHANGE: URBS 335  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science  
Department: Geography, Planning and Environment  
Program: Minor in Geospatial Tech; Honours, Spec in Urban Planning; Major Urban Studies  
Degree: BA  
Calendar Section/Graduate Page Number: 31.130

Type of Change:  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[X] Course Title  
[ ] Editorial  
[ ] Credit Value  
[ ] New Course  
[ ] Prerequisite

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<th>Present Text (from 2019/2020) calendar</th>
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| **URBS 335  Geographic Information Systems** (3 credits)  
Prerequisite: URBS 250. This course is an introduction to current theoretical and practical approaches to Geographic Information Systems (GIS) through which students acquire basic skills and understanding in the use of GIS for spatial analysis. Training is centred on a series of practical assignments using ArcGIS software and for the term project, students explore the potential of GIS for addressing a real-world problem. Lectures and laboratory.  
*NOTE: Students who have received credit for GEOG 363 may not take this course for credit.* | **URBS 335  *(also listed as GEOG 363)*  
Geographic Information Systems (3 credits)  
Prerequisite: URBS 250. This course is an introduction to current theoretical and practical approaches to Geographic Information Systems (GIS) through which students acquire basic skills and understanding in the use of GIS for spatial analysis. Training is centred on a series of practical assignments using ArcGIS software and for the term project, students explore the potential of GIS for addressing a real-world problem. Lectures and laboratory.  
*NOTE: Students who have received credit for GEOG 363 may not take this course for credit.* |

Rationale:  
In practice, GEOG 363/URBS 335 Geographic Information Systems have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

Resource Implications:  
None

Other Programs within which course is listed:  
None
**COURSE CHANGE:** URBS 337  
New Course Number: 

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

**Faculty/School:** Arts and Science  
**Department:** Geography, Planning and Environment  
**Program:** Honours, Specialization in Urban Planning; Major, Minor in Urban Studies  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.130

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

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| **URBS 337** *Urban Agriculture* (3 credits)  
Prerequisite: URBS 230 or GEOG 220 or permission of the Department. This course examines the history and practice of producing food in cities. Students explore the tensions between the politics, economies and ecologies that organize urban food production and the everyday ways people raise and access food in varied urban contexts. The course also critically evaluates food-based social movements: their limits, possibilities and connections to wider struggles for socio-economic justice.  
*NOTE:* Students who have received credit for GEOG 323 or for this topic under a GEOG 398 or URBS 398 number may not take this course for credit. | **URBS 337** *(also listed as GEOG 323)*  
*Urban Agriculture* (3 credits)  
Prerequisite: URBS 230 or GEOG 220 or permission of the Department. This course examines the history and practice of producing food in cities. Students explore the tensions between the politics, economies and ecologies that organize urban food production and the everyday ways people raise and access food in varied urban contexts. The course also critically evaluates food-based social movements: their limits, possibilities and connections to wider struggles for socio-economic justice.  
*NOTE:* Students who have received credit for GEOG 323 or for this topic under a GEOG 398 or URBS 398 number may not take this course for credit. |

**Rationale:**  
In practice, GEOG 323/URBS 337 *Urban Agriculture* have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
COURSE CHANGE: URBS 420  
New Course Number:  

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes  

Faculty/School: Arts and Science  
Department: Geography, Planning and Environment  
Program: Honours, Specialization in Urban Planning; Major, Minor in Urban Studies  
Degree: BA  

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

Type of Change: [X] Course Title  

Present Text (from 2019/2020) calendar  

URBS 420  
The Social and Cultural Geographies of Montreal (3 credits)  
Prerequisite: GEOG 361 or URBS 360 or 362. This course explores the social and cultural geographies of Montreal with particular emphasis on how the spatial distribution of communities influences urban planning and public policy at the local and regional levels. Complex webs of identities and solidarities informed by socio-economic, linguistic, ethno-cultural, and sexual orientation factors shape the city living experience of individuals and populations alike. Through lectures, discussions, assignments and field trips, students are introduced to a variety of analytical perspectives that investigate the socio-cultural dynamics that contribute to shaping urban settlements, human-environment interactions and local social networks.  

NOTE: Students who have received credit for GEOG 430 may not take this course for credit.  

Proposed Text  

URBS 420  
(also listed as GEOG 430)  
Social Geographies of Montreal (3 credits)  
Prerequisite: GEOG 315 or 330; or permission of the Department. This course explores the social and cultural geographies of Montreal with particular emphasis on how the spatial distribution of communities influences urban planning and public policy at the local and regional levels. Complex webs of identities and solidarities informed by socio-economic, linguistic, ethno-cultural, and sexual orientation factors shape the city living experience of individuals and populations alike. Through lectures, discussions, assignments and field trips, students are introduced to a variety of analytical perspectives that investigate the socio-cultural dynamics that contribute to shaping urban settlements, human-environment interactions and local social networks.  

NOTE: Students who have received credit for GEOG 430 may not take this course for credit.  

Rationale:  
The change in course title is to better reflect the content of the course and to avoid confusion with the new GEOG 315 Social and Cultural Geographies. GEOG 315 Social and Cultural Geographies or 330 Urban Geography are considered a more appropriate prerequisite than GEOG 361 Research Design and Qualitative Methods, URBS 360 Qualitative and Quantitative Research Methods, or URBS 362 Quantitative Research Methods. In practice, GEOG 430/URBS 420 have been offered as cross-listed courses. We are formalizing the cross-listing in the calendar entry.  

Resource Implications:  
None  

Other Programs within which course is listed:  
None
Program and Courses Change Forms for Document: GEOG-48 Version: 4

Course Change: URBS 450

New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Honours, Specialization in Urban Planning; Major, Minor in Urban Studies
Degree: BA

Calendar Section/Graduate Page Number: 31.130

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

Present Text (from 2019/2020) Calendar

URBS 450 Economic Restructuring (3 credits)
Prerequisite: GEOG 330 or GEOG 380 or URBS 380 or permission of the Department. This course examines the nature of firm restructuring in late capitalism and the implications that industrial restructuring trends are having for the geography of industries, the structure of firms, workplace relations and workers’ rights. It examines the new challenges that restructuring presents for both economic development prospects and labour market policies, as well as looks at contemporary initiatives to promote more socially and environmentally sustainable development paths.

NOTE: Students who have received credit for GEOG 450 may not take this course for credit.

Proposed Text

URBS 450 (also listed as GEOG 450) Economic Restructuring (3 credits)
Prerequisite: GEOG 330 or GEOG 380 or URBS 380 or permission of the Department. This course examines the nature of firm restructuring in late capitalism and the implications that industrial restructuring trends are having for the geography of industries, the structure of firms, workplace relations and workers’ rights. It examines the new challenges that restructuring presents for both economic development prospects and labour market policies, as well as looks at contemporary initiatives to promote more socially and environmentally sustainable development paths.

NOTE: Students who have received credit for GEOG 450 may not take this course for credit.

Rationale:
In practice, GEOG 350/URBS 350 Economic Restructuring have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

Resource Implications:
None

Other Programs within which course is listed:
None
COURSE CHANGE: URBS 481 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Geography, Planning and Environment
Program: Honours, Specialization in Urban Planning; Major, Minor in Urban Studies
Degree: BA
Calendar Section/Graduate Page Number: 31.130

Type of Change:
[X] Course Title

Present Text (from 2019/2020) calendar

URBS 481 Urban Planning in the Developing World (3 credits)
Prerequisite: GEOG 330 or URBS 380 or permission of the Department. This course explores the growth and planning of large metropolitan areas in developing nations. Issues and problems associated with recent urbanization are examined along with potential solutions offered by urban planning and public policies. The planning roles of institutions including governments, multi-lateral development agencies, and non-governmental organizations are reviewed.
NOTE: Students who have received credit for GEOG 431 may not take this course for credit.

Proposed Text

URBS 481 (also listed as GEOG 431) Urban Planning in the Developing World (3 credits)
Prerequisite: GEOG 330 or URBS 380 or permission of the Department. This course explores the growth and planning of large metropolitan areas in developing nations. Issues and problems associated with recent urbanization are examined along with potential solutions offered by urban planning and public policies. The planning roles of institutions including governments, multi-lateral development agencies, and non-governmental organizations are reviewed.
NOTE: Students who have received credit for GEOG 431 may not take this course for credit.

Rationale:
In practice, GEOG 431/URBS 481 Urban Planning in the Developing World have been offered as cross-listed courses. We are formalizing the cross-listing in the course title of the calendar entry.

Resource Implications:
None

Other Programs within which course is listed:
None
Hello Nicole,

We will be making the change you suggested below. I will try to get this completed on provotrack this week.

Thank you,
Casey Rae

Hi Beth and Casey,

I wanted to let you know that the Department of Geography, Planning and Environment is removing GEOG 300 Environment: Historical and Cultural Perspectives from their section of the calendar. This will impact your course offerings as this course is a prerequisite to your POLI 410 Environmental Policy in the Developing World.

Please be sure to include changes to this course in your next curriculum submission. If you simply wish to remove the GEOG 300 from the dossier, we might be able to submit the change in time for the 2020-21 calendar under the fast-track process. If this is of interest to you, let me know as soon as possible so that we can table it. i.e.:

POLI 410 Environmental Policy in the Developing World (3 credits)  
Prerequisite: See N.B. number (3) and POLI 203 or GEOG 300; or permission of the Department. This course surveys the interactions between development strategies and the environment. Topics may include the environmental ramifications of large development projects, different systems of property rights, decentralization, international debt, foreign aid, and the challenges associated with managing highly valuable natural resources.  
NOTE: Students who have received credit for this topic under a POLI 487 number may not take this course for credit.

Nicole Freeman  
Administrator, FAS Academic Programs  
Concordia University  
514-848-2424 ext. 2088
Dr. Bloodgood and Casey,

I wanted to let you know that the prerequisite for GEOG 407 has changed slightly due to GEOG 300 being removed from the calendar (provotrack dossier GEOG-48 going to APC). It is now replaced by GEOG 315 (or permission of the department). No curriculum changes are required from your end on this but your advisors should be aware of the change in the 2020-21 calendar for this course relative to your program requirements.

**GEOG 407  Indigenous Peoples and the Environment** (3 credits)
Prerequisite: GEOG 315 or permission of the Department. This course provides an extended, in-depth exploration of the relationships and roles of Indigenous peoples with respect to their traditional territories and natural resources. Indigenous ontologies and epistemologies are highlighted in addition to Indigenous aspirations and approaches for use and stewardship of the environment. The course examines theoretical and case-study literature, with a broad regional focus on Aboriginal peoples in Canada while also drawing from comparative international experiences of Indigenous peoples.

Kind regards,

Nicole Freeman
Administrator, FAS Academic Programs
Concordia University
514-848-2424 ext. 2088
nicole.freeman@concordia.ca
Course Description

The field of social and cultural geography explores how social difference (e.g., race, gender, sexuality, class, dis/ability, migrant status) and cultural representations (e.g., ideas of heritage, consumerism, colonialism, arts, aesthetics, or home) interact with space and place. This course will examine processes such as the legitimation of social structures and experience, struggles over identity and memory, contestations of cultural meaning, and resistance to power. This is a field that asks, how does geography help us imagine an alternative future?

Evaluation

Reading Questions  15%
Book review  15%
Presentation  20%
Essay Outline  15%
Final Essay  35%

Reading Questions

Every week, students will be required to submit two questions provoked by the week’s assigned readings. These are due by 12pm, before class, and should be uploaded to Moodle. These can include questions about key terms, concepts, argument, or the author’s thesis. Students should come to class prepared to discuss these questions.

Presentation

Each student will deliver a 10-minute class presentation, which will serve as a preliminary investigation into the subject of their final paper. Students will choose from a provided list of contemporary social movements, and explain to the class how that movement analyzes and seeks to address a particular social justice issue and how their analysis relates to the work of social and cultural geographers.

Book Review

Students will read and review one recent book in social and cultural geography. The book should be pertinent to the student’s presentation and final essay. Examples of book reviews will be provided. The review should be 1,500-2,000 words.
**Final Essay**

Expanding on the class presentation, each student will prepare a final essay, which explores a contemporary social movement in depth. The connections between the movement and the course readings should be made clear and rendered in depth. In particular, it is important that the essay make clear how the movement addresses issues around race, gender, sexuality, and/or class. **Papers should be** 2,500-3,000 words in length (10-112 pages), and be formatted according to APA guidelines.

**Course Schedule and Readings (Sample)**

**Critical Geographies**

**Critical of Geographies**
- Gregory, Derek (1994) “Geography and World-as-Exhibition” and “Geography and the Cartographic Anxiety.” From *Geographical Imaginations.*

**Positioning ourselves critically?**

**Performances of Space**
- Massey, Doreen (1994) “Politics and Space/Time.” From *Space, Place, and Gender.*
- Cresswell, Tim, “The Genealogy of Place” From *Place: A Short Introduction.*

**Everyday Life**
- Massey, Doreen (1994) “A Global Sense of Place.” From *Space, Place, and Gender.*

**Feminist Geopolitics**

**Citizenship/Immigration**

**More-Than-Human Geographies**


**National Mythologies**


GEOG 485 Feminist Geographies

Course Overview

This course examines the creation and effects of borders across a variety of scales, from the international to the interpersonal. While approaching borders from a variety of perspectives, the course emphasizes feminist analysis of bodies and borders. It shows, for example, how gendered bodies shape the meaning of borders and bordered spaces and bring attention to structural issues of access and power. This course explores feminism, bodies, and borders through its intersections with race, sexuality, class, disablement, and other axes of difference, and analyzes the topic across diverse sites including capitalism, poetry, storytelling, theory and practice over a range of borders and border-crossing work.

Learning Outcomes

Upon successful completion of the course, students will be able to:

- Describe historical and contemporary modes of feminist thought, and trouble the boundaries between the private and the public
- Generate connections among things learned inside and outside the classroom and apply concepts studied to “real life”
- Recognize and apply a variety of feminist approaches to the broad issue of bodies & borders
- Strengthen their critical writing skills

Instructional Method

The course will be conducted as a combination of lecture, open discussion, in class activities. This is a fourth year course – the success of the class depends on informed discussion, that is, you are expected to complete assigned readings before class, to attend class, and come prepared to actively participate.

Required Course Materials

Readings will be posted on Moodle

Evaluation

Optional organizer:

<table>
<thead>
<tr>
<th>Name of Assignment</th>
<th>Due Date</th>
<th>% of final grade</th>
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<tbody>
<tr>
<td>Op-Ed</td>
<td>Oct 4</td>
<td>15%</td>
</tr>
<tr>
<td>Participation</td>
<td>ongoing</td>
<td>10%</td>
</tr>
<tr>
<td>2 critical engagement papers</td>
<td>Oct 25; Nov 22</td>
<td>20%</td>
</tr>
<tr>
<td>Group Presentation</td>
<td>ongoing</td>
<td>20%</td>
</tr>
<tr>
<td>Final Essay</td>
<td>Dec 6</td>
<td>35%</td>
</tr>
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INTERNAL MEMORANDUM

TO: Dr Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
Office of the Provost and Vice-President, Academic Affairs
Chair, Academic Programs Committee

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

DATE: May 29, 2019

SUBJECT: 2020-21 Undergraduate Calendar Curriculum Changes
Department of Theology
THEO-23
Deletion of Certificate in Christian Spirituality; title changes to
Certificate in Pastoral Care, THEO 402, 404

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of May 10, 2019. We request that this proposal be considered at the next meeting of APC.

The Department of Theology proposes closing the Certificate in Christian Spirituality. This certificate was first offered in Fall 2016, but in the ensuing years has not met the anticipated enrolments. Currently there is one student enrolled in this Certificate in Christian Spirituality who will be permitted to complete it. In addition, the Department is updating the courses offered in the existing Certificate in Pastoral Ministry and changing its name to Certificate in Pastoral Care. These changes in course content and certificate title should allow the certificate to appeal to a broader audience and will allow students, if they so choose, to focus on spirituality in the absence of the Certificate in Christian Spirituality.

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

Reference documents:
FCC 2018.6/U_THEO-23
ASFC 2019-4M-E
Department of Theological Studies

THEO-23

Memo from Chair

Program deletion

Certificate in Christian Spirituality

Program change (including name change)

Certificate in Pastoral Care

Course title and description change

THEO 402  
Pastoral Care

Course title change

THEO 404  
Practicum in Pastoral Care
INTERNAL MEMORANDUM

TO: Paul Joyce, Associate Dean Academic Programs
FROM: Marie-France Dion, Chair Department of Theological Studies
DATE: March 15, 2019
SUBJECT: Changes to Certificates in Pastoral Ministry and Christian Spirituality

The department curriculum committee met on February 12, 2019, and agreed to make several changes to our certificates in Pastoral Ministry and Christian Spirituality. This decision was then approved at a department meeting on February 19, 2019. The proposed changes are as follows:

Certificate in Christian Spirituality – Program Deletion

We propose to close this program. While we were hopeful that the Certificate in Christian Spirituality would spark interest among mature learners this has not been the case. In addition, we partly started the Certificate in anticipation of an expressed need from the Ignatian Spirituality Centre of Montreal. We met several times with the Director and others who are trainers at the Centre to understand the needs of their clientele. The Ignatian Spirituality Centre attracts many persons interested in pursuing their program in Spiritual Direction. Part of that program includes taking courses in theology and the hope was that our new Certificate program would be attractive to this clientele. Unfortunately, while there seemed to be enthusiasm when this was initiated, it did not play out as anticipated. Thus, we propose to close this program and integrate some of its contents into the already existing Certificate in Pastoral Ministry.

Certificate in Pastoral Ministry – Program Changes

We propose changes to the Certificate in Pastoral Ministry to update the Certificate to meet needs of current and potential clientele. The basic framework of the program remains the same. We have adjusted some of the required courses to reach a broader audience and have added some courses to the choices in the elective courses. The proposed changes and the rationale for the changes are the following:

- Change in the name of the Certificate from Pastoral Ministry to Pastoral Care. This change broadens the appeal of the Certificate reaching clientele who are not necessarily connected to a Christian church but wish to obtain training in pastoral care work in a different context.
- Minor changes in the description of the Certificate. Again, these changes reflect the changing needs and interests of potential clientele. The changes reflect our desire to
attract a broader clientele to the Certificate program and also to incorporate “spiritual care” as a potential focus for clientele. With the Certificate in Christian Spirituality closing, this is a way that we can still offer potential clientele the opportunity to focus their work for the Certificate in spirituality.

- Changes in required courses. We propose the following changes:
  - THEO 203 Introduction to New Testament – we decided to change the required scripture course to THEO 202 Introduction to Biblical Studies as it would appeal to a broader audience and the New Testament is covered as part of this course.
  - THEO 205 Introduction to Christian Spirituality – we propose to add this course to the required courses. This course is one of our core theology courses and is of particular importance to students who wish to work in pastoral and/or spiritual care.
  - THEO 402 Pastoral Ministry – we propose to change the name to Pastoral Care as it reflects more accurately the course material and the interests of the clientele.
  - THEO 404 Practicum in Pastoral Ministry – we propose to change the name to Practicum in Pastoral Care to be consistent with the change in the name of THEO 402. We also propose to move this course from the required courses to the elective courses. While we anticipate many Certificate students will wish to do the Practicum, we recognize that not all will find this necessary, especially if a student’s focus is more on spiritual care rather than pastoral care.
  - AHSC 232 Working in Task Groups – we propose to exchange this course with PSYC 333 Fundamentals of Lifespan Development. The psychology course is more in line with the needs of students enrolled in the Certificate and complements AHSC 230 Interpersonal Communication and Relationships. Over the years, we have found that AHSC 232 Working in Task Groups was not particularly important or helpful to students. Lucie Bonneville, the undergraduate program director of psychology, approved this change and accepted to allow our students to forgo the prerequisites for PSYC 333.

- Changes in elective courses. We propose the following changes:
  - THEO 205 Introduction to Christian Spirituality – we drop this as one of the elective courses because we are proposing to make it a required course.
  - THEO 212 Faith, Reason and the Religious Sense has been added to our systematic theology elective courses for the Major and Minor programs. The course may be an important choice for Certificate in Pastoral Care students because the focus of the course is on religious experience understood in the light of psychology of religion and faith. Enrolment in the course has grown in the past years. It is a course that Certificate students may find particularly useful if they are focused on faith and psychology from different cultural and religious perspectives.
  - THEO 243 Indigenous Spirituality and THEO 311 Johannine Literature, previously offered under the Certificate in Christian Spirituality are integrated into the already existing Certificate in Pastoral Care. THEO 243 is an important course in certain Pastoral Care contexts because of its emphasis on...
knowing and experiencing Indigenous spirituality. Some Pastoral Care students will come from an Indigenous background and many will work with Indigenous persons. The course facilitates a deeper understanding of Indigenous ways of being and acting in the world and will be an important resource for many Certificate students in working with a variety of traditions. THEO 311 is a New Testament course that students who focus on New Testament in their Certificate studies might find valuable as an elective. We add it to other New Testament courses that focus on the three Gospel writings (Luke, Matthew, and Mark).

- THEO 404 Practicum in Pastoral Care – we propose to make this an elective course rather than a required course. Not all students who enter the Certificate in Pastoral Care are looking for a practicum experience. Because we are proposing to close the Certificate in Christian Spirituality and because many students do not benefit from a practicum because of their interest focus, we wish to leave open different possibilities for our clientele. The standard Certificate which includes the Practicum will always be available. However, by making the Practicum optional rather than required, we also open the program to those interested in focusing their studies on spirituality or biblical studies in the context of the Certificate. We anticipate that this might also segue some students into a BA program once they realize how much they gain from taking theology courses. Our basic strategy is to leave options open for potential students.

Thank-you,

Marie-France Dion
Chair Theological Studies
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: THEO-23 VERSION: 4

PROGRAM CHANGE: Certificate in Christian Spirituality

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

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

Faculty/School: Arts and Science
Department: Theological Studies
Program: Certificate in Christian Spirituality
Degree: BA
Calendar Section/Graduate Page Number: 31.330

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

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<th>Proposed Text</th>
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<tbody>
<tr>
<td>30 Certificate in Christian Spirituality</td>
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<tr>
<td>21 THEO 203, 205, 243, 402, 403, 404, PSYC 230</td>
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<td>3 Chosen from THEO 236, 242, 245, 291, 347 or another approved course in the area of Christian spirituality</td>
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<td>3 THEO 311, 315 or 317</td>
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<tr>
<td>3 THEO 204, 351 or 353</td>
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</tbody>
</table>

Rationale:
While we were hopeful that the Certificate in Christian Spirituality would spark interest among mature learners this has not been the case. In addition, we partly started the Certificate in anticipation of an expressed need from the Ignatian Spirituality Centre of Montreal. We met several times with the Director and others who are trainers at the Centre to understand the needs of their clientele. The Ignatian Spirituality Centre attracts many persons interested in pursuing their program in Spiritual Direction. Part of that program includes taking courses in theology and the hope was that our new Certificate program would be attractive to this clientele. Unfortunately, while there seemed to be enthusiasm when this was initiated, it did not play out as anticipated. Thus, we propose to drop this program and integrate it into the already existing Certificate in Pastoral Ministry.

Resource Implications:
Since most of the required courses in this certificate are also required in the Certificate in Pastoral Care, there will be little to no resource implications.
PROGRAM CHANGE: Certificate in Pastoral Care

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Theological Studies
Program: Certificate in Pastoral Ministry
Degree: BA
Calendar Section/Graduate Page Number: 31.330

Type of Change:
[X] Requirements

Present Text (from 2019/2020) calendar

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<td>30 Certificate in Pastoral Ministry</td>
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<td>15 THEO 202, 203, 402, 404; AHSC 230, 232</td>
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<tr>
<td>3 Chosen from THEO 315, 317</td>
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<td>3 Chosen from THEO 206, 233, 320, 322</td>
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Proposed Text

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<tbody>
<tr>
<td>30 Certificate in Pastoral Care</td>
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<tr>
<td>15 THEO 202, 203, 402; AHSC 230; PSYC 230 or 333</td>
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<tr>
<td>3 Chosen from THEO 311, 315, 317</td>
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<td>3 Chosen from THEO 206, 320, 322</td>
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<td>3 Chosen from THEO 212, 233, 331, 333, 337</td>
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<td>3 Chosen from THEO 204, 351, 353</td>
</tr>
<tr>
<td>3 Chosen from THEO 236, 242, 243, 245, 291, 347, 404</td>
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</table>

Rationale:

- The required scripture course THEO 203 Introduction to New Testament is replaced by THEO 202 Introduction to Biblical Studies as it will appeal to a broader audience and the New Testament is covered as part of this course.

- THEO 205 Introduction to Christian Spirituality is moved from the elective grouping to the required courses. This course is one of our core theology courses and is of particular importance to students who wish to work in pastoral and/or spiritual care.

- AHSC 232 Working in Task Groups – we propose to exchange this course with PSYC 230 Womb to Tomb: Psychological Transitions Across the Lifespan or PSYC 333 Fundamentals of Lifespan Development. The psychology course is more in line with the needs of students enrolled in the Certificate and complements AHSC 230 Interpersonal Communication and Relationships. Over the years, we have found that AHSC 232 Working in Task Groups was not particularly important or helpful to students. The undergraduate program director of Psychology approved of this change and accepted to allow our students to forgo the prerequisites for PSYC 333.

- THEO 212 and 311 are added to the electives section to reflect our BA major elective requirements. Students will be permitted to register for PSYC 333 if PSYC 230 is unavailable or at capacity and the prerequisites will be waived. As indicated in the supporting documents, most students would take PSYC 230 and would only be granted permission to take PSYC 333 if PSYC 230 is not being offered.
• THEO 404 *Practicum in Pastoral Care* is moved from a required to an elective course. Not all students who enter the Certificate in Pastoral Care are looking for a practicum experience. Because we are proposing to close the Certificate in Christian Spirituality and because many students do not benefit from a practicum because of their interest focus, we wish to leave open different possibilities for our clientele. The standard Certificate which includes the Practicum will always be available. However, by making the Practicum optional rather than required, we also open the program to those interested in focusing their studies on spirituality or biblical studies in the context of the Certificate. We anticipate that this might also segue some students into a BA program once they realize how much they gain from taking theology courses.

In breaking up the elective credit choices onto separate lines, we are offering students a wider choice of course options.

Resource Implications:
None.
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: THEO-23 VERSION: 4**

**COURSE CHANGE: THEO 402**

New Course Number:

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

**Faculty/School:** Arts and Science  
**Department:** Theological Studies  
**Program:** Certificate in Pastoral Ministry  
**Degree:** BA  
**Calendar Section/Graduate Page Number:** 31.330

**Type of Change:**

<table>
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<th>[ ] Course Number</th>
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**Present Text (from 2019/2020) calendar**

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<thead>
<tr>
<th>THEO 402 Pastoral Ministry (3 credits)</th>
<th>Proposed Text</th>
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<tbody>
<tr>
<td>This course introduces students to the history and theology of pastoral ministry. Particular attention is given to theological sources and spiritual resources available to the minister in a variety of pastoral settings.</td>
<td>THEO 402 Pastoral Care (3 credits)</td>
</tr>
<tr>
<td>This course introduces students to the history and theology of pastoral care. Particular attention is given to theological sources and spiritual resources available to the minister in a variety of pastoral settings.</td>
<td></td>
</tr>
</tbody>
</table>

**Rationale:**

THEO 402 Pastoral Ministry – we propose to change the name to Pastoral Care as it reflects more accurately the course material of the Certificate in Pastoral Care and the interests of the students.

**Resource Implications:**

This will broaden the clientele for the certificate along with THEO 402 registrations.

**Other Programs within which course is listed:**

None.

**Calendar for academic year:** 2020/2021  
**Implementation Month/Year:** May 2020
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: THEO-23 VERSION: 4

COURSE CHANGE: THEO 404 New Course Number: Proposed

[ ] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Arts and Science
Department: Theological Studies
Program: Certificate in Pastoral Ministry
Degree: BA
Calendar Section/Graduate Page Number: 31.330

Type of Change:
[ ] Course Number
[ ] Course Description
[ ] Course Deletion
[ ] Editorial
[ ] Credit Value
[ ] New Course
[ ] Other - Specify

Present Text (from 2019/2020) calendar

THEO 404 Practicum in Pastoral Ministry (3 credits)
Prerequisite: THEO 402 and permission of the Department. This course complements THEO 402 as the internship and field exploration of a particular pastoral ministry. It will be supervised by experts or experienced individuals in the various fields of ministry, e.g. eldercare, bereavement, hospital, school, youth ministries, and others.

Rationale:
THEO 404, Practicum in Pastoral Ministry – we propose to change the name to Practicum in Pastoral Care to be consistent with the change in the name of THEO 402.

Resource Implications:
This change broadens our students for the Certificate in Pastoral Care along with THEO 404 registrations.

Other Programs within which course is listed:

None.

Proposed Text

THEO 404 Practicum in Pastoral Care (3 credits)
Prerequisite: THEO 402 and permission of the Department. This course complements THEO 402 as the internship and field exploration of a particular pastoral ministry. It will be supervised by experts or experienced individuals in the various fields of ministry, e.g. eldercare, bereavement, hospital, school, youth ministries, and others.

Calendar for academic year: 2020/2021
Implementation Month/Year: May 2020
Thank you all for weighing in on these items today. I will advise you once the proposed changes are approved at APC and Senate.

Nicole

---

Lucie Bonneville, PhD
Undergraduate Program Director
Department of Psychology
Concordia University
PY 139-4

On 10/22/2019 11:14 AM, Nicole Freeman wrote:

Erin,

Thanks again. Can you also reconfirm that the prerequisite of PSYC 310 and 315 will be waived for Theology students taking the PSYC 333? I would like to include this confirmation in this email string as it will be included in the proposal.

Nicole Freeman
Administrator, FAS Academic Programs
Concordia University
514-848-2424 ext. 2088
nicole.freeman@concordia.ca

---

Hi,
I think Lucie's approval is what you need (as undergraduate curriculum coordinator), but I'll just echo that I also agree to this (as curriculum committee chair).
On Tue, Oct 22, 2019 at 10:58 AM Marie-France Dion <m-f.dion@concordia.ca> wrote:

Thank-you

Dr. Marie-France Dion (chair)
Department of Theological Studies

_From: Lucie Bonneville
_Sent: October 22, 2019 10:57 AM
_To: Nicole Freeman
Cc: Erin Barker; Marie-France Dion
Subject: Re: THEO-23

I’m ok with it.
Lucie

Lucie Bonneville, PhD
Undergraduate Program Director
Dept of Psychology

On Oct 22, 2019, at 9:30 AM, Nicole Freeman <nicole.freeman@concordia.ca> wrote:

Hi Erin, Lucie and Marie-France,

It sounds like the addition of PSYC 230 or 333 is feasible with some consideration to logistics in reserving space for THEO students in the PSYC courses (ideally PSYC 230 and PSYC 333 only when necessary when 230 is not offered). In order for the changes to the Certificate in Pastoral Care under Theology to make the 2020-21 calendar, we would need the consent from Psychology over the next few days. I am copying the Chair of Theology, Marie-France Dion on this message. If we can get this into the 2020-21 calendar rather than wait another full year to 2021-22, it would be ideal. Perhaps the logistics could be hashed out post approval if need be. Sorry for the tight turn around but this one is now on the wire as documents were actually due last week for APC. Thanks everyone!

30 Certificate in Pastoral Care
15 THEO 2023, 2053, 4023; AHSC 2303; _PSYC 2303 or 3333_
3 Chosen from THEO 3113, 3153, 3173
3 Chosen from THEO 2063, 3203, 3223
3 Chosen from THEO 2123, 2333, 3313, 3333, 3373
Chosen from THEO 204$^3$, 351$^3$, 353$^3$

Chosen from THEO 236$^3$, 242$^3$, 243$^3$, 245$^3$, 291$^3$, 347$^3$, 404$^3$
INTERNAL MEMORANDUM

To: Dr. Sandra Gabriele, Chair, Academic Programs Committee

FROM: Dr. Rebecca Duclos, Dean, Faculty of Fine Arts

CC: Dr. Elaine Paterson, Associate Dean Academic, Faculty of Fine Arts

DATE: October 18, 2019

RE: Curriculum Dossier for the Department of Theatre (THEA-26)

As Dean of the Faculty of Fine Arts, I fully support the curriculum changes proposed in THEA-26. The dossier was reviewed and approved unanimously by the Fine Arts Faculty Council at its meeting on October 18, 2019.

There are no resource implications.

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

To: Rebecca Duclos, Dean, Faculty of Fine Arts
From: Elaine Paterson, Associate Dean, Academic
Date: September 24, 2019
Re: Curriculum dossier for the Department of Theatre (THEA-26)

The Faculty of Fine Arts Curriculum Committee has reviewed and approved the THEA-26 curriculum dossier from the Department of Theatre during our meeting held on April 10, 2019. We hereby submit this dossier for review at Faculty Council on October 18, 2019.

This document proposes changes following considered curriculum review of the Specialization in Performance Creation. These changes are designed to provide clearer expectations and outcomes for students.

- Adjustments to course numbers, from 300 to 400 level, that reflect a stronger focus on a three-year trajectory for the program.
- Addition of PERC 398 and PERC 498 to the program requirements for the Specialization in Performance Creation.
- Addition of a new course, PERC 486.
- Update in the program requirements for the Specialization in Performance Creation, resulting in PERC 311 and PERC 318 being mandatory. PERC 311 will continue to offer two sections per year, and an additional section of PERC 318 will rotate every other year. Due to this change, the required number of credits is reduced from 12 to 9 credits in Public Performance course offerings.

There are no resource implications.

With thanks for your consideration.

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

TO: Elaine Cheasley Paterson, Associate Dean, Academic, Faculty of Fine Arts

FROM: Ursula Neuerburg-Denzer, Chair, Department of Theatre

DATE: April 1, 2019

SUBJECT: CHANGES FOR EXISTING PROGRAMS, Specialization in Performance Creation (PERC) Department of Theatre

Dear Elaine,

Earlier today, April 1, 2019, the attached changes to the BFA Specialization in Performance Creation program were approved by the Theatre Department Curriculum Committee, Chaired by Professor Gene Gibbons.

The minor changes follow a three-year “test drive” of the newly amalgamated specialization, and in anticipation and preparation for future adjustments. These are largely adjustments to course numbers, from 300 to 400 level, which reflect a stronger focus on a three-year trajectory in the program that had been missing thus far. We have added PERC 398 and PERC 498 to the list of course options from which a student select their degree requirements. This helps the academic advisor place these courses within the students’ sets of requirements. We have also added a new course, PERC 486, which is based on a special topics course that was successfully offered three times. This addition does not have any resource implications as the course will be offered in rotation within the allotted credit envelope. A change in requirements from a choice between two courses, to making both mandatory (PERC 311, Directing I and PERC 318, Playwriting I) reflects our need to give a broader base in these fields to all of our students. We currently offer two sections of PERC 311 per year already, and will be rotating an additional section of PERC 318 every second year. As a result of this change, we reduced the required number of credits from our public performance menu, from 12 to 9 credits. In some cases, we adjusted the language of course descriptions and/or the title to more closely describe the actual content of the course or reflect the course content better. We made changes to the prerequisites to a number of courses, in order to facilitate the students’ easier enrollment. Lastly, we re-evaluated which courses should be paying course fees.

We hope this reflects our desired changes and wait for your answer.

With best regards,

Ursula Neuerburg-Denzer
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: THEA-26 VERSION: 7

PROGRAM CHANGE: Changes to the program BFA Performance Creation

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

Faculty/School: Fine Arts  
Department: Theatre  
Program: Performance Creation  
Degree: BFA

Calendar Section/Graduate Page Number: 81.120

**Type of Change:**

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<th>[X] Requirements</th>
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**Present Text (from 2019/2020) calendar**

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<td>PERC 210&lt;sup&gt;3&lt;/sup&gt;</td>
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**Proposed Text**

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**Rationale:**

Adjustments reflect the program's need to give a broader base in both Directing (PERC 311) and Playwriting (PERC 318) to all PERC students. In order to maintain the 60 credit envelope, the amount of required credits in row six (public performance outcomes) is reduced from 12 to 9.

**Resource Implications:**

None.
**COURSE CHANGE: PERC 211**  
New Course Number: 

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

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<tr>
<td>Program:</td>
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<td>Degree:</td>
<td>BFA</td>
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<td>Calendar Section/Graduate Page Number:</td>
<td>81.120</td>
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**Type of Change:**  
[ ] Course Number  
[X] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:  
[ ] Credit Value  
[ ] Prerequisite  
[ ] New Course

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
</table>
| **PERC 211  *Theatre in the City* (3 credits)**  
Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. This lecture course offers an introduction to the history of urban performance space and the variety of theatre buildings and production philosophies in Montreal. Students encounter the challenges of a small production project in collaboration with other students across the Department's specialization programs, mirroring the close cooperation between directors, actors, designers, and artisans working in the profession.  
NOTE: Students who have received credit for PROD 211 may not take this course for credit.  
**NOTE:** Students enrolled in the course are required to pay a production fee. | **PERC 211  *Theatre in the City* (3 credits)**  
Prerequisite: Enrolment in a program of the Department of Theatre or permission of the Department. This lecture course offers an introduction to the history of urban performance space and the variety of theatre buildings and production philosophies in Montreal. Students encounter the challenges of a small production project in collaboration with other students across the Department’s specialization programs.  
**NOTE:** Students who have received credit for PROD 211 may not take this course for credit.  

| Rationale: | The course description is simplified to reflect course content more clearly.  
This course no longer requires production fees because it is not a course that produces a performance which requires support from the production team. |
| Other Implications: | None. |

Other Programs within which course is listed:  
BFA Specialization in Acting for the Theatre  
BFA Specialization in Design for the Theatre  
Minor in Theatre
**COURSE CHANGE:** PERC 212  

**New Course Number:**

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

---

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

---

**Type of Change:**

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

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<table>
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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</table>
| PERC 212  
**Dramaturgy** (3 credits)  
Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. This lecture course offers an introduction to the multi-faceted role of dramaturgy in contemporary theatre practice including production dramaturgy and new play development. This foundational course covers approaches to script analysis from Aristotle to Brecht and beyond, including elements such as structure, semiotics, and style.  
**NOTE:** Students who have received credit for THEA 211 may not take this course for credit. | PERC 212  
**Introduction to Dramaturgy** (3 credits)  
Prerequisite: Enrolment in a program of the Department of Theatre or permission of the Department. This lecture course offers an introduction to the multi-faceted role of dramaturgy in contemporary theatre practice including production dramaturgy and new play development. This foundational course places an emphasis on script analysis including elements such as structure, semiotics, **genre**, and style.  
**NOTE:** Students who have received credit for THEA 211 may not take this course for credit. |

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**Rationale:**
The course title is adjusted to more clearly define course content.
The course description is adjusted to reflect course content more precisely.

---

**Resource Implications:**
None.

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**Other Programs within which course is listed:**

- BFA Specialization in Acting for the Theatre
- BFA Specialization in Design for the Theatre
- Minor in Theatre
COURSE CHANGE: PERC 303

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Fine Arts
Department: Theatre
Program: Performance Creation
Degree: BFA
Calendar Section/Graduate Page Number: 81.120

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

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<th>Present Text (from 2019/2020) calendar</th>
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</table>
| PERC 303  *Theatre History and Theory to 1800* (3 credits)  
Prerequisite: 24 credits. This lecture course provides a framework for the analysis of theory, history, and practice up until the 19th century. Students are encouraged to critically approach different models of writing and reading in theatre history. The course examines both literary and non-literary genres of theatre and performance, as well as the theatre’s ritual functions in various times and cultures.  
*NOTE: Students who have received credit for THEA 303 may not take this course for credit.* | PERC 303  *Theatre History and Theory to 1800* (3 credits)  
Prerequisite: 18 credits and enrolment in a program of the Department of Theatre. This lecture course provides a framework for the analysis of theory, history, and practice up until the 19th century. Students are encouraged to critically approach different models of writing and reading in theatre history. The course examines both literary and non-literary genres of theatre and performance, as well as the theatre’s ritual functions in various times and cultures.  
*NOTE: Students who have received credit for THEA 303 may not take this course for credit.* |

Rationale:
The prerequisite is adjusted because the course is now offered in second semester of students’ first year.

Resource Implications:
None.

Other Programs within which course is listed:
BFA Specialization in Acting for the Theatre
BFA Specialization in Design for the Theatre
Minor in Theatre
COURSE CHANGE: PERC 311  

New Course Number:  

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Fine Arts  
Department: Theatre  
Program: Performance Creation  
Degree: BFA  
Calendar Section/Graduate Page Number: 81.120

Type of Change:
[ ] Course Number  
[X] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:  

Present Text (from 2019/2020) calendar

PERC 311 Directing I (3 credits)
Prerequisite: ACTT 209 or PERC 209 or written permission of the Department of Theatre. This studio course introduces students to basic organizational, analytical, and aesthetic concepts of directing for the stage. Course content focuses primarily on applied script analysis in naturalism and realism through a study of key figures in directing from the 20th century. The final assignment consists of the preparation and direction of a short scene with student actors. This course has a public performance outcome.  
NOTE: Students who have received credit for THEA 411 may not take this course for credit.  
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.  
NOTE: Students enrolled in the course are required to pay a production fee.

Proposed Text

PERC 311 Directing I (3 credits)
Prerequisite: 24 credits and enrolment in a program of the Department of Theatre. This studio course introduces students to basic organizational, analytical, and leadership skills for stage direction. Course content focuses primarily on applied script analysis and beginning storytelling techniques, supported by the study of key figures in directing from the 20th and 21st centuries. The final assignment may consist of the preparation and direction of a short scene with student actors.  
NOTE: Students who have received credit for THEA 411 may not take this course for credit.  
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.  
NOTE: Students enrolled in the course are required to pay a production fee.

Rationale:
Adjustment to prerequisites have been made to 24 credits and enrollment in the program to ensure students have acquired more than ACTT 209 or PERC 209 as a basis for enrolling in the course.

The course description is adjusted to reflect course content more precisely.

Resource Implications:
None.

Other Programs within which course is listed:

BFA Specialization in Acting for the Theatre  
BFA Specialization in Design for the Theatre
COURSE CHANGE: PERC 312  
New Course Number:

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
<tbody>
<tr>
<td>PERC 312 Dramaturgy II (3 credits)</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: PERC 212. This seminar course examines three major fields of dramaturgy relating to production, performance creation, and new play development. Students study the work of current dramaturges, explore the skills and concerns associated with each field, and apply knowledge and skills gained in a practical component.</td>
<td></td>
</tr>
</tbody>
</table>

**Rationale:**
This course is being deleted and will be replaced by new course PERC 412.

**Resource Implications:**
None.

Other Programs within which course is listed:

BFA Specialization in Acting for the Theatre
**PERC 318 Playwriting I (3 credits)**

Prerequisite: ACTT 209 or PERC 209 or written permission of the Department of Theatre. This studio course focuses on the creation of original performance texts to be developed through a workshop process. The class may work from a common theme or form, for example, writing a play for two actors, or adaptations from another genre.

*NOTE:* Students who have received credit for THEA 341 may not take this course for credit.

*NOTE:* This course may be repeated for credit in this program, provided the subject matter is different each time.

---

**PERC 318 Playwriting I (3 credits)**

Prerequisite: 24 credits and enrolment in a program of the Department of Theatre. This studio course focuses on building skills in writing for the stage. A variety of play formats and styles will be studied, from traditional to modern plays. The class may work from a common theme or form, for example, writing adaptations from another genre. Students will write their own one-act play throughout the course, and receive dramaturgical and workshop feedback.

*NOTE:* Students who have received credit for THEA 341 may not take this course for credit.

*NOTE:* This course may be repeated for credit in this program, provided the subject matter is different each time.

---

**Rationale:**

Adjustment to prerequisites have also been made to 24 credits and enrollment in the program to ensure students have acquired more than ACTT 209 or PERC 209 as a basis for enrolling in the course.

The course description is adjusted to reflect course content taught by new faculty more precisely.

**Resource Implications:**

None.

**Other Programs within which course is listed:**

BFA Specialization in Acting for the Theatre
**COURSE CHANGE: PERC 321  New Course Number:**

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**

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

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
</table>
| **PERC 321  *Introduction to Performance Studies* (3 credits)**  
Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. This seminar course introduces key texts in the interdisciplinary field of performance studies, and investigates a broad range of sites and practices from the realms of theatre, dance, and other cultural forms, from avant-garde to popular, aesthetic to political.  
Rationale: The prerequisite is adjusted to clarify that this is a course for upper level students.  
**Resource Implications:** None.  
Other Programs within which course is listed:  
BFA Specialization in Acting for the Theatre  
Minor in Theatre | **PERC 321  *Introduction to Performance Studies* (3 credits)**  
Prerequisite: 24 credits and enrolment in a program of the Department of Theatre or permission of the Department. This seminar course introduces key texts in the interdisciplinary field of performance studies, and investigates a broad range of sites and practices from the realms of theatre, dance, and other cultural forms, from avant-garde to popular, aesthetic to political.  
Rationale: The prerequisite is adjusted to clarify that this is a course for upper level students.  
**Resource Implications:** None.  
Other Programs within which course is listed:  
BFA Specialization in Acting for the Theatre  
Minor in Theatre |

**Calendar for academic year:** 2020/2021  
**Implementation Month/Year:** September 2020
COURSE CHANGE: PERC 322

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

Faculty/School: Fine Arts  
Department: Theatre  
Program: Performance Creation  
Degree: BFA  
Calendar Section/Graduate Page Number: 81.120

**Type of Change:**  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[ ] Other - Specify:  
[X] Prerequisite

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</table>
| **PERC 322 Gender and Sexuality in Performance** (3 credits)  
Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. This seminar course provides a grounding in feminist and queer theory as critical tools for the analysis and creation of performance. The performance of gendered and queer identities is considered, as presented in everyday life and on stage.  
Rationale:  
The prerequisite is adjusted to clarify that this is a course for upper level students.  
Resource Implications:  
None.  
Other Programs within which course is listed:  
BFA Specialization in Acting for the Theatre  
Minor in Theatre | **PERC 322 Gender and Sexuality in Performance** (3 credits)  
Prerequisite: 24 credits and enrolment in a program of the Department of Theatre or permission of the Department. This seminar course provides a grounding in feminist and queer theory as critical tools for the analysis and creation of performance. The performance of gendered and queer identities is considered, as presented in everyday life and on stage. |
COURSE CHANGE: PERC 323  New Course Number:

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**
- [ ] Course Number  
- [ ] Course Title  
- [ ] Course Description  
- [ ] Editorial  
- [ ] Course Deletion  
- [ ] Credit Value  
- [X] Prerequisite

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</thead>
</table>
| **PERC 323** *Post-Colonial Theory and Practice* (3 credits)  
Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. This seminar course in post-colonial theory provides students with flexible methodologies for examining the impact of colonialism on societies and cultures through the study of dramatic and other forms of literature and expression. The course covers key concepts such as hegemony, exoticism, identity, alterity, hybridity, and resistance, as these terms circulate within Canada and internationally. | **PERC 323** *Post-Colonial Theory and Practice* (3 credits)  
Prerequisite: 24 credits and enrolment in a program of the Department of Theatre or permission of the Department. This seminar course in post-colonial theory provides students with flexible methodologies for examining the impact of colonialism on societies and cultures through the study of dramatic and other forms of literature and expression. The course covers key concepts such as hegemony, exoticism, identity, alterity, hybridity, and resistance, as these terms circulate within Canada and internationally. |

**Rationale:**  
The prerequisite is adjusted to clarify that this is a course for upper level students.

**Resource Implications:**  
None

**Other Programs within which course is listed:**
- BFA Specialization in Acting for the Theatre  
- Minor in Theatre
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: THEA-26 VERSION: 7**

**COURSE CHANGE: PERC 324**

**New Course Number:**

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**  
[ ] Course Number  
[X] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:

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</thead>
<tbody>
<tr>
<td><strong>PERC 324 Queer Theatre and Performance (3 credits)</strong></td>
<td><strong>PERC 324 Queer Theatre and Performance (3 credits)</strong></td>
</tr>
<tr>
<td>This <em>lecture</em> course analyzes historical and contemporary examples of lesbian/gay/bisexual/transgender/two-spirited and queer theatre and performance. The course examines how the stage has been, and continues to be, a necessary public forum for queer political activism and identity politics, and offers a comprehensive overview of key concerns in sexuality studies in Canada and internationally.</td>
<td>Prerequisite: 24 credits and enrolment in a program of the Department of Theatre or permission of the Department. This <em>seminar</em> course analyzes historical and contemporary examples of lesbian/gay/bisexual/transgender/two-spirited and queer theatre and performance. The course examines how the stage has been, and continues to be, a necessary public forum for queer political activism and identity politics, and offers a comprehensive overview of key concerns in sexuality studies in Canada and internationally.</td>
</tr>
</tbody>
</table>

**Rationale:**

The prerequisite is added to clarify that this is a course for upper level students.

The course description is adjusted to reflect course content more precisely.

The course has only been offered as a seminar, not as a lecture.

**Resource Implications:**

None.

**Other Programs within which course is listed:**

BFA Specialization in Acting for the Theatre  
Minor in Theatre
**COURSE CHANGE: PERC 362**

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**

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<th>[ ] Credit Value</th>
<th>[ ] Prerequisite</th>
<th>[ ] Course Description</th>
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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</table>
| **PERC 362  Playwriting II (3 credits)** | Prerequisite: ACTT 209 or PERC 209 or written permission of the Department of Theatre. This advanced studio course focuses on the creation of original performance texts to be developed through a workshop process. The class may work from a common theme or form, for example, writing a play for two actors or adaptations from another genre.  
**NOTE:** Students who have received credit for THEA 342 may not take this course for credit.  
**NOTE:** This course may be repeated for credit in this program, provided the subject matter is different each time. |

<table>
<thead>
<tr>
<th>Rationale:</th>
<th>This course is being deleted and will be replaced by new course PERC 462.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Implications:</td>
<td>None.</td>
</tr>
<tr>
<td>Other Programs within which course is listed:</td>
<td>None.</td>
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</table>
COURSE CHANGE: PERC 364  New Course Number:

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

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<tbody>
<tr>
<td>Department:</td>
<td>Theatre</td>
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<tr>
<td>Program:</td>
<td>Performance Creation</td>
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<tr>
<td>Degree:</td>
<td>BFA</td>
</tr>
<tr>
<td>Calendar Section/Graduate Page Number:</td>
<td>81.120</td>
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</table>

**Type of Change:**

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

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
<tbody>
<tr>
<td><strong>PERC 364 — Oral History Performance</strong> (3 credits)</td>
<td>Prerequisite: ACTT 209 or PERC 209 or written permission of the Department of Theatre. This studio course explores key ethical, dramaturgical, and performative dimensions of the emergent field of oral history performance within the context of a range of forms that might include verbatim and documentary forms, applied theatre, playback theatre, community engaged performance, storytelling, performance art and digital media. This class has a public performance. <strong>NOTE:</strong> Students enrolled in the course are required to pay a production fee. <strong>NOTE:</strong> Students who have received credit for this topic under a PERC 398 number may not take this course for credit.</td>
</tr>
</tbody>
</table>

**Rationale:**
This course is being deleted and will be replaced by new course PERC 464.

**Resource Implications:**
None.

**Other Programs within which course is listed:**
None.
**COURSE CHANGE: PERC 386**  
New Course Number:

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

- **Faculty/School:** Fine Arts  
- **Department:** Theatre  
- **Program:** Performance Creation  
- **Degree:** BFA  
- **Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**  
[X] Course Number  
[X] Course Description  
[X] Credit Value  
[X] Prerequisite

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</thead>
<tbody>
<tr>
<td><strong>PERC 386</strong> <em>Interdisciplinary Approaches to Performance Creation</em> (3 credits)</td>
<td><strong>PERC 386</strong> <em>Interdisciplinary Approaches to Performance Creation</em> (3 credits)</td>
</tr>
</tbody>
</table>
| Prerequisite: ACTT 209 or PERC 209 or written permission of the Department of Theatre. This studio course emphasizes creative inquiry as the basis for interdisciplinary approaches to performance creation. In-class practical exercises open up possibilities for creation of original work through experimentation in creative process. Students also build skills in entrepreneurship as primary creators.  
NOTE: Students who have received credit for this topic under a TDEV 398 number may not take this course for credit.  
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.  
NOTE: Student enrolled in this course are required to pay a production fee. | Prerequisite: ACTT 209 or PERC 209 and 30 credits completed in a program of the Department of Theatre. This studio course emphasizes creative inquiry as the basis for interdisciplinary approaches to performance creation. In-class practical exercises open up possibilities for creation of original work through experimentation in creative process. Students also build skills in entrepreneurship as primary creators.  
NOTE: Students who have received credit for this topic under a TDEV 398 number may not take this course for credit.  
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.  
NOTE: Student enrolled in this course are required to pay a production fee. |

**Rationale:**  
The prerequisite is adjusted to clarify that this is a course for upper level students.

**Resource Implications:**  
None.

**Other Programs within which course is listed:**  
None.
COURSE CHANGE: PERC 390

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Fine Arts
Department: Theatre
Program: Performance Creation
Degree: BFA
Calendar Section/Graduate Page Number: 81.120

Rationale:
The prerequisite is adjusted to clarify that this is a course for upper level students.

Resource Implications:
None.

Other Programs within which course is listed:
None.

Present Text (from 2019/2020) calendar

PERC 390 *Performance Creation Studio* (3 credits)
Prerequisite: FFAR 250; 48 credits in a specialization of the Department of Theatre or written permission of the Department. This course involves students working in ensemble on all aspects of the study and production of an existing theatre script, or the creation and production of an original piece of theatre engaging with a particular event, issue, or topic. This course has a public performance outcome. This course normally takes place over one term.

NOTE: Students who have received credit for PROD 311 may not take this course for credit.

NOTE: Students may be required to present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.

NOTE: Students enrolled in this course are required to pay a production fee.

NOTE: This course may be repeated for credit in this program, provided the subject matter is different each time.

NOTE: Specific title, and additional prerequisites if required, are stated in the Undergraduate Class Schedule.

Resource Implications:
None.

Other Programs within which course is listed:
None.

Proposed Text

PERC 390 *Performance Creation Studio* (3 credits)
Prerequisite: FFAR 250; 24 credits completed in a specialization program of the Department of Theatre or permission of the Department. This course involves students working in ensemble on all aspects of the study and production of an existing theatre script, or the creation and production of an original piece of theatre engaging with a particular event, issue, or topic. This course has a public performance outcome. This course normally takes place over one term.

NOTE: Students who have received credit for PROD 311 may not take this course for credit.

NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.

NOTE: Students enrolled in this course are required to pay a production fee.

NOTE: This course may be repeated for credit in this program, provided the subject matter is different each time.

NOTE: Specific title, and additional prerequisites if required, are stated in the Undergraduate Class Schedule.
**Program and Courses Change Forms for Document: THEA-26 Version: 7**

**Course Change:** PERC 405  
New Course Number: [ ] Undergraduate or [ ] Graduate Curriculum Changes

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**
- [ ] Course Number
- [X] Course Description
- [ ] Course Deletion
- [ ] Editorial
- [ ] Other - Specify:
- [ ] Credit Value
- [ ] Prerequisite

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<tr>
<th>Present Text (from 2019/2020) Calendar</th>
<th>Proposed Text</th>
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</thead>
<tbody>
<tr>
<td><strong>PERC 405 Independent Study I (3 credits)</strong></td>
<td><strong>PERC 405 Independent Study I (3 credits)</strong></td>
</tr>
<tr>
<td>Prerequisite: Written permission of the Department of Theatre. A student-proposed seminar, workshop, or public performance capstone project supervised by a full-time faculty member.</td>
<td>Prerequisite: Permission of the Department of Theatre. A student-proposed research project supervised by a full-time faculty member.</td>
</tr>
<tr>
<td>NOTE: Students who have received credit for THEA 405 or TDEV 405 may not take this course for credit.</td>
<td>NOTE: Students who have received credit for THEA 405 or TDEV 405 may not take this course for credit.</td>
</tr>
</tbody>
</table>

**Rationale:**  
The course description is adjusted to reflect course content more precisely.

**Resource Implications:**  
None.

**Other Programs within which course is listed:**  
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: THEA-26 VERSION: 7

COURSE CHANGE: PERC 412
New Course Number:

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**
[ ] Course Number  
[ ] Course Title  
[ ] Credit Value  
[ ] Prerequisite  
[ ] Course Description  
[ ] Editorial  
[ ] Course Deletion  
[ ] Other - Specify:

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</thead>
</table>
| PERC 412 *Expanded Dramaturgical Practice* (3 credits)  
Prerequisite: PERC 212 and completion of 30 credits in the Department of Theatre or permission of the Department of Theatre. This advanced hybrid seminar-studio course investigates expanded and interdisciplinary approaches to dramaturgy, focusing on post-dramatic performance, movement and sound arts, new media in performance, and performance in public space.  
Rationale:  
This new course replaces the deleted course PERC 312.  
The prerequisite, 'completion of 30 credits', is to ensure that students are adequately prepared for the more advanced content of the course.  
The course title is adjusted to more clearly define course content.  
The course description is adjusted to reflect course content taught by new faculty more precisely. An advanced hybrid seminar-studio indicates that the course offers both theoretical and practical approaches to learning.  
Resource Implications:  
None.  
Other Programs within which course is listed: |

Calendar for academic year: 2020/2021  
Implementation Month/Year: September 2020
**Program and Courses Change Forms for Document: THEA-26 Version: 7**

**COURSE CHANGE: PERC 462**

New Course Number:

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**

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

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<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</table>
| PERC 462  
Playwriting II (3 credits)  
Prerequisite: PERC 318 and 30 credits completed in the Specialization in Performance Creation. This advanced studio course focuses on the further development of the creator’s voice taught in Playwriting I. Students will work on an original performance text to be developed through a workshop process and end in an invited staged reading in the department.  
NOTE: Students who have received credit for THEA 342 may not take this course for credit.  
NOTE: This course may be repeated for credit in this program, provided the subject matter is different each time. |

**Rationale:**

This new course replaces the deleted course PERC 362.

The new course number reflects upper level course content.

The course content for PERC 318 is more suitable to prepare students for PERC 462 than ACTT 209 or PERC 209, though many students will have completed ACTT 209 or PERC 209 in their first year.

The course description is adjusted to reflect course content taught by new faculty more precisely.

**Resource Implications:**

None.

**Other Programs within which course is listed:**

None.
**COURSE CHANGE: PERC 464**  
New Course Number:

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

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**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

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**Type of Change:**

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<tr>
<th>[ ] Course Number</th>
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<tr>
<td>[ ] Course Description</td>
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<td>[ ] Other - Specify:</td>
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<th>Proposed Text</th>
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</table>
| PERC 464  **Oral History Performance** (3 credits)  
Prerequisite: ACTT 209 or PERC 209 and 30 credits completed in a program of the Department of Theatre, or permission of the Department of Theatre. This advanced hybrid seminar-studio course explores key ethical, dramaturgical, and performative dimensions of the emergent field of oral history performance within the context of a range of forms that might include verbatim and documentary forms, applied theatre, playback theatre, community engaged performance, storytelling, performance art and digital media. This class has a public performance.  
**NOTE:** Students who have received credit for this topic under a PERC 398 number may not take this course for credit. |

---

**Rationale:**

This new course replaces the deleted course PERC 364.

The course number is adjusted to reflect upper level course content.

The prerequisite is adjusted to clarify that this is a course for upper level students.

The course description is adjusted to reflect course content taught by new faculty more precisely.

An advanced hybrid seminar-studio indicates that the course offers both theoretical and practical approaches to learning.

This course no longer requires production fees because it is not a course that produces a performance which requires support from the production team.


**Resource Implications:**

None.

**Other Programs within which course is listed:**

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All text is reads as if naturally and is formatted accordingly.
None.
**COURSE CHANGE: PERC 471**

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**  
[ ] Course Number  
[X] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:

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<tbody>
<tr>
<td><strong>PERC 471 Directing II</strong> (3 credits)</td>
<td><strong>PERC 471 Directing II</strong> (3 credits)</td>
</tr>
</tbody>
</table>
| Prerequisite: PERC 311 or written permission of the Department of Theatre. This studio course builds on already developed skills and knowledge while engaging with additional styles of theatre making, such as director-led creation, postmodern performance, documentary, or verbatim theatre. The final assignment involves directing a short work. This course has a public performance outcome.  
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.  
NOTE: Students enrolled in the course are required to pay a production fee. | Prerequisite: PERC 311 and 30 credits from within the Department of Theatre. This studio course builds on already developed skills and knowledge while engaging with additional styles of theatre making, such as director-led creation, postmodern performance, documentary, or verbatim theatre. The final assignment involves directing a short work. This course has a studio performance outcome.  
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus.  
NOTE: Students enrolled in the course are required to pay a production fee. |

**Rationale:**  
The prerequisite is adjusted to clarify that this is a course for upper level students in the Department of Theatre.  
The course description is adjusted to reflect course content more accurately.

**Resource Implications:**  
None.

**Other Programs within which course is listed:**  
None.
COURSE CHANGE: PERC 482  
New Course Number:  

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**

[ ] Course Number  
[X] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Credit Value  
[ ] New Course  
[X] Prerequisite

<table>
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<tr>
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<tbody>
<tr>
<td><strong>PERC 482 The Artist-in-Residence</strong> (3 credits)</td>
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</tbody>
</table>
| Prerequisite: ACTT 209 or PERC 209 or written permission of the Department. This studio course takes a hands-on, place-based approach to exploring the ethical and practical considerations facing artists and others wishing to work "in residence" with community partners. Students investigate how theatre artists might collaborate with other disciplines to explore social change within specific organizations and/or neighbourhoods. This course has a site-specific public performance outcome. 
NOTE: Students who have received credit for TDEV 431 or for this topic under a TDEV 498 number may not take this course for credit. 
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus. 
NOTE: Students enrolled in this course are required to pay a production fee. | Prerequisite: ACTT 209 or PERC 209 and 30 credits from within the Department of Theatre or permission of the Department. This studio course takes a hands-on, place-based approach to exploring the ethical and practical considerations facing artists and others wishing to work "in residence" with community partners. Students investigate how theatre artists might collaborate with other disciplines to explore social change within specific organizations and/or neighbourhoods. This course has a practical community-engaged outcome.  
NOTE: Students who have received credit for TDEV 431 or for this topic under a TDEV 498 number may not take this course for credit.  
NOTE: Students may be required to be present for additional hours related to technical and/or dress rehearsals as stipulated in the course syllabus. 
NOTE: Students enrolled in this course are required to pay a production fee. |

Rationale:  
The prerequisite is adjusted to clarify that this is a course for upper level students. 
The course description is adjusted to reflect course more accurately.

Resource Implications:  
None.

Other Programs within which course is listed:  
None.
**COURSE CHANGE: PERC 486**

New Course Number:

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

<table>
<thead>
<tr>
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</table>

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

PERC 486  Site-specific Performance Practice (3 credits)
Prerequisite: 30 credits completed in a program of the Department of Theatre or permission of the Department of Theatre. This advanced studio course introduces students to interdisciplinary methods for developing solo or collaborative site-specific works. Contemporary topics and a broad range of theory and practices from the realms of theatre, sound, visual, and spatial arts will be addressed to stimulate conceptual reflection on methods for realizing site-specific works. This course has a site-specific public project outcome.
NOTE: Students who have received credit for this topic under a TDEV or PERC 498 number may not take this course for credit.
NOTE: Students may be required to be present for additional hours related to technical and/or rehearsals as stipulated in the course syllabus.
NOTE: Students enrolled in this course are required to pay a production fee.

**Rationale:**

The course description is based on a special topics course.

PERC 498: Special Topics in Site-Specific Performance was offered in 2017-2018 with an enrollment of 10 students and in 2018-2019 with an enrollment of 12 students.

A variation on the course was offered in the summer of 2019-2020: PERC 498: Special Topcis in Performance Creation: Theatre Island Field School. The course took place in Denmark and had four students enrolled.

**Resource Implications:**

None. The course will be offered in rotation with other courses within the department's existing credit envelope.

**Other Programs within which course is listed:**

None.
**COURSE CHANGE: PERC 490**

**New Course Number:**

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

**Faculty/School:** Fine Arts  
**Department:** Theatre  
**Program:** Performance Creation  
**Degree:** BFA  
**Calendar Section/Graduate Page Number:** 81.120

**Type of Change:**

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

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| **PERC 490** *Performance Creation Mainstage* (6 credits)  
Prerequisite: FFAR 250; **48** credits in a specialization of the Department of Theatre or written permission of the Department. This course involves students working in ensemble on all aspects of the study and production of an existing theatre script, or the creation and production of an original piece of theatre engaging with a particular event, issue, or topic. This course has a public performance component. This course normally takes place over two terms.  
**NOTE:** Students who have received credit for PROD 415 may not take this course for credit.  
**NOTE:** Extra time may be required for technical or production-related rehearsals.  
**NOTE:** This course may be repeated for credit in this program, provided the subject matter is different each time.  
**NOTE:** Students enrolled in the course are required to pay a production fee.  
**NOTE:** Specific title, and additional prerequisites if required, are stated in the Undergraduate Class Schedule. | **PERC 490** *Performance Creation Mainstage* (6 credits)  
Prerequisite: FFAR 250; **30** credits in a specialization of the Department of Theatre or permission of the Department of Theatre. This course involves students working in ensemble on all aspects of the study and production of an existing theatre script, or the creation and production of an original piece of theatre engaging with a particular event, issue, or topic. This course has a public performance component. This course normally takes place over two terms.  
**NOTE:** Students who have received credit for PROD 415 may not take this course for credit.  
**NOTE:** Extra time may be required for technical or production-related rehearsals.  
**NOTE:** This course may be repeated for credit in this program, provided the subject matter is different each time.  
**NOTE:** Students enrolled in the course are required to pay a production fee.  
**NOTE:** Specific title, and additional prerequisites if required, are stated in the Undergraduate Class Schedule. |

**Rationale:**  
The prerequisite is adjusted to clarify that this is a course for upper level students.

**Resource Implications:**  
None.

**Other Programs within which course is listed:**  
None.
INTERNAL MEMORANDUM

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

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

DATE: October 4, 2019

RE: Updates on Complementary Studies course list (Section 71.110) (ENCS-97)

Due to changes made on two courses on the complementary studies for engineering students section on the calendar, GCS proposes to update undergraduate calendar section 71.110.

- SCPA 201 is a closed course reserved as a foundational course for students enrolled in the School of Community and Public Affairs
- Course title of GEOG 220 is being modified by the department

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee (ECSUSC) on September 9, 2019 and by the GCS Council on October 4, 2019. I would be grateful if you could put it on the agenda of the next APC meeting.
INTERNAL MEMORANDUM

TO: Dr. A. Asif, Dean; Chair, GCS Council
FROM: Dr. A. Akgunduz, Associate Dean, Academic Programs and Ugrad Activities
DATE: September 17, 2019
RE: Removal of SCPA 201 from the list of Complementary Studies (71.110) and reflect the title change for GEOG 220 (ENCS-97)

Please find attached the curriculum proposal with respect to course title change for GEOG 220 and the removal of SCPA 201 from the list of Complementary Studies for Engineering and Computer Science Students in section 71.110 of the Undergraduate Calendar.

The school of Community and Public Affairs requests the removal of SCPA 201 from the Section 71.110 of the Undergraduate Calendar. SCPA 201 is a closed course reserved as a foundational course for students enrolled in the Community, Public Affairs, and Policy Studies program, which also includes an interview process for admitted students.

In response to the changes proposed by the Department of Geography, Planning and Environment, the GEOG 202 course title is modified in the section 71.110.

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee on September 9, 2019. I would be grateful if you could put it on the agenda of the next GCS Council.
PROGRAM CHANGE: Removal of SCPA 201

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Gina Cody School of Engineering and Computer Science
Program: Complementary Studies for Engineering and Computer Science Students
Degree:
Calendar Section/Graduate Page Number: 71.110

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

<table>
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<td>To fulfill the requirements of the General Education Elective or General Electives, students may choose the courses from the three lists below. Students in the Extended Credit Program (ECP) or the Mature Entry Program (MEP) (see §14.2.3) or any other students who have been assigned credits in Humanities and Social Sciences must select those credits from the two corresponding lists below. Those credits cannot be chosen from the list of Other Complementary Studies.</td>
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<td>ARTH 354 Studies in Interdisciplinarity in the Visual Arts</td>
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<tr>
<td>ENGL 224 The Creative Process</td>
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<tr>
<td>ENGL 233</td>
<td>Critical Reading</td>
</tr>
<tr>
<td>FLIT 230</td>
<td>Introduction aux cultures de la francophonie</td>
</tr>
<tr>
<td>FLIT 240</td>
<td>Introduction aux littératures de la francophonie</td>
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<tr>
<td>FMST 214</td>
<td>English-Canadian Film</td>
</tr>
<tr>
<td>FMST 215</td>
<td>Le cinéma québécois</td>
</tr>
<tr>
<td>HIST 202</td>
<td>Modern Europe</td>
</tr>
<tr>
<td>HIST 205</td>
<td>History of Canada, Post-Confederation</td>
</tr>
<tr>
<td>HIST 281</td>
<td>Film in History</td>
</tr>
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<td>HIST 283</td>
<td>The 20th Century: A Global History</td>
</tr>
<tr>
<td>LBCL 201</td>
<td>Great Books: Western History and Thought from Antiquity through the Renaissance</td>
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<td>Critical Thinking</td>
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<td>Applied Ethics</td>
</tr>
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<td>PHIL 235</td>
<td>Biomedical Ethics</td>
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<tr>
<td>PHIL 275</td>
<td>From Modern to Postmodern: Philosophical Thought and Cultural Critique</td>
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<tr>
<td>PHIL 330</td>
<td>Contemporary Ethical Theory</td>
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<tr>
<td>THEO 202</td>
<td>Introduction to Biblical Studies</td>
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<tr>
<td>THEO 204</td>
<td>Introduction to Christian Ethics</td>
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<tr>
<td>THEO 233</td>
<td>Religious Pluralism in a Secular Culture</td>
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**Social Sciences**

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<td>ECON 201</td>
<td>Introduction to Microeconomics</td>
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<tr>
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<td>Introduction to Macroeconomics</td>
</tr>
<tr>
<td>EDUC 230</td>
<td>Introduction to Philosophy of Education</td>
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<tr>
<td>ENCS 483</td>
<td>Creativity, Innovation and Critical Thinking in Science and Technology</td>
</tr>
<tr>
<td>ENCS 484</td>
<td>Development and Global Engineering</td>
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<td>GEOG 203</td>
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<tr>
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<td>GEOG 210</td>
<td>Geography of Global Change</td>
</tr>
<tr>
<td>GEOG 220</td>
<td>The Human Environment: Place, Space, and Identity</td>
</tr>
<tr>
<td>INST 250</td>
<td>Introductory Information Literacy Skills</td>
</tr>
<tr>
<td>LING 222</td>
<td>Language and Mind: The Chomskyan Program</td>
</tr>
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<td>SCPA 201</td>
<td>Introduction to Public Policy and the Public Interest</td>
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<td>Economics for Public Policy and Community Development</td>
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<td>URBS 230</td>
<td>Urbanization: Global and Historical Perspectives</td>
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<td>WSDB 290</td>
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Please note the following:

1. Prior to registering, students who do not have any specified prerequisites for a course above must obtain permission of the relevant Department.
2. An ESL course or an introductory course that deals with the acquisition of a language will not be considered as a General Education elective or a General Elective.
3. Should students wish to take a course not listed above, they must receive

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1. Prior to registering, students who do not have any specified prerequisites for a course above must obtain permission of the relevant Department.
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**Rationale:**
The school of Community and Public Affairs requests the removal of SCPA 201 from the Section 71.110 of the Undergraduate Calendar. SCPA 201 is a closed course reserved as a foundational course for students enrolled in the Community, Public Affairs, and Policy Studies program, which also includes an interview process for admitted students.

The title of GEOG 220 is being modified in GEOG-48 dossier as "GEOG 220 Place, Space, and Identity"

**Resource Implications:**
None.
Hi Anna;

I’m writing this email as follow-up to a call earlier today. We are requesting that the listing for SCPA 201 be removed from Section 71.110 of the Undergraduate Calendar. This is a closed course strictly reserved as a foundational course for students enrolled in the Community, Public Affairs, and Policy Studies program (which admits students through interview process), and therefore cannot be listed as an elective outside our program.

After speaking with my colleague it seems that we once offered a parallel online course for SCPA 201 formulated as an elective for those outside the program, but I do not believe we have offered that version of the course in years.

Please let me know if you need any other information!

Best,

Lucinda Marshall-Kiparissis
Assistant to the Principal (interim)
School of Community and Public Affairs
Concordia University

514 848-2424 ex. 2575

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

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

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

DATE: October 4, 2019

RE: Curriculum proposal to cross-list courses in the Department of Electrical and Computer Engineering with courses in the Department of Biology (ENCS-98)

Please find attached the changes made to two courses in computer engineering program in the Department of Electrical and Computer Engineering.

Courses impacted:

- Cross-listing of COEN 433 with BIOL 475
- Cross-listing of COEN 434 with BIOL 476

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee (ECSUSC) on September 9, 2019 and by the GCS Council on October 4, 2019. I would be grateful if you could put it on the agenda of the next APC meeting.
INTERNAL MEMORANDUM

TO: Dr. A. Asif, Dean; Chair, GCS Council
FROM: Dr. A. Akgunduz, Associate Dean, Academic Programs and Ugrad Activities
DATE: September 17, 2019
RE: Curriculum proposal to cross-list courses in the Department of Electrical and Computer Engineering with courses in the Department of Biology (ENCS-98)

Please find attached the curriculum proposal to cross-list COEN 433 and BIOL 475; and COEN 434 and BIOL 476.

The cross-listings of these two courses have already been approved by the Senate (May 17, 2019) in dossiers COMP-96 and BIOL-7 for the new program, Bachelor of Computer Science in Health & Life Sciences. Since the implementation date for these dossiers are TBD due to the fact that they still require approval from BCI. The Department of Biology is putting forward a dossier to formally request these changes for May 2020. Therefore, to mirror the changes submitted by the Department of Biology, GCS has equally submitted the changes.

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee on September 9, 2019. I would be grateful if you could put it on the agenda of the next GCS Council.
COURSE CHANGE: COEN 433  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

<table>
<thead>
<tr>
<th>Faculty/School:</th>
<th>Gina Cody School of Engineering and Computer Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Electrical and Computer Engineering</td>
</tr>
<tr>
<td>Program:</td>
<td>Computer Engineering</td>
</tr>
<tr>
<td>Degree:</td>
<td>BEng</td>
</tr>
<tr>
<td>Calendar Section/Graduate Page Number:</td>
<td>71.60</td>
</tr>
</tbody>
</table>

Type of Change:

<table>
<thead>
<tr>
<th></th>
<th>[ ] Course Number</th>
<th>[X] Course Title</th>
<th>[ ] Credit Value</th>
<th>[ ] Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Course Description</td>
<td>[ ] Editorial</td>
<td>[ ] New Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[ ] Course Deletion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[X] Other - Specify: Note</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Present Text (from 2019/2020) calendar

<table>
<thead>
<tr>
<th>COEN 433 Biological Computing and Synthetic Biology (3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: COEN 212, 244. Introduction to the cell and the genome. Foundations of synthetic biology and ethics. Synthetic genomes and metabolic engineering. Model organisms, such as E. coli bacteria and synthetic cells, self-replicating cells man-made from cloned genes, a cellular membrane and the basic elements of RNA and protein synthesis. Designing computational devices for implementation in biological cells. Introduction to modelling and computer simulation of gene regulatory networks. Methods of building and testing gene regulatory networks within and without cells. Expanding functionality via inter-cellular signaling. Basic interfacing to electronic sensors and actuators. Landmark and interesting applications of synthetic biology in computer engineering and other disciplines. Lectures: three hours per week.</td>
</tr>
</tbody>
</table>

Proposed Text

<table>
<thead>
<tr>
<th>COEN 433 (also listed as BIOL 475) Biological Computing and Synthetic Biology (3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: COEN 212, 244. Introduction to the cell and the genome. Foundations of synthetic biology and ethics. Synthetic genomes and metabolic engineering. Model organisms, such as E. coli bacteria and synthetic cells, self-replicating cells man-made from cloned genes, a cellular membrane and the basic elements of RNA and protein synthesis. Designing computational devices for implementation in biological cells. Introduction to modelling and computer simulation of gene regulatory networks. Methods of building and testing gene regulatory networks within and without cells. Expanding functionality via inter-cellular signaling. Basic interfacing to electronic sensors and actuators. Landmark and interesting applications of synthetic biology in computer engineering and other disciplines. Lectures: three hours per week.</td>
</tr>
<tr>
<td>NOTE: Students who have received credit for BIOL 475 or for this topic under a BIOL 498 number may not take this course for credit.</td>
</tr>
</tbody>
</table>

Rationale:

COEN 433 is a combined course with BIOL 475. The cross-listing is now being reflected in the title and exclusion note.

Note to calendar editor: These changes were previously approved under US-2019-3-D25 (COMP -96) with an implementation date of TBD. This proposal requests that the changes be implemented instead in the 2020-21 Undergraduate calendar.

Resource Implications:

None.

Other Programs within which course is listed:

Biology, Arts and Science
COURSE CHANGE: COEN 434 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Electrical and Computer Engineering
Program: Computer Engineering
Degree: BEng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[X] Course Title
[ ] Course Number
[ ] Course Description
[ ] Editorial
[ ] Credit Value
[ ] Prerequisite
[ ] New Course

Present Text (from 2019/2020) calendar

COEN 434 Microfluidic Devices for Synthetic Biology (3 credits) Prerequisite: COEN 244 and ENGR 290; or BIOL 261 and COMP 249. Introduction to microfluidic components (pumps, valves, automation) programming microfluidics, paradigms, and applications for chemical and biological analysis. Introduction to synthetic biology; biological parts and their properties, network structure and pathway engineering, synthetic networks, manipulating DNA and measuring responses, basic behaviour of genetic circuits, building complex genetic networks; integration of microfluidics and synthetic biology; economic implications. Lectures: three hours per week.

Proposed Text

COEN 434 (also listed as BIOL 476) Microfluidic Devices for Synthetic Biology (3 credits) Prerequisite: COEN 244 and ENGR 290; or BIOL 261 and COMP 249. This course introduces students to microfluidic components (pumps, valves, automation) programming microfluidics, paradigms, and applications for chemical and biological analysis. Introduction to synthetic biology; biological parts and their properties, network structure and pathway engineering, synthetic networks, manipulating DNA and measuring responses, basic behaviour of genetic circuits, building complex genetic networks; integration of microfluidics and synthetic biology; economic implications. Lectures: three hours per week.

NOTE: Students who have received credit for BIOL 476 or for this topic under a BIOL 498 number may not take this course for credit.

Rationale:
COEN 434 is a combined course with BIOL 476. The cross-listing is now being reflected in the title and exclusion note.

Note to calendar editor: These changes were previously approved under US-2019-3-D25 (COMP -96) with an implementation date of TBD. This proposal requests that the changes be implemented instead in the 2020-21 Undergraduate calendar.

Resource Implications:
None.

Other Programs within which course is listed:

Biology, Arts and Science
INTERNAL MEMORANDUM

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

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

DATE: October 4, 2019

RE: Curriculum changes to the undergraduate programs in Building, Civil and Environmental Engineering Department

Please find attached the changes made to the following programs in the Department of Building, Civil and Environmental Engineering.

BUILDING ENGINEERING:

Program Change:
- BLDG 432 and 490 are added to the building engineering core
- BLDG 366 and CIVI 432 are removed from the core
- Option elective lists have been updated with the new courses
- ENGR 490 is added as an alternative to BLDG 490 in the building engineering core

CIVIL ENGINEERING:

Program Change:
- ENGR 490 is added as an alternative to CIVI 490 in the civil engineering core

COURSE CHANGES:
- Permanent codes are given to slot courses
- Prerequisite and editorial changes on both building and civil engineering courses
- Courses common to both building and civil engineering degrees are given BCEE titles.

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee (ECSUSC) on September 9, 2019 and by the GCS Council on October 4, 2019. GCS agrees to cover expenses due to introduction of new courses as part of this dossier. I would be grateful if you could put it on the agenda of the next APC meeting.
INTERNAL MEMORANDUM

TO: Dr. A. Asif, Dean; Chair, GCS Council
FROM: Dr. A. Akgunduz, Associate Dean, Academic Programs and Ugrad Activities
DATE: September 17, 2019
RE: Curriculum changes to the undergraduate programs in Building, Civil and Environmental Engineering Department

Please find attached the curriculum proposals from the Department of Building, Civil and Environmental Engineering which includes the following modifications in their building engineering and civil engineering programs:

1. Permanent codes have been assigned to six (6) building engineering slot courses
2. Title of two (2) BCEE courses have been modified
3. Prerequisite and editorial changes on various BLDG and CIVI courses
4. Course codes for four (4) BLDG course have been changed to BCEE
5. ENGR 490 has been included as an alternative to BLDG 490 and CIVI 490

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee on September 9, 2019. I would be grateful if you could put it on the agenda of the next GCS Council.
TO: Ali Akgunduz, Associate Dean, Academic Programs, Faculty of Engineering and Computer Science

FROM: Dr. Ashutosh Bagchi, Chair of Building, Civil and Environmental Engineering

DATE: September 3, 2019

SUBJECT: Curriculum changes to our Programs

Please find attached the curriculum package for the undergraduate programs in the Building, Civil and Environmental Engineering (BCEE) Department. These changes were previously approved during the BCEE Department Council on April 30, 2018.

OVERVIEW OF CHANGES:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Rationale</th>
<th>Resource implications</th>
</tr>
</thead>
</table>
| Permanent Code to old BLDG-498s:  
- BLDG 479 (Commission of HVAC Systems in buildings),  
- BLDG 483 (Integrated Solar Systems),  
- BLDG 484 (Building Diagnostics and rehabilitation of building envelope)  
- BLDG 480 Building Information Modelling in Construction  
- BLDG 481 Fundamentals of Facility Management  
- BLDG 432 Geology and Soil Mechanics | All these courses were previously slot courses  
New courses got allocated to option A and B as per Provo track details | This course will be offered as part of a faculty member’s teaching load. |
<p>| BCEE 344 – Title change | Enhance the calendar description and avoid ambiguity in the title of BCEE 344 (Structural Design I). The new title better reflects the contents. | None |
| BCEE 345 – Title change | Enhance the calendar description and avoid ambiguity in the title of BCEE 345 (Structural Design II). The new title better reflects the contents. | None |
| BLDG 390 – Prerequisite change | The contents are streamlined in relation to other courses. “Estimation of loads on buildings” is added to better prepare the students for the following courses: BLDG 490, CIVI 453, CIVI 454. It is also added as a prerequisite to CIVI 453 and CIVI 454. | The resources required are already implemented |
| BLDG 490 A and BLDG 490B | Remove from the core and elective courses. Replace by BLDG 490. | None |
| CIVI 471 - prerequisite change: Remove CIVI-372 | Topics from CIVI-372 are not needed for CIVI-471. According to the instructor CIVI- | None |</p>
<table>
<thead>
<tr>
<th>ITEM</th>
<th>Rationale</th>
<th>Resource implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add CIVI-321</td>
<td>471 relies heavily on topics seen in CIVI-321</td>
<td></td>
</tr>
<tr>
<td>BLDG 432 Replaces course CIVI 432</td>
<td>CEAB suggested that geology concepts be added into Building Engineering Program (BLDG). This course will replace CIVI 432: Soil Mechanics, which is a core course in the BLDG program. This course will offers the required contents in geology and soil mechanics</td>
<td>None</td>
</tr>
<tr>
<td>BLDG 463 prerequisite change: Remove CIVI-321</td>
<td>According to the instructor contents from CIVI 321 are not required for BLDG-463: Building Envelope design.</td>
<td>None</td>
</tr>
<tr>
<td>CIVI 390 – prerequisite and editorial changes</td>
<td>The contents are streamlined in relation to other courses. “Estimation of loads on structures” is added to better prepare the students for the following courses: CIVI 490, CIVI 453, CIVI 454. It is also added as a prerequisite to CIVI 453 and CIVI 454.</td>
<td>None</td>
</tr>
<tr>
<td>CIVI 453 – prerequisite and editorial changes</td>
<td>Prerequisite BCEE 342 is removed as BEE 345 has it as a prerequisite. Prerequisites CIVI 390 or BLDG 390 added to better prepare students for the advanced level of design course CIVI 453. Calculation of lateral loads is removed as it is covered in CIVI 390 and BLDG 390.</td>
<td>None</td>
</tr>
<tr>
<td>CIVI 454 – prerequisite and editorial changes</td>
<td>Prerequisite BCEE 342 is removed as BEE 344 has it as a prerequisite. Prerequisites CIVI 390 or BLDG 390 added to better prepare students for the advanced level of design course CIVI 454. Introduction to steel-bridge design used to cover loadings on bridges which is now covered in another elective course on Planning and Design of Bridges (CIVI 498).</td>
<td>None</td>
</tr>
<tr>
<td>ENGR-490 Addition of ENGR-490 on the core of Building Engineering and Civil Engineering</td>
<td>Add the option for students to register on ENGR-490 instead of BLDG-490 for CIVI-490</td>
<td>The resources required are already implemented</td>
</tr>
<tr>
<td>BLDG 478 Change course code to BCEE 478</td>
<td>Used by option C of the CIVI and for Option B of the BLDG</td>
<td>None</td>
</tr>
<tr>
<td>ITEM</td>
<td>Rationale</td>
<td>Resource implications</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>BLDG 491</td>
<td>Change course code to BCEE 491 Removed from BLDG program. Used by Option C of the CIVI program</td>
<td>None</td>
</tr>
<tr>
<td>BLDG 492</td>
<td>Change course code to BCEE 492 Used by option C of the CIVI and for Option B of the BLDG</td>
<td>None</td>
</tr>
<tr>
<td>BLDG 493</td>
<td>Change course code to BCEE 493 Removed from BLDG program. Used by Option C of the CIVI program</td>
<td>None</td>
</tr>
</tbody>
</table>

We would be grateful if you could put this on the agenda of the next Engineering and Computer Science Undergraduate Studies Committee (ECSUSC) meeting.
PROGRAM CHANGE: 71.50.1 Course Requirements (BEng in Building Engineering)

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.50.1

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>71.50.1 Course Requirements (BEng in Building Engineering)</strong></td>
<td><strong>71.50.1 Course Requirements (BEng in Building Engineering)</strong></td>
</tr>
<tr>
<td>The program in Building Engineering consists of the Engineering Core, the Building Engineering Core, and one of the options listed below. The normal length of the program is 119 credits.</td>
<td>The program in Building Engineering consists of the Engineering Core, the Building Engineering Core, and one of the options listed below. The normal length of the program is 119 credits.</td>
</tr>
<tr>
<td><strong>Engineering Core for Building Engineering</strong> (29 credits)*</td>
<td><strong>Engineering Core for Building Engineering</strong> (29 credits)*</td>
</tr>
<tr>
<td>See §71.20.5. Students in BEng (Bldg) must successfully complete BLDG 482 instead of ENGR 392.</td>
<td>See §71.20.5. Students in BEng (Bldg) must successfully complete BLDG 482 instead of ENGR 392.</td>
</tr>
<tr>
<td>*Note: The Engineering Core credits for students in the Building Engineering program are reduced from 30.5 credits to 29 credits since Building Engineering students are not required to take ENGR 202 (1.5 credits) in their program.</td>
<td>*Note: The Engineering Core credits for students in the Building Engineering program are reduced from 30.5 credits to 29 credits since Building Engineering students are not required to take ENGR 202 (1.5 credits) in their program.</td>
</tr>
<tr>
<td><strong>Building Engineering Core</strong></td>
<td><strong>Building Engineering Core</strong></td>
</tr>
<tr>
<td>BCEE 231 Structured Programming and Applications for Building and Civil Engineers 3.00</td>
<td>BCEE 231 Structured Programming and Applications for Building and Civil Engineers 3.00</td>
</tr>
<tr>
<td>BCEE 342 Structural Analysis I 3.00</td>
<td>BCEE 342 Structural Analysis I 3.00</td>
</tr>
<tr>
<td>BCEE 344 Structural Design I 3.00</td>
<td>BCEE 344 Structural Design of Steel and Wood Elements 3.00</td>
</tr>
<tr>
<td>BCEE 345 Structural Design II 3.00</td>
<td>BCEE 345 Structural Design of Reinforced Concrete Elements 3.00</td>
</tr>
<tr>
<td>BCEE 371* Surveying 3.00</td>
<td>BCEE 371* Surveying of Reinforced Concrete Elements 3.00</td>
</tr>
<tr>
<td>BCEE 451 Construction Engineering 3.00</td>
<td>BCEE 451 Construction Engineering 3.00</td>
</tr>
<tr>
<td>BLDG 212 Building Engineering Drawing and Introduction to Design 3.00</td>
<td>BLDG 212 Building Engineering Drawing and Introduction to Design 3.00</td>
</tr>
<tr>
<td>BLDG 341 Building Engineering Systems 3.00</td>
<td>BLDG 341 Building Engineering Systems 3.00</td>
</tr>
<tr>
<td>BLDG 365 Building Science 3.50</td>
<td>BLDG 365 Building Science 3.50</td>
</tr>
</tbody>
</table>
BLDG 366  Acoustics and Lighting  3.50
BLDG 371  Building Service Systems  3.50
BLDG 390  Building Engineering Design Project  3.50
BLDG 463  Building Envelope Design  3.00
BLDG 471  HVAC System Design  4.00
BLDG 476  Thermal Analysis of Buildings  3.00
CIVI 321  Engineering Materials  3.75
CIVI 432  Soil Mechanics  3.50
ENGR 242  Statics  3.00
ENGR 243  Dynamics  3.00
ENGR 244  Mechanics of Materials  3.75
ENGR 251  Thermodynamics I  3.00
ENGR 311  Transform Calculus and Partial Differential Equations  3.00
ENGR 361  Fluid Mechanics I  3.00

---

74.00

*Summer course to be taken before entering second year of BEng program.

**Option Course Requirements**

Students must complete a minimum of 16 credits from one of the following options: A or B. Option A is designed for students interested in careers in building energy efficiency, HVAC systems and indoor environment. Option B is tailored for students wishing to pursue careers in building design, building structures, and construction engineering and management.

1. **Option A — Building Energy and Environment**

   Students must complete the following compulsory course from the Option Core and a minimum of 12 credits from the Option Electives.

   **Option A — Core**

   **Credits**

   BLDG 490A  Capstone Building Engineering Design Project  4.00

   **Option A — Electives**

   **Credits**

   ... (remaining courses listed)

   **Total: 74.00**

*Note: Students may replace BLDG 490 with ENGR 490 if they are interested in a multidisciplinary project that requires collaboration with students from other engineering departments. In order for students to register in ENGR 490, their projects must be approved by the department and the ENGR 490 Design Committee before the start of the fall term.*

---

**Option B — Building Design and Construction**

Students must complete a minimum of 15.5 credits from one of the following options: A or B. Option A is designed for students interested in careers in building energy efficiency, HVAC systems and indoor environment. Option B is tailored for students wishing to pursue careers in building design, building structures, and construction engineering and management.

1. **Option A — Building Energy and Environment**

   Students must complete a minimum of 15.5 credits from the Option Electives.

   **Option A — Electives**

   **Credits**

   ... (remaining courses listed)

   **Total: 74.50**

*Note: Students may replace BLDG 490 with ENGR 490 if they are interested in a multidisciplinary project that requires collaboration with students from other engineering departments. In order for students to register in ENGR 490, their projects must be approved by the department and the ENGR 490 Design Committee before the start of the fall term.*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 465</td>
<td>Fire and Smoke Control in Buildings</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 472</td>
<td>Building Energy Conservation Technologies</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 473</td>
<td>Building Acoustics</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 474</td>
<td>Building Illumination and Daylighting</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 475</td>
<td>Indoor Air Quality</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 477</td>
<td>Control Systems in Buildings</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 478</td>
<td>Topics in Building Engineering</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 411</td>
<td>Special Technical Report</td>
<td>1.00</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Honours Research Project</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Note: Students from Option A may choose one course from Option B electives.

2. Option B — Building Structures and Construction

Students must complete the following compulsory course from the Option Core and a minimum of 12 credits from the Option Electives.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 490B</td>
<td>Capstone Building Engineering Design Project</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Option B — Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCEE 343</td>
<td>Structural Analysis II</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 462</td>
<td>Modern Building Materials</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 478</td>
<td>Project Management in Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 492</td>
<td>Construction Processes</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 498</td>
<td>Topics in Building Engineering</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 435</td>
<td>Foundation Design</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 453</td>
<td>Design of Reinforced Concrete Structures</td>
<td>3.50</td>
</tr>
<tr>
<td>CIVI 454</td>
<td>Design of Steel Structures</td>
<td>3.50</td>
</tr>
<tr>
<td>ENGR 411</td>
<td>Special Technical Report</td>
<td>1.00</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Honours Research Project</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Note: Students from Option B may choose one course from Option A electives.

2. Option B — Building Structures and Construction

Students must complete a minimum of 15.5 credits from the Option Electives.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCEE 343</td>
<td>Structural Analysis II</td>
<td>3.00</td>
</tr>
<tr>
<td>BCEE 455</td>
<td>Introduction to Structural Dynamics</td>
<td>3.00</td>
</tr>
<tr>
<td>BCEE 478</td>
<td>Project Management in Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>BCEE 492</td>
<td>Construction Processes</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 462</td>
<td>Modern Building Materials</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 480</td>
<td>Building Information Modelling in Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 481</td>
<td>Fundamentals of Facility Management</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 498</td>
<td>Topics in Building Engineering</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 435</td>
<td>Foundation Design</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 453</td>
<td>Design of Reinforced Concrete Structures</td>
<td>3.50</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CIVI 454</td>
<td>Design of Steel Structures</td>
<td>3.50</td>
</tr>
<tr>
<td>ENGR 411</td>
<td>Special Technical Report</td>
<td>1.00</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Honours Research Project</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Note: Students from Option B may choose one course from Option A electives.

Rationale:
BLDG 490 is moved to the core to be consistent with the other program in the department and CEAB requirements. BLDG 366 is moved to the list of Option A elective courses to make room for BLDG 490 in the core. Also, a new course, BLDG 432, is proposed to replace CIVI 432 in order to add the necessary contents of geology to the Building Engineering core to address the CEAB recommendations. BCEE 455 is added to the list of elective courses in Option B as it is an important elective course for building structures. The permanent course codes (formerly slot courses) are allocated to the options: BLDG 479, BLDG 483, and BLDG 484 to Option A; and BLDG 480 and BLDG 481 to Option B.

Resource Implications:
The resources required are already implemented.
**PROGRAM CHANGE:** 71.50.2 Course Requirements (BEng in Civil Engineering)

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Civil Engineering  
**Degree:** Undergraduate  
**Calendar Section/Graduate Page Number:** 71.50.2

<table>
<thead>
<tr>
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<th>[X] Editorial</th>
<th>[ ] Requirements</th>
<th>[ ] Regulations</th>
<th>[ ] Program Deletion</th>
<th>[ ] New Program</th>
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<tr>
<th><strong>Present Text (from 2019/2020) calendar</strong></th>
<th><strong>Proposed Text</strong></th>
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<tbody>
<tr>
<td><strong>71.50.2 Course Requirements (BEng in Civil Engineering)</strong></td>
<td><strong>71.50.2 Course Requirements (BEng in Civil Engineering)</strong></td>
</tr>
<tr>
<td>The program in Civil Engineering consists of the Engineering Core, the Civil Engineering Core, and one of the options listed below. The normal length of the program is 119 credits.</td>
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</tr>
</tbody>
</table>

**Engineering Core (30.5 credits)**

<table>
<thead>
<tr>
<th><strong>Civil Engineering Core</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCEE 231</td>
<td>Structured Programming and Applications for Building and Civil Engineers</td>
</tr>
<tr>
<td>BCEE 342</td>
<td>Structural Analysis I</td>
</tr>
<tr>
<td>BCEE 343</td>
<td>Structural Analysis II</td>
</tr>
<tr>
<td>BCEE 344</td>
<td>Structural Design</td>
</tr>
<tr>
<td>BCEE 345</td>
<td>Structural Design</td>
</tr>
<tr>
<td>BCEE 371*</td>
<td>Surveying</td>
</tr>
<tr>
<td>BCEE 451</td>
<td>Construction Engineering</td>
</tr>
<tr>
<td>CIVI 212</td>
<td>Civil Engineering Drawing and Introduction to Design</td>
</tr>
<tr>
<td>CIVI 231</td>
<td>Geology for Civil Engineers</td>
</tr>
<tr>
<td>CIVI 321</td>
<td>Engineering Materials</td>
</tr>
<tr>
<td>CIVI 341</td>
<td>Civil Engineering Systems</td>
</tr>
<tr>
<td>CIVI 361</td>
<td>Introduction to Environmental Engineering</td>
</tr>
</tbody>
</table>
CIVI 372 Transportation Engineering 3.00
CIVI 381 Hydraulics 3.50
CIVI 390 Civil Engineering Design Project 3.50
CIVI 432 Soil Mechanics 3.50
CIVI 490 Capstone Civil Engineering Design Project 4.00
ENGR 242 Statics 3.00
ENGR 243 Dynamics 3.00
ENGR 244 Mechanics of Materials 3.75
ENGR 251 Thermodynamics I 3.00
ENGR 311 Transform Calculus and Partial Differential Equations 3.00
ENGR 361 Fluid Mechanics I 3.00

73.50

*Summer course to be taken before entering second year of BEng program.

**Option Course Requirements**

Students must complete a minimum of 15 credits from one of the following options: A, B or C. Option A is designed for students interested in careers in structural, geotechnical, and transportation engineering. Option B is tailored for students wishing to pursue careers in environmental engineering. Option C is designed for students interested in construction engineering and management.

**Option A – Civil Infrastructure**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCEE 452 Fundamentals of Finite Element Analysis of Structures 3.00</td>
</tr>
<tr>
<td>BCEE 455 Introduction to Structural Dynamics 3.00</td>
</tr>
<tr>
<td>CIVI 435 Foundation Design 3.00</td>
</tr>
<tr>
<td>CIVI 437* Advanced Geotechnical Engineering 3.00</td>
</tr>
<tr>
<td>CIVI 453 Design of Reinforced Concrete Structures 3.50</td>
</tr>
<tr>
<td>CIVI 454 Design of Steel Structures 3.50</td>
</tr>
<tr>
<td>CIVI 471 Highway and Pavement Design 3.00</td>
</tr>
<tr>
<td>CIVI 474* Transportation Planning and Design 3.00</td>
</tr>
<tr>
<td>CIVI 498 Topics in Civil Engineering 3.00</td>
</tr>
</tbody>
</table>

CIVI 361 Introduction to Environmental Engineering 3.50
CIVI 372 Transportation Engineering 3.00
CIVI 381 Hydraulics 3.50
CIVI 390 Civil Engineering Design Project 3.50
CIVI 432 Soil Mechanics 3.50
CIVI 490 Capstone Civil Engineering Design Project 4.00
ENGR 242 Statics 3.00
ENGR 243 Dynamics 3.00
ENGR 244 Mechanics of Materials 3.75
ENGR 251 Thermodynamics I 3.00
ENGR 311 Transform Calculus and Partial Differential Equations 3.00
ENGR 361 Fluid Mechanics I 3.00

73.50

*Note: Students may replace CIVI 490 with ENGR 490 if they are interested in a multidisciplinary project that requires collaboration with students from other engineering departments. In order for students to register in ENGR 490, their projects must be approved by the department and the ENGR 490 Design Committee before the start of the fall term.
ENGR 411  Special Technical Report 1.00
ENGR 412  Honours Research Project 3.00

Note: Students may choose one course marked with * from Option B or C.

Option B – Environmental

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVI 382*</td>
<td>Water Resources Engineering</td>
<td>3.50</td>
</tr>
<tr>
<td>CIVI 464*</td>
<td>Environmental Impact Assessment</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 465</td>
<td>Water Pollution and Control</td>
<td>3.50</td>
</tr>
<tr>
<td>CIVI 466</td>
<td>Engineering Aspects of Chemical and Biological Processes</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 467*</td>
<td>Air Pollution and Emission Control</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 468</td>
<td>Waste Management</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 469*</td>
<td>Geo-Environmental Engineering</td>
<td>3.50</td>
</tr>
<tr>
<td>CIVI 483*</td>
<td>Hydrology</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 484*</td>
<td>Hydraulic Engineering</td>
<td>3.50</td>
</tr>
<tr>
<td>BLDG 478*</td>
<td>Project Management for Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 491</td>
<td>Labour and Industrial Relations in Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 492</td>
<td>Construction Processes</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 493</td>
<td>Legal Issues in Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 440*</td>
<td>Computer Applications in Civil Engineering Practice</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 411</td>
<td>Special Technical Report</td>
<td>1.00</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Honours Research Project</td>
<td>3.00</td>
</tr>
</tbody>
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Note: Students may choose one course marked with * from Option A or C.

Option C – Construction Engineering and Management (CEM)

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCEE 464</td>
<td>Project Cost Estimating</td>
<td>3.00</td>
</tr>
<tr>
<td>BCEE 465</td>
<td>Construction Planning and Control</td>
<td>3.00</td>
</tr>
<tr>
<td>BCEE 466</td>
<td>Simulations and Design of Construction Operations</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 478*</td>
<td>Project Management for Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 491</td>
<td>Labour and Industrial Relations in Construction</td>
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</tr>
<tr>
<td>BLDG 492</td>
<td>Construction Processes</td>
<td>3.00</td>
</tr>
<tr>
<td>BLDG 493</td>
<td>Legal Issues in Construction</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 435</td>
<td>Foundation Design</td>
<td>3.00</td>
</tr>
<tr>
<td>CIVI 437*</td>
<td>Advanced Geotechnical Engineering</td>
<td>3.00</td>
</tr>
<tr>
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<td>3.50</td>
</tr>
<tr>
<td>CIVI 454</td>
<td>Design of Steel Structures</td>
<td>3.50</td>
</tr>
<tr>
<td>CIVI 471</td>
<td>Highway and Pavement Design</td>
<td>3.00</td>
</tr>
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<td>CIVI 474*</td>
<td>Transportation Planning and Design</td>
<td>3.00</td>
</tr>
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Note: Students may choose one course marked with * from Option A or C.
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<tbody>
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<td>CIVI 498</td>
<td>Topics in Civil Engineering</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 411</td>
<td>Special Technical Report</td>
<td>1.00</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Honours Research Project</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Note: Students may choose one course marked with * from Option A or B.

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<tr>
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<td>3.00</td>
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</tbody>
</table>

Note: Students may choose one course marked with * from Option A or B.

**Rationale:**
Change on course codes and names, and addition of option to take ENGR 490 instead of CIVI 490. BCEE 344 and BCEE 345 are renamed to better reflect their contents. Explanatory text for replacement of CIVI 490 with ENGR 490 has been added.

**Resource Implications:**
The resources required are already implemented.
**COURSE CHANGE: BCEE 344**  
New Course Number: **Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes**

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Building Engineering/Civil Engineering  
**Degree:** Undergraduate  
**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

**Type of Change:**  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[ ] Credit Value  
[ ] Prerequisite  
[ ] New Course  
[ ] Other - Specify:

<table>
<thead>
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<th>Proposed Text</th>
</tr>
</thead>
</table>
| **BCEE 344  Structural Design I** (3 credits)  
Prerequisite: BCEE 342. Basis for limit states design. Code requirements. Structural steel design: tension and compression members, beams and beam-columns. Connections. Introduction to the design of timber members. Lectures: three hours per week. Tutorial: two hours per week. | **BCEE 344  Structural Design of Steel and Wood Elements** (3 credits)  
Prerequisite: BCEE 342. This course covers the following topics: basis for limit states design, code requirements, structural steel design: tension and compression members, beams and beam-columns, connections, design of timber members. Lectures: three hours per week. Tutorial: two hours per week. |

**Rationale:**  
Enhance the calendar description and avoid ambiguity in the title of BCEE 344 (Structural Design I). The new title better reflects the contents.

**Resource Implications:**  
The resources required are already implemented.

**Other Programs within which course is listed:**  
This course is not listed in any other programs.
COURSE CHANGE: BCEE 345 New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering/Civil Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

Type of Change:
[ ] Course Number
[X] Course Title
[ ] Editorial
[ ] Other - Specify:

Present Text (from 2019/2020) calendar

BCEE 345 Structural Design II (3 credits)

Proposed Text

BCEE 345 Structural Design of Reinforced Concrete Elements (3 credits)
Prerequisite: BCEE 342. This course covers the behaviour of reinforced concrete elements in flexure, compression, shear and bond. Other topics covered in the course are limit states design of reinforced concrete beams, one-way slabs, columns, and footings; serviceability limits states; introduction to prestressed concrete and masonry structures. Lectures: three hours per week. Tutorial: two hours per week.

Rationale:
Enhance the calendar description and avoid ambiguity in the title of BCEE 345 (Structural Design II). The new title better reflects the contents.

Resource Implications:
The resources required are already implemented.

Other Programs within which course is listed:
This course is not listed in any other programs.
COURSE CHANGE: BCEE 465  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Department of Building, Civil & Envir. Engineering
Degree: Building Engineering/Civil Engineering
Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

Type of Change:
[ ] Course Number  [ ] Course Title
[ ] Course Description  [ ] Editorial
[ ] Course Deletion  [ ] Other - Specify:  [X] Prerequisite

<table>
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<th>Present Text (from 2019/2020) calendar</th>
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</thead>
</table>
| **BCEE 465 Construction Planning and Control (3 credits)**  
Prerequisite: **BLDG 478.** Methods of delivering construction, contractual relationships and organizational structures, phases of project development, estimating resource requirements, costs and durations, bidding strategies, network analysis using CPM and PERT, time-cost trade-off, resource allocation, cash flow analysis, earned-value concept for integrated time and cost control, quality control, value engineering. Lectures: three hours per week.  
Rationale:  
BLDG 478 has been changed to BCEE 478 so the prerequisite has been updated accordingly.  
Resource Implications:  
None  
Other Programs within which course is listed: |
| **BCEE 465 Construction Planning and Control (3 credits)**  
Prerequisite: **BCEE 478, or equivalent.** This course covers the following topics: methods of delivering construction, contractual relationships and organizational structures, phases of project development, estimating resource requirements, costs and durations, bidding strategies, network analysis using CPM and PERT, time-cost trade-off, resource allocation, cash flow analysis, earned-value concept for integrated time and cost control, quality control, and value engineering. Lectures: three hours per week.  
Rationale:  
BLDG 478 has been changed to BCEE 478 so the prerequisite has been updated accordingly.  
Resource Implications:  
None  
Other Programs within which course is listed: |
COURSE CHANGE: BLDG 390  

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

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<tr>
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</table>

**Type of Change:**

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

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

<table>
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<tr>
<th>Course</th>
<th>New Course</th>
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</thead>
<tbody>
<tr>
<td>BLDG 390 <strong>Building Engineering Design Project</strong> (3.5 credits)</td>
<td>BLDG 390 <strong>Building Engineering Design Project</strong> (3.5 credits)</td>
</tr>
</tbody>
</table>

Prerequisite: BLDG 341; ENCS 282; BCEE 344 previously or concurrently. The project of each team will encompass the conceptual and preliminary design of a medium-size building. Students learn building engineering design process, methodology, identification of objectives, building codes, formulation of design problems. Development and evaluation of sustainable building design alternatives. Conceptual building design: spatial requirements, design of space layout. Preliminary building design: synthesis and design of structures, enclosure systems, and services (HVAC, lighting, electrical distribution) using computer-aided design tools. Performance evaluation using modeling, sensitivity analysis and cost estimation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

**Proposed Text**

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>BLDG 390 <strong>Building Engineering Design Project</strong> (3.5 credits)</td>
<td>BLDG 390 <strong>Building Engineering Design Project</strong> (3.5 credits)</td>
</tr>
</tbody>
</table>

Prerequisite: BLDG 341; ENCS 282; BCEE 344 previously or concurrently. The project of each team will encompass various stages of design of a medium-size building. Students learn building engineering design process, methodology, identification of objectives, building codes, formulation of design problems, and estimation of loads on buildings. The design topics encompass the development and evaluation of sustainable building design alternatives; conceptual building design of spatial requirements, design of space layout; and building design accounting for the synthesis and design of structures, enclosure systems, and services (HVAC, lighting, electrical distribution) using computer-aided design tools. Additionally, performance evaluation using modelling, sensitivity analysis and cost estimation is presented. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

**Rationale:**
The contents are streamlined in relation to other courses. “Estimation of loads on buildings” is added to better prepare the students for the following courses: BLDG 490, CIVI 453, CIVI 454. It is also added as a prerequisite to CIVI 453 and CIVI 454.

**Resource Implications:**
The resources required are already implemented.

**Other Programs within which course is listed:**

This course is not listed in any other programs.
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: BLDG-86 VERSION: 5**

**COURSE CHANGE:** BLDG 432  
New Course Number:

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Building Engineering  
**Degree:** Undergraduate  
**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Credit Value  
[ ] Prerequisite  
[ ] Course Description  
[ ] Editorial  
[ ] New Course  
[ ] Course Deletion  
[ ] Other - Specify:

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<thead>
<tr>
<th>Present Text (from 20xx/20xx) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 432 Geology and Soil Mechanics (3.5 credits)</td>
<td>Prerequisite: ENGR 244. Basic principles of physical geology are covered, with emphasis on topics related to soil mechanics. Furthermore, this course covers the study of minerals, index properties and classification of soils, weight-volume relationships, soil structures and moisture-density relationships. Permeability, deformation, and strength of soils, principle of total and effective stresses, steady state seepage through isotropic soil media, stress distribution due to external loads and analysis of total settlements, and outline of theory of consolidation are covered. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.</td>
</tr>
</tbody>
</table>

**Rationale:**  
CEAB suggested that geology concepts be added into Building Engineering Program (BLDG). This course will replace CIVI 432: Soil Mechanics, which is a core course in the BLDG program. This course offers the required contents in geology and soil mechanics.

**Resource Implications:**  
Time scheduling of classroom and laboratory space. Course will be part of faculty member course load. Course will use existing Soil Mechanics laboratory.

**Other Programs within which course is listed:**  
This course is not listed in any other programs.
COURSE CHANGE: BLDG 463  
New Course Number:  

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

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

<table>
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</tr>
<tr>
<td>[X] Credit Value</td>
<td>[X] Prerequisite</td>
</tr>
</tbody>
</table>

**Present Text (from 2019/2020) calendar**  
**BLDG 463 Building Envelope Design** (3 credits)  
Prerequisite: BLDG 365, CIVI 321. Technical influences in the design of building envelope, including the control of heat flow, air and moisture penetration, building movements, and deterioration. Application of air/vapour barrier and rain-screen systems. Performance assessment and building codes through case studies and design projects. Sustainable design principles. Design of walls, roofs, joints and assemblies. Cause of deterioration and preventive measures, on-site investigation. Relevant building codes and standards. Lectures: three hours per week.

**Proposed Text**  
**BLDG 463 Building Envelope Design** (3 credits)  
Prerequisite: BLDG 365. Technical influences in the design of building envelope, including the control of heat flow, air and moisture penetration, building movements, and deterioration are covered. Other topics covered by the course are the application of air/vapour barrier and rain-screen systems, performance assessment and building codes through case studies and design projects, sustainable design principles, design of walls, roofs, joints and assemblies. Students also learn cause of deterioration and preventive measures, on-site investigation and relevant building codes and standards. Lectures: three hours per week.

**Rationale:**  
Based on the instructor’s experience there are very few contents from CIVI 321 required for Building Envelope Design.

**Resource Implications:**  
The resources required are already implemented.

**Other Programs within which course is listed:**  
This course is not listed within any other programs.
**Program and Courses Change Forms for Document: BLDG-86 Version: 5**

**Course Change:** BLDG 478  
New Course Number: BCEE 478

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Building Engineering/Civil Engineering  
**Degree:** Undergraduate  
**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

**Type of Change:**  
[x] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Editorial  
[ ] Other - Specify:

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) Calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| **BLDG 478 Project Management for Construction** (3 credits)  
Prerequisite: BLDG 341 or CIVI 341. Introduction to project management techniques in construction, including project delivery methods, construction contracts, cost estimating and bidding planning and scheduling, cash flow analysis, project tracking and control, computer applications. Lectures: three hours per week. | **BCEE 478 Project Management for Construction** (3 credits)  
Prerequisite: BLDG 341 or CIVI 341. This course introduces project management techniques in construction, including project delivery methods, construction contracts, cost estimating and bidding planning and scheduling, cash flow analysis, project tracking and control and computer applications. Lectures: three hours per week. |

**Rationale:**  
Course is currently used by both: Building Engineering and Civil Engineering programs

**Resource Implications:**  
The resources required are already implemented.

**Other Programs within which course is listed:**  
This course is not listed within any other programs.
COURSE CHANGE: BLDG 479

New Course Number: BLDG 479

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

Type of Change:
[ ] Course Number  [ ] Course Title
[ ] Course Description  [ ] Editorial
[ ] Course Deletion  [ ] Other - Specify:

<table>
<thead>
<tr>
<th>Present Text (from 20xx/20xx) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 479 Commissioning of HVAC Systems in Buildings (3 credits) Prerequisite: BLDG 471 previously or concurrently. This course covers the following topics: introduction; scope of commissioning of Heating, Ventilating and Air Conditioning (HVAC) systems including commissioning, retro-commissioning, recommissioning, continuous commissioning, and ongoing commissioning; process vs. technical commissioning; instrumentation for the monitoring of HVAC operation and performance; uncertainty analysis of experimental data; mathematical models of different classes of virtual sensors; data mining techniques applied to measurements from HVAC systems; development of benchmarking models of the normal HVAC operation including correlation-based models, Artificial Neural Networks, and calibrated models; methods for the automated faults detection and diagnostic (FDD); forecasting models of the energy demand in buildings; recommissioning measures for HVAC systems; methods of estimation of energy and cost savings due to the commissioning of HVAC systems. Lectures: three hours per week.</td>
<td></td>
</tr>
</tbody>
</table>

Rationale:
Give permanent code to a slot course.

Resource Implications:
Since the course has been offered as a slot course, the required resources have already been allocated.

Other Programs within which course is listed:
This course is not listed within any other programs.
COURSE CHANGE: BLDG 480  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

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

**Department:** Department of Building, Civil & Envir. Engineering

**Program:** Building Engineering

**Degree:** Undergraduate

**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

**Type of Change:**

<table>
<thead>
<tr>
<th>Type of Change</th>
<th>Present Text (from 20XX/20XX) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Course Number</td>
<td></td>
<td>BLDG 480  Building Information Modelling in Construction (3 credits)</td>
</tr>
<tr>
<td>[ ] Course Description</td>
<td></td>
<td>This course covers the following topics: introduction to Building Information Modeling (BIM) technologies; BIM implementation at different project stages (pre-construction, construction, and facility management); BIM-Aided design alternatives (constructability analysis, and development of space-time-cost models); BIM for visualization (trade coordination and processes monitoring). A project is required. Lectures: three hours per week.</td>
</tr>
<tr>
<td>[ ] Course Deletion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Editorial</td>
<td></td>
<td></td>
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<tr>
<td>[ ] Other - Specify:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rationale:**

Give permanent code to a slot course

**Resource Implications:**

As a slot course, the resources required have already been implemented.

**Other Programs within which course is listed:**

This course is not listed within any other programs.
**COURSE CHANGE:** BLDG 481  
New Course Number: **BLDG 481**

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Building Engineering  
**Degree:** Undergraduate  
**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Credit Value  
[ ] Prerequisite  
[ ] Course Description  
[ ] Editorial  
[ ] Course Deletion  
[ ] Other - Specify:

<table>
<thead>
<tr>
<th>Present Text (from 20XX/20xx) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| **BLDG 481 Fundamentals of Facility Management** (3 credits)  
The course provides a study of the fundamental practices concomitant with facility management. The subjects include facility management industry backgrounds, management of outsourced services, financial analysis, asset management as it relates to building systems and controls. The course has a focus on sustainability, finance, maintenance and operations of facilities and considers solutions to facility management challenges. Lectures: three hours per week. |

**Rationale:**  
Give permanent code to slot course.

**Resource Implications:**  
Since the course has been offered as a slot course, the required resources have already been allocated.

**Other Programs within which course is listed:**  
This course is not listed within any other programs.
COURSE CHANGE: BLDG 483  
New Course Number:

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Building Engineering  
**Degree:** Undergraduate  
**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

**Type of Change:**
[ ] Course Number  
[ ] Course Title  
[ ] Credit Value  
[ ] Prerequisite  
[ ] Course Description  
[ ] Editorial  
[ ] Course Deletion  
[ ] Other - Specify:

<table>
<thead>
<tr>
<th>Present Text (from 20XX/20XX) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| BLDG 483 *Integrated Solar Systems: Design and Operation* (3 credits)  
This course covers the following topics: energy modelling; analysis and design of solar buildings with passive and hybrid building-integrated systems; and photovoltaic systems. Students learn both fundamentals and applications, including use of software in Mathcad, TRNSYS and Retscreen. A project is required. Lectures: three hours per week. |

**Rationale:**  
Give permanent code to a slot course.

**Resource Implications:**  
Since the course has been offered as a slot course, the required resources have already been allocated.

**Other Programs within which course is listed:**  
This course is not listed within any other programs.
COURSE CHANGE: BLDG 484  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.60 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

BLDG 484 Diagnostics and Rehabilitation of Building Envelope (3 credits)
Prerequisite: BLDG 463 previously or concurrently. This course covers the following topics: modes of failures including wood decay, mould growth, freeze-thaw, corrosion, chemical reaction, and movements; common failures in building envelopes including contemporary and traditional walls, windows, roofs and below-grade structures; performance assessment protocols including diagnostics procedures, laboratory and field test methods; remedy strategies and maintenance plan; relevant building codes and standards. A project is required. Lectures: three hours per week.

Rationale:
Give permanent code to slot course.

Resource Implications:
Since the course has been offered as a slot course, the required resources have already been allocated.

Other Programs within which course is listed:
This course is not listed within any other programs.
COURSE CHANGE: BLDG 491 New Course Number: BCEE 491

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering/Civil Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BLDG 491 Labour and Industrial Relations in Construction</strong> (3 credits)</td>
<td><strong>BCEE 491 Labour and Industrial Relations in Construction</strong> (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: ENGR 301. The study of labour legislation with special emphasis on the construction industry, union organization, the theory and practice of negotiations, mediation, contract administration, and arbitration. Review of actual contracts, discussion of future trends. Lectures: three hours per week.</td>
<td>Prerequisite: ENGR 301. The study of labour legislation is covered, with special emphasis on the construction industry, union organization, the theory and practice of negotiations, mediation, contract administration, and arbitration. Moreover, the review of actual contracts and future trends are discussed. Lectures: three hours per week.</td>
</tr>
<tr>
<td>NOTE: Students who have received credit for BLDG 491 may not take this course for credit.</td>
<td></td>
</tr>
</tbody>
</table>

Rationale:
Department wants the flexibility that the course can be offered by both programs.

Resource Implications:
The resources required are already implemented.

Other Programs within which course is listed:
This course is not listed within any other programs.
COURSE CHANGE: BLDG 492  
New Course Number: BCEE 492

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Building Engineering/Civil Engineering  
**Degree:** Undergraduate

**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

<table>
<thead>
<tr>
<th>Type of Change</th>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>[X] Course Number</td>
<td>BLDG 492 Construction Processes (3 credits)</td>
<td>BCEE 492 Construction Processes (3 credits)</td>
</tr>
<tr>
<td>[ ] Course Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] Course Description</td>
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<tr>
<td>[ ] Course Deletion</td>
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<tr>
<td>[ ] Other - Specify:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rationale:**  
Department wants the flexibility that the course can be offered by both programs.

**Resource Implications:**  
The resources required are already implemented.

**Other Programs within which course is listed:**  
This course is not listed within other programs.

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

**Present Text**  
BLDG 492 Construction Processes (3 credits)  

**Proposed Text**  
BCEE 492 Construction Processes (3 credits)  
Prerequisite: BCEE 451 or ENGR 451. This course is a study of current construction methods and techniques. The subjects include site preparation and earth-work, wood framing, masonry, concrete forming, slip forming, precast construction, industrialized building, deep excavation shoring and underpinning. Other topics covered in the course are design, erection, and removal of temporary construction work, current field practice and safety considerations and site visits. Lectures: three hours per week.

**NOTE:** Students who have received credit for BLDG 492 may not take this course for credit.
COURSE CHANGE: BLDG 493  
New Course Number: BCEE 493

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering/Civil Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

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

Present Text (from 2019/2020) calendar

BLDG 493 Legal Issues in Construction (3 credits)
Prerequisite: ENGR 301. Legal concepts and processes applicable to the development of constructed facilities and to the operation of the construction firm. Emphasis on Quebec law and institutions. Lectures: three hours per week.

Proposed Text

BCEE 493 Legal Issues in Construction (3 credits)
Prerequisite: ENGR 301. Legal concepts and processes applicable to the development of constructed facilities and to the operation of the construction firm are covered. Emphasis is given to Quebec law and institutions. Lectures: three hours per week.

NOTE: Students who have received credit for BLDG 493 may not take this course for credit.

Rationale:
Department wants the flexibility that the course can be offered by both programs.

Resource Implications:
The resources required are already implemented.

Other Programs within which course is listed:

This course is not listed within any other programs.
COURSE CHANGE: CIVI 390  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering/Civil Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</tr>
</thead>
</table>
| CIVI 390  **Civil Engineering Design Project** (3.5 credits)  
Prerequisite: CIVI 361; ENCS 282; BCEE 344 previously or concurrently. The project of each team will encompass the conceptual and preliminary design of a medium-size civil engineering project. Students learn civil engineering design process, methodology, identification of objectives, codes, formulation of design problems. Development and evaluation of sustainable design alternatives. Computer-aided design tools. Performance evaluation using modelling, sensitivity analysis, and cost estimation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. | CIVI 390  **Civil Engineering Design Project** (3.5 credits)  
Prerequisite: CIVI 361  previously or concurrently; ENCS 282; BCEE 344 or 345 previously or concurrently. The project of each team will encompass the various stages of design of a medium-size civil engineering project. Students learn civil engineering design process, methodology, identification of objectives, codes, formulation of design problems, and estimation of loads on structures. The topics of design include the development and evaluation of sustainable design alternatives; and the computer-aided design tools. Additionally, performance evaluation using modelling, sensitivity analysis, and cost estimation is presented. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. |

Rationale:
The contents are streamlined in relation to other courses. "Estimation of loads on structures" is added to better prepare the students for the following courses: CIVI 490, CIVI 453, CIVI 454. It is also added as a prerequisite to CIVI 453 and CIVI 454.

Resource Implications:
The resources required are already implemented.

Other Programs within which course is listed:
This course is not listed in any other programs.
COURSE CHANGE: CIVI 453  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering/Civil Engineering
Degree: Undergraduate
Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

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

<table>
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<tr>
<th>Present Text (from 2019/2020) calendar</th>
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</thead>
<tbody>
<tr>
<td>CIVI 453 <strong>Design of Reinforced Concrete Structures</strong> (3.5 credits)</td>
<td>CIVI 453 <strong>Design of Reinforced Concrete Structures</strong> (3.5 credits)</td>
</tr>
<tr>
<td>Prerequisite: BCEE 342, 345. Two-way slab systems: flat plate, flat slab and slab-on-beams. Slender columns; columns subjected to biaxial bending. Calculation of lateral loads; wind and seismic. Lateral loads resisting systems: moment-resisting frames, shear walls and coupled shear walls. Prestressed concrete: losses, design requirements for flexure, shear, bond, anchorage and deflections. Design project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.</td>
<td>Prerequisite: BCEE 345; CIVI 390 or BLDG 390 previously or concurrently. This course covers a wide variety of topics on reinforced concrete including two-way slab systems (flat plate, flat slab and slab-on-beams); slender columns; columns subjected to biaxial bending; lateral loads resisting systems (moment-resisting frames, shear walls and coupled shear walls); prestressed concrete (losses, design requirements for flexure, shear, bond, anchorage and deflections). Design project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.</td>
</tr>
</tbody>
</table>

Rationale:
Prerequisite BCEE 342 is removed as BCEE 345 has it as a prerequisite. Prerequisites CIVI 390 or BLDG 390 added to better prepare students for the advanced level of design course CIVI 453. Calculation of lateral loads is removed as it is covered in CIVI 390 and BLDG 390.

Resource Implications:
The resources required are already implemented.

Other Programs within which course is listed:
This course is not listed in any other programs.
COURSE CHANGE: CIVI 454 New Course Number:

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Building, Civil & Envir. Engineering
Program: Building Engineering/Civil Engineering
Degree: Undergraduate

Calendar Section/Graduate Page Number: 71.60 Engineering Course Descriptions

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIVI 454</strong> <em>Design of Steel Structures</em> (3.5 credits)</td>
<td><strong>CIVI 454</strong> <em>Design of Steel Structures</em> (3.5 credits)</td>
</tr>
<tr>
<td>Prerequisite: BCEE 342; 344. Trends and developments in structural-steel design. Framing systems. Floor systems—composite construction; plate girders. Braced frames. Moment-resisting frames. Connections. P-Delta effects. <em>Introduction to steel-bridge design.</em> Design project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.</td>
<td>Prerequisite: BCEE 344; CIVI 390 or BLDG 390 previously or concurrently. <em>This course covers a wide variety of topics on steel structures:</em> trends and developments in structural-steel design, framing systems, floor systems such as composite construction and plate girders, braced frames, and moment-resisting frames. <em>The subject includes connections and P-Delta effects.</em> <em>A design project is required.</em> Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.</td>
</tr>
</tbody>
</table>

Rationale:
Prerequisite BCEE 342 is removed as BCEE 344 has it as a prerequisite. Prerequisites CIVI 390 or BLDG 390 added to better prepare students for the advanced level of design course CIVI 454. *'Introduction to steel-bridge design’ is removed as this is now covered in another elective course on Planning and Design of Bridges (CIVI 498).*

Resource Implications:
The resources required are already implemented.

Other Programs within which course is listed:
This course is not listed in any other programs.
## COURSE CHANGE: CIVI 471

**New Course Number:**

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Building, Civil & Envir. Engineering  
**Program:** Civil Engineering  
**Degree:** Undergraduate  
**Calendar Section/Graduate Page Number:** 71.60 Engineering Course Descriptions

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Credit Value  
[X] Prerequisite  
[ ] Course Description  
[X] Editorial  
[ ] Course Deletion  
[ ] Other - Specify:

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

**CIVI 471 Highway and Pavement Design** (3 credits)  
Prerequisite: CEE 371; CIVI 372. Design criteria, including capacity and level of service; route alignment and right-of-way considerations; geometric design; earthworks and construction practices; Pavement materials and tests; Flexible and rigid pavement design procedures; subgrade, base, and surfacing characteristics; loads; stresses in pavement systems; material characterization; pavement response models; effects of natural forces, and construction practices; Pavement management; Computer applications; Geometric and pavement design projects. Lectures: three hours per week. Tutorial: two hours per week.

### Proposed Text

**CIVI 471 Highway and Pavement Design** (3 credits)  
Prerequisite: CEE 371; CIVI 321. This course covers the following topics: design criteria, including capacity and level of service, route alignment and right-of-way considerations, geometric design, earthworks and construction practices, pavement materials and tests, flexible and rigid pavement design procedures including subgrade, base, and surfacing characteristics, loads, stresses in pavement systems, material characterization, pavement response models, effects of natural forces, and construction practices; pavement management; computer applications; geometric and pavement design projects. Lectures: three hours per week. Tutorial: two hours per week.

**Rationale:**

CIVI 321 (Materials Engineering) is very relevant to the pavement design component of CIVI 471, only few concepts from CIVI 372 are required and are presented during the first lecture of CIVI 471.

**Resource Implications:**

The resources required are already implemented.

**Other Programs within which course is listed:**

This course is not listed within any other programs.
Concordia University
Department of Building, Civil and Environmental Engineering

BLDG 432 Geology and Soil Mechanics

Fall 2020

Instructor:

Office Hours:

Lectures:

Tutorials:

Labs:

Required book: B. M. Das, *Fundamentals* of Geotechnical Engineering, 5th Ed., (Available in the bookstore), Also, for those who think they can benefit, the use of MindTap addition should be purchased.


Course Description:


Course Learning Outcomes (CLO):

Upon successful completion of this course, students will be able to:

1. Demonstrate the understanding of rock cycles and basic principles of physical geology.
2. Identify the origin of soils and determine their classification
3. Set up models and perform seepage calculations
4. Compute the state of stress in a soil mass
5. Assess the consolidation and settlement of soils
6. Evaluate the shear strength of soils
7. Perform related laboratory experiments, as outlined above.

Course Outline:

<table>
<thead>
<tr>
<th>Chapters</th>
<th>Contents</th>
<th>Attribute</th>
<th>CLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>From physical Geology</td>
<td>- An introduction to physical geology and minerals</td>
<td>A1, A3</td>
<td>1</td>
</tr>
<tr>
<td>Ch. 2</td>
<td>- Soil Deposits – Origin, Grain-Size and Shape</td>
<td>A3</td>
<td>1,2</td>
</tr>
<tr>
<td>Ch. 3</td>
<td>- Weight-Volume Relationships and Plasticity</td>
<td>A1, A2</td>
<td>2</td>
</tr>
<tr>
<td>Ch. 4</td>
<td>- Soil Classification</td>
<td>A3, A4</td>
<td>2</td>
</tr>
<tr>
<td>Ch. 6</td>
<td>- Hydraulic Conductivity</td>
<td>A1, A2</td>
<td>3</td>
</tr>
<tr>
<td>Ch. 7</td>
<td>- Seepage</td>
<td>A1, A2</td>
<td>3</td>
</tr>
<tr>
<td>Ch. 8</td>
<td>- Stresses in Soil Mass</td>
<td>A2, A4</td>
<td>4</td>
</tr>
<tr>
<td>Ch. 9</td>
<td>- Consolidation</td>
<td>A3</td>
<td>5</td>
</tr>
<tr>
<td>Ch. 10</td>
<td>- Shear Strength of Soil</td>
<td>A2, A4</td>
<td>6</td>
</tr>
</tbody>
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Marking Scheme:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Reports</td>
<td>15%</td>
<td>A3, A5, A6</td>
</tr>
<tr>
<td>Midterm</td>
<td>35%</td>
<td>A1, A2, A4</td>
</tr>
<tr>
<td>Final</td>
<td>50%</td>
<td>A1, A2, A4, A5</td>
</tr>
</tbody>
</table>

Notes: In order to pass the course you must pass the final with at least a 50% and attend all labs and submit all lab reports.

The completed and signed originality sheet must be attached to your first lab report. Without it, the submission is automatically rejected, requiring re-submittal and incurring late penalty.

Midterm: There will be no supplemental midterm.

Schedule of experiments:

<table>
<thead>
<tr>
<th>Laboratory Session</th>
<th>Experiment Number - in Lab Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 &amp; 3 (Specific Gravity of Soil Solids &amp; Compaction Test)</td>
</tr>
<tr>
<td>2</td>
<td>1 (Consistency Limits)</td>
</tr>
<tr>
<td>3</td>
<td>4 (Permeability Test)</td>
</tr>
<tr>
<td>4</td>
<td>6 (Direct Shear Test)</td>
</tr>
<tr>
<td>5</td>
<td>7 (Unconfined Compression Test)</td>
</tr>
</tbody>
</table>

Lab related rules:

- You must attend all your labs.
- You must submit an original lab report for each lab experiment attended. You are not allowed to submit lab reports for labs you have not attended.
- You have to attend the lab section that you are assigned to, no switching, no exceptions unless with my permission.
  - If you miss a lab, you have to contact me plus the affected Lab Demonstrator as soon as possible and provide a credible reason. You are still responsible for re-scheduling the missed lab (by selecting a lab session that fits your schedule and inform BOTH affected Lab Demonstrator plus me) and submitting the lab report.

Late fees: Any late submission is penalized at a rate of 10%/day up to 100%.

Attributes: The attributes associated with this course are knowledge base for engineering, problem analysis, investigation, use of engineering tools, communication skills and lifelong learning. These attributes will be taught, practiced and evaluated as follows:

**A1 - A knowledge base for engineering:** Demonstrated competence in university level mathematics, natural sciences, engineering fundamentals, and specialized engineering knowledge appropriate to the program.

*Indicators:*

- Knowledge-base of mathematics
- Knowledge-base of natural science

**A2 - Problem analysis:** An ability to use appropriate knowledge and skills to identify, formulate, analyze, and solve complex engineering problems in order to reach substantiated conclusions.
Indicators:

- Problem identification and formulation
- Modeling
- Problem solving
- Analysis (uncertainty and incomplete knowledge)

A3 - Investigation: An ability to conduct investigations of complex problems by methods that include appropriate experiments, analysis and interpretation of data, and synthesis of information in order to reach valid conclusions.

Indicators:

- Background and Hypothesis Formulation
- Designing Experiments
- Conducting Experiments and Collection of Data
- Analysis and Interpretation of Data

A4 - Use of engineering tools: An ability to create, select, apply, adapt, and extend appropriate techniques, resources, and modern engineering tools to a range of engineering activities, from simple to complex, with an understanding of the associated limitations. Note: Programs should identify a list of essential tools and which courses cover their use.

Indicators:

- Ability to use appropriate engineering tools, techniques and resources
- Ability to select appropriate tools, techniques, and resources
- Demonstrate awareness of limitations of tools, create and extend tools as necessary

A5 - Communication skills: An ability to communicate complex engineering concepts within the profession and with society at large. Such ability includes reading, writing, speaking and listening, and the ability to comprehend and write effective reports and design documentation, and to give and effectively respond to clear instructions.

Indicators:

- Writing Process
- Research Methods
- Documentation

A6 - Life-long learning: An ability to identify and to address their own educational needs in a changing world in ways sufficient to maintain their competence and to allow them to contribute to the advancement of knowledge.

Indicators:

- Identifying missing knowledge and learning opportunities
- Continuous improvement and self-learning

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

TO: Dr. Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
FROM: Dr. A. Asif, Dean; Chair, GCS Council
DATE: October 4, 2019
RE: Curriculum Changes to the Undergraduate Programs in the Department of Electrical and Computer Engineering (ELEC 109)

Please find attached the changes made to the computer engineering program in the Department of Electrical and Computer Engineering.

Program Change:
- Modifications on computer engineering core course list
- Modifications on computer engineering options
- Modifications on computer engineering elective list
- ENGR 490, the multidisciplinary capstone project course is included in the core as an alternative to COEN 490
- Course prerequisite and contents are changed
- ELEC 353 is deleted

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee (ECSUSC) on September 9, 2019 and by the GCS Council on October 4, 2019. I would be grateful if you could put it on the agenda of the next APC meeting.
INTERNAL MEMORANDUM

TO: Dr. A. Asif, Dean; Chair, GCS Council
FROM: Dr. A. Akgunduz, Associate Dean, Academic Programs and Ugrad Activities
DATE: September 17, 2019
RE: Curriculum Changes to the Undergraduate Programs in the Department of Electrical and Computer Engineering (ELEC 109)

Please find attached the curriculum proposals from the Department of Electrical and Computer Engineering. The dossier includes the following modifications in their computer engineering program:

- Computer engineering core has been modified
- All computer engineering options have been modified
- Computer engineering electives have been modified
- Course title changes due to a previously approved Computer Science and Software Engineering curriculum change (COMP-95) has been reflected in the Computer Engineering curriculum
- ENGR 490 has been included as an alternative to COEN 490

The details of the aforementioned changes are provided in the attached ELEC-109 dossier.

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee on September 9, 2019. I would be grateful if you could put it on the agenda of the next GCS Council.
INTERNAL MEMORANDUM

DATE: August 21, 2019

TO: Dr. A. Akgunduz, Associate Dean, Academic Programs Faculty of Engineering and Computer Science

FROM: Dr. Yousef Shayan, Chair, Department of Electrical and Computer Engineering

SUBJECT: Undergraduate Changes 2020

Please find enclosed the curriculum package Dossier #109 for the undergraduate programs submitted by the Department of Electrical and Computer Engineering.

These changes have been approved at the Department Curriculum Committee meeting held, February 4 and March 11, 2019 and at the Department Council meeting held May 24, 2019. I would be grateful if you could put this on the agenda of the next Engineering and Computer Science Undergraduate Studies Committee meeting.

Included are the letter of support to extend the access of sciences courses to COEN students via the Science Electives list, from Dr. Alexandre Champagne, Professor, Chair, Department of Physics and Dr. Patrick Gulick, Professor, Chair, Department of Biology.

The Department has proposed the changes to our ECE Undergraduate Programs in this package which are summarized below. These changes are aimed at upgrading the Electrical and Computer Engineering program by deletion and introduction of some other courses in the core.
### Overview of Program Changes

<table>
<thead>
<tr>
<th>Item</th>
<th>Rationale</th>
<th>Resource Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>71.30.2 Computer Engineering Core</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. ELEC 321, 353 has been replaced with COEN 320 and 445</td>
<td>1. ELEC 321, 353 have been removed from the Computer core and COEN 320 and 445 have been added to the Computer core.</td>
<td>These changes are aimed at upgrading the Computer Engineering program by deletion and introducing some other courses into the core.</td>
</tr>
<tr>
<td>2. Science Electives List has been added in which 6 credits must be taken.</td>
<td>2. Science Elective List has been added where Coen students can choose 6 credits.</td>
<td>If a student takes 6.5 credits, the additional 0.5 credits will be counted towards the Computer Engineering Elective list.</td>
</tr>
<tr>
<td><strong>Computer Engineering Option Core:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Courses have been removed from the: Avionics and Embedded Systems Option Core.</td>
<td>1. COEN 320 has been removed from the Avionics and Embedded Systems option core. The minimum elective credits have been adjusted from 7 to 4. Total credits have been changed from 23.50 credits to 17.50.</td>
<td></td>
</tr>
<tr>
<td>2. Avionics and Embedded Option Electives has been added</td>
<td>2. A new section: Avionics and Embedded Options Electives has been added, with the following elective courses: AERO 417 and ELEC 483.</td>
<td></td>
</tr>
<tr>
<td>3. Credits changed in Biological and Biomedical Engineering Option Core</td>
<td>3. Minimum elective credits have been adjusted from 17.50 to 11.50. Total credits have been changed from 23.50 credits to 17.50.</td>
<td></td>
</tr>
<tr>
<td>4. Courses have been removed from Biological and Biomedical Engineering Option Electives</td>
<td>4. BIOL 261, 266 and PHYS 443 and 445 have been removed from Biological and Biomedical Engineering Option Electives.</td>
<td></td>
</tr>
<tr>
<td>5. Credits changed and courses removed from Pervasive Computing Option Core</td>
<td>5. COEN 320 and 445 have been removed from the Pervasive Computing Option Core. Minimum elective credits have been adjusted from 17.50 to 10.50. Total credits have been changed from 23.50 credits to 17.50.</td>
<td></td>
</tr>
<tr>
<td>6. Courses have been removed from the General Stream</td>
<td>6. COEN 320 and 445 have been removed from the General Stream. Total elective credits have been adjusted from 17 to</td>
<td></td>
</tr>
</tbody>
</table>
17.50. Total credits have been changed from 23.50 credits to 17.50.

**Computer Engineering Electives:**

1. Courses have been removed from **Hardware/Electronics/VLSI (A)**
2. Courses have been removed from **Real-Time and Software Systems (B)**
3. SOEN 342, 343 and 344 Course title changed in **Computer Science and Software Engineering (D)**
4. Courses have been removed from **Telecommunications, Networks and Signal Processing (E)**

1. ELEC 458 has been removed from Hardware/Electronics/VLSI electives
2. COEN 320 has been removed from Real-Time and Software Systems electives
3. **As per Senate approval on May 17, 2019 (COMP-95):**
   a. SOEN 342 changed to Software Requirements and Deployment
   b. SOEN 343 changed to Software Architecture and Design
   c. SOEN 344 changed to Advanced Software Architecture and Design
4. COEN 445 has been removed from Telecommunications, Networks and Signal Processing (E)

### Overview of Course Changes:

<table>
<thead>
<tr>
<th>Item</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COEN 390</strong></td>
<td>To improve this project course, COEN 244 is replaced with COEN 352 as pre-requisite. ENGR 301 is not required in COEN 390 and is removed as pre-requisite.</td>
</tr>
<tr>
<td><strong>COEN 490</strong></td>
<td>Pre-requisite is modified since ENGR 301 is required for this course and COEN 352 is a pre-requisite of COEN 390 and therefore it is removed. ELEC 311 is removed as pre-requisite since it is not required.</td>
</tr>
<tr>
<td><strong>ELEC 353</strong></td>
<td>This course is not required in the core of Computer engineering and therefore it is deleted.</td>
</tr>
<tr>
<td><strong>ELEC 473</strong></td>
<td>The change in description reflects the new equipment that was purchased to add a hands-on component to the course.</td>
</tr>
<tr>
<td><strong>COEN 243</strong></td>
<td>MIAE 215 and COEN 243 are very similar courses. COEN 243 does not contain a lab component, but we have allowed equivalency between these courses to help AERO students transfer between options. Exclusion note for MECH 215. MECH 215 has been renamed to MIAE 215.</td>
</tr>
<tr>
<td><strong>COEN 244</strong></td>
<td>MECH 215 has been renamed to MIAE 215.</td>
</tr>
</tbody>
</table>
**Program Change:** Computer Engineering

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

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

**Department:** Department of Electrical and Computer Engineering

**Program:** Computer Engineering

**Degree:** B.Eng

**Calendar Section/Graduate Page Number:** 71.30.2

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

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 212 Digital Systems Design I</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 231 Introduction to Discrete Mathematics</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 243 Programming Methodology I</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 244 Programming Methodology II</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 311 Computer Organization and Software</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 313 Digital Systems Design II</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 316 Computer Architecture and Design</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 317 Microprocessor Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 346 Operating Systems</td>
<td>3.50</td>
</tr>
</tbody>
</table>

### Proposed Text

The program in Computer Engineering consists of the Engineering Core, the Computer Engineering Core, and one of four choices as set out below. The normal length of the program is 120 credits.

Students in the Computer Engineering program are required to complete at least one work term administered by either the CIADI (§71.10.9) or co-op (§71.10.8) offices.

Only work terms undertaken after successfully completing 75 credits in the Computer Engineering program, including COEN 390, would satisfy this requirement.

In order to fulfill the work term, students must successfully complete one of the courses managed through CIADI or the Institute for Co-operative Education.

It should be noted that ultimately it is the responsibility of the student to find an approved work-term placement.

For information on co-op fees, see concordia.ca/academics/co-op/students/fees.

**Engineering Core:** (30.5 credits)

See §71.20.5.

**Computer Engineering Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 212 Digital Systems Design I</td>
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<tr>
<td>COEN 231 Introduction to Discrete Mathematics</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 243 Programming Methodology I</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 244 Programming Methodology II</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 311 Computer Organization and Software</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 313 Digital Systems Design II</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 316 Computer Architecture and Design</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 317 Microprocessor Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 346 Operating Systems</td>
<td>3.50</td>
</tr>
</tbody>
</table>

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*Calendar for academic year: 2020/2021
Implementation Month/Year: May 2020*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 352</td>
<td>Data Structures and Algorithms</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 390</td>
<td>Computer Engineering Product Design Project</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 490</td>
<td>Capstone Computer Engineering Design Project</td>
<td>4.00</td>
</tr>
<tr>
<td>ELEC 242</td>
<td>Continuous-Time Signals and Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 311</td>
<td>Electronics I</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 321</td>
<td>Introduction to Semiconductor Materials and Devices</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 342</td>
<td>Discrete-Time Signals and Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 353</td>
<td>Transmission Lines, Waves and Signal Integrity</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 372</td>
<td>Fundamentals of Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>ENGR 290</td>
<td>Introductory Engineering Team Design Project</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 341</td>
<td>Software Process</td>
<td>3.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 317</td>
<td>Microprocessor-Based Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 320</td>
<td>Introduction to Real-Time Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 346</td>
<td>Operating Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 352</td>
<td>Data Structures and Algorithms</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 390</td>
<td>Computer Engineering Product Design Project</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 445</td>
<td>Communication Networks and Protocols</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 490</td>
<td>Capstone Computer Engineering Design Project</td>
<td>4.00</td>
</tr>
<tr>
<td>ELEC 242</td>
<td>Continuous-Time Signals and Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 311</td>
<td>Electronics I</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 342</td>
<td>Discrete-Time Signals and Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 372</td>
<td>Fundamentals of Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>ENGR 290</td>
<td>Introductory Engineering Team Design Project</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 341</td>
<td>Software Process and Practices</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Students may choose one of the following options:**

1. Avionics and Embedded Systems Option
2. Biological and Biomedical Engineering (BME) Option
3. Pervasive Computing Option

Otherwise, students must follow IV.

**I. Avionics and Embedded Systems Option Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 480</td>
<td>Flight Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 482</td>
<td>Avionic Navigation Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 483</td>
<td>Integration of Avionics Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 320</td>
<td>Introduction to Real-Time Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 421</td>
<td>Embedded Systems and Design</td>
<td>4.00</td>
</tr>
</tbody>
</table>

**Minimum number of Elective credits:**

If a student takes 6.5 credits, the additional 0.5 credits will be counted towards the credits in Computer Engineering Elective list.

**II. Biological and Biomedical Engineering (BME) Option Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 206</td>
<td>Elementary Genetics</td>
<td>3.00</td>
</tr>
<tr>
<td>BIOL 261</td>
<td>Molecular and General Genetics</td>
<td>3.00</td>
</tr>
<tr>
<td>BIOL 266</td>
<td>Cell Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>CHEM 217</td>
<td>Introductory Analytical Chemistry I</td>
<td>3.00</td>
</tr>
<tr>
<td>CHEM 221</td>
<td>Introductory Organic Chemistry I</td>
<td>3.00</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>COEN 432</td>
<td>Applied Evolutionary and Learning Algorithms</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 434</td>
<td>Microfluidic Devices for Synthetic Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 442</td>
<td>Digital Signal Processing</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 445</td>
<td>Biological Signal Processing</td>
<td>3.00</td>
</tr>
<tr>
<td>BIOL-264</td>
<td>Molecular and General Genetics</td>
<td>3.00</td>
</tr>
<tr>
<td>BIOL-266</td>
<td>Cell Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>BIOL 367</td>
<td>Molecular Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 260</td>
<td>Introductory Biophysics</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 443</td>
<td>Quantitative Human Systems Physiology</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 445</td>
<td>Principles of Medical Imaging</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**III. Pervasive Computing Option Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 320</td>
<td>Introduction to Real-Time Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 421</td>
<td>Embedded Systems Design</td>
<td>4.00</td>
</tr>
<tr>
<td>COEN 424</td>
<td>Programming on the Cloud</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 445</td>
<td>Communication Networks and Protocols</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Minimum number of Elective credits: 10.00

Minimum number of Elective credits: 4.00

Minimum number of Elective credits: 3.00

Minimum number of Elective credits: 3.50

Minimum number of Elective credits: 4.00

Minimum number of Elective credits: 3.00

Minimum number of Elective credits: 3.00
### Pervasive Computing Option Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 422</td>
<td>Cyber-Physical Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 446</td>
<td>Internet of Things</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 447</td>
<td>Software-Defined Networking</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 367</td>
<td>Introduction to Digital Communications</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 472</td>
<td>Advanced Telecommunication Networks</td>
<td>3.50</td>
</tr>
<tr>
<td>SOEN 321</td>
<td>Information Systems Security</td>
<td>3.00</td>
</tr>
</tbody>
</table>

### IV. For students NOT selecting an option:

#### General Stream

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 320</td>
<td>Introduction to Real-Time Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 445</td>
<td>Communication Networks and Protocols</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Minimum number of Elective credits: 17.00

- at least 3 of these 17 credits must be taken from the General Stream Electives list.
- The rest may be chosen from the Computer Engineering Electives list.

#### General Stream Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 345</td>
<td>Software Testing and Validation</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 413</td>
<td>Hardware Functional Verification</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 321</td>
<td>Information Systems Security</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Minimum number of Elective credits: 11.50

- at least 9 of these credits must be taken from the Biological and Biomedical Engineering Option Electives list.
- Not more than one science courses (BIOL or PHYS) may be taken.
- The remaining credits may be chosen from the Computer Engineering Electives list.

#### Computer Engineering Electives

Courses are listed in groups to facilitate course selection. With adequate academic justification and with permission of the Department, students may take one technical elective course from the Electrical Engineering Electives list.

### Biological and Biomedical Engineering (BME) Option Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 367</td>
<td>Molecular Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 432</td>
<td>Applied Evolutionary and Learning Algorithms</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 434</td>
<td>Microfluidic Devices for Synthetic Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 442</td>
<td>Digital Signal Processing</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 445</td>
<td>Biological Signal Processing</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 260</td>
<td>Introductory Biophysics</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Minimum number of Elective credits: 17.50

- at least 9 of these credits must be taken from the Electrical Engineering Electives list.
- Not more than one science courses (BIOL or PHYS) may be taken.
- The remaining credits may be chosen from the Computer Engineering Electives list.

### III. Pervasive Computing Option Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 421</td>
<td>Embedded Systems Design</td>
<td>4.00</td>
</tr>
<tr>
<td>COEN 424</td>
<td>Programming on the Cloud</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Minimum number of Elective credits: 10.50

- at least 8 of these credits must be taken from the Pervasive Computing Option Electives list.
- The rest may be chosen from the Computer Engineering Electives list.

### Pervasive Computing Option Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>COEN 422</td>
<td>Cyber-Physical Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 446</td>
<td>Internet of Things</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 447</td>
<td>Software-Defined Networking</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 367</td>
<td>Introduction to Digital Communications</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 472</td>
<td>Advanced Telecommunication Networks</td>
<td>3.50</td>
</tr>
<tr>
<td>SOEN 321</td>
<td>Information Systems Security</td>
<td>3.00</td>
</tr>
</tbody>
</table>
### B. Real-Time and Software Systems

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COEN 320</td>
<td>Introduction to Real-Time Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 345</td>
<td>Software Testing and Validation</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 421</td>
<td>Embedded Systems Design</td>
<td>4.00</td>
</tr>
<tr>
<td>COEN 422</td>
<td>Cyber-Physical Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 424</td>
<td>Programming on the Cloud</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 432</td>
<td>Applied Evolutionary and Learning Algorithms</td>
<td>3.00</td>
</tr>
</tbody>
</table>

### C. Biological and Biomedical Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COEN 432</td>
<td>Applied Evolutionary and Learning Algorithms</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 433</td>
<td>Biological Computing and Synthetic Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 434</td>
<td>Microfluidic Devices for Synthetic Biology</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 444</td>
<td>Medical Image Processing</td>
<td>3.00</td>
</tr>
<tr>
<td>ELEC 445</td>
<td>Biological Signal Processing</td>
<td>3.00</td>
</tr>
</tbody>
</table>

### D. Computer Science and Software Engineering

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<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>COMP 335</td>
<td>Introduction to Theoretical Computer Science</td>
<td>3.00</td>
</tr>
<tr>
<td>COMP 353</td>
<td>Databases</td>
<td>4.00</td>
</tr>
<tr>
<td>COMP 371</td>
<td>Computer Graphics</td>
<td>4.00</td>
</tr>
<tr>
<td>COMP 426</td>
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<td>Parallel Programming</td>
<td>4.00</td>
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<tr>
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<td>Compiler Design</td>
<td>4.00</td>
</tr>
<tr>
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<td>Database Design</td>
<td>4.00</td>
</tr>
<tr>
<td>COMP 465</td>
<td>Design and Analysis of Algorithms</td>
<td>3.00</td>
</tr>
<tr>
<td>COMP 472</td>
<td>Artificial Intelligence</td>
<td>4.00</td>
</tr>
<tr>
<td>COMP 474</td>
<td>Intelligent Systems</td>
<td>4.00</td>
</tr>
<tr>
<td>SOEN 321</td>
<td>Information Systems Security</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 342</td>
<td>Software Requirements and Specifications</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 343</td>
<td>Software Architecture and Design</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 344</td>
<td>Software Architecture and Design</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 357</td>
<td>User Interface Design</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 448</td>
<td>Management of Evolving Systems</td>
<td>3.00</td>
</tr>
</tbody>
</table>

### E. Telecommunications, Networks and Signal Processing

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 445</td>
<td>Communication Networks and Protocols</td>
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</tbody>
</table>

### IV. For students NOT selecting an option:

#### General Stream

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COEN 345</td>
<td>Software Testing and Validation</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 413</td>
<td>Hardware Functional Verification</td>
<td>3.00</td>
</tr>
<tr>
<td>SOEN 321</td>
<td>Information Systems Security</td>
<td>3.00</td>
</tr>
</tbody>
</table>

#### Computer Engineering Electives

Courses are listed in groups to facilitate course selection. With adequate academic justification and with permission of the Department, students may take one technical elective course from the Electrical Engineering Electives list.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COEN 315</td>
<td>Digital Electronics</td>
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</tr>
<tr>
<td>COEN 413</td>
<td>Hardware Functional Verification</td>
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<tr>
<td>COEN 451</td>
<td>VLSI Circuit Design</td>
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<td>ELEC 312</td>
<td>Electronics II</td>
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<tr>
<td>ELEC 413</td>
<td>Mixed-Signal VLSI for Communication Systems</td>
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</tr>
<tr>
<td>ELEC 423</td>
<td>Introduction to Analog VLSI</td>
<td>4.00</td>
</tr>
<tr>
<td>COEN 345</td>
<td>Software Testing and Validation</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 421</td>
<td>Embedded Systems Design</td>
<td>4.00</td>
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<tr>
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<td>Introduction to Digital Communications</td>
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<td>Digital Signal Processing</td>
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</tr>
<tr>
<td>ELEC 465</td>
<td>Networks Security and Management</td>
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<tr>
<td>ELEC 470</td>
<td>Broadcast Signal Transmission</td>
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</tr>
<tr>
<td>ELEC 472</td>
<td>Advanced Telecommunication Networks</td>
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<tr>
<td>F. Control Systems</td>
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<tr>
<td>ELEC 473</td>
<td>Autonomy for Mobile Robots</td>
<td>3.00</td>
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<tr>
<td>ELEC 481</td>
<td>Linear Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>ELEC 482</td>
<td>System Optimization</td>
<td>3.50</td>
</tr>
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<td>ELEC 483</td>
<td>Real-Time Computer Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>ENGR 472</td>
<td>Robot Manipulators</td>
<td>3.50</td>
</tr>
<tr>
<td>G. Avionics</td>
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<td></td>
</tr>
<tr>
<td>AERO 417</td>
<td>Standards, Regulations and Certification</td>
<td>3.00</td>
</tr>
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<td>AERO 480</td>
<td>Flight Control Systems</td>
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<td>AERO 482</td>
<td>Avionic Navigation Systems</td>
<td>3.00</td>
</tr>
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<td>AERO 483</td>
<td>Integration of Avionics Systems</td>
<td>3.00</td>
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<tr>
<td>H. Other</td>
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<tr>
<td>COEN 498</td>
<td>Topics in Computer Engineering</td>
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<td>Special Technical Report</td>
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<td>SOEN 321</td>
<td>Information Systems Security</td>
<td>3.00</td>
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<td>SOEN 342</td>
<td>Software Requirements and Deployment</td>
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</tr>
<tr>
<td>SOEN 343</td>
<td>Software Architecture and Design</td>
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<td>Advanced Software Architecture and Design</td>
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</table>

Rationale:
The course change to modify the title for COEN 317 was made in dossier ELEC 109 and the course change to modify the title for SOEN 341 was made in dossier COMP 95.
All corresponding changes to program requirements for the BEng in Aerospace Engineering and Software Engineering programs were made in dossiers MECH 111, COMP 95 and ELEC 106.

Resource Implications:
Any resource implications can be found on the individual course change forms.
COURSE CHANGE: COEN 243

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Electrical and Computer Engineering
Program: Electrical and Computer Engineering
Degree: B.Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[X] Course Description

Present Text (from 2019/2020) calendar

COEN 243 Programming Methodology I (3 credits)
Prerequisite: MATH 204 (Cegep Mathematics 105).
This course is an introduction to computer hardware and software, programming and programming paradigms; essential procedural programming languages: key elements; reserved words and identifiers; data types and declarations; statements; arithmetic expressions; different modes of execution. Flow control using If-Else and Switch statements. Repetition using loops. Recursive functions. Pointers, references and dynamic data structures, function pointer. Lambda expression, data structures, built-in arrays, template arrays and vectors, n-dimensional vectors, sorting and searching; object oriented programming. User-defined classes, class attributes and methods. Object creation, use and destruction. Introduction to exception handling. Introduction to UML class diagrams. Lectures: three hours per week. Tutorial: two hours per week.
NOTE: Students who have received credit for COMP 248 may not take this course for credit.

Proposed Text

COEN 243 Programming Methodology I (3 credits)
Prerequisite: MATH 204 (Cegep Mathematics 105).
This course is an introduction to computer hardware and software, programming and programming paradigms; essential procedural programming languages: key elements; reserved words and identifiers; data types and declarations; statements; arithmetic expressions; different modes of execution. The course covers: flow control using If-Else and Switch statements, repetition using loops, recursive functions, pointers, references and dynamic data structures and function pointer. The course material also includes Lambda expression, data structures, built-in arrays, template arrays and vectors, n-dimensional vectors, sorting and searching. Students learn object-oriented programming, user-defined classes, class attributes and methods, object creation, use and destruction. Students are also introduced to exception handling and UML class diagrams. Lectures: three hours per week. Tutorial: two hours per week.
NOTE: Students who have received credit for COMP 248, MIAE 215 or MECH 215 may not take this course for credit.

Rationale:
MECH 215 and COEN 243 are very similar courses.
COEN 243 does not contain a lab component, but we have allowed equivalency between these courses to help AERO students transfer between options.
MECH 215 has been renamed to MIAE 215.

Resource Implications:
There are no additional resources implications.

Other Programs within which course is listed:
Aerospace Engineering
COURSE CHANGE: COEN 244 New Course Number: 

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Department of Electrical and Computer Engineering  
**Program:** Electrical and Computer Engineering  
**Degree:** B.Eng  
**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**  
[X] Course Description  
[ ] Course Number  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[ ] Other - Specify:  
[ ] Credit Value  
[X] Prerequisite

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

<table>
<thead>
<tr>
<th>Proposed Text</th>
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</thead>
</table>
| COEN 244 **Programming Methodology II** (3 credits)  
Prerequisite: COEN 243 or MECH 215.  
NOTE: Students who have received credit for COMP 249 may not take this course for credit. |

**Proposed Text**

| COEN 244 **Programming Methodology II** (3 credits)  
Prerequisite: COEN 243 or MECH 215 or MIAE 215  
This course covers advanced topics in computer programming. The course reviews object-oriented programming and further concepts, and revisits pointers. The following topics are covered: operator overloading (regular and advanced usage) fundamentals of file and stream processing. The course also covers class composition and inheritance (regular and advanced usage), virtual functions, polymorphism, static and dynamic binding and abstract classes. A case study of a small-scale object-oriented project along with simplified analysis, design and implementation are discussed. Other topics in the course include files and streams, exception handling (advanced usage), templates (class templates, template instantiation and type binding), sequence containers and STL algorithms, UML modelling and an introduction to open software repository. Lectures: three hours per week. Tutorial: two hours per week.  
NOTE: Students who have received credit for COMP 249 may not take this course for credit. |

**Rationale:**  
MECH 215 has been renamed to MIAE 215.

**Resource Implications:**  
There are no additional resources implications.

**Other Programs within which course is listed:**  
Aerospace Engineering
COURSE CHANGE: COEN 390  
New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Electrical and Computer Engineering
Program: Electrical and Computer Engineering
Degree: B.Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[ ] Course Number  [ ] Course Title
[ ] Course Description  [ ] Editorial
[ ] Course Deletion  [ ] Other - Specify:

Present Text (from 2019/2020) calendar

COEN 390  Computer Engineering Product Design Project (3 credits)
Prerequisite: Minimum of 45 credits in BEng (Computer); COEN 244, 311; ENGR 290, 301.

The Product Design Project reinforces skills introduced in ENGR 290, which include teamwork, project management, engineering design for a complex problem, technical writing, and technical presentation in a team environment. It also introduces students to product development. Students are assigned to teams and each team develops, defines, designs and builds a system and/or device under broad constraints set by the Department. Students present their product definition and design, and demonstrate that their system/device works at the end of the term. Tutorial: two hours per week. Equivalent laboratory time: six hours per week.

NOTE: All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

Proposed Text

COEN 390  Computer Engineering Product Design Project (3 credits)
Prerequisite: Minimum of 45 credits in BEng (Computer); COEN 311, 352; ENGR 290.

The Product Design Project reinforces skills introduced in ENGR 290, which include teamwork, project management, engineering design for a complex problem, technical writing, and technical presentation in a team environment. It also introduces students to product development. Students are assigned to teams and each team develops, defines, designs and builds a system and/or device under broad constraints set by the Department. Students present their product definition and design, and demonstrate that their system/device works at the end of the term. Tutorial: two hours per week. Equivalent laboratory time: six hours per week.

NOTE: All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

Rationale:
To improve this project course, COEN 244 is replaced with COEN 352 as prerequisite. ENGR 301 is not required in COEN 390 and is removed as prerequisite.

Resource Implications:
None

Other Programs within which course is listed:
None
## COURSE CHANGE: COEN 490

### New Course Number:

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

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

**Department:** Department of Electrical and Computer Engineering

**Program:** Electrical and Computer Engineering

**Degree:** B.Eng

**Calendar Section/Graduate Page Number:** 71.60

### Type of Change:

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</tbody>
</table>

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

**COEN 490 Capstone Computer Engineering Design Project** (4 credits)

Prerequisite: Minimum of 75 credits in BEng (Computer) or permission of the Department; ENGR 371; COEN 352, 390; ELEC 311 or SOEN 341.

Students are assigned to groups, and work together under faculty supervision to solve a complex interdisciplinary design problem — typically involving communications, control systems, electromagnetics, power electronics, software design, and/or hardware design. The project fosters teamwork between group members and allows students to develop their project management, technical writing, and technical presentation skills. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

**NOTE:** All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

### Proposed Text

**COEN 490 Capstone Computer Engineering Design Project** (4 credits)

Prerequisite: Minimum of 75 credits in BEng (Computer) or permission of the Department; ENGR 301, 371; COEN 390; SOEN 341.

Students are assigned to groups, and work together under faculty supervision to solve a complex interdisciplinary design problem — typically involving communications, control systems, electromagnetics, power electronics, software design, and/or hardware design. The project fosters teamwork between group members and allows students to develop their project management, technical writing, and technical presentation skills. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

**NOTE:** All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

### Rationale:

Prerequisite is modified since ENGR 301 is required for this course and COEN 352 is a prerequisite of COEN 390 and therefore it is removed. ELEC 311 is removed as prerequisite since it is not required.

### Resource Implications:

None

### Other Programs within which course is listed:

None
**COURSE CHANGE:** ELEC 353  
**New Course Number:**

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

<table>
<thead>
<tr>
<th>Faculty/School:</th>
<th>Gina Cody School of Engineering and Computer Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Department of Electrical and Computer Engineering</td>
</tr>
<tr>
<td>Program:</td>
<td>Computer Engineering</td>
</tr>
<tr>
<td>Degree:</td>
<td>B.Eng</td>
</tr>
<tr>
<td>Calendar Section/Graduate Page Number:</td>
<td>71.60</td>
</tr>
</tbody>
</table>

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

**Type of Change:**

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| **ELEC 353** — *Transmission Lines, Waves and Signal Integrity* *(3 credits)*  
Prerequisite: ELEC 242 or 264; ENGR 233—.  
Transmission lines and high-speed logic design. Intersymbol interference and eye patterns. Transmission line circuits in the frequency domain; rise time and bandwidth of digital signals. Maxwell's equations, plane waves, and antennas. Wireless communications and indoor propagation. Lectures: three hours per week. Tutorial: one hour per week.  |

**Rationale:**  
This course is not required in the core of computer engineering and therefore it is deleted.

**Resource Implications:**  
None

**Other Programs within which course is listed:**  
None
COURSE CHANGE: ELEC 473

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

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Department of Electrical and Computer Engineering
Program: Electrical and Computer Engineering
Degree: B.Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[X] Course Description

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

**ELEC 473 Autonomy for Mobile Robots** (3 credits)

**Rationale:**
The change in description reflects the new equipment that was purchased to add a hands-on component to the course.

**Resource Implications:**
None

**Other Programs within which course is listed:**
None

### Proposed Text

**ELEC 473 Autonomy for Mobile Robots** (3 credits)
Prerequisite: ELEC 372; ENGR 371. The course discusses application of autonomous wheeled robots such as autonomous cars, indoor robots, and (off-road) unmanned ground vehicles. Topics include robot motion models, robot odometry, robot sensor models (beam models of range finders and feature-based measurement models) and occupancy grid mapping. The course also covers state estimation for robot localization and introduction to simultaneous localization and mapping (SLAM). Assignments include algorithm implementation on a robot. Lectures: three hours per week.

**NOTE:** Students who have received credit for this topic under an ELEC 498 number may not take this course for credit.
Subject: Access to Physics courses for COEN undergraduate students

From: Dr. Alexandre Champagne, Chair, Department of Physics

To: Dr. William Lynch, Professor, Chair, Department of Electrical & Computer Engineering
Dr. Yousef Shayan, First-Year Program, Director, Department of Electrical & Computer Engineering

Cc: Dr. Laszlo Kalman, UPD, Department of Physics
Dr. Hassan Rivaz, Department of Electrical & Computer Engineering

Dear Dr. Lynch,

The Department of Physics is, and will be, happy to open its courses to all COEN undergraduate students and facilitate their registration on equal footing with Physics students. The pre-requisites for each course are listed in the calendar, and the specific courses which you have selected for your list of electives (PHYS 252, PHYS 284, PHYS 260, PHYS 367, PHYS 443, PHYS 445) only contains CEGEP-level science pre-requisites which will make it easy for most of your students to register.

Our Undergraduate Program Director is currently Dr. Laszlo Kalman and can be consulted if problem arise, but we expect none. All of the courses listed above currently have some extra available seats and we look forward to accommodate and serve your students.

Best wishes,

Alexandre Champagne
MEMO

To: Dr. William Lynch, Professor, Chair, Department of Electrical & Computer Engineering

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

Date: Jan 23, 2019

Subject: Access to Biology courses for undergraduate COEN students

Dear Dr. Lynch,

In 2015 The Biology Department had offered support for the Biological & Biomedical Engineering (BME) Option available to COEN students, to take courses in Biology. I am writing to extend the access to Biology courses to all COEN students.

I expect a modest increase in the number of students from COEN taking BIOL courses. This increase would not require new resources. The BIOL courses, listed in the addendum, can be taken by COEN students in sequence. Students who have taken the standard science profile at CEGEP, or the equivalent, will be able to take the first courses, BIOL 261 (Molecular and General Genetics) and BIOL 266 (Cell Biology). Students will be allowed to take the subsequent BIOL 367 (Molecular Biology) without the usual prerequisite of CHEM 271 (Biochemistry). The number of prerequisite courses for BIOL 368 was reduced by substituting BIOL 367 in lieu of other laboratory courses (CHEM212 or CHEM 217 or BIOL227).

I believe that both BME Option students and other COEN students interested in Biology, whether out of curiosity or for possible future research work, would benefit significantly from taking some BIOL courses, and hence, I pleased to offer support to both the BME Option and the science electives list proposal for other COEN students.

Please find in the addendum the pre-requisite structure that the Dept. of Biology will apply to COEN students wishing to register into BIOL courses. This is the same as that which was established (by memo, on Nov 10th, 2015) for the BME Option students, but is now extended to all COEN students.

Sincerely,

Patrick Gulick
INTERNAL MEMORANDUM

TO: Dr. Sandra Gabriele, Vice- Provost, Innovation in Teaching and Learning
FROM: Dr. A. Asif, Dean; Chair, GCS Council
DATE: October 4, 2019
RE: Curriculum changes to the undergraduate programs in the Department of Mechanical, Industrial and Aerospace Engineering (MECH-116)

Please find attached the changes made to the following programs in the Department of Mechanical, Industrial and Aerospace Engineering.

AEROSPACE ENGINEERING:
Program Change:
- Due to new course code (MIAE), both core and elective lists have been updated accordingly

MECHANICAL ENGINEERING CORE:
Program Change:
- Due to new course code (MIAE), both core and elective lists have been updated accordingly
- MIAE 380 is included in the core

INDUSTRIAL ENGINEERING:
Program Change:
- Due to new course code (MIAE), both core and elective lists have been updated accordingly
- MIAE 380 is included in the core

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee (ECSUSC) on September 9, 2019 and by the GCS Council on October 4, 2019. I would be grateful if you could put it on the agenda of the next APC meeting.
INTERNAL MEMORANDUM

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

FROM: Dr. A. Akgunduz, Associate Dean, Academic Programs and Ugrad Activities

DATE: September 27, 2019

RE: Curriculum changes to the undergraduate programs in the Department of Mechanical, Industrial and Aerospace Engineering (MECH-116)

Please find attached the curriculum proposals from the Department of Mechanical, Industrial and Aerospace Engineering. The dossier includes the following modifications to their mechanical engineering and aerospace engineering programs:

- New course subject area as MIAE is introduced and courses common to all three programs under MIAE are listed under the new subject area
- MIAE 380 Product Design and Development course is included in both mechanical engineering and industrial engineering programs as core course
- Editorial changes to the aerospace engineering program
- Editorial changes to the mechanical engineering program
- Editorial changes to the industrial engineering program
- Course description changes and prerequisite modifications

The details of the aforementioned changes are provided in the attached MECH-116 dossier.

This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee on September 9, 2019. I would be grateful if you could put it on the agenda of the next GCS Council.
INTERNAL MEMORANDUM

DATE: September 30, 2019

TO: Dr. A. Akgunduz, Associate Dean, Academic Programs
    Faculty of Engineering and Computer Science

FROM: Dr. Martin Pugh, Chair,
      Department of Mechanical, Industrial and Aerospace Engineering

SUBJECT: Undergraduate Changes 2020-21

Please find enclosed the Undergraduate curriculum package, MECH-116, submitted by the Department of Mechanical, Industrial and Aerospace Engineering (MIAE). These changes have been approved at the Department Council meeting held on September 20th, 2019.

I would be grateful if you could put this on the agenda of the next Engineering and Computer Science Undergraduate Studies Committee meeting.
## Overview of Program Changes:

<table>
<thead>
<tr>
<th>Item</th>
<th>Details and/or Rationale</th>
<th>Resource Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aerospace Engineering</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACTION(S):</strong></td>
<td>• Editorial</td>
<td>There are no additional resource implications.</td>
</tr>
<tr>
<td></td>
<td>• Requirements</td>
<td></td>
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<tr>
<td></td>
<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE.</td>
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<tr>
<td></td>
<td>• ENGR 411, Special Technical Report, has been added to all options as students may be missing one credit or less to graduate.</td>
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<tr>
<td></td>
<td>• MECH 426, Stress and Failure Analysis of Machinery, has been added to Option B. The option is called Aerospace Structures and Materials hence learning stress and failure of machinery is appropriate. The pre-requisite (AERO 481) is part of their core.</td>
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<tr>
<td></td>
<td>• AERO 444 has been removed from our course offerings.</td>
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<tr>
<td></td>
<td>• MECH 463 is removed as there are more relevant courses for the Aerospace industry such as AERO471 and AERO472.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AERO 446 and AERO 485 have been removed from Option B as students are only allowed to take one elective course (2.75cr). As MECH 351 and 361 are pre-requisites to these courses, and are not part of their core, they would not be able to take them as an elective.</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical Engineering</strong></td>
<td></td>
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<tr>
<td><strong>ACTION(S):</strong></td>
<td>• Editorial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The Technical elective INDU 440 has been changed to a core course and renamed to MIAE 380 as it will be a pre-requisite to another 300 level course, MECH 390.</td>
<td>An extra section of MIAE 380 will be needed as it is changing from a technical elective to a core course. This will be included in the normal teaching duties of the Department (the number of elective courses required has also been reduced by this change)</td>
</tr>
<tr>
<td></td>
<td>• Core and elective credits have been updated accordingly</td>
<td></td>
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<tr>
<td>Industrial Engineering</td>
<td>Action(S):</td>
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<tr>
<td>Editorial</td>
<td></td>
<td></td>
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<tr>
<td>Requirements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- AERO 446, Aerospace Vehicle Performance, has been added to the Electives (under Aerospace). It only requires MECH 361 as a pre-requisite and this is part of the core.

- Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE.

- The Technical elective INDU 440 has been changed to a core course and renamed to MIAE 380 as it will be a pre-requisite to another 300 level course, MECH 390 (Mechanical), as well as INDU 490.

- Core and elective credits have been updated accordingly.
## Overview of Course Changes:

<table>
<thead>
<tr>
<th>Item</th>
<th>Rationale</th>
<th>Resource Implications</th>
</tr>
</thead>
</table>
| **AERO 290 Introduction to Aircraft Design**  
**ACTION(S):**  
• Prerequisite Change  
ENCS 282 is added as a co-req/pre-req to AERO 290 so that students are familiarized with technical report writing and communication prior to finalizing their design report in AERO290. | There are no additional resource implication |
| **AERO 390 Aerospace Engineering Design Project**  
**ACTION(S):**  
• Prerequisite Change  
• Editorial  
AERO201 is removed from prerequisites because it is already covered by the AERO290 prerequisite requirement. | There are no additional resource implication |
| **AERO 444 Concurrent Engineering in Aerospace Systems**  
**ACTION(S):**  
• Course Deletion  
We are removing this course as a technical elective as the content of AERO444 is now redundant with the material that has been added into AERO 290 and 390. | There are no additional resource implication |
| **AERO 490 Capstone Aerospace Engineering Design Project**  
**ACTION(S):**  
• Prerequisite Change  
• Editorial  
• We are removing ENCS 282 as this requirement is already covered by the "200-before-400-level" rule.  
• Students are required to complete their program’s specific Capstone project unless they request to enroll in a multi-disciplinary project ENGR490. However, as Mechanical and Aerospace Engineering programs have many commonalities, we are allowing an exception for AERO490 students to switch to MECH490 on the condition that the project they select is aerospace based (such as SAE Aero, Space Concordia, etc.) | There are no additional resource implications. |
| **ENGR 391 Numerical Methods in Engineering**  
**ACTION(S):**  
• Prerequisite Change  
• Editorial  
Prerequisite: ENGR 213, 233; COMP 248 or COEN 243 or MECH 215 or MIAE 215 or BCEE 231. | There are no additional resource implications. |
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDU 410 Safety Engineering</strong></td>
<td></td>
<td>Prerequisite: MECH 311 or MIAE 311.</td>
</tr>
<tr>
<td><strong>INDU 411 Computer Integrated Manufacturing</strong></td>
<td></td>
<td>Prerequisite: MECH 311 or MIAE 311.</td>
</tr>
<tr>
<td><strong>INDU 440 Product Design and Development</strong></td>
<td></td>
<td>This course is now MIAE 380 Product Design and Development.</td>
</tr>
<tr>
<td><strong>INDU 490 Capstone Industrial Engineering Design Project</strong></td>
<td></td>
<td>We are removing ENCS 282 as this requirement is already covered by the “200-before-400-level” rule.</td>
</tr>
<tr>
<td><strong>MECH 211 Mechanical Engineering Drawing</strong></td>
<td></td>
<td>This course is now MIAE 211 Mechanical Engineering Drawing</td>
</tr>
<tr>
<td>Course</td>
<td>New Course</td>
<td>Action(S):</td>
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<tr>
<td>------------------------</td>
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<td>-------------------------------------------------</td>
</tr>
<tr>
<td>MECH 215 Programming</td>
<td>MIAE 215 Programming</td>
<td>• Course Number</td>
</tr>
<tr>
<td>for Mechanical and</td>
<td></td>
<td>• Editorial</td>
</tr>
<tr>
<td>Industrial Engineers</td>
<td></td>
<td>• This course is now MIAE 215</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• We have added the note because MECH 215 and COEN 243 are very similar courses. COEN 243 does not contain a lab component, but we have allowed equivalency between these courses to help AERO students transfer between options.</td>
</tr>
<tr>
<td>MECH 221</td>
<td>MIAE 221 Materials Science</td>
<td>• Course Number</td>
</tr>
<tr>
<td>Materials Science</td>
<td></td>
<td>• Editorial</td>
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<tr>
<td></td>
<td></td>
<td>• This course is now MIAE 221 Materials Science</td>
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<tr>
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<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.</td>
</tr>
<tr>
<td>MECH 311</td>
<td>MIAE 311 Manufacturing Processes</td>
<td>• Course Number</td>
</tr>
<tr>
<td>Manufacturing Processes</td>
<td></td>
<td>• Editorial</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• This course is now MIAE 311 Manufacturing Processes</td>
</tr>
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<td></td>
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<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.</td>
</tr>
<tr>
<td>MECH 313</td>
<td>MIAE 313 Machine Drawing and Design</td>
<td>• Course Number</td>
</tr>
<tr>
<td>Machine Drawing and</td>
<td></td>
<td>• Editorial</td>
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<tr>
<td>Design</td>
<td></td>
<td>• This course is now MIAE 313 Machine Drawing</td>
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<tr>
<td></td>
<td></td>
<td>and Design</td>
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<td></td>
<td></td>
<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.</td>
</tr>
<tr>
<td>MECH 321</td>
<td></td>
<td>• Prerequisite Change</td>
</tr>
<tr>
<td>Properties and Failure</td>
<td></td>
<td>• Editorial</td>
</tr>
<tr>
<td>of Materials</td>
<td></td>
<td>• This course is now MIAE 321 Properties and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Failure of Materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• There is considerable overlap between MECH 321 and AERO 481 thus student</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Prerequisite</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>MECH 344</td>
<td>Machine Element Design</td>
<td>Prerequisite: ENGR 244; MECH 313 or MIAE 313; MECH 343 previously or concurrently.</td>
</tr>
<tr>
<td>MECH 390</td>
<td>Mechanical Engineering Design project</td>
<td>Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.</td>
</tr>
<tr>
<td>MECH 412</td>
<td>Computer-Aided mechanical Design</td>
<td>Prerequisite: MECH 313 or MIAE 313.</td>
</tr>
<tr>
<td>MECH 414</td>
<td>Computer Numerically Controlled Machining</td>
<td>Prerequisite: MECH 311 or MIAE 311; MECH 412.</td>
</tr>
<tr>
<td>MECH 415</td>
<td>Advanced Programming for Mechanical and Industrial Engineers</td>
<td>Prerequisite: MECH 215 or MIAE 215.</td>
</tr>
<tr>
<td>MECH 421</td>
<td>Mechanical Shaping of metals and Plastics</td>
<td>Prerequisite: MECH 221 or MIAE 221.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Prerequisite Change</td>
</tr>
<tr>
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</tr>
<tr>
<td>MECH 422</td>
<td>Mechanical Behaviour of Polymer Composite Materials</td>
<td>Prerequisite: ENGR 233, 244; MECH 221 or MIAE 221.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Editorial</td>
</tr>
<tr>
<td>MECH 423</td>
<td>Casting, Welding, Heat Treating, and Non-Destructive Testing</td>
<td>Prerequisite: MECH 221 or MIAE 221.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Editorial</td>
</tr>
<tr>
<td>MECH 424</td>
<td>MEMS – Design and Fabrication</td>
<td>Prerequisite: MECH 311 or MIAE 311; MECH 343.</td>
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<tr>
<td></td>
<td></td>
<td>Editorial</td>
</tr>
<tr>
<td>MECH 425</td>
<td>Manufacturing of Composites</td>
<td>Prerequisite: MECH 311 or MIAE 311.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Editorial</td>
</tr>
<tr>
<td>MECH 426</td>
<td>Stress and Failure Analysis of Machinery</td>
<td>MECH 426 is an option elective for AERO (Option A) students. Its current prerequisite is MECH 321 but Option A students take the AERO 481 (a similar course) as part of their program.</td>
</tr>
<tr>
<td>MECH 463</td>
<td>Fluid Power Control</td>
<td>ELEC students cannot take MECH463 since it also requires ENGR361 as a prerequisite</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Editorial</td>
</tr>
<tr>
<td>MECH 472</td>
<td>Mechatronics and Automation</td>
<td>Prerequisite: MECH 215 or MIAE 215; MECH 371 previously or concurrently.</td>
</tr>
<tr>
<td><strong>MECH 490 Capstone Mechanical Engineering Design Project</strong></td>
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<tr>
<td><strong>ACTION(S):</strong></td>
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</tr>
<tr>
<td>• Prerequisite Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Editorial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• We are removing ENCS 282 as this requirement is already covered by the “200-before-400-level” rule.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Students are required to complete their program’s specific Capstone project unless they request to enroll in a multi-disciplinary project ENGR490. However, as Mechanical and Aerospace Engineering programs have many commonalities, we are allowing an exception, students the possibility to substitute MECH 490 with AERO490</td>
<td></td>
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</tr>
<tr>
<td>There are no additional resource implications as both AERO 490 and MECH 490 are offered each year.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Program and Courses Change Form**

**Program Change:** Aerospace Engineering Program Changes

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

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

**Department:** Mechanical, Industrial and Aerospace Engineering

**Program:** Aerospace Engineering

**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.55

**Type of Change:**

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

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

#### Course Requirements (BEng in Aerospace Engineering)

The program in Aerospace Engineering consists of the Engineering Core, the Aerospace Engineering Core, and option requirements as shown below. The minimum length of the program is 120 credits.

**Engineering Core (27 credits)**

See §71.20.5.

<table>
<thead>
<tr>
<th>AEROSPACE ENGINEERING CORE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 201 Introduction to Flight and Aerospace Systems</td>
<td>4.00</td>
</tr>
<tr>
<td>AERO 290 Introduction to Aircraft Design</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 371 Modelling and Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 390 Aerospace Engineering Design Project</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 417 Standards, Regulations and Certification</td>
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<tr>
<td>AERO 490 Capstone Aerospace Engineering Design Project</td>
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<tr>
<td>ENGR 242 Statics</td>
<td>3.00</td>
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<td>ENGR 243 Dynamics</td>
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</tr>
<tr>
<td>ENGR 244 Mechanics of Materials</td>
<td>3.75</td>
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<tr>
<td>ENGR 251 Thermodynamics I</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 361 Fluid Mechanics I</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Option Requirements**

Students in the Aerospace Engineering program must complete at least 56.75 elective credits from within one of options A, B, or C.

### Proposed Text

#### Course Requirements (BEng in Aerospace Engineering)

The program in Aerospace Engineering consists of the Engineering Core, the Aerospace Engineering Core, and option requirements as shown below. The minimum length of the program is 120 credits.

**Engineering Core (27 credits)**

See §71.20.5.

<table>
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<tr>
<th>AEROSPACE ENGINEERING CORE</th>
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<td>AERO 490 Capstone Aerospace Engineering Design Project*</td>
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<tr>
<td>ENGR 242 Statics</td>
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<tr>
<td>ENGR 243 Dynamics</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 244 Mechanics of Materials</td>
<td>3.75</td>
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<tr>
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<td>3.00</td>
</tr>
<tr>
<td>ENGR 361 Fluid Mechanics I</td>
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</tbody>
</table>

**Option Requirements**

Students in the Aerospace Engineering program must complete at least 56.75 elective credits from within one of options A, B, or C.

*NOTE: Students may replace AERO 490 with ENGR 490 if they are interested in a multidisciplinary project that requires collaboration with students from other engineering departments. In order for students to register in ENGR 490, their projects must be approved by the ENGR 490 Design Committee before the start of the fall term.*
### Option A — Aerodynamics and Propulsion

Students must complete the following compulsory courses from the Option Core and at least 6.5 credits from the Option Electives, with no more than one of the courses marked *. Students having a GPA of 3.0 or more may submit a request to take a graduate course as an elective.

#### Option A Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<td>Aerospace Vehicle Performance</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 455</td>
<td>Computational Fluid Dynamics for Aerospace</td>
<td>3.75</td>
</tr>
<tr>
<td>AERO 462</td>
<td>Turbomachinery and Propulsion</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 464</td>
<td>Aerodynamics</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 465</td>
<td>Gas Turbine Design</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 481</td>
<td>Materials Engineering for Aerospace</td>
<td>3.50</td>
</tr>
<tr>
<td>ENGR 311</td>
<td>Transform Calculus and Partial Differential Equations</td>
<td>3.00</td>
</tr>
<tr>
<td>MECH 211</td>
<td>Mechanical Engineering Drawing</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 215</td>
<td>Programming for Mechanical and Industrial Engineers</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 224</td>
<td>Materials Science</td>
<td>3.00</td>
</tr>
<tr>
<td>MECH 343</td>
<td>Theory of Machines</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 351</td>
<td>Thermodynamics II</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 352</td>
<td>Heat Transfer I</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 361</td>
<td>Fluid Mechanics II</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 461</td>
<td>Gas Dynamics</td>
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**Total Credits:** 50.25

#### Option A Electives

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<th>Course Code</th>
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<th>Credits</th>
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<td>AERO 444</td>
<td>Concurrent Engineering in Aerospace Systems</td>
<td>3.00</td>
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<tr>
<td>AERO 471</td>
<td>Aircraft Hydro-Mechanical and Fuel Systems</td>
<td>3.50</td>
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<tr>
<td>AERO 472</td>
<td>Aircraft Pneumatic and Electrical Power Systems</td>
<td>3.50</td>
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<tr>
<td>AERO 480</td>
<td>Flight Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 482</td>
<td>Avionic Navigation Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 485</td>
<td>Introduction to Space Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 486*</td>
<td>Aircraft Stress Analysis</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Honours Research Project</td>
<td>3.00</td>
</tr>
<tr>
<td>INDU 372</td>
<td>Quality Control and Reliability</td>
<td>3.00</td>
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### Option Requirements

Students in the Aerospace Engineering program must complete at least 56.75 elective credits from within one of options A, B, or C.

#### Option A — Aerodynamics and Propulsion

Students must complete the following compulsory courses from the Option Core and at least 6.5 credits from the Option Electives, with no more than one of the courses marked *. Students having a GPA of 3.0 or more may submit a request to take a graduate course as an elective.

#### Option A Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AERO 446</td>
<td>Aerospace Vehicle Performance</td>
<td>3.00</td>
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<td>AERO 455</td>
<td>Computational Fluid Dynamics for Aerospace</td>
<td>3.75</td>
</tr>
<tr>
<td>AERO 462</td>
<td>Turbomachinery and Propulsion</td>
<td>3.00</td>
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<tr>
<td>AERO 464</td>
<td>Aerodynamics</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 465</td>
<td>Gas Turbine Design</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 481</td>
<td>Materials Engineering for Aerospace</td>
<td>3.50</td>
</tr>
<tr>
<td>ENGR 311</td>
<td>Transform Calculus and Partial Differential Equations</td>
<td>3.00</td>
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<tr>
<td>MECH 211</td>
<td>Mechanical Engineering Drawing</td>
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</tr>
<tr>
<td>MECH 215</td>
<td>Programming for Mechanical and Industrial Engineers</td>
<td>3.50</td>
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<tr>
<td>MECH 224</td>
<td>Materials Science</td>
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<tr>
<td>MECH 343</td>
<td>Theory of Machines</td>
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<tr>
<td>MECH 351</td>
<td>Thermodynamics II</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 352</td>
<td>Heat Transfer I</td>
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<tr>
<td>MIAE 221</td>
<td>Materials Science</td>
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**Total Credits:** 50.25

#### Option A Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AERO 431</td>
<td>Principles of Aeroelasticity</td>
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<tr>
<td>AERO 471</td>
<td>Aircraft Hydro-Mechanical and Fuel Systems</td>
<td>3.50</td>
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<tr>
<td>AERO 472</td>
<td>Aircraft Pneumatic and Electrical Power Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 480</td>
<td>Flight Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 482</td>
<td>Avionic Navigation Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 485</td>
<td>Introduction to Space Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>MECH 368</td>
<td>Electronics for Mechanical Engineers</td>
<td>3.50</td>
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<td>MECH 375*</td>
<td>Mechanical Vibrations</td>
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<tr>
<td>MECH 411</td>
<td>Instrumentation and Measurements</td>
<td>3.50</td>
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<td>MECH 426*</td>
<td>Stress and Failure Analysis of Machinery</td>
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<td>Heat Transfer II</td>
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<tr>
<td>MECH 453</td>
<td>Heating, Ventilation and Air Conditioning Systems</td>
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<tr>
<td>MECH 460*</td>
<td>Finite Element Analysis</td>
<td>3.75</td>
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<tr>
<td>MECH 463</td>
<td>Fluid Power Control</td>
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<tr>
<td>MECH 498</td>
<td>Topics in Mechanical Engineering</td>
<td>3.00</td>
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</table>

2. **Option B — Aerospace Structures and Materials**

Students must complete the following compulsory courses from the Option Core and at least 2.75 credits from the Option Electives. Students having a GPA of 3.0 or more may submit a request to take a graduate course as an elective.

### Option B Core

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<tr>
<td>AERO 481</td>
<td>Materials Engineering for Aerospace</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 486</td>
<td>Aircraft Stress Analysis</td>
<td>3.00</td>
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<tr>
<td>AERO 487</td>
<td>Design of Aircraft Structures</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 311</td>
<td>Transform Calculus and Partial Differential Equations</td>
<td>3.00</td>
</tr>
<tr>
<td>MECH 211</td>
<td>Mechanical Engineering Drawing</td>
<td>3.50</td>
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<tr>
<td>MECH 245</td>
<td>Programming for Mechanical and Industrial Engineers</td>
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<td>MECH 221</td>
<td>Materials Science</td>
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</tr>
<tr>
<td>MECH 311</td>
<td>Manufacturing Processes</td>
<td>3.75</td>
</tr>
<tr>
<td>MECH 343</td>
<td>Machine Drawing and Design</td>
<td>3.50</td>
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<tr>
<td>MECH 343</td>
<td>Theory of Machines</td>
<td>3.50</td>
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<td>MECH 352</td>
<td>Heat Transfer I</td>
<td>3.50</td>
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<tr>
<td>MECH 375</td>
<td>Mechanical Vibrations</td>
<td>3.50</td>
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<td>MECH 411</td>
<td>Instrumentation and Measurements</td>
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</tr>
<tr>
<td>MECH 412</td>
<td>Computer-Aided Mechanical Design</td>
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<tr>
<td>MECH 460</td>
<td>Finite Element Analysis</td>
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**Total Credits for Option B Core: 54.00**

### Option B Electives

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<td>AERO 446*</td>
<td>Aerospace Vehicle Performance</td>
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**Total Credits for Option B Electives: 54.00**
<table>
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<tbody>
<tr>
<td>AERO 455*</td>
<td>Computational Fluid Dynamics for Aerospace</td>
<td>3.75</td>
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<tr>
<td>AERO 471</td>
<td>Aircraft Hydro-Mechanical and Fuel Systems</td>
<td>3.50</td>
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<td>AERO 472</td>
<td>Aircraft Pneumatic and Electrical Power Systems</td>
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<td>AERO 480*</td>
<td>Flight Control Systems</td>
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<td>Avionic Navigation Systems</td>
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<tr>
<td>AERO 485</td>
<td>Introduction to Space Systems</td>
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<td>ENGR 412</td>
<td>Honours Research Project</td>
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<td>INDU 372</td>
<td>Quality Control and Reliability</td>
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<td>Machine Element Design</td>
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<td>Thermodynamics II</td>
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<td>Electronics for Mechanical Engineers</td>
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<tr>
<td>MECH 422</td>
<td>Mechanical Behaviour of Polymer Composite Materials</td>
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<td>MECH 425</td>
<td>Manufacturing of Composites</td>
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<tr>
<td>MECH 476</td>
<td>Generative Design and Manufacturing in Engineering</td>
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<tr>
<td>MECH 498</td>
<td>Topics in Mechanical Engineering</td>
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</table>

3. Option C — Avionics and Aerospace Systems

Students must complete the following compulsory courses from the Option Core and at least 15.25 credits from the Option Electives. Students having a GPA of 3.0 or more may submit a request to take a graduate course as an elective.

**Option C Core**

<table>
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<td>Avionics Navigation Systems</td>
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<td>AERO 483</td>
<td>Integration of Avionics Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 212</td>
<td>Digital Systems Design I</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 231</td>
<td>Introduction to Discrete Mathematics</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 243</td>
<td>Programming Methodology I</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 244</td>
<td>Programming Methodology II</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 311</td>
<td>Computer Organization and Software</td>
<td>3.50</td>
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<tr>
<td>COEN 352</td>
<td>Data Structures and Algorithms</td>
<td>3.00</td>
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<tr>
<td>ELEC 242</td>
<td>Continuous-Time Signals and Systems</td>
<td>3.00</td>
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<tr>
<td>ELEC 273</td>
<td>Basic Circuit Analysis</td>
<td>3.50</td>
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<td>ELEC 342</td>
<td>Discrete-Time Signals and Systems</td>
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<td>ELEC 483</td>
<td>Real-Time Computer Control Systems</td>
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<td>SOEN 341</td>
<td>Software Process and Practices</td>
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**Option B Electives**

<table>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>Computational Fluid Dynamics for Aerospace</td>
<td>3.75</td>
</tr>
<tr>
<td>AERO 471</td>
<td>Aircraft Hydro-Mechanical and Fuel Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 472</td>
<td>Aircraft Pneumatic and Electrical Power Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 480*</td>
<td>Flight Control Systems</td>
<td>3.50</td>
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<tr>
<td>AERO 482*</td>
<td>Avionic Navigation Systems</td>
<td>3.00</td>
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<td>ENGR 411</td>
<td>Special Technical Report</td>
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<td>ENGR 412</td>
<td>Honours Research Project</td>
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<tr>
<td>INDU 372</td>
<td>Quality Control and Reliability</td>
<td>3.00</td>
</tr>
<tr>
<td>MECH 344</td>
<td>Machine Element Design</td>
<td>3.00</td>
</tr>
<tr>
<td>MECH 351*</td>
<td>Thermodynamics II</td>
<td>3.50</td>
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<td>MECH 361*</td>
<td>Fluid Mechanics II</td>
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<td>MECH 368</td>
<td>Electronics for Mechanical Engineers</td>
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<td>MECH 422</td>
<td>Mechanical Behaviour of Polymer Composite Materials</td>
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<td>Generative Design and Manufacturing in Engineering</td>
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<tr>
<td>MECH 498</td>
<td>Topics in Mechanical Engineering</td>
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</table>

3. Option C — Avionics and Aerospace Systems

Students must complete the following compulsory courses from the Option Core and at least 15.25 credits from the Option Electives. Students having a GPA of 3.0 or more may submit a request to take a graduate course as an elective.

**Option C Core**

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<td>Avionics Navigation Systems</td>
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<td>Integration of Avionics Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>COEN 212</td>
<td>Digital Systems Design I</td>
<td>3.50</td>
</tr>
<tr>
<td>COEN 231</td>
<td>Introduction to Discrete Mathematics</td>
<td>3.00</td>
</tr>
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<td>COEN 243</td>
<td>Programming Methodology I</td>
<td>3.00</td>
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<td>COEN 244</td>
<td>Programming Methodology II</td>
<td>3.00</td>
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<td>COEN 311</td>
<td>Computer Organization and Software</td>
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<td>COEN 352</td>
<td>Data Structures and Algorithms</td>
<td>3.00</td>
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<td>ELEC 242</td>
<td>Continuous-Time Signals and Systems</td>
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<td>ELEC 273</td>
<td>Basic Circuit Analysis</td>
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<td>Software Process and Practices</td>
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### Option C Electives

<table>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>Aircraft Hydro-Mechanical and Fuel Systems</td>
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<td>AERO 472</td>
<td>Aircraft Pneumatic and Electrical Power Systems</td>
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<td>COEN 313</td>
<td>Digital Systems Design II</td>
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<tr>
<td>COEN 317</td>
<td>Microprocessor-Based Systems</td>
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<td>COEN 320</td>
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<td>COEN 346</td>
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<td>Fundamentals of Applied Electromagnetics</td>
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<td>ELEC 311</td>
<td>Electronics I</td>
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</tr>
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<td>ELEC 351</td>
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<tr>
<td>ELEC 367</td>
<td>Introduction to Digital Communications</td>
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<td>ELEC 433</td>
<td>Power Electronics</td>
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<td>ELEC 481</td>
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<td>System Optimization</td>
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<tr>
<td>SOEN 343</td>
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**Rationale:**

Courses added:

- ELEC 483 Real-Time Computer Control Systems 3.50
- SOEN 341 Software Process and Practices 3.00

**Option C Electives**

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</table>
• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE.

• ENGR 411, Special Technical Report, has been added to all options as students may be missing one credit or less to graduate.

• MECH 426, Stress and Failure Analysis of Machinery, has been added to Option B. The option is called Aerospace Structures and Materials hence learning stress and failure of machinery is appropriate. The pre-requisite (AERO 481) is part of their core.

Courses removed:

• AERO 444 has been removed from our course offerings

• MECH 463 is removed as there are more relevant courses for the Aerospace industry such as AERO471 and AERO472.

• AERO 446 and AERO 485 - Option B students are only allowed to take one elective course (2.75 cr). As MECH 351 and 361 are pre-requisites to these courses, and are not part of their core, they would not be able to take them as an elective.

Resource Implications:
There are no additional resource implications.
Program and Courses Change Forms for Document: MECH-116 Version: 5

Program Change: Mechanical Engineering Program Changes

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.40.1

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

Present Text (from 2019/2020) Calendar

71.40.1 Course Requirements (BEng in Mechanical Engineering)

The program in Mechanical Engineering consists of the Engineering Core, the Mechanical Engineering Core, and elective credits as shown below. The minimum length of the program is 120 credits.

Engineering Core (27 credits)
See §71.20.5.

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<thead>
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<tbody>
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<tr>
<td>ENGR 243 Dynamics</td>
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<td>ENGR 311 Transform Calculus and Partial Differential Equations</td>
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<tr>
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<tr>
<td>MECH 321 Properties and Failure of Materials</td>
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<td>MECH 352 Heat Transfer I</td>
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<td>MECH 361 Fluid Mechanics II</td>
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Proposed Text

71.40.1 Course Requirements (BEng in Mechanical Engineering)

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Electives

Students in the Mechanical Engineering program must complete at least 15.25 elective credits from the list of courses below. Courses are listed in groups to facilitate the selection of courses in a particular area of the field.

### Aerospace

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<tr>
<td>AERO 455</td>
<td>Computational Fluid Dynamics for Aerospace Appli</td>
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<tr>
<td>AERO 462</td>
<td>Turbomachinery and Propulsion</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 464</td>
<td>Aerodynamics</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 465</td>
<td>Gas Turbine Design</td>
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</tr>
<tr>
<td>AERO 480</td>
<td>Flight Control Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>AERO 482</td>
<td>Avionic Navigation Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 485</td>
<td>Introduction to Space Systems</td>
<td>3.00</td>
</tr>
<tr>
<td>AERO 486</td>
<td>Aircraft Stress Analysis</td>
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</tr>
<tr>
<td>AERO 487</td>
<td>Design of Aircraft Structures</td>
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<tr>
<td>ENGR 411</td>
<td>Special Technical Report</td>
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<td>ENGR 412</td>
<td>Honours Research Project</td>
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### Design and Manufacturing

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<tr>
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<td>Quality Control and Reliability</td>
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<tr>
<td>INDU-440</td>
<td>Product Design and Development</td>
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</table>

*NOTE: Students may replace MECH 490 with ENGR 490 if they are interested in a multidisciplinary project that requires collaboration with students from other engineering departments. In order for students to register in ENGR 490, their projects must be approved by the ENGR 490 Design Committee before the start of the fall term.*

Electives

Students in the Mechanical Engineering program must complete at least 11.75 elective credits from the list of courses below. Courses are listed in groups to facilitate the selection of courses in a particular area of the field.

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Total: 81.25
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**Systems and Mechatronics**

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**Thermo-Fluids and Propulsion**

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### MECH 498 Topics in Mechanical Engineering 3.00

<table>
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<th>Rationale:</th>
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<tr>
<td>• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE.</td>
</tr>
<tr>
<td>• The Technical elective INDU 440 has been changed to a core course and renamed to MIAE 380 as it will be a pre-requisite to another 300 level course, MECH 390.</td>
</tr>
<tr>
<td>• Core and elective credits have been updated accordingly.</td>
</tr>
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<td>• AERO 446, Aerospace Vehicle Performance, has been added to the Electives (under Aerospace). It only requires MECH 361 as a pre-requisite and this is part of the core.</td>
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<th>Resource Implications:</th>
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<tr>
<td>An extra section of MIAE 380 will be needed as it is changing from a technical elective to a core course. This will be included in the normal teaching duties of the Department (the number of elective courses required has also been reduced by this change).</td>
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</table>
**Program and Courses Change Forms for Document: MECH-116 Version: 5**

**Program Change:** Industrial Engineering Program Changes

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Industrial Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.40.2

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

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**Present Text (from 2019/2020) Calendar**

<table>
<thead>
<tr>
<th>Course Requirements (BEng in Industrial Engineering)</th>
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</table>
| Engineering Core (27 credits)  
See §71.20.5. |
| **Industrial Engineering Core** | **Credits** |
| ENGR 245 Mechanical Analysis | 3.00 |
| ENGR 251 Thermodynamics I | 3.00 |
| ENGR 311 Transform Calculus and Partial Differential Equations | 3.00 |
| INDU 211 Introduction to Production and Manufacturing Systems | 3.00 |
| INDU 311 Simulation of Industrial Systems | 3.50 |
| INDU 320 Production Engineering | 3.00 |
| INDU 321 Lean Manufacturing | 3.00 |
| INDU 323 Operations Research I | 3.50 |
| INDU 324 Operations Research II | 3.50 |
| INDU 330 Engineering Management | 3.00 |
| INDU 342 Logistics Network Models | 3.00 |
| INDU 371 Stochastic Models in Industrial Engineering | 3.00 |
| INDU 372 Quality Control and Reliability | 3.00 |
| INDU 411 Computer Integrated Manufacturing | 3.50 |
| INDU 412 Human Factors Engineering | 3.50 |

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**Proposed Text**

<table>
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<th>Course Requirements (BEng in Industrial Engineering)</th>
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<tr>
<td>The program in Industrial Engineering consists of the Engineering Core, the Industrial Engineering Core, and elective credits as shown below. Students must select one course from the list of Basic and Natural Science courses as part of the Industrial Engineering Core courses. The minimum length of the program is 120 credits.</td>
</tr>
<tr>
<td><strong>Industrial Engineering Core</strong></td>
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<td>ENGR 251 Thermodynamics I</td>
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<td>INDU 423</td>
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<td>MIAE 215</td>
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<td>MIAE 221</td>
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<td>MECH 314</td>
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<td>MECH 343</td>
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One Basic and Natural Science course from the list below.

78.75

**Basic and Natural Science Courses**

Students must complete one course from the following list:

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<tr>
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<td>Elementary Genetics</td>
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<tr>
<td>BIOL 261</td>
<td>Molecular and General Genetics</td>
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<tr>
<td>CHEM 217</td>
<td>Introductory Analytical Chemistry I</td>
<td>3.00</td>
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<td>CHEM 221</td>
<td>Introductory Organic Chemistry I</td>
<td>3.00</td>
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<tr>
<td>GEOL 206</td>
<td>Earthquakes, Volcanoes, and Plate Tectonics</td>
<td>3.00</td>
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<tr>
<td>GEOL 208</td>
<td>The Earth, Moon and the Planets</td>
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</tr>
<tr>
<td>PHYS 252</td>
<td>Optics</td>
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<td>PHYS 385</td>
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**Electives**

Students must complete a minimum of 44.25 credits from the following courses, including at least three INDU courses and with no more than one of the courses marked *. With permission of the Department, students may take one technical elective course from another program or Faculty.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>BSTA 478*</td>
<td>Data Mining Techniques</td>
<td>3.00</td>
</tr>
<tr>
<td>BTM 430*</td>
<td>Enterprise Resource Planning and Information Technology Integration</td>
<td>3.00</td>
</tr>
<tr>
<td>BTM 480*</td>
<td>Project Management</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Basic and Natural Science Courses**

Students must complete one course from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BIOL 206</td>
<td>Elementary Genetics</td>
<td>3.00</td>
</tr>
<tr>
<td>BIOL 261</td>
<td>Molecular and General Genetics</td>
<td>3.00</td>
</tr>
<tr>
<td>CHEM 217</td>
<td>Introductory Analytical Chemistry I</td>
<td>3.00</td>
</tr>
<tr>
<td>CHEM 221</td>
<td>Introductory Organic Chemistry I</td>
<td>3.00</td>
</tr>
<tr>
<td>GEOL 206</td>
<td>Earthquakes, Volcanoes, and Plate Tectonics</td>
<td>3.00</td>
</tr>
<tr>
<td>GEOL 208</td>
<td>The Earth, Moon and the Planets</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 252</td>
<td>Optics</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 260</td>
<td>Introductory Biophysics</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 270</td>
<td>Introduction to Energy and Environment</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 284</td>
<td>Introduction to Astronomy</td>
<td>3.00</td>
</tr>
<tr>
<td>PHYS 385</td>
<td>Astrophysics</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Electives**

Students must complete a minimum of 11.25 credits from the following courses, including at least three INDU courses and with no more than one of the courses marked *. With permission of the Department, students may take one technical elective course from another program or Faculty.

<table>
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<td>3.00</td>
</tr>
</tbody>
</table>

**NOTE:** Students may replace INDU 490 with ENGR 490 if they are interested in a multidisciplinary project that requires collaboration with students from other engineering departments. In order for students to register in ENGR 490, their projects must be approved by the ENGR 490 Design Committee before the start of the fall term.
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 361</td>
<td>Fluid Mechanics I</td>
<td>3.00</td>
</tr>
<tr>
<td>ENGR 411</td>
<td>Special Technical Report</td>
<td>1.00</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Honours Research Project</td>
<td>3.00</td>
</tr>
<tr>
<td>INDU 410</td>
<td>Safety Engineering</td>
<td>3.00</td>
</tr>
<tr>
<td>INDU 431</td>
<td>Quantitative Methods in Health-care Systems</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>INDU 440</strong></td>
<td><strong>Product Design and Development</strong></td>
<td><strong>3.00</strong></td>
</tr>
<tr>
<td>INDU 441</td>
<td>Introduction to Six Sigma</td>
<td>3.00</td>
</tr>
<tr>
<td>INDU 466</td>
<td>Decision Models in Service Sector</td>
<td>3.00</td>
</tr>
<tr>
<td>INDU 475</td>
<td>Advanced Concepts in Quality Improvement</td>
<td>3.00</td>
</tr>
<tr>
<td>INDU 480</td>
<td>Cases in Industrial Engineering</td>
<td>3.00</td>
</tr>
<tr>
<td>INDU 498</td>
<td>Topics in Industrial Engineering</td>
<td>3.00</td>
</tr>
<tr>
<td>MANA 300*</td>
<td>Entrepreneurship: Launching Your Business</td>
<td>3.00</td>
</tr>
<tr>
<td>MECH 321</td>
<td>Properties and Failure of Materials</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 370</td>
<td>Modelling and Analysis of Dynamic Systems</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 371</td>
<td>Analysis and Design of Control Systems</td>
<td>3.75</td>
</tr>
<tr>
<td>MECH 412</td>
<td>Computer-Aided Mechanical Design</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 415</td>
<td>Advanced Programming for Mechanical and Industrial Engineers</td>
<td>3.00</td>
</tr>
<tr>
<td>MECH 421</td>
<td>Mechanical Shaping of Metals and Plastics</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 423</td>
<td>Casting, Welding, Heat Treating and Non-Destructive Testing</td>
<td>3.50</td>
</tr>
<tr>
<td>MECH 425</td>
<td>Manufacturing of Composites</td>
<td>3.50</td>
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</tr>
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</table>

Rationale:
• Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE.

• The Technical elective INDU 440 has been changed to a core course and renamed to MIAE 380 as it will be a pre-requisite to another 300 level course, MECH 390 (Mechanical), as well as INDU 490.

• Core and elective credits have been updated accordingly.

Resource Implications:
An extra section of MIAE 380 will be needed as it is changing from a technical elective to a core course. This will be included in the normal teaching duties of the Department (the number of elective courses required has also been reduced by this change).
COURSE CHANGE: AERO 290

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Aerospace Engineering
Degree: B.Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[X] Prerequisite

Present Text (from 2019/2020) calendar

AERO 290 Introduction to Aircraft Design (3 credits)
Prerequisite: AERO 201. Students taking this course will work as part of a multidisciplinary team to solve an assigned aerospace conceptual design problem. The course provides introductory, design-related knowledge on aerospace design topics including structural layout, powerplant integration, integrated systems requirements (such as avionics, electrical, flight controls, hydraulic, fuel, air, pressurization) and preliminary performance predictions. Lectures instruct students on the conceptual design process; aircraft sizing including take-off weight, empty weight and fuel-fraction estimates; mission analysis and trade studies; airfoil selection; constraint diagrams for thrust-to-weight and wing loading estimation; fuselage layout, engines and control surface sizing; structural and systems layout; introductory stability, control and performance; and cost analysis methods. Lectures: three hours per week. Tutorial: two hours per week.

Proposed Text

AERO 290 Introduction to Aircraft Design (3 credits)
Prerequisite: AERO 201; ENCS 282 previously or concurrently. Students taking this course will work as part of a multidisciplinary team to solve an assigned aerospace conceptual design problem. The course provides introductory, design-related knowledge on aerospace design topics including structural layout, powerplant integration, integrated systems requirements (such as avionics, electrical, flight controls, hydraulic, fuel, air, pressurization) and preliminary performance predictions. Lectures instruct students on the conceptual design process; aircraft sizing including take-off weight, empty weight and fuel-fraction estimates; mission analysis and trade studies; airfoil selection; constraint diagrams for thrust-to-weight and wing loading estimation; fuselage layout, engines and control surface sizing; structural and systems layout; introductory stability, control and performance; and cost analysis methods. Lectures: three hours per week. Tutorial: two hours per week.

Rationale:
ENCS 282 is added as a co-req/pre-req to AERO 290 so that students are familiarized with technical report writing and communication prior to finalizing their design report in AERO 290.

Resource Implications:
There are no additional resource implications.

Other Programs within which course is listed:
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: MECH-116 VERSION: 5

**COURSE CHANGE:** AERO 390  
**New Course Number:**

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

<table>
<thead>
<tr>
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</thead>
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<tr>
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<td>Program:</td>
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<td>Degree:</td>
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<td>Calendar Section/Graduate Page Number:</td>
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</tr>
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</table>

**Type of Change:**

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

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

<table>
<thead>
<tr>
<th><strong>AERO 390</strong> Aerospace Engineering Design Project (3 credits)</th>
<th><strong>Proposed Text</strong> AERO 390 Aerospace Engineering Design Project (3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: AERO 201, 371; ENCS 282. General design philosophy and the design process: Design factors such as product safety, reliability, life cycle costs and manufacturability. Design in the aerospace context: vehicle and system design with regard to mission requirements, configuration, sizing, loads, etc. Mathematical modelling, analysis, and validation. Introduction to Computer-Aided Design and Engineering (CAD and CAE). Design documentation. A team-based project in which an aerospace system/subsystem is designed, implemented, documented and presented is an intrinsic part of this course. Lectures: three hours per week. Tutorial: two hours per week.</td>
<td>Prerequisite: AERO 290, 371; ENCS 282. This course focuses on general design philosophy and the design process. The following topics are covered: design factors such as product safety, reliability, life cycle costs and manufacturability; design in the aerospace context (vehicle and system design with regard to mission requirements, configuration, sizing, loads, etc.); mathematical modelling, analysis, and validation; introduction to Computer-Aided Design and Engineering (CAD and CAE); design documentation. A team-based project in which an aerospace system/subsystem is designed, implemented, documented and presented is an intrinsic part of this course. Lectures: three hours per week. Tutorial: two hours per week.</td>
</tr>
</tbody>
</table>

**Rationale:**

AERO 201 is removed from prerequisites because it is already covered by the AERO 290 prerequisite requirement.

**Resource Implications:**

There are no additional resource requirements.

**Other Programs within which course is listed:**

None.
COURSE CHANGE: AERO 444  
New Course Number:

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science
**Department:** Mechanical, Industrial and Aerospace Engineering
**Program:**
**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**
[ ] Course Number  [ ] Course Title  [ ] Credit Value  [ ] Prerequisite  [ ] Course Description  [ ] Editorial  [ ] New Course  [ ] Other - Specify:

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<tbody>
<tr>
<td><strong>AERO 444 — Concurrent Engineering in Aerospace Systems (3 credits)</strong></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: AERO 390. Introduction: objectives, definitions, impact on product development; process modelling and optimization; forming of engineering team; selection of techniques, methodology and tools; market design focus vs. quality design focus; development time management; process integration; aerospace case studies/projects; future trends. Lectures: three hours per week. NOTE: Students who have received credit for INDU 440 may not take this course for credit.</td>
<td></td>
</tr>
</tbody>
</table>

**Rationale:**
We are removing this course as a technical elective as the content of AERO444 is now redundant with the material that has been added into AERO 290 and 390.

**Resource Implications:**
There are no additional resource implications.

**Other Programs within which course is listed:**
None.
COURSE CHANGE: AERO 490  New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Aerospace Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

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

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</thead>
<tbody>
<tr>
<td><strong>AERO 490</strong> Capstone Aerospace Engineering Design Project (4 credits)</td>
<td><strong>AERO 490</strong> Capstone Aerospace Engineering Design Project (4 credits)</td>
</tr>
<tr>
<td>Prerequisite: 75 credits in the program; AERO 390; ENCS 282; ENGR 301. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms. NOTE: Students will work in groups under direct supervision of a faculty member. NOTE: Students who have received credit for COEN 490 or ELEC 490 or MECH 490 may not take this course for credit.</td>
<td>Prerequisite: 75 credits in the program; AERO 390; ENGR 301. This course includes a supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms. NOTE: Students will work in groups under direct supervision of a faculty member. NOTE: With permission of the Department, students may enrol in MECH 490 instead of AERO 490 on the condition that they choose to complete an aerospace-oriented project.</td>
</tr>
</tbody>
</table>

Rationale:
We are removing ENCS 282 as this requirement is already covered by the “200-before-400-level” rule.

Students are required to complete their program’s specific Capstone project unless they request to enroll in a multi-disciplinary project ENGR490. However, as Mechanical and Aerospace Engineering programs have many commonalities, we are allowing an exception for AERO490 students to switch to MECH490 on the condition that the project they select is aerospace-based (such as SAE Aero, Space Concordia, etc.)

Resource Implications:
There are no additional resource implications as both AERO 490 and MECH 490 are offered every year..

Other Programs within which course is listed:
None.
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: MECH-116 VERSION: 5

COURSE CHANGE: ENGR 391  New Course Number:

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

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

**Department:** Mechanical, Industrial and Aerospace Engineering

**Program:** Mechanical, Industrial and Aerospace Engineering

**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**

[ ] Course Number

[ ] Course Title

[ ] Credit Value

[ ] Prerequisite

[ ] Course Description

[ ] Editorial

[ ] New Course

[ ] Course Deletion

[ ] Other - Specify:

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td><strong>ENGR 391</strong> <em>Numerical Methods in Engineering</em> (3 credits) <strong>Prerequisite:</strong> ENGR 213, 233; COMP 248 or COEN 243 or MECH 215 or BCEE 231. <strong>Roots</strong> of algebraic and transcendental equations; function approximation; numerical differentiation; numerical integration; solution of simultaneous algebraic equations; numerical integration of ordinary differential equations. Lectures: three hours per week. Tutorial: one hour per week.</td>
<td><strong>ENGR 391</strong> <em>Numerical Methods in Engineering</em> (3 credits) <strong>Prerequisite:</strong> ENGR 213, 233; COMP 248 or COEN 243 or MECH 215 or MIAE 215 or BCEE 231. <strong>This course focuses on roots</strong> of algebraic and transcendental equations; function approximation; numerical differentiation; numerical integration; solution of simultaneous algebraic equations; numerical integration of ordinary differential equations. Lectures: three hours per week. Tutorial: one hour per week.</td>
</tr>
</tbody>
</table>

**Rationale:**

Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**

None.

**Other Programs within which course is listed:**

None.
COURSE CHANGE: INDU 410

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: B. Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[ ] Course Number
[ ] Course Description
[ ] Course Deletion
[X] Editorial
[ ] Credit Value
[ ] Prerequisite
[X] New Course

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<tr>
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<tr>
<td><strong>INDU 410  Safety Engineering</strong> (3 credits)</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: MECH 311. Engineering design for the control of workplace hazards; occupational injuries and diseases; codes and standards; Workplace Hazardous Materials Information Systems (WHMIS); hazard evaluation and control; design criteria; risk assessment; safety in the manufacturing environment; applications in ventilation, air cleaning, noise and vibration. Lectures: three hours per week.</td>
<td><strong>INDU 410  Safety Engineering</strong> (3 credits)</td>
</tr>
<tr>
<td>Prerequisite: MECH 311 or MIAE 311. This course focuses on the following topics: engineering design for the control of workplace hazards; occupational injuries and diseases; codes and standards; Workplace Hazardous Materials Information Systems (WHMIS); hazard evaluation and control; design criteria; risk assessment; safety in the manufacturing environment; applications in ventilation, air cleaning, noise and vibration. Lectures: three hours per week.</td>
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Rationale:
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

Resource Implications:
None.

Other Programs within which course is listed:
None.
COURSE CHANGE: INDU 411

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[ ] Course Number
[ ] Course Description
[ ] Course Deletion
[ ] Credit Value
[ ] New Course
[X] Editorial
[ ] Other - Specify:

Present Text (from 2019/2020) calendar

INDU 411  Computer Integrated Manufacturing  (3.5 credits)
Prerequisite: MECH 311. Concepts and benefits of computer integrated manufacturing (CIM): Design for manufacturing (computer-aided design, process planning, manufacturing (computer numerical control parts programming), and inspection); Robots in CIM; Production planning and scheduling in CIM; System integration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

Rationale:
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

Resource Implications:
None.

Other Programs within which course is listed:
None.

Proposed Text

INDU 411  Computer Integrated Manufacturing  (3.5 credits)
Prerequisite: MECH 311 or MIAE 311. This course focuses on concepts and benefits of computer integrated manufacturing (CIM): design for manufacturing; computer-aided design, process planning, manufacturing (computer numerical control parts programming), and inspection; robots in CIM; production planning and scheduling in CIM; system integration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.
COURSE CHANGE: INDU 440  
New Course Number: MIAE 380

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Industrial Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[X] Course Number  [ ] Course Title  [ ] Credit Value  [ ] Prerequisite  [ ] Other - Specify:  [X] Editorial  [ ] New Course

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<tr>
<td><strong>INDU 440. Product Design and Development</strong> (3 credits) Prerequisite: <strong>MECH 311. Development</strong> processes and organizations, product planning, identifying customer needs, product specifications, concept generation, concept selection, concept testing, product architecture, industrial design, design for manufacturing, prototyping robust design, patents and intellectual property. Lectures: three hours per week. NOTE: Students who have received credit for AERO 444 may not take this course for credit.</td>
<td><strong>MIAE 380. Product Design and Development</strong> (3 credits) Prerequisite: **MECH 211 or MIAE 211. This course focuses on development processes and organizations, product planning, identifying customer needs, product specifications, concept generation, concept selection, concept testing, product architecture, industrial design, design for manufacturing, prototyping robust design, patents and intellectual property. Lectures: three hours per week. NOTE: Students who have received credit for AERO 444 or INDU 440 may not take this course for credit.</td>
</tr>
</tbody>
</table>

Rationale:
This change is based on recommendations from an internal review of the Design-related courses in the Mechanical and Industrial Engineering programs as part of our continuous improvement process. The prerequisite is changed from MECH311 (Manufacturing processes) to MECH211 as it is deemed that the content in MECH211 is sufficient for MIAE380. This course will be core for both Mechanical and Industrial Engineering Programs.

Resource Implications:
This course will need to be offered 2 times per year now that it is a required course but students in both programs will take one less technical elective.

Other Programs within which course is listed:
Mechanical Engineering
**COURSE CHANGE:** INDU 490  
**New Course Number:**

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

---

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Industrial Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60

---

**Type of Change:**

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

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

**INDU 490**  
*Capstone Industrial Engineering Design Project* (4 credits)  
Prerequisite: 75 credits in the program; ENCS 282; ENGR 301; INDU 421 previously or concurrently. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and individual oral presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.  
*NOTE:* Students will work in groups under direct supervision of a faculty member.

**Proposed Text**

**INDU 490**  
*Capstone Industrial Engineering Design Project* (4 credits)  
Prerequisite: 75 credits in the program; ENGR 301; MIAE 380; INDU 421 previously or concurrently. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and individual oral presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.  
*NOTE:* Students will work in groups under direct supervision of a faculty member.

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**Rationale:**

We are removing ENCS 282 as this requirement is already covered by the “200-before-400-level” rule.

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**Resource Implications:**

There are no additional resource implications.

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**Other Programs within which course is listed:**

None.
COURSE CHANGE: MECH 211  
New Course Number: MIAE 211

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical, Industrial and Aerospace Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

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

Present Text (from 2019/2020) calendar

MECH 211  Mechanical Engineering Drawing  (3.5 credits)
introduction  to graphic language and design — means and techniques. The third and the
first angle projections—Orthographic projection of points, lines, planes and solids—Principal
and auxiliary views—Views in a given direction—Sectional views. Intersection of lines,
planes and solids—Development of surfaces—Drafting practices—Dimensioning, fits and
tolerancing—Computer-aided drawing and solid modelling—Working drawings — detail and
assembly drawing—Design practice—Machine elements representation. Lectures: three
hours per week. Tutorial: two hours per week — includes learning of a CAD software.
Laboratory: two hours per week, alternate weeks.

Proposed Text

MIAE 211  Mechanical Engineering Drawing  (3.5 credits)
This course is an introduction to graphic language and design — means and techniques. The following topics are covered: the third and the first angle projections; orthographic projection of points, lines, planes and solids; principal and auxiliary views; views in a given direction; sectional views, intersection of lines, planes and solids; development of surfaces; drafting practices; dimensioning, fits and tolerancing; computer-aided drawing and solid modelling; working drawings — detail and assembly drawing; design practice; machine elements representation. Lectures: three hours per week. Tutorial: two hours per week — includes learning of a CAD software. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for MECH 211 may not take this course for
credit.

Rationale:
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

Resource Implications:
There are no additional resource implications.

Other Programs within which course is listed:
None.
COURSE CHANGE: MECH 215 New Course Number: MIAE 215

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical, Industrial and Aerospace Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

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

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
<tbody>
<tr>
<td>MECH 215  Programming for Mechanical and Industrial Engineers (3.5 credits)</td>
<td>MIAE 215  Programming for Mechanical and Industrial Engineers (3.5 credits)</td>
</tr>
<tr>
<td>Prerequisite: MATH 204 (Cegep mathematics 105). Writing programs using assignment and sequences. Variables and types. Operators and expressions. Conditional and repetitive statements. Input and output. File access. Functions. Program structure and organization. Pointers and dynamic memory allocation. Introduction to classes and objects. Mechanical and industrial engineering applications. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: one hour per week.</td>
<td>Prerequisite: MATH 204 (Cegep mathematics 105). This course focuses on writing programs using assignment and sequences: variables and types; operators and expressions; conditional and repetitive statements; input and output; file access; functions; program structure and organization; pointers and dynamic memory allocation; introduction to classes and objects; mechanical and industrial engineering applications. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: one hour per week. NOTE: Students who have received credit for COEN 243 or MECH 215 may not take this course for credit.</td>
</tr>
</tbody>
</table>

Rationale:
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

We have added the note because MECH 215 and COEN 243 are very similar courses. COEN 243 does not contain a lab component, but we have allowed equivalency between these courses to help AERO students transfer between options.

Resource Implications:
There are no additional resource implications.

Other Programs within which course is listed:
None.
**COURSE CHANGE: MECH 221**

**New Course Number:** MIAE 221

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

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

**Department:** Mechanical, Industrial and Aerospace Engineering

**Program:** Mechanical, Industrial and Aerospace Engineering

**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**

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

[ ] Course Description  [X] Editorial  [ ] New Course  [ ] Other - Specify:

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<th>Present Text (from 2019/2020) calendar</th>
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<tbody>
<tr>
<td><strong>MECH 221</strong> Materials Science (3 credits)</td>
<td><strong>MIAE 221</strong> Materials Science (3 credits)</td>
</tr>
</tbody>
</table>
| Prerequisite: CHEM 205 (Cegep Chemistry 101). Relationships between properties and internal structure, atomic bonding; molecular, crystalline and amorphous structures, crystalline imperfections and mechanisms of structural change. Microstructures and their development from phase diagrams. Structures and mechanical properties of polymers and ceramics. Thermal, optical, and magnetic properties of materials. Lectures: three hours per week. Tutorial: one hour per week. | Prerequisite: CHEM 205 (Cegep Chemistry 101). This course focuses on relationships between properties and internal structure, atomic bonding; molecular, crystalline and amorphous structures, crystalline imperfections and mechanisms of structural change. Microstructures and their development from phase diagrams. Structures and mechanical properties of polymers and ceramics. Thermal, optical, and magnetic properties of materials. Lectures: three hours per week. Tutorial: one hour per week. 

**NOTE:** Students who have received credit for MECH 221 may not take this course for credit. |

**Rationale:**

Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**

There are no additional resource implications.

**Other Programs within which course is listed:**

None.
COURSE CHANGE: MECH 311   New Course Number: MIAE 311

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical, Industrial and Aerospace Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

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

Present Text (from 2019/2020) calendar
MECH 311. Manufacturing Processes (3.75 credits)
Prerequisite: MECH 313. Fundamentals of manufacturing processes and their limitations, metrology, machine shop practice, safety and health considerations, forming, conventional machining and casting processes, welding and joining, plastic production, and non-conventional machining techniques. Sustainable technologies. Laboratory includes instruction and practice on conventional machine tools and a manufacturing project. Lectures: three hours per week. Tutorial: two hours per week, including industrial visits and field trips to local industries. Laboratory: three hours per week, alternate weeks.

Proposed Text
MIAE 311 Manufacturing Processes (3.75 credits)
Prerequisite: MECH 313 or MIAE 313. This course focuses on the fundamentals of manufacturing processes and their limitations, metrology, machine shop practice, safety and health considerations, forming, conventional machining and casting processes, welding and joining, plastic production, and non-conventional machining techniques; sustainable technologies. Laboratory includes instruction and practice on conventional machine tools and a manufacturing project. Lectures: three hours per week. Tutorial: two hours per week, including industrial visits and field trips to local industries. Laboratory: three hours per week, alternate weeks.
NOTE: Students who have received credit for MECH 311 may not take this course for credit.

Rationale:
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

Resource Implications:
There are no additional resource implications.

Other Programs within which course is listed:
None.

Calendar for academic year: 2020/2021
Implementation Month/Year: May 2020
COURSE CHANGE: MECH 313 New Course Number: MIAE 313

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical, Industrial and Aerospace Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[X] Course Number [ ] Course Title
[ ] Course Description [X] Editorial
[ ] Course Deletion [ ] Other - Specify:

Present Text (from 2019/2020) calendar Proposed Text

**MECH 313** *Machine Drawing and Design* (3.5 credits)
Prerequisite: MECH 211. *Introduction* to engineering design and design process. Problem definition, solution formulation, model development and collaboration aspects of design process. The use of drawings and other graphical methods in the process of engineering design. Industrial standards and specifications, design of fits, linear and geometrical tolerances. Design projects based on design philosophies will involve design and selection of many standard machine components like mechanical drives, cams, couplings, brakes, seals, fasteners, springs, and bearings. Drawing representation of standard components. Design projects are an integral part of this course. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: 12 hours total.

**MIAE 313** *Machine Drawing and Design* (3.5 credits)
Prerequisite: MECH 211 or MIAE 211. *This course is an introduction* to engineering design and design process. The following topics are covered: problem definition, solution formulation, model development and collaboration aspects of design process: the use of drawings and other graphical methods in the process of engineering design; industrial standards and specifications, design of fits, linear and geometrical tolerances. Design projects based on design philosophies will involve design and selection of many standard machine components like mechanical drives, cams, couplings, brakes, seals, fasteners, springs, and bearings. Drawing representation of standard components is also *covered*. Design projects are an integral part of this course. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: 12 hours total.

**NOTE:** Students who have received credit for MECH 313 may not take this course for credit.

Rationale:
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

Resource Implications:
There are no additional resource implications.

Other Programs within which course is listed:

None.
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: MECH-116 VERSION: 5**

**COURSE CHANGE: MECH 321  New Course Number:**

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

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Mechanical, Industrial and Aerospace Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[X] Editorial  
[ ] Other - Specify:  
[ ] Credit Value  
[X] Prerequisite

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
</table>
| **MECH 321 Properties and Failure of Materials (3.5 credits)**  
Prerequisite: MECH 221. This course covers the following topics: the service capabilities of alloys and their relationship to microstructure as produced by thermal and mechanical treatments; tensile and torsion tests; elements of dislocation theory; strengthening mechanisms; composite materials; modes of failure of materials; fracture, fatigue, wear, creep, corrosion, radiation damage; failure analysis; material codes; material selection for design. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.  
NOTE: Students who have received credit for AERO 481 may not take this course for credit.  
| **MECH 321 Properties and Failure of Materials (3.5 credits)**  
Prerequisite: MECH 221 or MIAE 221. This course covers the following topics: the service capabilities of alloys and their relationship to microstructure as produced by thermal and mechanical treatments; tensile and torsion tests; elements of dislocation theory; strengthening mechanisms; composite materials; modes of failure of materials; fracture, fatigue, wear, creep, corrosion, radiation damage; failure analysis; material codes; material selection for design. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.  
NOTE: Students who have received credit for AERO 481 may not take this course for credit. |

**Rationale:**  
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses. There is considerable overlap between MECH 321 and AERO 481 thus students should not be allowed to take both if they change programs.

**Resource Implications:**  
There are no additional resource implications.

**Other Programs within which course is listed:**  
None.
COURSE CHANGE: MECH 344  
New Course Number: 

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Mechanical, Industrial and Aerospace Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60

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

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Deletion  
[ ] Other - Specify: 

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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</thead>
</table>
| **MECH 344  Machine Element Design**  (3 credits)  
Prerequisite: ENGR 244; MECH 313; MECH 343 previously or concurrently.  
This course covers the following topics: introduction to machine design; static failure theories; failure of ductile vs. brittle materials under static loading; fatigue failure theories; fatigue loads; notches and stress concentrations; residual stresses; designing for high cycle fatigue; design of shafts, keys and couplings; design of spur gears; spring design; design of screws and fasteners; design of bearings; case studies. Lectures: three hours per week. Tutorial: two hours per week.  
**NOTE:** Students who have received credit for MECH 441 may not take this course for credit. | **MECH 344  Machine Element Design**  (3 credits)  
Prerequisite: ENGR 244; MECH 313 or MIAE 313; MECH 343 previously or concurrently.  
This course covers the following topics: introduction to machine design; static failure theories; failure of ductile vs. brittle materials under static loading; fatigue failure theories; fatigue loads; notches and stress concentrations; residual stresses; designing for high cycle fatigue; design of shafts, keys and couplings; design of spur gears; spring design; design of screws and fasteners; design of bearings; case studies. Lectures: three hours per week. Tutorial: two hours per week.  
**NOTE:** Students who have received credit for MECH 441 may not take this course for credit. |

**Rationale:**  
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**  
There are no additional resource implications.

**Other Programs within which course is listed:**  
None.
COURSE CHANGE: MECH 390  
New Course Number: 

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Mechanical Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[X] Prerequisite  
[ ] Credit Value  
[ ] Other - Specify:

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

<table>
<thead>
<tr>
<th>MECH 390 Mechanical Engineering Design Project (3.5 credits)</th>
<th>MECH 390 Mechanical Engineering Design Project (3.5 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: ENCS 282; MECH 311, 343; MECH 344 previously or concurrently. This course covers the following topics: the design process; product cost, quality and time to market; open and concept design problems, problem description; geometric and type synthesis; direct and inverse design problems; material selection and load determination; mathematical modelling, analysis, and validation; introduction to Computer-Aided Design and Engineering (CAD and CAE); product evaluation for performance, tolerance, cost, manufacture, assembly, and other measures; design documentation. A team-based design project is an intrinsic part of this course. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: one hour per week.</td>
<td>Prerequisite: ENCS 282; MECH 311 or MIAE 311; MECH 343; MIAE 380; MECH 344 previously or concurrently. This course covers the following topics: the design process; product cost, quality and time to market, open and concept design problems, problem description; geometric and type synthesis; direct and inverse design problems; material selection and load determination; mathematical modelling, analysis, and validation; introduction to Computer-Aided Design and Engineering (CAD and CAE); product evaluation for performance, tolerance, cost, manufacture, assembly, and other measures; design documentation. A team-based design project is an intrinsic part of this course. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: one hour per week.</td>
</tr>
</tbody>
</table>

**Rationale:**  
MIAE380 is now deemed as the prerequisite to MECH390.

**Resource Implications:**  
There are no additional resource implications.

**Other Programs within which course is listed:**  
None.
COURSE CHANGE: MECH 412  

New Course Number:

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Faculty/School: Gina Cody School of Engineering and Computer Science
Department: Mechanical, Industrial and Aerospace Engineering
Program: Mechanical, Industrial and Aerospace Engineering
Degree: B. Eng
Calendar Section/Graduate Page Number: 71.60

Type of Change:
[X] Course Number
[X] Course Description
[X] Prerequisite

Present Text (from 2019/2020) calendar
MECH 412 Computer-Aided Mechanical Design (3.5 credits)
Prerequisite: MECH 313. Introduction to computational tools in the design process. Introduction to the fundamental approaches to computer-aided geometric modelling, physical modelling and engineering simulations. Establishing functions and functional specifications with emphasis on geometric tolerancing and dimensioning, manufacturing and assembly evaluation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

Rationale:
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

Resource Implications:
There are no additional resource implications.

Other Programs within which course is listed:
None.

Proposed Text

MECH 412 Computer-Aided Mechanical Design (3.5 credits)
Prerequisite: MECH 313 or MIAE 313. This course is an introduction to computational tools in the design process. The following topics are covered: introduction to the fundamental approaches to computer-aided geometric modelling, physical modelling and engineering simulations; establishing functions and functional specifications with emphasis on geometric tolerancing and dimensioning, manufacturing and assembly evaluation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.
### Program and Courses Change Forms for Document: MECH-116 Version: 5

**Course Change:** MECH 414

- **New Course Number:**

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

- **Faculty/School:** Gina Cody School of Engineering and Computer Science
- **Department:** Mechanical, Industrial and Aerospace Engineering
- **Program:** Mechanical, Industrial and Aerospace Engineering
- **Degree:** B. Eng
- **Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**

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

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<tr>
<th>Present Text (from 2019/2020 calendar)</th>
<th>Proposed Text</th>
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<tbody>
<tr>
<td><strong>MECH 414</strong> Computer Numerically Controlled Machining (3.5 credits)</td>
<td><strong>MECH 414</strong> Computer Numerically Controlled Machining (3.5 credits)</td>
</tr>
<tr>
<td>Prerequisite: MECH 311, 412. Computer aided design and manufacturing (CAD/CAM) hardware and software. Essentials of Computer Numerical Control (CNC) machine tools and systems.</td>
<td>Prerequisite: MECH 311 or MIAE 311; MECH 412. This course focuses on computer aided design and manufacturing (CAD/CAM) hardware and software. The following topics are covered: essentials of Computer Numerical Control (CNC) machine tools and systems; process planning and tooling systems for CNC machining, theory of CNC programming of sculptured parts; multi-axis CNC tool path generation; project using CAD/CAM software; CATIA for complex mechanical parts design and a CNC machine tool to manufacture parts. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.</td>
</tr>
</tbody>
</table>

**Rationale:**

Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**

There are no additional resource implications.

**Other Programs within which course is listed:**

None.

Calendar for academic year: 2020/2021

Implementation Month/Year: May 2020
COURSE CHANGE: MECH 415

New Course Number:

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

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

**Department:** Mechanical, Industrial and Aerospace Engineering

**Program:** Mechanical, Industrial and Aerospace Engineering

**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**
- [X] Prerequisite

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

<table>
<thead>
<tr>
<th>MECH 415</th>
<th>Advanced Programming for Mechanical and Industrial Engineers (3 credits)</th>
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<tbody>
<tr>
<td>Prerequisite: MECH 215. <strong>Class</strong> definitions. Designing classes and member functions; Constructors and destructors; <strong>Class</strong> libraries and their uses. Input and output; <strong>Data</strong> abstraction and encapsulation; Introduction to software engineering; <strong>Computer</strong> graphics and visualization; Numerical methods; Advanced mechanical and industrial engineering applications. This course includes a substantial project. Lectures: three hours per week. Tutorial: one hour per week.</td>
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**Proposed Text**

<table>
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<tr>
<th>MECH 415</th>
<th>Advanced Programming for Mechanical and Industrial Engineers (3 credits)</th>
</tr>
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<tbody>
<tr>
<td>Prerequisite: MECH 215 or MIAE 215. This course focuses on <strong>class</strong> definitions. The following topics are covered: designing classes and member functions; constructors and destructors; class libraries and their uses; input and output; data abstraction and encapsulation; introduction to software engineering; computer graphics and visualization; numerical methods; advanced mechanical and industrial engineering applications. This course includes a substantial project. Lectures: three hours per week. Tutorial: one hour per week.</td>
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</tbody>
</table>

**Rationale:**
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**
There are no additional resource implications.

**Other Programs within which course is listed:**

None.
COURSE CHANGE: MECH 421  

New Course Number:  

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

Faculty/School:  
Gina Cody School of Engineering and Computer Science  
Department:  
Mechanical, Industrial and Aerospace Engineering  
Program:  
Mechanical, Industrial and Aerospace Engineering  
Degree:  
B. Eng  
Calendar Section/Graduate Page Number: 71.60

Type of Change:  
[X] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Other - Specify:  

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<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| **MECH 421** Mechanical Shaping of Metals and Plastics (3.5 credits)  
Prerequisite: MECH 221. Metal forming: extrusion, forging, rolling, drawing, pressing, compacting; shear line theory, sheet forming limits. Metal cutting, machinability, tooling.  
Plastics shaping: extrusion, moulding, vacuum forming. Consideration of the mechanical parameters critical for process control and computer applications. Interaction of materials characteristics with processing to define product properties: cold working, annealing, hot working, super plasticity, thermomechanical treatment. Energy conservation, safety, product quality, and liability. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. | **MECH 421** Mechanical Shaping of Metals and Plastics (3.5 credits)  
Prerequisite: MECH 221 or MIAE 221. This course focuses on metal forming: extrusion, forging, rolling, drawing, pressing, compacting; shear line theory, sheet forming limits; metal cutting, machinability, tooling; plastics shaping: extrusion, moulding, vacuum forming; consideration of the mechanical parameters critical for process control and computer applications; interaction of materials characteristics with processing to define product properties (cold working, annealing, hot working, super plasticity, thermomechanical treatment); energy conservation, safety, product quality, and liability. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. |  

Rationale:  
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

Resource Implications:  
There are no additional resource implications.

Other Programs within which course is listed:  
None.
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: MECH-116 VERSION: 5**

**COURSE CHANGE: MECH 422**

**New Course Number:**

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

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

**Department:** Mechanical, Industrial and Aerospace Engineering

**Program:** Mechanical, Industrial and Aerospace Engineering

**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.60

**Implementation Month/Year:** May 2020

**Calendar for academic year:** 2020/2021

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<tbody>
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<td>[ ] Course Number</td>
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<td>[ ] Course Description</td>
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<td>[ ] Course Deletion</td>
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<tbody>
<tr>
<td><strong>MECH 422 Mechanical Behaviour of Polymer Composite Materials</strong> (3 credits) Prerequisite: ENGR 233, 244; MECH 221. General applications of polymer composite materials in aircraft, aerospace, automobile, marine, recreational, and chemical processing industries. Mechanics of a unidirectional lamina. Transformation of stress, strain, modulus, and compliance. Off-axis engineering constants, shear and normal coupling coefficients. In-plane and flexural stiffness and compliance with different laminates, including cross-ply, angle-ply, quasi-isotropic, and general bidirectional laminates. Hydrothermal effects. Strength of laminates and failure criteria. Micromechanics. Lectures: three hours per week.</td>
<td><strong>MECH 422 Mechanical Behaviour of Polymer Composite Materials</strong> (3 credits) Prerequisite: ENGR 233, 244; MECH 221 or MIAE 221. This course focuses on general applications of polymer composite materials in aircraft, aerospace, automobile, marine, recreational, and chemical processing industries. The following topics are covered: mechanics of a unidirectional lamina; transformation of stress, strain, modulus, and compliance; off-axis engineering constants, shear and normal coupling coefficients; in-plane and flexural stiffness and compliance with different laminates, including cross-ply, angle-ply, quasi-isotropic, and general bidirectional laminates; hydrothermal effects; strength of laminates and failure criteria; micromechanics. Lectures: three hours per week.</td>
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**Rationale:**
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**
There are no additional resource implications.

**Other Programs within which course is listed:**
None.
COURSE CHANGE: MECH 423  
New Course Number:  

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Mechanical, Industrial and Aerospace Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60  

**Type of Change:**  
[ ] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[ ] Course Title  
[ ] Editorial  
[X] Prerequisite  
[ ] Other - Specify:  

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

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<th>Present Text (from 2019/2020) calendar</th>
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| **MECH 423** *Casting, Welding, Heat Treating, and Non-Destructive Testing* (3.5 credits)  
Prerequisite: MECH 221. Comparative analysis of the various techniques of casting, welding, powder fabrication, finishing, and non-destructive testing. Consideration of the control parameters that are essential to define both automation and robot application. Materials behaviour which determines product micro-structure and properties. Technology and theory of solidification, normalizing, quenching, surface hardening, tempering, aging, and thermomechanical processing for steels, cast irons and Al, Cu, Ni and Ti alloys. Energy conservation, worker safety, quality control, and product liability. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. | **MECH 423** *Casting, Welding, Heat Treating, and Non-Destructive Testing* (3.5 credits)  
Prerequisite: MECH 221 or MIAE 221. This course focuses on comparative analysis of the various techniques of casting, welding, powder fabrication, finishing, and non-destructive testing. The following topics are covered: consideration of the control parameters that are essential to define both automation and robot application; materials behaviour which determines product micro-structure and properties; technology and theory of solidification, normalizing, quenching, surface hardening, tempering, aging, and thermomechanical processing for steels, cast irons and Al, Cu, Ni and Ti alloys; energy conservation, worker safety, quality control, and product liability. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. |

**Rationale:**  
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**  
There are no additional resource implications.

**Other Programs within which course is listed:**  
None.
**COURSE CHANGE:** MECH 424  
**New Course Number:**

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Mechanical, Industrial and Aerospace Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**

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<th>[ ] Course Number</th>
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**Present Text (from 2019/2020) calendar**

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<tr>
<th>MECH 424 MEMS — Design and Fabrication (3.5 credits)</th>
<th>Proposed Text</th>
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<tbody>
<tr>
<td>Prerequisite: MECH 311, 343. <em>Introduction</em> to microsystems and devices; mechanical properties of materials used in microsystems; microfabrication and post-processing techniques; sacrificial and structural layers; lithography, deposition and etching; introduction and design of different types of sensors and actuators; micromotors and other microdevices; mechanical design, finite element modelling; design and fabrication of free-standing structures; microbearings; special techniques: double-sided lithography, electrochemical milling, laser machining, LIGA, influence of IC fabrication methods on mechanical properties; application examples in biomedical, industrial, and space technology areas; integration, bonding and packaging of MEMS devices. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.</td>
<td>MECH 424 MEMS — Design and Fabrication (3.5 credits)</td>
</tr>
<tr>
<td>Prerequisite: MECH 311 or MIAE 311; MECH 343. This course is an introduction to microsystems and devices; mechanical properties of materials used in microsystems; microfabrication and post-processing techniques; sacrificial and structural layers; lithography, deposition and etching; introduction and design of different types of sensors and actuators; micromotors and other microdevices; mechanical design, finite element modelling; design and fabrication of free-standing structures; microbearings; special techniques: double-sided lithography, electrochemical milling, laser machining, LIGA, influence of IC fabrication methods on mechanical properties; application examples in biomedical, industrial, and space technology areas; integration, bonding and packaging of MEMS devices. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.</td>
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</table>

**Rationale:**
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**
There are no additional resource implications.

**Other Programs within which course is listed:**
None.
**COURSE CHANGE: MECH 425**

**New Course Number:**

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

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**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Mechanical, Industrial and Aerospace Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60

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

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

**MECH 425 Manufacturing of Composites** (3.5 credits)  

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**Proposed Text**

**MECH 425 Manufacturing of Composites** (3.5 credits)  
Prerequisite: MECH 311 or MIAE 311. This course focuses on fibres and resins. The following topics are covered: hand lay up; autoclave curing; compression molding; filament winding; resin transfer molding; braiding. Injection molding; cutting; joining; thermostet and thermoplastic composites; Polymer Nanocomposites; process modelling and computer simulation; non-destructive evaluation techniques. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

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**Rationale:**  
Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

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**Resource Implications:**  
There are no additional resource implications.

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**Other Programs within which course is listed:**  
None.

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**Calendar for academic year:** 2020/2021  
**Implementation Month/Year:** May 2020
**COURSE CHANGE: MECH 426**

**New Course Number:**

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Aerospace Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60  

**Type of Change:**  
- [ ] Course Number  
- [ ] Course Description  
- [ ] Course Deletion  
- [ ] Editorial  
- [X] Prerequisite  
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- [ ] New Course

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| **MECH 426 Stress and Failure Analysis of Machinery (3 credits)**  
Prerequisite: ENGR 233, 244; MECH 321. Analysis of stresses, strains and deformations in machine elements; non-symmetric bending of beams; shear centre for thin-walled beams; curved beams; torsion of non-circular shafts and tubes; thick wall cylinders; plates and shells; contact elements; stress concentrations; energy methods; failure modes, analysis and prevention; buckling, fracture, fatigue and creep. Lectures: three hours per week.  
Rationale: MECH 426 is an option elective for AERO (Option A) students. It's current pre-requisite is MECH 321 but Option A students take the AERO 481 (a similar course) as part of their program.  
Resource Implications: There are no additional resource implications.  
Other Programs within which course is listed: Mechanical Engineering | **MECH 426 Stress and Failure Analysis of Machinery (3 credits)**  
Prerequisite: ENGR 233, 244; AERO 481 or MECH 321. Analysis of stresses, strains and deformations in machine elements; non-symmetric bending of beams; shear centre for thin-walled beams; curved beams; torsion of non-circular shafts and tubes; thick wall cylinders; plates and shells; contact elements; stress concentrations; energy methods; failure modes, analysis and prevention; buckling, fracture, fatigue and creep. Lectures: three hours per week. |
COURSE CHANGE: MECH 463  
New Course Number:  

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science  
**Department:** Mechanical, Industrial and Aerospace Engineering  
**Program:** Aerospace and Mechanical Engineering  
**Degree:** B. Eng  
**Calendar Section/Graduate Page Number:** 71.60  
**Implementation Month/Year:** May 2020  

**Type of Change:**  
[X] Course Number  
[ ] Course Description  
[ ] Course Deletion  
[X] Editorial  
[ ] Credit Value  
[ ] New Course  
[ ] Prerequisite  
[ ] Other - Specify:  

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| **MECH 463** *Fluid Power Control* (3.5 credits)  
Prerequisite: ENGR 361; ELEC 372 or MECH 371. *Introduction* to fluid power; pneumatic devices; fluidic devices; hydraulic system components; hydraulic and electro-hydraulic systems; dynamic performance of fluid power systems; fluid logic. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.  
**Rationale:**  
ELEC students cannot take MECH463 since it also requires ENGR361 as a prerequisite.  
**Resource Implications:**  
There are no additional resource implications.  
**Other Programs within which course is listed:**  
None. | **MECH 463** *Fluid Power Control* (3.5 credits)  
Prerequisite: ENGR 361; MECH 371. *This course is an introduction* to fluid power; pneumatic devices; fluidic devices; hydraulic system components; hydraulic and electro-hydraulic systems; dynamic performance of fluid power systems; fluid logic. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.  
**Rationale:**  
ELEC students cannot take MECH463 since it also requires ENGR361 as a prerequisite.  
**Resource Implications:**  
There are no additional resource implications.  
**Other Programs within which course is listed:**  
None. |
**COURSE CHANGE: MECH 472**

**New Course Number:**

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

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

**Department:** Mechanical, Industrial and Aerospace Engineering

**Program:** Mechanical, Industrial and Aerospace Engineering

**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**

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

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<tr>
<td><strong>MECH 472</strong> <em>Mechatronics and Automation</em> (3.5 credits)</td>
<td><strong>MECH 472</strong> <em>Mechatronics and Automation</em> (3.5 credits)</td>
</tr>
<tr>
<td>Prerequisite: MECH 215; MECH 371 previously or concurrently. Design and analysis of mechatronic and automation systems. Selection and integration of actuators, sensors, hardware, and software. Computer vision. Programming and software design for mechatronic systems. Modelling and simulation. Design of logic control systems. Finite state machine methods. Feedback control and trajectory generation. Safety logic systems. Case studies including automation systems, mobile robots, and unmanned vehicle systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.</td>
<td>Prerequisite: MECH 215 or MIAE 215; MECH 371 previously or concurrently. <em>This course focuses on design</em> and analysis of mechatronic and automation systems. <em>The following topics are covered:</em> selection and integration of actuators, sensors, hardware, and software; computer vision; programming and software design for mechatronic systems; modelling and simulation; design of logic control systems; finite state machine methods; feedback control and trajectory generation; safety logic systems; case studies including automation systems, mobile robots, and unmanned vehicle systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.</td>
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**Rationale:**

Core courses that are taken by at least 2 of our programs are now being given the common name of MIAE. As such, we are updating all of our associated courses.

**Resource Implications:**

There are no additional resource implications.

Other Programs within which course is listed:

None.
**COURSE CHANGE: MECH 490**

**New Course Number:**

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

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

**Department:** Mechanical, Industrial and Aerospace Engineering

**Program:** Mechanical Engineering

**Degree:** B. Eng

**Calendar Section/Graduate Page Number:** 71.60

**Type of Change:**

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

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

[ ] Course Deletion  [ ] Other - Specify:

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<tr>
<td><strong>MECH 490</strong>  <em>Capstone Mechanical Engineering Design Project</em> (4 credits) Prerequisite: 75 credits in the program; ENCS 282; ENGR 301; MECH 344, 390. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms. NOTE: Students will work in groups under direct supervision of a faculty member.</td>
<td><strong>MECH 490</strong>  <em>Capstone Mechanical Engineering Design Project</em> (4 credits) Prerequisite: 75 credits in the program; ENGR 301; MECH 344, 390. This course includes a supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms. NOTE: Students will work in groups under direct supervision of a faculty member. NOTE: With permission of the Department, students may enrol in AERO 490 instead of MECH 490.</td>
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**Rationale:**

We are removing ENCS 282 as this requirement is already covered by the “200-before-400-level” rule.

Students are required to complete their program’s specific Capstone project unless they request to enroll in a multi-disciplinary project ENGR490. However, as Mechanical and Aerospace Engineering programs have many commonalities, we are allowing an exception, students the possibility to substitute MECH 490 with AERO490.

**Resource Implications:**

There are no additional resource implications as both AERO 490 and MECH 490 are offered each year.

**Other Programs within which course is listed:**

None.
SENATE
OPEN SESSION
Meeting of December 13, 2019

AGENDA ITEM:  Motion regarding Concordia University Foundation

ACTION REQUIRED:  For approval

SUMMARY:  As a follow-up from the November Senate meeting, it is proposed that Senate adopt a congratulatory motion to commend the Concordia University Foundation but also underline the role of the students, faculty and staff whose lobbying efforts over the past few years caused this dossier to advance.

DRAFT MOTION:

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

BE IT RESOLVED:

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

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

PREPARED BY:

Name:  Danielle Tessier
Date:   December 3, 2019
INTERNAL MEMORANDUM

To: Dr. Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
Office of the Provost and Vice-President, Academic Affairs
Chair, Academic Programs Committee

From: Stéphanie de Celles, University Registrar

Date: November 5, 2019

Re: 2020-21 Undergraduate Calendar Proposal
Section 16.2.2 Residence Requirements
Section 16.2.4 Concentration Requirements

The edits included in this dossier reflect changes to the Academic Regulations outlined in sections 16.2.2 and 16.2.4 as approved by Academic Cabinet, to accommodate the introduction of the Baccalaureate by Accumulation degree structure. The decision to implement this change was approved following consultations with Associate Deans, Deans, members of the Academic Program Committee and staff within the Office of the Registrar (see attached supporting documentation for details of the consultation process and a summary of issues to be considered for implementation).

Given the rapidly changing nature of current and future job markets, creating more flexible structures and a greater range of options for students to complete their degrees is becoming increasingly important. Evidence of the need for universities to adopt more flexible structures is indicated in a number of recent reports on job market trends and the changing landscape of higher education. While the ‘Baccalauréat par cumul,’ or ‘Bac par cumul,’ is already well established in many French language universities in Quebec, ‘stackable,’ degree structures are also emerging in English speaking universities across North America.

The introduction of the Baccalaureate by Accumulation will allow students the choice of fulfilling their degree requirements through the completion of three 30-credit certificates. Students will also be able to continue to follow the traditional undergraduate degree structure, combining an honours, specialization, major or option with a minor. With the introduction of the changes to regulations proposed in this dossier, students would also be able to combine an honours, specialization, major or option with a certificate.

The Baccalaureate by Accumulation will provide students with more options and flexibility for completing an undergraduate degree, allowing them to receive credentials incrementally as they work towards completion of a full degree. It will also allow the University greater
flexibility and agility in designing and implementing interdisciplinary programs that span a range of fields, and will enable the University to better meet the constantly evolving educational needs of students.

To accommodate the introduction of the Baccalaureate by Accumulation, this dossier includes the following changes to calendar sections 16.2.2 and 16.2.4:

16.2.2 Residence Requirements

The residency regulation that ‘at least 50 per cent of the credits’ applied to honours, majors and minors must be taken at Concordia is also being applied to certificate programs, to accommodate the introduction of the Baccalaureate by accumulation of certificates structure.

16.2.4 Concentration Requirements

5. Combined Programs

Along with the introduction of the Baccalaureate by accumulation of certificates structure, students will be permitted to combine a certificate program with an honours, specialization or major program, similar to how they are currently able to combine minor programs. As the SIS currently does not permit a student to simultaneously be enrolled in a degree program and in a certificate program, this change will only be introduced in the calendar when the SIS is capable of implementing it.

7. Baccalaureate by Accumulation

The title 'Baccalaureate by Accumulation' was chosen as the preferred name for this degree by Academic Cabinet. The Baccalaureate by Accumulation could involve more than one Faculty, as certificates from different fields may be combined. This may require the inclusion of an interdisciplinary studies section in the calendar when the defined stackable degree programs are introduced. When the Faculties introduce the defined degrees, specific degree titles would be given, appropriate to the field of study, as is done currently at French language institutions. For example, a student could receive a ‘BComm in Accountancy by Accumulation’ if a defined degree pathway were to be created by JMSB, including the appropriate certificates for this field.

7.1

Academic Cabinet recommended that students should declare their intention to complete a Baccalaureate by Accumulation at the time of admission to their third certificate. A Form of Declaration would need to be made available online, once the stackable degree structures are introduced and admissions opened. The form would be included in the documentation that students complete when they apply for admission to their third certificate.

7.2

An option is needed for students who are admitted into the Extended Credit Program (ECP) and the Mature Entry Program (MEP). Academic Cabinet approved of the recommendation that students in the ECP would be required to take a fourth certificate to total 120 credits. In order for this to be implemented, the Faculties will need to design an introductory level certificate suitable for students enrolled in the ECP. For now, students are referred to sections 14 and 13.3.2 for the general regulations for the MEP and ECP. When the defined degrees are introduced by the Faculties, a decision will need to be made more specifically about how
students meet the ECP requirements, whether a foundational certificate will fulfill this requirement, or whether students are informed upon admission to the first certificate that additional courses will be required, as is currently the practice for certificate programs. Faculties may define the ECP and MEP requirements more specifically once they have developed their defined stackable degree pathways.

7.3
The regulation indicating that ‘the credits for any course may not be used to satisfy the requirements of more than one program of study’ prevents students from ‘double counting’ courses towards multiple programs.

7.4
Academic Cabinet recommended that at least 50 percent of the credits for the Baccalaureate by Accumulation degree should be completed at Concordia. This will still allow for partnerships with other institutions, as at least one certificate may be completed outside of Concordia. Academic Cabinet also recommended that the final certificate should be completed at Concordia. It will be within the jurisdiction of the Faculties to determine whether specific certificates from other universities may be applied towards the Baccalaureate by Accumulation, according to the defined degree structures that they propose.

7.5
Based on the discussion at Academic Cabinet, it was decided that students who complete a second Baccalaureate by Accumulation should be subject to similar regulations as those who complete a Baccalaureate degree through the traditional structure. That is, they should be able to complete a second degree through the completion of an additional 60 credits.

7.6
Consultations with Deans and Associate Deans indicated a strong preference to open the Baccalaureate by Accumulation model by starting with defined degrees composed of specific certificates. Students will only be able to combine specific certificates, as deemed eligible by the Faculties, towards the Baccalaureate by Accumulation.

7.7
The implications of the regulation that ‘all candidates must satisfy the admission criteria for each certificate’ are that students who do not obtain a satisfactory GPA in their first certificate may not be eligible to be admitted into a second certificate. In this case, students would not be eligible to complete the Baccalaureate by Accumulation.

7.8
Students must meet all of the above criteria in order to qualify for a Baccalaureate by Accumulation.

Please note that all of the above changes will only be implemented until the SIS is able to accommodate the simultaneous enrolment in a certificate program and a Baccalaureate degree.

Prepared by:
Julie Johnston,
Administrator, University Curriculum
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: OOR-4 VERSION: 2

PROGRAM CHANGE: Adding Certificate programs to Residence Requirements

Proposal [X] Undergraduate or [ ] Graduate Curriculum Changes

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

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

Present Text (from 2019/2020) calendar

16.2.2 Residence Requirements
Residence requirements define the number of credits that students working towards a Concordia University degree must take at the University itself.

1. Of the total number of credits required for an undergraduate degree, students must take a minimum of 45 credits, normally the last 45, at Concordia University. The BEng, BA (Early Childhood and Elementary Education), BEd (Teaching English as a Second Language), BSc in Athletic Therapy, and BFA (Specialization in Art Education) require 60 credits, normally the last 60, at Concordia.

2. At least 50 per cent of the credits for honours, specializations, majors, minors or other concentrations must be taken at Concordia. The BComm and BAdmin programs also require that at least 50 per cent of the core courses be taken at Concordia.

3. Concordia University students who wish to include courses taken at another university within their residence requirements must obtain permission in advance from their Faculty Student Request Committee. Those wishing to engage in interuniversity exchanges in Quebec or student exchange programs must obtain authorization to cross-register from his or her academic advisor, the appropriate Associate Dean or delegate of the student's Faculty, and the University Registrar. For participation in the Concordia Student Exchange Program, the student must comply with the specific Faculty requirements outlined at concordia.ca/students/exchanges/csep.

Proposed Text

16.2.2 Residence Requirements
Residence requirements define the number of credits that students working towards a Concordia University degree must take at the University itself.

1. Of the total number of credits required for an undergraduate degree, students must take a minimum of 45 credits, normally the last 45, at Concordia University. The BEng, BA (Early Childhood and Elementary Education), BEd (Teaching English as a Second Language), BSc in Athletic Therapy, and BFA (Specialization in Art Education) require 60 credits, normally the last 60, at Concordia.

2. At least 50 per cent of the credits for honours, specializations, majors, minors, certificates or other concentrations must be taken at Concordia. The BComm and BAdmin programs also require that at least 50 per cent of the core courses be taken at Concordia.

3. Concordia University students who wish to include courses taken at another university within their residence requirements must obtain permission in advance from their Faculty Student Request Committee. Those wishing to engage in interuniversity exchanges in Quebec or student exchange programs must obtain authorization to cross-register from his or her academic advisor, the appropriate Associate Dean or delegate of the student's Faculty, and the University Registrar. For participation in the Concordia Student Exchange Program, the student must comply with the specific Faculty requirements outlined at concordia.ca/students/exchanges/csep.

Rationale:
The residency regulation that ‘at least 50 per cent of the credits’ applied to honours, majors and minors must be taken at Concordia is also being applied to certificate programs, to accommodate the introduction of the Baccalaureate by accumulation of certificates structure.
Resource Implications:
None.
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: OOR-4 VERSION: 2**

**PROGRAM CHANGE:** Changes to Concentration Requirements for Bacc by accumulation of certificates

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

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

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

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<tr>
<td><strong>16.2.4 Concentration Requirements</strong></td>
<td><strong>16.2.4 Concentration Requirements</strong></td>
</tr>
<tr>
<td>Every undergraduate program requires a cohesive sequence of courses. To graduate in a degree program, a student must complete one of the following concentrations: honours, specialization, major. Under certain conditions, a student may be eligible to obtain a Baccalaureate degree through the accumulation of certificates. In the Gina Cody School of Engineering and Computer Science, concentrations are referred to as programs. Most of these programs have options, where students take a number of related courses in a chosen area. Honours is a highly concentrated program with a required performance level; the specialization and the major require varying degrees of concentration, normally without a performance requirement. An honours, specialization, or major can be combined with a minor. In some circumstances, a double major is also possible.</td>
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</tr>
<tr>
<td>1. Honours Programs</td>
<td>1. Honours Programs</td>
</tr>
<tr>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>5. Combined Programs</td>
<td>5. Combined Programs</td>
</tr>
<tr>
<td>An honours, specialization, or major program may be combined with a minor program. In some circumstances, a major program may also be combined with another major program.</td>
<td>An honours, specialization, or major program may be combined with a minor or a certificate program. In some circumstances, a major program may also be combined with another major program.</td>
</tr>
</tbody>
</table>

**Rationale:**  
Along with the introduction of the Baccalaureate by accumulation of certificates structure, students will be permitted to combine a certificate program with an honours, specialization or major program, similar to how they are currently able to combine minor programs. As the SIS currently does not permit a student to simultaneously be enrolled in a degree program and in a certificate program, this change will only be introduced in the calendar when the SIS is capable of implementing it.

**Resource Implications:**  
Resources will be required for changes to implement changes to the SIS, and the Provost has been notified of this need.

**Calendar for academic year:** 20TB/20TBD  
**Implementation Month/Year:** TBD 20TB
PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: OOR-4 VERSION: 2

PROGRAM CHANGE: Changes to Concentration Requirements for Bacc by Accumulation

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

<table>
<thead>
<tr>
<th>Type of Change:</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Editorial</td>
<td></td>
</tr>
<tr>
<td>[ ] Requirements</td>
<td></td>
</tr>
</tbody>
</table>
An undergraduate certificate is a coherent program, usually of 30 credits, made up of regular undergraduate courses. Courses taken as part of a certificate program are normally applicable to the appropriate undergraduate degree. There is no guarantee that a certificate program can be completed in one academic year. |
| [ ] Program Deletion |
| [ ] New Program |

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

**Calendar for academic year:** 2020/2021  
**Implementation Month/Year:** TBD 20TB

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

**6. Certificate Programs**  
An undergraduate certificate is a coherent program, usually of 30 credits, made up of regular undergraduate courses. Courses taken as part of a certificate program are normally applicable to the appropriate undergraduate degree. There is no guarantee that a certificate program can be completed in one academic year.

**7. Baccalaureate by Accumulation**  
Under certain conditions, a student may earn a Baccalaureate degree through the accumulation of a minimum of three certificates in eligible fields of studies or disciplines. The Faculties and Schools under which the Baccalaureate degree is offered shall determine criteria for specific certificate programs eligible for application towards the degree.

Students must satisfy the following conditions in order to qualify for a Baccalaureate by Accumulation:

1. A declaration of intention to complete a Baccalaureate by Accumulation must be submitted at the time of admission to the third certificate.
2. A minimum of 90 credits must be obtained through the accumulation of a minimum of three certificates in order to qualify for the degree. Students admitted to the Extended Credit Program (ECP) and the Mature Entry Program (MEP) are required to take additional credits. See §14 of the Calendar for regulations pertaining to the Mature Entry Program (MEP). See §13.3.2 of the Calendar for regulations pertaining to the Extended Credit Program (ECP).
3. The credits obtained for any course may not be used to satisfy the requirements of more than one program of study, including certificate, minor, major, specialization, and honours programs.
4. Under certain conditions, where admission requirements permit, students may apply a certificate completed at an institution other than Concordia towards the Baccalaureate by Accumulation. The following conditions must be met:

   a) At least 50 per cent of the credits for the Baccalaureate by Accumulation must be taken at Concordia.

   b) The final certificate must be completed at Concordia.

5. Students who already have a Baccalaureate degree and wish to pursue a second degree through the Baccalaureate by Accumulation program are subject to the conditions below. Before registering, such students should consider whether their purpose might be better served by enrolling in a graduate degree, diploma, or certificate program. To obtain a second undergraduate degree, students must:

   a) Apply, register and successfully complete two additional certificates (a minimum of 60 credits total) eligible to be applied towards a Baccalaureate by Accumulation.

   b) At least two thirds of the credits applied towards the second degree must be in courses other than those credited to the first degree — for example, a minimum of 60 credits must be completed when the normal requirement is 90 credits.

Students who already have a Baccalaureate by Accumulation who wish to undertake a second Baccalaureate degree through the traditional structure are subject to the Residence Requirements outlined in §16.2.2.

6. Only specific certificates may be deemed as eligible for application towards a Baccalaureate by Accumulation by the granting Faculty or School. All Baccalaureate degrees are subject to the admission and graduation criteria established by the Faculties and Schools under which they are offered.

7. All candidates must satisfy the admission criteria for each certificate; admission into one certificate does not guarantee admission into other certificates. The specific admission requirements are listed on the Concordia website.

8. Students are eligible for graduation only once they have satisfied all of the above criteria. Eligibility for graduation is normally assessed following the successful completion of a minimum of three certificates deemed eligible for application towards a Baccalaureate by Accumulation by the granting Faculty or School.

Rationale:

7. **Baccalaureate by Accumulation**

The title 'Baccalaureate by Accumulation' was chosen as the preferred name for this degree by Academic Cabinet. The Baccalaureate by Accumulation could involve more than one Faculty, as certificates from different fields may be combined. This may require the inclusion of an interdisciplinary studies section in the calendar when the defined stackable degree programs are introduced. When the Faculties introduce the defined degrees, specific degree titles would be given, appropriate to the field of study, as is done currently at French language institutions. For example, a student could receive a ‘BComm in Accountancy by Accumulation’ if a defined degree pathway were to be created by JMSB, including the appropriate certificates for this field.
Academic Cabinet recommended that students should declare their intention to complete a Baccalaureate by Accumulation at the time of admission to their third certificate. A Form of Declaration would need to be made available online, once the stackable degree structures are introduced and admissions opened. The form would be included in the documentation that students complete when they apply for admission to their third certificate.

7.2
An option is needed for students who are admitted into the Extended Credit Program (ECP) and the Mature Entry Program (MEP). Academic Cabinet approved of the recommendation that students in the ECP would be required to take a fourth certificate to total 120 credits. In order for this to be implemented, the Faculties will need to design an introductory level certificate suitable for students enrolled in the ECP. For now, students are referred to sections 14 and 13.3.2 for the general regulations for the MEP and ECP. When the defined degrees are introduced by the Faculties, a decision will need to be made more specifically about how students meet the ECP requirements, whether a foundational certificate will fulfill this requirement, or whether students are informed upon admission to the first certificate that additional courses will be required, as is currently the practice for certificate programs. Faculties may define the ECP and MEP requirements more specifically once they have developed their defined stackable degree pathways.

7.3
The regulation indicating that ‘the credits for any course may not be used to satisfy the requirements of more than one program of study’ prevents students from ‘double counting’ courses towards multiple programs.

7.4
Academic Cabinet recommended that at least 50 percent of the credits for the Baccalaureate by Accumulation degree should be completed at Concordia. This will still allow for partnerships with other institutions, as at least one certificate may be completed outside of Concordia. Academic Cabinet also recommended that the final certificate should be completed at Concordia. It will be within the jurisdiction of the Faculties to determine whether specific certificates from other universities may be applied towards the Baccalaureate by Accumulation, according to the defined degree structures that they propose.

7.5
Based on the discussion at Academic Cabinet, it was decided that students who complete a second Baccalaureate by Accumulation should be subject to similar regulations as those who complete a Baccalaureate degree through the traditional structure. That is, they should be able to complete a second degree through the completion of an additional 60 credits.

7.6
Consultations with Deans and Associate Deans indicated a strong preference to open the Baccalaureate by Accumulation model by starting with defined degrees composed of specific certificates. Students will only be able to combine specific certificates, as deemed eligible by the Faculties, towards the Baccalaureate by Accumulation.

7.7
The implications of the regulation that ‘all candidates must satisfy the admission criteria for each certificate’ are that students who do not obtain a satisfactory GPA in their first certificate may not be eligible to be admitted into a second certificate. In this case, students would not be eligible to complete the Baccalaureate by Accumulation.

7.8
Students must meet all of the above criteria in order to qualify for a Baccalaureate by Accumulation.

Please note that all of the above changes will only be implemented until the SIS is able to accommodate the simultaneous enrolment in a certificate program and a Baccalaureate degree.

Resource Implications:
Resources will be required for implementation with the SIS. The Provost has been informed of this need.
Memorandum

To: Amir Asif, Dean, Gina Cody School of Engineering and Computer Science
Caroline Baril, Director, Office of the Provost and Vice President, Academic
Guylaine Beaudry, Vice Provost, Digital Strategy
Nadia Hardy, Interim Deputy Provost and Vice-Provost Planning and Positioning
and Vice-Provost Faculty Development and Inclusion
Anne-Marie Croteau, Dean, John Molson School of Business
Rebecca Duclos, Dean, Faculty of Fine Arts
Isabel Dunnigan, Associate Vice President, Lifelong Learning
Christophe Guy, Vice President, Research and Graduate Studies
Anne Whitelaw, Interim Provost and Vice President Academic
André Roy, Dean, Faculty of Arts and Science
Paula Wood-Adams, Dean of Graduate Studies, School of Graduate Studies

From: Sandra Gabriele, Vice Provost, Innovation, Teaching and Learning

Date: 2019-10-28

Re: Changes to Academic Regulations to allow for the introduction of a
Baccalaureate by accumulation of certificates structure at Concordia

Dear colleagues,

The Office of the Provost has undertaken the following process in preparation for
changes to the Academic Regulations to allow for the introduction of a Baccalaureate by
accumulation of certificates structure at Concordia:

October 4-10: Meetings with Associate Deans to discuss specifics of various models and
to review any concerns or questions.

October 18: Meeting with all Associate Deans and Registrar Stéphanie De Celles to
discuss specific concerns around implementation, and to develop recommendations
around which model to adopt.

October 23: Meeting with Registrar Stéphanie De Celles and team responsible for
Admissions, Student Services, Enrolment Services, Recruitment and SIS management.

October 23: A draft of proposed changes to the current calendar text was circulated to
Associated Deans for their feedback. Comments and edits to the proposed text are
Included attached updated draft, using track changes to show where feedback has been integrated.

Through these consultations, the following issues to consider for implementation were identified:

1. The SIS currently does not allow students to be registered simultaneously in a certificate program and in an undergraduate degree program. Significant modifications to the system are required in order to allow this.
   **Mitigation:** The issue with the SIS is being investigated further to identify solutions.

2. Additional research is required to ensure that students who graduate with a Baccalaureate by accumulation of certificates would be eligible for graduate studies.
   **Mitigation:** This issue is being further explored by Brad Nelson, Associate Dean, Academic Program & Development, School of Graduate Studies and Stéphanie De Celles, University Registrar. Creating specific and well-structured combinations of certificates will help to ensure that the degree is recognized as being equivalent to traditional Baccalaureate degrees.

3. There is some concern that the combining of three certificates from different fields will not result in deep learning in any specific area, and that previously introduced certificates are not being used by students in the way that they were intended.
   **Mitigation:** Learning outcomes will need to be well structured in order to ensure deep learning, and to ensure that students graduating with this degree will complete advanced courses in particular field of study. As the Faculties plan their defined a Baccalaureate degree by accumulation of certificates, they would have access to Curriculum Developers to ensure a sound academic structures and pathways are in place.

4. There is some concern that current admission standards for some certificate programs are not rigorous enough to ensure the appropriate quality of student for entry into a Baccalaureate degree program.
   **Mitigation:** Admission standards for the certificates will need to be set to ensure the quality of candidates, and to ensure that students are appropriately prepared to do work at the level required for an undergraduate degree program. Faculties will have the ability to set appropriate admission criteria for entry into the certificate programs.

5. Currently, students enrolled in certificate programs have difficulty accessing their required courses, as courses are at capacity.
Mitigation: A plan for how funding will be allocated for additional sections of existing courses or the creation of new courses will need to be communicated before the Faculties propose their structured Baccalaureate by accumulation of certificates programs.

6. There is some concern that implementing the Baccalaureate by accumulation of certificates structure will lead to logistical challenges around advising, admissions and recruitment.

Mitigation: Consensus has been reach with Associate Deans that the first step will be to create a select number of defined degree pathways in order to test the market, monitor success, and address logistical issues that arise in the implementation, before introducing this structure at a larger scale.
16.2.2 Residence Requirements

Residence requirements define the number of credits that students working towards a Concordia University degree must take at the University itself.

1. Of the total number of credits required for an undergraduate degree, students must take a minimum of 45 credits, normally the last 45, at Concordia University. The BEng, BA (Early Childhood and Elementary Education), BEd (Teaching English as a Second Language), BSc in Athletic Therapy, and BFA (Specialization in Art Education) require 60 credits, normally the last 60, at Concordia.

2. At least 50 per cent of the credits for honours, specializations, majors, minors, certificates or other concentrations must be taken at Concordia. The BComm and BAdmin programs also require that at least 50 per cent of the core courses be taken at Concordia.

3. Concordia University students who wish to include courses taken at another university within their residence requirements must obtain permission in advance from their Faculty Student Request Committee. Those wishing to engage in interuniversity exchanges in Quebec or student exchange programs must obtain authorization to cross-register from his or her academic advisor, the appropriate Associate Dean or delegate of the student’s Faculty, and the University Registrar. For participation in the Concordia Student Exchange Program, the student must comply with the specific Faculty requirements outlined at concordia.ca/students/exchanges/csep.

4. Students who already have an undergraduate degree may undertake a second undergraduate degree, subject to the conditions below. Before registering, such students should consider whether their purpose might be better served by enrolling in a graduate degree, diploma, or certificate program. To obtain a second undergraduate degree, students must:
   a) Apply and register in a program with a higher concentration than a minor, and
   b) Complete at least two-thirds of the credits normally required for the second degree in courses other than those credited to the first degree — for example, a minimum of 60 credits must be completed when the normal requirement is 90 credits, and
   c) Complete at least 36 credits in the new field of concentration.

5. An exception to 4b) above, is the BEd in TESL, for which students must complete at least half of the 120 credits required for the second degree in courses other than those credited to the first degree.

6. Any student who is accepted at Concordia University after failing or compiling an unsatisfactory record at another university, will generally be required to complete at least 60 credits at Concordia.
16.2.4 Concentration Requirements

Every undergraduate program requires a cohesive sequence of courses. To graduate in a degree program, a student must complete one of the following concentrations: honours, specialization, or major. Under certain conditions, a student may be eligible to obtain a Baccalaureate degree through the accumulation of three certificates. In the Gina Cody School of Engineering and Computer Science, concentrations are referred to as programs. Most of these programs have options, where students take a number of related courses in a chosen area. Honours is a highly concentrated program with a required performance level; the specialization and the major require varying degrees of concentration, normally without a performance requirement. An honours, specialization, or major can be combined with a minor. In some circumstances, a double major is also possible.

1. Honours Programs

... The Faculties and Schools under which the Baccalaureate degree is offered shall determine criteria for specific certificate programs eligible for application towards the Baccalaureate degree.

Students must satisfy the following conditions in order to qualify for a Baccalaureate degree through the accumulation of certificates:

1. A declaration of intention to complete a Baccalaureate through the accumulation of certificates must be submitted at the time of admission to the second-third certificate.

2. A minimum of 90 credits must be obtained through the accumulation of three certificates in order to qualify for the degree. Of these 90 credits, a minimum of 60 credits must be from within the same field of study. 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 for a total of 120 credits. ECP students may meet the 120-credit requirement through the completion of four 30-credit certificates.

3. The credits obtained for any course may not be used to satisfy the requirements of more than one program of study, including certificate, minor, major, specialization, and honours programs.

4. All certificates applied towards the Baccalaureate degree must be completed at Concordia University.

5. In order to qualify for graduation for a Baccalaureate degree through the accumulation of certificates, students must complete a minimum of one integration component or synthesis course of at least three credits.

6. Once a certificate has been applied towards the completion of a Baccalaureate degree, it cannot be applied towards the required credits for a second Baccalaureate degree.

7. Only specific certificates may be deemed as eligible for application towards a Baccalaureate degree through the accumulation of certificates. All Baccalaureate degrees are subject to the admission and graduation criteria established by the Faculties and Schools under which they are offered.

8. All candidates must satisfy the admission criteria for each certificate; admission into one certificate does not guarantee admission into other certificates. The specific admission requirements are listed in the Undergraduate Program Guide and on the Concordia website.

9. Students are eligible for graduation only once they have satisfied all of the above criteria. Eligibility for graduation is normally assessed following the successful completion of three certificates deemed eligible for application towards a Baccalaureate by Accumulation degree.

Commented [JJ6]: Alternate text could read:

At least two of the certificates applied towards the Baccalaureate degree must be completed at Concordia University.

This would open up the possibility to partner with other institutions in the future.

Commented [JJ7]: We are proposing to remove the integration component previously included. This would be built into the design of the degree structure, but it is not necessary to include this in the regulations. The inclusion of the integration component would require modifications to existing certificates.

Commented [JJ8]: The implication of this clause is that the current rule allowing the transfer of 30 credits to a second degree would not be permitted for these students.
Baccalaureate by Accumulation

Sandra Gabriele, VP, Innovation in Teaching & Learning
THE CHANGING LANDSCAPE

• Rapid technological change means rapid change in the world around us:
  • 25% of Canadian jobs to be disrupted by tech
  • 60% of future jobs do not exist yet
  • How will Concordia respond in terms of how we prepare our students for this kind of an environment?
• Challenges to credentials from non-university organizations
• Micro-credentials are gaining relevance and prominence in the changing workforce
• Unbundling of conventional degrees is happening at universities across the world
• Concordia: difficulty of creating multi-disciplinary degrees
“Making micro-credentials work for learners, employers and providers” proposes that:

credit-bearing micro-credentials include assessment aligned to a formal qualification level. Achievement of the learning outcomes leads to an offer of admission to or credit towards at least one formal qualification, regardless of whether or not the offer is taken up by the learner. Credit-bearing micro-credentials mirror and contribute to the academic standards required in the target qualification(s). The duration and effort required by the learner are in keeping with amount of credit earned in the target qualification(s).

(Deakin 19)
STACKABLE DEGREES: Baccalauréat par cumul

- Has been on offer in the French university system for over 20 years
- A 90-credit bachelor’s degree obtained by combining three 30-credit certificates of study (or combining majors or minors and certificates from different disciplines)
- Intended for those who wish to undertake open training through the learning of several disciplines instead of a single one
- **Bac par cumul multidisciplinaire:** students can choose their own combinations from a large number of certificates, minors, and majors (30-80 certificates and minors available at USherbrooke, UdeM)
- **Bac par cumul avec appellation (BACCAP):** a predetermined set of programs for students to choose from. It is a defined pathway of study for the student to follow.
# BACCAP Structure

**HEC (Bcomm)**

<table>
<thead>
<tr>
<th>Stream</th>
<th>Professional Accountancy</th>
<th>Intelligence Marketing</th>
<th>Management</th>
<th>Cybersecurity Management</th>
<th>Supply Chain Optimization</th>
<th>Financial Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificates</td>
<td>Accounting Management</td>
<td>Business Analytics</td>
<td>Organizational Process Management</td>
<td>Security and Information Systems Analysis</td>
<td>Supply Chain Management</td>
<td>Market Finance</td>
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<tr>
<td></td>
<td>Professional Accountancy</td>
<td>Marketing Management</td>
<td>A choice of certificates offered at HEC</td>
<td>Network Cybersecurity</td>
<td>Business Analytics</td>
<td>Personal Financial Planning</td>
</tr>
</tbody>
</table>

- Business Management
- Business Management
- Business Management
- Business Management
- Business Management
- Business Management
- Business Management
- Business Management
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- Business Management
- Business Management
- Business Management
BACCAP STRUCTURE- APPLIED SCIENCES

UQAM: Bachelor of Applied Sciences (B.App.Sc.)

<table>
<thead>
<tr>
<th>List A (30 credits)</th>
<th>List B (30 credits)</th>
<th>List C (30 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciences</td>
<td>Sciences</td>
<td>Sciences</td>
</tr>
<tr>
<td>Computer Science &amp; Software Development</td>
<td>Advanced Software Development</td>
<td>Chemical Analysis</td>
</tr>
<tr>
<td>Telecommunications Networks and Systems</td>
<td>Quantitative Methods</td>
<td>Administration</td>
</tr>
</tbody>
</table>

- 1 from List A
- +2 from List B
- 1 from List A
- + 1 from List B
- + 1 from List C

Management Sciences
- Administration
- Human Sciences
- Linguistics (Minor)

Management Sciences
- Business Technologies
# BACCAP STRUCTURE

Polytechnique Montreal: B.Sc. in Cyber Security

<table>
<thead>
<tr>
<th>HEC</th>
<th>Polytechnique Certificates</th>
<th>UdeM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certificate in Information Security and Systems Analysis</td>
<td>Certificate in Cyber Investigation</td>
</tr>
<tr>
<td></td>
<td>Certificate in Cyber Fraud</td>
<td>Certificate in Cyber Security of Computer Networks</td>
</tr>
<tr>
<td></td>
<td>Certificate in Cyber Fraud</td>
<td>Certificate in Cyber Security of Computer Networks</td>
</tr>
</tbody>
</table>

The degree can be obtained through combining three 30-credit certificates, with a minimum of two from Polytechnique Montréal.
BACCAP STRUCTURE- FINE ARTS

UdeM: BACCAP in Visual Cultures

<table>
<thead>
<tr>
<th>Predetermined BACCAP in Visual Cultures (90 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-credit Minor Film Studies</td>
</tr>
<tr>
<td>30-credit Minor Art History</td>
</tr>
<tr>
<td>30-credit Minor Video Game Studies</td>
</tr>
</tbody>
</table>
Reports and Studies

Reports and studies related to the changing landscape of higher education can be found at the following link:

https://bit.ly/35VpmWe
To: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

cc: Julie Johnston, University Curriculum Administrator
    Brad Nelson, Associate Dean, School of Graduate Studies

From: Joanne Beaudoin, Secretary, Council of the School of Graduate Studies

Date: November 11, 2019

Re: Graduate Curriculum Changes – CSGS November 11, 2019

This is to confirm that at the Council of the School of Graduate Studies meeting of Monday, November 11, 2019 the following new program was approved:

**Faculty of Fine Arts**

- Department of Creative Arts Therapies
  CSGS 1920 2 D2
  (CATS-28) *Graduate Certificate in Play Therapy*

The documents can be forwarded to Senate for final approval.

Thank you.
MEMO TO: Paula Wood-Adams, Dean of Graduate Studies

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

DATE: October 16, 2019

SUBJECT: GRADUATE CURRICULUM CHANGES (CATS-28)
(CALENDAR – 2019/2020)
DEPARTMENT OF CREATIVE ART THERAPIES
FACULTY OF FINE ARTS

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

The Department of Creative Art Therapies is proposing a new Graduate Certificate in Play Therapy.

The GCC approved the new program with a number of suggestions and recommendations, namely the clarification of the certificate as it relates to accrediting bodies in a Canadian context, the requirements of support staff, and minor editorial changes to the proposal text. I therefore recommend that the Council of the School of Graduate Studies approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: E. C. Paterson, Associate Dean, Academic Affairs, Faculty of Fine Arts
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs
INTERNAL MEMORANDUM

To:      Dr. Bradley Nelson, Chair, Graduate Curriculum Committee

From:    Dr. Rebecca Duclos, Dean, Faculty of Fine Arts

CC:      Elaine Paterson, Associate Dean, Academic, Faculty of Fine Arts

DATE:    September 24, 2019

Re:      Curriculum Dossier for the Department of Creative Art Therapies, NEW – Play Therapy
          Graduate Certificate, CATS-28

As Dean of the Faculty of Fine Arts, I fully support the new graduate certificate CATS-28. The
dossier was reviewed and approved by the Fine Arts Faculty Council at its meeting on September
13, 2019.

The resource implications will be covered by the Faculty with bridge funding from the Provost in
the first 3 years, as described in the approved budget found in the appendices.

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

To: Rebecca Duclos, Dean, Faculty of Fine Arts

From: Elaine Paterson, Associate Dean, Academic

Date: September 3, 2019

Re: Curriculum dossier for the Department of Creative Art Therapies, NEW – Play Therapy Graduate Certificate, CATS-28

The Faculty of Fine Arts Curriculum Committee has reviewed and approved the CATS-28 curriculum dossier from the Department of Creative Arts Therapies. We hereby submit this dossier for review at Faculty Council on September 13, 2019.

The proposed new program, a 15-credit Graduate Certificate in Play Therapy, would include the addition of the following five courses and descriptions to the Graduate Calendar.

1. PLTH501 Play Therapy 1 Introduction to Play Therapy
2. PLTH502 Play Therapy 2 Cognitive Behavioural Child-Centered Play Therapy
3. PLTH503 Play Therapy 3 Child-Centered Group Play Therapy
4. PLTH504 Play Therapy 4 Relational Play Therapy and Filial Play Therapy
5. PLTH505 Play Therapy 5 Neurobiology and Attachment in Play Therapy

The resource implications will be covered by the Faculty with bridge funding from the Provost in the first 3 years, as described in the approved budget in appendix 3.

With thanks for your consideration.

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

TO: Dr. Elaine Cheasley Paterson, Associate Dean, Academic Affairs
FROM: Guylaine Vaillancourt, Chair, Department of Creative Arts Therapies
DATE: August 30, 2019
SUBJECT: Play Therapy Graduate Certificate

Dear Associate Dean Cheasley Paterson,

The Department of Creative Arts Therapies respectfully submits the attached new Play Therapy graduate program and curriculum to be added to the graduate calendar. The Departmental Curriculum Committee and the Departmental Council reviewed and unanimously approved the proposal at their meetings held in April 2018.

We would like to add the following five courses and descriptions to the Graduate Calendar for the New Play Therapy Graduate Certificate.

1. PLTH 501 Play Therapy 1 Introduction to Play Therapy
2. PLTH 502 Play Therapy 2 Cognitive Behavioural Child-Centered Play Therapy
3. PLTH 503 Play Therapy 3 Child-Centered Group Play Therapy
4. PLTH 504 Play Therapy 4 Relational Play Therapy and Filial Play Therapy
5. PLTH 505 Play Therapy 5 Neurobiology and Attachment in Play Therapy

Other resource implications include funding for the cost of Teaching Assistants for these five new courses and a 3-credit remission, approved in the LOI for the first two years. A detailed breakdown of cost associated with this new program is included in the approved LOI budget of this dossier.

Faculty workload will be managed by the Department of Creative Arts Therapies through a new Tenure Track position in Drama Therapy who will start in August 2020, Part Time Faculty hires, and a Visiting scholar position in Play Therapy. Current staffing in the Department will have capacity to undertake the Certificate administration work detailed in the proposal.

The Department of Creative Arts Therapies is in the process of moving to a new space in the ER Building in 2021. This new space will include dedicated Play Therapy teaching and research spaces. In summer 2019, the pilot project in Play Therapy was held in our department’s spaces and throughout spaces in the SGW campus.

Sincerely,

Guylaine Vaillancourt, PhD, MTA
Department Chair
Creative Arts Therapies
Concordia University, Montreal, Quebec
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FACULTY OF FINE ARTS

Graduate Certificate in Play Therapy

Executive Summary

This proposal is for a 15-credit Graduate Certificate in Play Therapy to be offered in the Summer term. The Department of Creative Arts Therapies will offer this certificate as part of the Faculty of Fine Arts’ long-term plan to develop and offer graduate-level certificates with a focus on professional development, skills training, and experiential learning opportunities. Theory and academic work will pair with practice and hands-on experience in every course. This program is designed to provide graduate level training in play therapy and a certificate in child-centered play therapy. Graduates of the certificate may also continue their training and appropriate supervision to apply for accreditation in play therapy through the American Association for Play Therapy and/or the Canadian Association for Play Therapy. The program will attract students who have completed an undergraduate degree in any of the following areas: Child Studies; Early Child and/or Elementary Education; Youth Work; Applied Human Sciences; Social Work; Psychology (Educational, Counselling, etc.); or the Creative Arts Therapies. The certificate will also be open to current Master’s students, recent Master-level graduates, and professionals working in related fields. This certificate will respond to the needs of Creative Arts Therapies students, outside professionals, and recent graduates working with children in a broad array of helping professions.

Program Overview

The Graduate Certificate in Play Therapy will create a learning environment that promotes transformative learning and, by its very nature, civic involvement for the students in the program. This by extension will directly affect the children with whom they will work. Child-centered play therapy is an effective, innovative, and scientifically validated treatment for children. Play, seen as a form of communication, is the central tenet of Play Therapy. The goal of this therapy is to learn how to understand a child’s communication through play, as well as to intervene both verbally and through play to help the child heal. This program will train students to intervene therapeutically with children by using a comprehensive multi-modal approach. While the focus will be on the child-centered approach, students will also learn Cognitive Behavioural Therapy (CBT) techniques with children, group play therapy, school-based techniques, Theraplay and Filial play therapy—which involves both parents and children.
This program has been developed in consultation with: Garry Landreth, Ed.D., LPC, RPT-S, one of the original creators of child-centered play therapy and the founder of the Center for Play Therapy at the University of North Texas; Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-S, Certified CPRT-S, the current director of the Centre for Play Therapy; and with the American Association for Play Therapy and the Canadian Association for Play Therapy.

**Academic Objectives**

This graduate certificate provides experiential hands-on learning grounded in theory in five (5) 3-credit courses specifically developed for this new program. These courses are in the process of approval by the Ordre des Psychologues du Québec (OPQ) as continuing education hours and certain courses (specifically Cognitive Behavioural Child-Centered Play Therapy and Neurobiology) may be eligible for those students accruing credit towards the psychotherapy permit through the Ordre des Psychologues du Québec. This is in discussion with the OPQ, and we assume it will move forward. The key academic aims are to enhance the therapeutic skills of creative arts therapy students and allied professionals working with children, and to engage recent graduates aspiring to launch careers involving therapy and children. The courses offered provide students with an opportunity to learn psychodynamic, humanistic, cognitive-behavioural, and neurobiological-informed approaches to play therapy. Child-centered play therapy informs the theoretical and practical basis of the training. Its fundamental techniques are taught in four of the five courses and are reinforced through practice. Students will study filial play therapy (an extension of child-centered play therapy with parent involvement), and learn trauma-informed and attachment-based practices.

**Intended Audience**

The intended audience for the program is threefold: current Master-level students in Creative Arts Therapies and related fields, recent graduates with undergraduate degrees in psychology, education, social work and other related professional fields, and mental health and educational professionals seeking to expand their practice and continue to develop through continuing education as required by their professional orders. Offering this 15-credit graduate certificate during the summer allows flexibility for students who may not otherwise be able to complete a full-year graduate certificate. A summer training would be accessible to those currently working, out-ofprovince students not able to spend a year or more away, or those looking for additional skills development—either post-bachelor or pre-/post-Master programs.
Uniqueness of the Program

The Graduate Certificate in Play Therapy is the first of its kind to be offered at a Canadian university, thereby supporting Concordia’s evolution as a Next-Gen University. Child-focused therapy training opportunities are extremely limited. This program will therefore fill a significant gap in existing training opportunities. There are several private play therapy institutes in Canada including The Rocky Mountain Play Therapy Institute and The Canadian Association for Play Therapy. Offering the Graduate Certificate in Play Therapy at Concordia University will provide greater public access to such training.
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Rationale for Program

A Graduate Certificate in Play Therapy will provide students with a specific, recognized, and evidence-based approach that enhances their employability. Child-centered play therapy is a well-known method commonly used in hospitals, clinics, schools, after-school programs and private practice. Many graduates from the Concordia University Creative Arts Therapies program have gone on to complete play therapy certification through weekend workshops and hiring accredited supervisors (a long and costly process) in other provinces and the United States in order to increase their employability and skills. We would like to offer our Creative Arts Therapies students, Montreal-based graduates, Canadian and international students these skills at Concordia University, becoming the first Canadian university to offer a Graduate Certificate in Play Therapy. It will be more financially feasible for Canadian and international students to study at Concordia, due to lower tuition costs and also due to the fact that most play therapy trainings are offered through private institutes where courses are spread out over several terms and at considerable expense.

Adding a Graduate Certificate in Play Therapy, administered by the Drama Therapy option within the Creative Arts Therapies Department, enhances the attractiveness of all programs offered through this MA. This type of innovative certificate will improve Concordia’s visibility. Child-centered play therapy is used across cultures, and the skills offered through the graduate certificate will be highly applicable in diverse geographic regions and professional environments.

Play therapy is a well-established profession that includes research, theory and methods that address cultural differences and the impact of cultural oppression on mental health. Obtaining a Graduate Certificate in Play Therapy will permit our students to work in a greater variety of institutions, and it will prepare them to work in culturally sensitive, responsive and responsible ways with diverse racial, cultural, religious, and socioeconomic settings, and with LGBTQ communities and families.

As a Graduate Certificate in Play Therapy has never been offered by a Canadian university before, Concordia University will benefit from increased visibility, uniqueness and reputation in the field of mental health training. A Graduate Certificate in Play Therapy is uniquely placed to attract and retain students from other Concordia programs including Psychology, Child Studies, Early Child and Elementary Education, Youth Work, Applied Human Sciences, and the Creative Arts Therapies. We will attract current students from Social Work, Educational Psychology, Counselling Psychology, Guidance Counselling, Psychoeducation and Education from neighbouring universities McGill, Université du Québec à Montréal (UQAM) and Université de Montréal. International students will also be drawn to the program, due to its condensed nature (over the summer) and financial viability.
This program aims to teach the ethical and culturally responsive practice of child-centered play therapy, as well as more directive play therapy methods, to assess, treat and evaluate the progress of children, adolescents and families experiencing different social, behavioural, and psychological issues. Using the language of play as communication, we gain further understanding of the conflicts, traumas, and life events as experienced by the child. With this deepened understanding, treatment consists of the resolution of isolation, communicating back to the child the tools needed to successfully navigate their stressors and challenges. The program will focus on the history and development of the play therapy field, child psychotherapy theory, and learning and practicing child-centered play therapy methods with specific applications. All learning connects to evidence-based practice, and cites research studies that support the therapeutic value and effectiveness of learned methods. The foundation of the program is the teaching of directive and non-directive play therapy and child psychotherapy theory, methods, and applications to enhance the therapeutic skills of creative arts therapy students and allied professionals (psychologists, social workers, youth workers, educators, psychoeducators) working with children. Students with a Master’s degree in mental health will be further eligible to apply for the American Association for Play Therapy and/or the Canadian Association for Play Therapy accreditation upon completing their additional supervised play therapy hours following the certificate. Many students will not apply to be members of these associations as they are not large associations. Most students will integrate these skills into their clinical or educational work, and join the association or order attached to their mental health or undergraduate degree. They will also receive a Certificate in Child-Centered Play Therapy as faculty have been training at the Center for Child Centered Play Therapy in North Texas and will be able to administer that certificate.

**History of Play Therapy**

Play is an essential component to the healthy development of a child, however it was not recognized as a means of therapeutic expression until the early 20th Century by the psychoanalysts Anna Freud (1928) and Melanie Klein (1932). Since this time, both structured approaches (Grove Hambridge, 1955), and more non-directive styles (Virginia Axline, 1947) have developed to advance the field. Axline was among the first to study and popularize the impact and effects of play therapy, advocating that play is the natural mode of expression for children, a built-in capacity that allows them to solve their own problems.

From Axline’s contributions, Haim Ginott (1961), Clark Moustakas (1953), Louise Guerney (1983), and Gary Landreth (1991) have aided in the widespread acceptance and practice of what is now more commonly referred to as child-centered play therapy (Landreth, 2002). Training and supervising parents in this method became a priority for both Bernard and Louise Guerney (1960s), as they witnessed a shortage of mental health services for children in need. Garry Landreth (1991) and Sue Bratton, Ph.D., LPC-S, RPT-S, have since developed a more condensed training for
parents through their child-centered play therapy approach. Dr. Landreth became the founder and
director of the Center for Play Therapy in Texas, which was then run by Sue Bratton. This center is
the result of 25 years of planned development on how to best train for and have recognized the
work of child-centered play therapy. Play therapy’s 100-year history and development draws upon
different threads of treatment methods and theoretical schools of thought.

Though the intervention styles may vary, play therapy remains committed to the therapeutic and
developmental properties of play. Valuing the uniqueness of each child, with focus on their present
living experience, and a deep empathy and acceptance of the child remain the cornerstones of child-
centered play therapy (Dee Ray, 2001).

Intended Audience

This program will attract several types of students:

• Students who have completed a Bachelor’s degree in a related field at a local, Canadian, or
  international university and now wish to gain expertise working with children. They may wish
to continue after completion of the certification, and apply to a Creative Arts Therapies
Master’s program or another Master’s program.
• Those who do not go on to complete an MA in Creative Arts Therapies or an MA in a related
  field, may take this certificate to enhance their professional skills in non-clinical environments
including educational and childcare settings.
• Students enrolled in a Master’s program in Creative Arts Therapies who wish to do further
  training in play therapy. With the combination of a completed Master’s and the Graduate
Certificate in Play Therapy, they would be able to begin the accreditation process with the
American Association for Play Therapy and/or the Canadian Association for Play Therapy
depending on where they reside. After completing the academic component, students would
begin completing the balance of the required supervised clinical hours. Students in the MA in
Creative Arts Therapies will be able to use the hours acquired in their internships (450) as well
as the 40 clinical hours working with children, acquired during the completion of the Graduate
Certificate in Play Therapy. Students in other clinical Master’s programs will also be able to
include acquired supervised clinical hours as well as the 40 hours in the Graduate Certificate
in Play Therapy, towards their registration/certification in play therapy. Students or
professionals who are eligible to obtain a psychotherapy permit, would be able to use two of
these courses (CBT and Neurobiology) towards their application to the OPQ in order to gain
the Psychotherapy title in Quebec.
• Students in a related Master’s program (psychology, social work, youth work,
  psychoeducation) who would like to gain further training in working with children and a
  specialization in play therapy.
• Professionals working in other fields (psychology, social work, psychoeducation, counselling, education, youth work, art therapy, drama therapy, and music therapy) who would like to gain further training in play therapy. These professionals would be attracted to the certificate from Canadian or international communities. Those professionals would then be able to begin to apply for membership in the American Association for Play Therapy and/or the Canadian Association for Play Therapy depending on their place of residence and after completing further necessary training and supervision hours. Those who are eligible would also be able to gain credits towards meeting the requirements for the OPQ or the requirements for continuing education hours.

This past summer Concordia hosted two well-attended play therapy seminars with pioneers in the field, Dr. Landreth and Dr. Ray, which offer concrete evidence of the interest in this work (event and registration information is available in the appendices). The workshops provided the 70+ attendees with the basic model of non-directive play therapy and used diverse presentation models ranging from lecture to live demonstration to role-play. Attendees in Dr. Ray’s workshop also had the opportunity to work with a local daycare on the third day practicing the techniques with real children. This practical hands-on exercise was enthusiastically received by both the daycare and the attendees. Both workshops were attended by a diverse group of professionals and students from Concordia University’s departments of Education and Psychology, McGill University’s Department of Psychology, Faculty of Education and School of Social Work, mental health professionals from the networks of the Integrated Health and Social Services (CISSS) and Integrated University Health and Social Services Centres (CIUSSS), child psychologists from the English Montreal School Board and Lester B. Pearson School Board, local daycare workers and administrators, students and graduates from the Creative Arts Therapies department and faculty and psychotherapists local and from Ontario (please see breakdown of attendees in appendix 5). The seminar surveys showed that more than 50 attendees indicated they would apply for the certificate when it launched.

**Play Therapy’s Connection to the Creative Arts Therapies**

It is appropriate that this new Graduate Certificate in Play Therapy is housed within the Creative Arts Therapies Department and administered by the Drama Therapy Option. There is a natural connection between these ways of approaching work with children, adolescents, and families. They address the client’s needs via non-verbal, creative communication. Professors in the Drama Therapy Option have been integrating play therapy approaches into their teaching and supervision to meet the needs of students choosing to complete their internships with children.

The Graduate Certificate in Play Therapy is very compelling for current students enrolled in the Master’s program in Creative Arts Therapies at Concordia for several reasons. Play therapy uses
play, including but not limited to expression in the creative arts modalities of art, drama, dance and music, as the primary mode of communication and is a validated form of therapy for addressing a wide variety of presenting problems with children, adolescents, and families. Play therapy is based on three fields of knowledge, these include: psychology/therapy, play, and child development (Dee Ray, 2001). A considerable amount of randomized control trials have been put forth to offer evidence-based support for play therapy treatment practices (Swank, J. M., Cheung, C., & Williams, S., 2018). This research has generated recognition of and a demand for the work of play therapists. Many recent Creative Arts Therapies graduates begin their careers working with children due to the high need for these services. These positions can be very demanding as they are often in front-line settings with children and families with complex psychosocial challenges; they are especially demanding for new therapists who have fewer resources to process their own reactions to the overwhelming situations they face. Under the current MA programs in Creative Arts Therapies, students enrolled in any of the three available options, Art Therapy, Music Therapy, or Drama Therapy, currently graduate with only one course that involves learning how to work with children. This graduate certificate would provide students with five critical courses, teaching essential tools to better address children’s needs; thorough grounding in play therapy skills helps to prevent therapist burn-out by providing students with concrete resources and a greater sense of self-efficacy grounded in validated treatment methods.

Art therapy and drama therapy students who wish to stay in Quebec and join the OPQ need two of the play therapy courses (Cognitive-Behavioural Play Therapy and Neurobiological Approaches to Play Therapy) to complete their application for the title of Psychotherapist, which allows them to practice psychotherapy in the province of Quebec. Likewise, recent graduates who require several additional courses to qualify for the order may be able to join the OPQ through completing the Graduate Certificate in Play Therapy. Similarly, professionals working in the field (psychologists, social workers, psychoeducators, etc.) can use these credits towards their application to the OPQ and for continuing education credits. All students with an MA who complete the training offered through this certificate will be eligible to join the American Association for Play Therapy and/or the Canadian Association for Play Therapy once they have met all the requirements of these associations. These further credentials will attract many students toward the certificate. Students applying with a Bachelor’s degree will be interested as the certificate is helpful for their work with children in school, social work, children’s programming, youth work, and many other settings where adults work and interact with children—whether or not they continue their training in play therapy. Importantly, the certificate will support the other Creative Arts Therapies Master’s programs, as students will be able to graduate with their Master’s as well as their certificate in play therapy. These are distinct programs and students will not be able to use credits from one program towards another with the exception of elective courses in the MA in Creative Arts Therapies. The ideal timing of the certificate would be between the first and second year of the MA in Creative Arts Therapies programs as preparation for a potential internship working with children.
Alignment with Concordia’s Strategic Directions

The Graduate Certificate in Play Therapy aligns with Concordia’s Strategic Directions in the following ways:

• Being the first program of its kind in Canada, and building on areas of acknowledged strength (2 – Teach for Tomorrow; 5 – Experiment Boldly; 6 – Grow Smartly)
• Accelerating curriculum transformation – the new graduate certificate is being developed against the backdrop of curriculum modernization underway in the Department of Creative Arts Therapies (2 – Teach for Tomorrow)
• Increasing graduate enrolments, including international students; developing specialized offerings for specific student populations; and delivering professional development and skills-based training (6 – Grow Smartly; 3 – Get Your Hands Dirty)
• Creating additional value by optimizing the use of the Faculty’s facilities and resources during the summer term (5 – Experiment Boldly; 6 – Grow Smartly)
• Aligning with the ‘Summer at Concordia’ concept currently under development (6 – Grow Smartly)
• Strengthening the awareness of mental health and developmental psychology at the university and giving more visibility to the Creative Arts Therapies degree programs offered at Concordia, aligns with the University’s emphasis on Health and Wellness, which the Department of Creative Arts Therapies is contributing to in a variety of ways

Administrative Location

The program will be located in the Department of Creative Arts Therapies, Drama Therapy Option, Faculty of Fine Arts.
Description of Program

Admission Requirements

Those wishing to enter the program should have the minimum of a Bachelor’s degree in psychology, social work, youth work, child studies, early childhood and/or elementary or secondary education, or psychoeducation. Students with a completed Master’s degree in any of the above professions, as well as those with a Master’s degree in the Creative Arts Therapies, or those enrolled in a Master’s program currently, will be prioritized for admission. Maturity and relevant life experience are essential, as prospective Play Therapists need to be sensitive, open, and motivated to help children and families in intense emotional distress.

Proficiency in English

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

Proficiency in French

While there are no formal French proficiency program requirements, students intending to work in Québec are strongly encouraged to develop a working knowledge of French.

Credits

A fully qualified candidate is required to complete 15 credits.

Curriculum Requirements

Courses for the certificate consist of the five (5) required courses, together providing a thorough grounding in Child-Centered Play Therapy with additional focus on other approaches to working with children.

A maximum of six credits may count as elective courses towards the Art Therapy and Drama Therapy Master’s requirements. Credits may also count towards the requirements for the psychotherapy title through the Ordre des psychologues du Québec (OPQ) as well as continuing education requirements of the various professional orders and associations.
Required Courses (15 credits):

1. PLTH 501 Play Therapy 1 Introduction to Play Therapy
2. PLTH 502 Play Therapy 2 Cognitive Behavioural Child-Centered Play Therapy
3. PLTH 503 Play Therapy 3 Child-Centered Group Play Therapy
4. PLTH 504 Play Therapy 4 Relational Play Therapy and Filial Play Therapy
5. PLTH 505 Play Therapy 5 Neurobiology and Attachment in Play Therapy

**Course Sequence & Completion Schedule**

Courses must be taken in the order listed above, and the program may be completed during the summer session. Each course builds on the previous course and as a result, must be taken in sequence during the summer months. Courses will run as one-week intensives from May to June. The fundamental approach of child-centered play therapy is instilled in several of the classes and reinforced through practice, while other approaches are introduced as additional resources and specializations.

The course material is designed in a manner that facilitates the integration of theory and practice. Each course will reinforce previous learning while introducing new concepts. At the completion of the certificate, students will have developed a thorough understanding of the history and development of play therapy, will be able to apply the concepts to work with children, adolescents and their families, and they will have had an opportunity to practice these skills with faculty supervision. Ethical and culturally sensitive practices will be integrated into each of the five courses. Students will be introduced to the Codes of Ethics of the American Association for Play Therapy and the Canadian Association for Play Therapy. Ethical issues will be explored through case examples and direct teaching. Working with families from diverse cultural backgrounds will be embedded in all of the teaching. Concordia University is an inclusive university and this value will be a core component of the teaching.

The courses will run in VA 212-2 and VA 215. Observational nursery associate director Nine Howe has offered the upstairs observational nursery classroom in GA-1.125 in the department of education if needed as well. Students will also be working with children at the YMCA Daycare. This was piloted during the spring play therapy seminars with several daycare workers also attending the seminar. Because the daycare is directly next door, students may use the daycare gym (as was done during the seminars) to run practice sessions.
Table 1: Course Titles and Descriptions

<table>
<thead>
<tr>
<th>Course Titles</th>
<th>Course Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLTH 501   Play Therapy 1</td>
<td>This course introduces the history, major models, and processes of play therapy. The basic model of child-centered play therapy, which evolved from the humanistic psychotherapy model, is explored through both theory and practice. Topics such as trauma, negative life experiences, the impact of these experiences on the brain and the child’s development are introduced and will continue to be explored in other course material. This course introduces students to the four structures which contain a play therapy session. Evaluation and assessment in play therapy is addressed. The course covers common themes in play therapy acknowledging the cultural diversity of clients, record-keeping, preparation for the ending of the therapy relationship and the essential materials for an effective and culturally responsive playroom.</td>
</tr>
<tr>
<td>PLTH 502   Play Therapy 2 Cogotive</td>
<td>Prerequisite: PLTH 501. This course focuses on the theories and techniques that inform CBT and their application in play therapy. Topics include the cognitive model and cognitive behavioural therapy assessment and evaluation, session structure, and directive interventions in play therapy.</td>
</tr>
<tr>
<td>PLTH 503   Child-Centered Group Play Therapy</td>
<td>Prerequisite: PLTH 501, PLTH 502. This course emphasises the philosophy and rationale for group work with children and pre-adolescents. Focus is on the goals of group therapy, the role of the play therapist, screening and selection of group members, play and activities at various developmental levels, and planning and structuring sessions. Building on PLTH 502, this course covers when to integrate CBT into child-centered group play therapy.</td>
</tr>
<tr>
<td>PLTH 504   Play Therapy 4 Relational Play Therapy and Filial Play Therapy</td>
<td>Prerequisite: PLTH 501, PLTH 502, PLTH 503. This course focuses on the history, theoretical foundations, research, and practical applications of relational and filial play therapy. In particular, students examine the techniques and models to work with parents including the Guerney, VanFleet and Landreth models based on attachment and self-regulation theories. Students learn techniques to support the attunement of parents to their children and facilitate a more secure attachment and the strengthening of family bonds.</td>
</tr>
</tbody>
</table>
PLTH 505  
Play Therapy 5  
Neurobiology and   
Attachment in Play Therapy  

Prerequisite: PLTH 501, PLTH 502, PLTH 503, PLTH 504. This course covers neurobiological attachment theories within child-centered play therapy. This course focuses on understanding how trauma impacts neurological development and the treatment of trauma using child-centered play therapy.

Learning Outcomes

- Students gain a sound working knowledge of play therapy theory, methods, and applications. The emphasis will be on mastery of play therapy skills. Upon completion of this certificate, students will be able to:
  - Define and describe the history, rationale, and evidence-based benefits of play therapy and the major theoretical models;
  - Understand and apply a wide range of child-centered play therapy interventions including individual, CBT, group, relational, filial, and Theraplay;
  - Demonstrate an understanding of human neurobiology including the nervous system and the brain and be able to define trauma and other negative life events and how they impact development and attachment.

All classes combine theoretical learning and discussion with experiential activities including personal development and processing, role-play interactions, and play therapy practice with children. Students will be in class in the morning and in supervised play therapy sessions with faculty members in the afternoon with children from the YMCA des femmes/ YMCA daycare. Learning outcomes are assessed and evaluated through supervised hands-on learning, group presentations, papers, quizzes and in-class participation. Theoretical learning is tested and demonstrated in research papers covering basic and advanced play therapy principles.

Implementation of play therapy methods in assessment, treatment, and evaluation is assessed through supervised role-play in which faculty will assess students’ interventions and provide oral feedback. It is important for students to take the courses in sequence as they build on one another, and will be run in sequence, with students learning child development, the history of play therapy and working with individual children before they learn how to work with groups and families. It will be essential for students to understand child development and how to work with individual children, before working with groups of children and before working with parents and teaching parents the core concepts. The final course will be advanced play therapy and work with trauma and again, students must understand the basic skills in each course leading to the advanced skills in the final course with children with more severe psychosocial issues and pathology. Students will be assessed on their capacity to understand basic skills to more advanced skills as the courses progress and develop.
Table 2: Learning Outcomes Course Mapping

*“I” denotes “introduction, “R” denotes “reinforcement, and “E” denotes “emphasis”*

<table>
<thead>
<tr>
<th>OUTCOME / COURSE</th>
<th>PLAY THERAPY 1 INTRODUCTION TO PLAY THERAPY</th>
<th>PLAY THERAPY 2 COGNITIVE-BEHAVIORAL CHILD-CENTERED PLAY THERAPY</th>
<th>PLAY THERAPY 3 CHILD-CENTERED GROUP PLAY THERAPY</th>
<th>PLAY THERAPY 4 RELATIONAL PLAY THERAPY AND FILIAL PLAY THERAPY</th>
<th>PLAY THERAPY 5 NEUROBIOLOGY AND ATTACHMENT PLAY THERAPY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define and describe the history, rationale and evidence-based benefits of play therapy and the major theoretical models</td>
<td>I &amp; E</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Understand and apply a wide range of child-centered play therapy interventions including group, relational and filial, and Theraplay</td>
<td>I</td>
<td>E</td>
<td>E</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Demonstrate an understanding of human neurobiology including the nervous system and the brain and be able to define trauma and other negative life events and how they impact development and attachment</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td>E &amp; R</td>
</tr>
</tbody>
</table>
Resource Requirements

Anticipated Student Enrolment

In the first year of the program, we anticipate recruiting five to ten students from the Creative Arts Therapy Department’s existing Drama Therapy program, an additional two students from adjacent Art Therapy and Music Therapy Programs, additional students from other Concordia programs, as well as working professionals from relevant fields. In our first year, we expect to be able to recruit a total of 10 students and up to 15 students in our second year. Please note that we think this is a conservative estimate.

In the informal research leading up to this proposal, professors from Concordia University’s Psychology Department, Youth Work Program (in Applied Human Sciences Department), and the Creative Arts Therapies Department have attested to the interest and professional usefulness of a Play Therapy Program amongst their students. As psychotherapists working in the field, we have informally surveyed our professional colleagues in Social Work, Psychology, Recreational Therapy, and Occupational Therapy who have also expressed interest in a summer certificate program in Play Therapy. As professionals in a small creative arts therapy community, we have also remained in close contact with many of our recent graduates who have expressed wanting more training opportunities in Play Therapy. In the fourth and fifth years of offering the Graduate Certificate in Play Therapy, as word of mouth travels and our graduates become established in the field, we anticipate enrolling 15-20 students a year. Students will complete all of their coursework over the summer with a fall graduation.

Due to the careful application assessment process, we ensure the students’ professional readiness for the program and, as such, anticipate a low attrition rate. In addition to letters of reference attesting to applicants’ suitability for this program and a letter of intent, prospective students are interviewed where their skills and previous knowledge will be assessed for suitability.

Should the infrastructure exist to support more students we would be happy to increase enrolment.

Teaching Resources

The Graduate Certificate in Play Therapy requires candidates for teaching positions to hold related Master’s degrees and training in play therapy or related disciplines, and a minimum five years experience working with children and families in a mental health setting. Leaders in the field of play therapy will be again invited to the Department of Creative Arts Therapies as guest lecturers in the 2020-2021 academic year to assist with capacity building and recruitment efforts. When leaders Dr. Gary Landreth and Dr. Dee Ray visited this past summer, participation exceeded expectations...
with Dr. Landreth having 70 attendees and Dr. Ray having 80 with outstanding evaluations (please see breakdown of attendees in appendix 5).

Table 3: Projected Faculty Members, Full-time, Part-time, Guests

<table>
<thead>
<tr>
<th>Name</th>
<th>Specialization</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonnie Harnden</td>
<td>Drama Therapy, Play Therapy, Psychoanalysis, Attachment, Trauma, Member of the Ordre des Psychologues, Psychotherapist Permit</td>
<td>Full-time Tenured</td>
</tr>
<tr>
<td>Jessica Bleuer</td>
<td>Drama Therapist, Attachment, Trauma, Play Therapy, Member of the Ordre des Psychologues du Québec, Psychotherapist Permit, Past Diversity Chair of the North American Drama Therapy Association</td>
<td>Lecturer, Limited Term Appt (LTA)</td>
</tr>
<tr>
<td>Susan Ward</td>
<td>Play Therapy, Drama Therapy, Attachment, Trauma, Play Therapy, Humanistic, Member of the Ordre des Psychologues du Québec, Psychotherapist Permit</td>
<td>Part-time faculty member</td>
</tr>
<tr>
<td>Visiting Scholar</td>
<td>Play Therapy, Attachment, Trauma</td>
<td>Part-time faculty member</td>
</tr>
</tbody>
</table>
Human Resources Requirements

• Funding for Teaching Assistants (30 hours per course, for five courses)
• Due to the nature of the experiential component with children, coordination and support will be beyond the means of the professor of any individual module. In addition, consistency is very important in working with children. The program will require the work of a coordinator bridging the academic and experiential milieux. In the first two years of the program the equivalent of a 3-credit remission are required in the form of a stipend to the coordinating professor.
• The administrative requirements associated with the practical experience with children are to be met through existing staff support by identifying existing capacities in the department.

Start-up Costs for the Graduate Certificate in Play Therapy

Guest speakers from the United States and Canada who are making incredible gains in the fields of play therapy and neurobiology will be invited to the Department of Creative Arts Therapies as guest lecturers to assist with capacity building and recruitment efforts. Guest lecturers already invited include Dr. Landreth and Dr. Ray and in future may include notable allied professionals such as: Dr. Sue Bratton, Maggie Kline, Dr. Bruce Perry, Don Chafe and Barbara Dalziel from the Canadian Association for Sandplay Therapy. The faculty has secured start-up costs for guest speakers and play therapy supplies through a grant from a donor.

Space Requirements

The existing Sandplay room in the VA Building requires renovations and if used, the observational room in the observational nursery also require sound installation (there is a two-way mirror but no sound). When we move to the new creative arts therapies space, these issues will be resolved as there are observational mirrors being installed and a clinical space. For now, the certificate will use existing CATS spaces and run in VA 212-2 and VA 215.

Library Requirements

See attached Library Report in Appendix 1.

Program Impacts

Many Creative Arts Therapies alumni move on to work in frontline settings with traumatized children and their families. The Graduate Certificate in Play Therapy gives therapists specific tools to help these children and their families. Trauma can run generations deep and be embedded in the
neurology of these children and their parents. There are many recent innovations in North America using play therapy and neurobiology to heal children’s brains, nervous systems, and emotions. This program has therefore been designed in consultation with Dr. Landreth and Dr. Ray, renowned leaders in the field of child-centered play therapy, and with the American Association for Play Therapy and the Canadian Association for Play Therapy.

The Graduate Certificate in Play Therapy is uniquely placed to attract and retain our own Concordia students from the fields of Psychology, Child Studies, Youth Work, Applied Human Sciences and the Creative Arts Therapies. We also believe that we will be able to attract current students from Social Work, Psychoeducation, Educational Psychology, Counselling Psychology, Guidance Counselling, and Education from neighbouring universities such as McGill, Université du Québec à Montréal (UQAM) and Université de Montréal. The certificate will be of equal interest to students from the many related programs in mental health in Montreal, Quebec, and North America. There is particular excitement around the program, as access to child-specific therapeutic training is extremely limited. Graduates will be able to find jobs in community clinics, hospitals, and school settings. Current professionals will be able to enhance their current work as social workers, psychologists, creative arts therapists, educators, guidance counsellors, childcare specialists, and pedagogical consultants. The Graduate Certificate in Play Therapy will complement existing offerings and meet demands from within the Creative Arts Therapies Program.

Comparative Programs at Other Institutions

There are no graduate-level Play Therapy certificate programs in Canada. The Canadian Association for Play Therapy offers non-credit, private training in Toronto and Alberta. We are currently in conversations with the American Association for Play Therapy, the British Columbia Play Therapy Association and the Canadian Association for Play Therapy to ensure that Concordia’s proposed Graduate Certificate in Play Therapy Program complies with all the educational components required for accreditation from these different associations. There is a Master’s level program at the University of North Texas which trains play therapists in their counselling department. There are other private training programs for play therapy throughout the United States. There is an International Play Therapy Network which has intensive trainings in play therapy throughout the United Kingdom, Asia and certain countries in Africa.

Cost/Revenue Projection

Please refer to the attached budget.
# LOI Budget Chart

**Requested amounts for the Department of:**

**Program name:** Play Therapy Graduate Certificate

**NOTE:** ONLY ___________ NEED TO BE POPULATED

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<thead>
<tr>
<th>EXPENSES</th>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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| Number of course remissions requested | 0.5 | 0.5 |

| Technical support - Number of positions | 0 |

| Part Time Contracts - Number of contracts | 3 | 3 |

| Teacher's Assistants - Hours | 16 | 16 | 16 | 16 | 16 |

| Administrative Staff - Number of positions | Director % | 100% | 100% | 100% | 100% | 100% |
| Office support % | 0 | 0 | 0 | 0 | 0 | 0 |
| Professional % | 0 | 0 | 0 | 0 | 0 | 0 |
## LOI Budget Chart

### EXPENSES

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<td>$ 61,417</td>
<td>$ 38,917</td>
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</table>

**Salary and Benefits**

- **Salary and Benefits**
- **Total Payroll**

- **New Classroom, renovation and lab equipment - NON-CAPITAL**: $3,618
- **New Classroom, renovation and lab equipment - CAPITAL**: $2,645
- **Marketing**: $5,750
- **Recruitment**: $- $ (This cost is covered by donor funds)
- **IT - Software**: $- $ (For renovations to Sandplay room- already paid for through capital budget)
- **Library**: $- $ (This cost is covered by donor funds)
- **Membership and Subscription**: $- $ (This cost is covered by donor funds)
- **Student support - Bursaries, Awards, others**: $25,693
- **Training**: $25,693
- **Other**: $2,035 (Costs associated with accreditation process)
### Requested amounts for the Department of:

**Program name:** Play Therapy Graduate Certificate

**NOTE:** ONLY □□□□ NEED TO BE POPULATED

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<thead>
<tr>
<th>STUDENTS</th>
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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<td>STUDENTS</td>
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<td>Cycle 2 FTE (FTE = 30 credits)</td>
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<td>New Cycle 2 FTE registered in the program</td>
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<th>Year 3</th>
<th>Year 4</th>
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<th>Year 3</th>
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Note 1: Linked to capital expenses
# Requested amounts for the Department of:
## Program name: Play Therapy Graduate Certificate

## Program Financial Viability

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<th>Year 4</th>
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<tbody>
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<td>$22,896</td>
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<td>$22,896</td>
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<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tr>
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<td>Extended Term Contrats</td>
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<td>Limited Term Contracts</td>
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<td>Course remissions</td>
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<td>Part Time Contracts</td>
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Page 1 of 3, prepared on 2019-11-06
## LOI Budget Chart

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<tr>
<td><strong>Stipends</strong></td>
<td>$</td>
<td>-</td>
<td>$</td>
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<td>$</td>
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<td>$</td>
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<tr>
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<td>Administrative Staff</td>
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<td>-</td>
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<td>-</td>
<td>$</td>
<td>-</td>
<td>$</td>
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<tr>
<td><strong>Total Payroll</strong></td>
<td>$5,750</td>
<td>$67,000</td>
<td>$61,250</td>
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<td>$38,250</td>
<td>$38,250</td>
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<td><strong>OTHER EXPENSES</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total Other Expenses</td>
<td>$38,706</td>
<td>$867</td>
<td>$167</td>
<td>$167</td>
<td>$667</td>
<td>$167</td>
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<tr>
<td><strong>Total Expenses</strong></td>
<td>$44,456</td>
<td>$67,867</td>
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<td>$61,417</td>
<td>$38,917</td>
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<tr>
<td><strong>CONCORDIA UNIVERSITY SURPLUS / (DEFICIT)</strong></td>
<td>$ (15,145)</td>
<td>$ (7,940)</td>
<td>$40,460</td>
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## Faculty Financial Viability

### ADDITIONAL BASE FUNDING

<table>
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<tr>
<th></th>
<th>Year 0 Start-Up</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Additional Base Funding per FTE</td>
<td>$900</td>
<td>$4,050</td>
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<td>Additional Base funding - full time TT Hire</td>
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<td>$-</td>
<td>$-</td>
<td>$-</td>
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<td>$-</td>
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<tr>
<td>Additional Provost, External, Capital or Institutional funding</td>
<td>$44,456</td>
<td>$44,000</td>
<td>$38,250</td>
<td>$34,500</td>
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### ADDITIONAL EXPENSES

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<th></th>
<th>Year 0 Start-Up</th>
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<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
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<tbody>
<tr>
<td>Payroll</td>
<td>$5,750</td>
<td>$67,000</td>
<td>$61,250</td>
<td>$61,250</td>
<td>$38,250</td>
<td>$38,250</td>
<td>$271,750</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>$38,706</td>
<td>$867</td>
<td>$167</td>
<td>$167</td>
<td>$667</td>
<td>$167</td>
<td>$40,741</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$44,456</td>
<td>$67,867</td>
<td>$61,417</td>
<td>$61,417</td>
<td>$38,917</td>
<td>$38,417</td>
<td>$312,491</td>
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### FACULTY SURPLUS / (DEFICIT)

<table>
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<tr>
<th></th>
<th>Year 1</th>
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<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
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<tr>
<td></td>
<td>$-</td>
<td>$(23,867)</td>
<td>$(5,887)</td>
<td>$2,459</td>
<td>$(7,813)</td>
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<tr>
<td><strong>Total</strong></td>
<td>$(38,965)</td>
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</table>
**Program and Courses Change Forms for Document: CATS-28 Version: 6**

**Program Change**: New Program

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

<table>
<thead>
<tr>
<th>Faculty/School:</th>
<th>Fine Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Creative Arts Therapies</td>
</tr>
<tr>
<td>Program:</td>
<td>Play Therapy</td>
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<tr>
<td>Degree:</td>
<td>Graduate Certificate</td>
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**Calendar Section/Graduate Page Number**:

<table>
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<th>Type of Change:</th>
<th>Proposed Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
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<tbody>
<tr>
<td>[ ] Editorial</td>
<td></td>
<td></td>
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<tr>
<td>[ ] Requirements</td>
<td><strong>Graduate Certificate in Play Therapy</strong></td>
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<tr>
<td>[ ] Regulations</td>
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<td></td>
</tr>
<tr>
<td>[ ] Program Deletion</td>
<td></td>
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<tr>
<td>[X] New Program</td>
<td><strong>Admission Requirements</strong></td>
<td></td>
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<td></td>
<td><strong>Language Proficiency</strong></td>
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<td></td>
<td><strong>Requirements for the Certificate</strong></td>
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<tr>
<td></td>
<td><strong>Academic Regulations</strong></td>
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<tr>
<td></td>
<td><strong>1. Academic Standing</strong></td>
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<tr>
<td></td>
<td><strong>2. Time Limit</strong></td>
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</table>

**Calendar for Academic Year**: 2020/2021  
**Implementation Month/Year**: May 2020
regarding the Time Limit requirements. It is expected that students will normally complete the certificate within one year.

3. Graduation Requirement. In order to graduate, students must have a minimum cumulative GPA of 2.70.

<table>
<thead>
<tr>
<th>Rationale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>See curriculum proposal.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource Implications:</th>
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</thead>
<tbody>
<tr>
<td>See approved program resources as outlined in the curriculum proposal</td>
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COURSE CHANGE: PLTH 501  New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Faculty/School: Fine Arts
Department: Creative Arts Therapies
Program: Play Therapy
Degree: Graduate Certificate

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

Type of Change:
[ ] Course Number
[ ] Course Description
[ ] Course Deletion
[ ] Course Title
[ ] Editorial
[ ] Credit Value
[ ] Prerequisite
[X] New Course

Present Text (from 2019/2020) calendar
PLTH 501 Play Therapy 1 Introduction to Play Therapy (3 credits)
This course introduces the history, major models, and processes of play therapy. The
basic model of child-centered play therapy, which evolved from the humanistic
psychotherapy model, is explored through both theory and practice. Topics such as
trauma, negative life experiences, the impact of these experiences on the brain and the
child’s development are introduced and will continue to be explored in other course
material. This course introduces students to the four structures which contain a play
therapy session. Evaluation and assessment in play therapy is addressed. The course
covers common themes in play therapy acknowledging the cultural diversity of clients,
record-keeping, preparation for the ending of the therapy relationship and the essential
materials for an effective and culturally responsive playroom.

Rationale:
This course is required courses for the Play Therapy Graduate Certificate.

Resource Implications:
See approved program resources as outlined in the curriculum proposal.

Other Programs within which course is listed:
None.
Program and Courses Change Form

Course Change: PLTH 502

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

**Faculty/School:** Fine Arts  
**Department:** Creative Arts Therapies  
**Program:** Play Therapy  
**Degree:** Graduate Certificate  
**Calendar Section/Graduate Page Number:**

**Type of Change:**
- [ ] Course Number
- [ ] Course Description
- [ ] Course Deletion
- [ ] Course Title
- [ ] Editorial
- [X] New Course
- [ ] Credit Value
- [ ] Prerequisite

<table>
<thead>
<tr>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
</table>
| PLTH 502 Play Therapy 2 Cognitive Behavioural Child-Centered Play Therapy (3 credits)  
Prerequisite: PLTH 501.  
This course focuses on the theories and techniques that inform cognitive behavioural therapy and their application in play therapy. Topics include the cognitive model and cognitive behavioural therapy assessment and evaluation, session structure, and directive interventions in play therapy. |

**Rationale:**  
This course is required for the Play Therapy Graduate Certificate.

**Resource Implications:**  
See approved program resources as outlined in the curriculum proposal.

**Other Programs within which course is listed:**  
None.
**COURSE CHANGE: PLTH 503**  
New Course Number: 

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Faculty/School: Fine Arts  
Department: Creative Arts Therapies  
Program: Play Therapy  
Degree: Graduate Certificate

**Calendar Section/Graduate Page Number:**

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<th>Type of Change:</th>
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<th>[ ] Course Title</th>
<th>[ ] Credit Value</th>
<th>[ ] Prerequisite</th>
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<tbody>
<tr>
<td>[ ] Course Description</td>
<td>[ ] Editorial</td>
<td>[X] New Course</td>
<td>[ ] Prerequisite</td>
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<tr>
<td>[ ] Course Deletion</td>
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**Present Text (from 2019/2020) calendar**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>PLTH 503 Play Therapy 3 Child-Centered Group Play Therapy (3 credits)</td>
</tr>
<tr>
<td>Prerequisites: PLTH 501, PLTH 502.</td>
</tr>
<tr>
<td>This course emphasizes the philosophy and rationale for group work with children and pre-adolescents. Focus is on the goals of group therapy, the role of the play therapist, screening and selection of group members, play and activities at various developmental levels, and planning and structuring sessions. Building on PLTH 502, this course covers when to integrate cognitive behavioural therapy into child-centered group play therapy.</td>
</tr>
</tbody>
</table>

**Rationale:**  
These are required courses for the Play Therapy Graduate Certificate.

**Resource Implications:**  
See approved program resources as outlined in the curriculum proposal

**Other Programs within which course is listed:**  
None
**COURSE CHANGE: PLTH 504**  
New Course Number:

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

**Faculty/School:** Fine Arts  
**Department:** Creative Arts Therapies  
**Program:** Play Therapy  
**Degree:** Graduate Certificate

**Calendar Section/Graduate Page Number:**

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<tr>
<th>Type of Change</th>
<th>Present Text (from 2019/2020) calendar</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Course Number</td>
<td></td>
<td></td>
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<tr>
<td>[ ] Course Title</td>
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<tr>
<td>[ ] Course Description</td>
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<tr>
<td>[ ] Course Deletion</td>
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<td></td>
</tr>
<tr>
<td>[ ] Credit Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Prerequisite</td>
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<td></td>
</tr>
<tr>
<td>[ ] Editorial</td>
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<tr>
<td>[ ] Other - Specify:</td>
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</table>

**Present Text (from 2019/2020) calendar:**

**Proposed Text:**

**PLTH 504 Play Therapy 4 Relational Play Therapy and Filial Play Therapy** (3 credits)  
Prerequisites: PLTH 501, PLTH 502, PLTH 503.  
This course focuses on the history, theoretical foundations, research, and practical applications of relational and filial play therapy. In particular, students examine the techniques and models to work with parents including the Guerney, VanFleet and Landreth models based on attachment and self-regulation theories. Students learn techniques to support the attunement of parents to their children and facilitate a more secure attachment and the strengthening of family bonds.

**Rationale:**
This is a required course for the Play Therapy graduate certificate.

**Resource Implications:**
See approved program resources as outlined in the curriculum proposal.

**Other Programs within which course is listed:**
None.

Calendar for academic year: 2020/2021  
Implementation Month/Year: May 2020
**PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: CATS-28 VERSION: 6**

**COURSE CHANGE: PLTH 505**  
New Course Number:  

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

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<tbody>
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<td>Creative Arts Therapies</td>
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<tr>
<td>Program:</td>
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<td>Degree:</td>
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Calendar Section/Graduate Page Number:  

**Type of Change:**  
[ ] Course Number  
[ ] Course Title  
[ ] Course Description  
[ ] Course Deletion  
[X] New Course  
[ ] Credit Value  
[ ] Prerequisite  

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>PLTH 505 Play Therapy 5 Neurobiology and Attachment in Play Therapy (3 credits)</td>
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</table>

**Rationale:**  
This is a required course for the Play Therapy Graduate Certificate.

**Resource Implications:**  
See approved program resources as outlined in the curriculum proposal.

**Other Programs within which course is listed:**  
None.

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

Appendix 1  Library Report
Appendix 2  Letters of Support
Appendix 3  Current Research
Appendix 4  Play Therapy Seminar: Summer 2019
Appendix 5  Breakdown of Attendees
Appendix 6  Survey Results for Play Therapy Seminar
Appendix 7  Curricula Vitae
Appendix 8  Affiliation Agreement
Appendix 9  Course Syllabi
Appendix 1

Library Report
Library Report

For the Proposed

Graduate Certificate in Play Therapy

Prepared by John Latour
Reference and Subject Librarian for the Fine Arts

September 18, 2019

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**Introduction**

The purpose of this document is to report upon available Library collections, resources and services that would support the proposed Graduate Certificate in Play Therapy by the Department of Creative Arts Therapies within the Faculty of Fine Arts.

The proposed 15-credit certificate represents five courses (3 credits each). Like all of the courses in the Creative Arts Therapies, the proposed classes will be interdisciplinary in nature. They will draw upon theories of (and approaches to) Play Therapy that are grounded in the fields of Biology and Psychology.

**Selection Policy**

The Creative Arts Therapies Department at Concordia University offers graduate programs in Art Therapy, Music Therapy and Drama Therapy. The subject fund for Creative Arts Therapies (c441m) is used to purchase monographs that support course work and research in all of these distinct (but related) disciplines and would be used to support the proposed certificate program.

**Library Collections**

The Library collections for Creative Arts Therapies consist of monographs (including “in print” books and e-books) as well as electronic resources, and journals (both “in print” and e-journals). Students, faculty and staff are able to access e-books and e-journals while on campus and from afar.

**Monograph Collection**

In order to report upon the availability of monographs that support the proposed certificate program in Play Therapy, it is necessary to identify these titles in the Library’s collection.

**Methodology:** The identification of relevant titles can be achieved through a number of searches in the Library’s online catalogue using Library of Congress (LC) Subject Headings. The chosen
subject headings should relate to the discipline of Play Therapy as well as the theories and approaches identified in the program’s content. Given the interdisciplinary nature of the program, the following twenty LC Subject Headings were identified as pertinent to this search, and are arranged in alphabetical order:

Adolescent Psychotherapy
Art Therapy
Behavioral Assessment
Child Development
Child Psychotherapy
Cognitive Therapy
Drama -- Therapeutic use*
Experiential Learning
Family Psychotherapy
Music Therapy
Neurobiology
Play -- Psychological Aspects
Play -- Social Aspects
Play Assessment (Child Psychology)
Play Therapy
Psychodynamic Psychotherapy
Psychology
Psychotherapy
Psychotherapy -- Moral and Ethical Aspects
Recreational Therapy

* Please note that there is no Library of Congress Subject Heading for “Drama Therapy.” Rather, the Library of Congress uses the subject heading “Drama -- Therapeutic use” for this discipline.

The search was carried out using the Concordia Library catalogue and the results of this research are presented in Table 1 (see below). This table includes two columns – one for books (including e-books), and the other for e-books alone. The results are ranked in order of the number of items per subject.

Table 1. Subject analysis of Concordia Library’s monographic holdings that support a Graduate Certificate in Play Therapy.
As the analysis above demonstrates, Concordia Library’s holdings are strongest in the subject area of “Child Development” which combines aspects of Biology and Psychology. The field of Psychology itself is very well-covered as are the Creative Art Therapies. “Play Therapy” ranked 10th in this analysis, just under “Drama Therapy” (i.e. Drama -- Therapeutic use) which for all intents and purposes, reflects well on the collection. The lowest ranked subject, “Play Assessment (Child Psychology)” could be further development in the collection in the future.

Over 10% of the Library’s holdings in the above list are in fact e-books, which will provide students with online access to the collection while on campus or off-campus. Concordia’s Library collections also benefit from several e-book collections using centralized (non-subject funds). A number of these collections include coverage in the Fine Arts, the Social Sciences and Medicine such as APA books, Harvard University Press, Oxford University Press, and Springer. Undoubtedly, new acquisitions from these sources will be pertinent to the proposed certificate program in Play Therapy.
Electronic Resources

Concordia University Library has subscriptions to important research databases that index academic journal articles related to Creative Arts Therapies notably Art Full-Text, Education Full-Text, ERIC, JSTOR, PsycInfo and PubMed as well as SAGE Research Methods.

SPECTRUM, Concordia’s Institutional Repository, will be a valuable resource for the students enrolled in the proposed program as it includes almost 500 Graduate (non-thesis) projects, articles and other research documents deposited by the Creative Arts Therapies Department.

Concordia University has a subscription to ProQuest Dissertations and Theses Global which includes over 700 Dissertations and theses indexed to Art Therapy, Music Therapy and Drama Therapy. A recent search in ProQuest using the LC Subject Heading “Play Therapy” produced over 200 results.

Journals

There are currently 45 journal titles available in print and in electronic formats in the Library that relate specifically to the Creative Arts Therapies. More than half (26) of these titles are e-journals.

Concordia Library participates in national consortia licenses that have been negotiated with the Canadian Research Knowledge Network (CRKN). It also makes use of licenses negotiated by the Bureau de coopération interuniversitaire (BCI) as well as its own, independently negotiated licenses.

Library Materials Budget

The monograph fund for Creative Arts Therapies was created in 2017 and is set at $3,000. In general, the Library’s overall budget for monographs has been stable for the past five years. The Library has also invested in large e-book packages such as Project Muse as well as Springer and Palgrave Connect. The Library’s budget for serials has increased in recent years to respond to rising costs for databases, e-journals and “in print” journals.

External Resources and Collections

Students at Concordia have free access to resources and collections outside of the University via the BCI card.

BCI card: the Bureau de coopération interuniversitaire (BCI) is a coalition of academic institutions that facilitate the sharing of collection materials from one participating institution to another. As a member of this coalition, the Library can issue Concordia students with a BCI card thus enabling them to borrow books from a wide range of other library collections.
Services

Concordia students have access to a number of free services that facilitate their studies including Request an Item; Inter-Campus & Article Delivery; Inter-Library Loans, Suggest a Purchase; and Reference Services.

**Request an Item:** Using a special feature from the Library’s online catalogue, students may reserve a title in the collection and have it sent to one of the Library’s Course Reserve Rooms – where they can collect it at their convenience. They may also use this function to place currently “checked out” items on hold.

**Inter-Campus & Article Delivery:** A student may request bound periodicals or periodicals on microfilm to be transferred from one campus to the other for convenient access purposes. Students may also request that any article from a periodical or any chapter from a book in the collection be scanned by Library staff and then emailed to them.

**Inter-Library Loans:** Students may put in a request with the Inter-Library Loans Department to have non-collection publications borrowed from other academic libraries on their behalf. The extent of this service is worldwide.

**Suggest a Purchase:** Using another feature from the Library’s online catalogue, students may suggest the purchase of a publication to add to the collection. This service is open to students at any level, but selectors will pay special attention to the recommendations of graduate students.

**Reference services:** All Concordia students may seek reference assistance from the Library electronically through either the Chat function (available through the Library’s website) or by regular email. Students may also seek assistance in person through the Ask Us Desks or through a Reference & Subject Librarian.

Concordia Library has a Reference & Subject Librarian for the Fine Arts which includes Creative Arts Therapies. The Librarian is able to provide student orientations on how to conduct research in the Library, as well as one on one consultations with students in order to facilitate their research.

Conclusion

The courses discussed in this report will explore various interdisciplinary facets of Play Therapy. Given the depth of the Library’s holdings in the disciplines of Creative Arts Therapies and Play Therapy, it is believed that the current collection will be able to support the proposed certificate program fully.
Appendix 2

Letters of Support
December 3, 2017

To: Dr. Graham Carr, Provost and Vice-President of Academic Affairs
   Dr. Paula Woods-Adams, Dean, School of Graduate Studies
   Dr. Rebecca Duclos, Dean, Faculty of Fine Arts

Re: Letter of Support – Proposal for a Graduate Certificate in Play Therapy by the
Department of Creative Arts Therapies, Faculty of Fine Arts

The Quebec Art Therapy Association Board Members are pleased to write this letter on
behalf of the Department of Creative Arts Therapies in support of the proposal for offering a
new Graduate Certificate in Play Therapy at Concordia University.

The Quebec Art Therapy Association (AATQ) supports this innovative 15-credit program
with a focus on professional development, skills training, and experiential learning. We
acknowledge the specific roles and contributions, along the years, of the Department of
Creative Arts Therapies with our association to promote the fields of arts and health. As the
President of the AATQ, I believe that this training is a well-suited professional development
opportunity for our members, and I would be pleased to share information about this
certificate with them. Furthermore, our members could undertake continuing education
credits in this program that would benefit their professional practice.

The Québec Art Therapy Association (AATQ) represents the professional practice of art
therapy in Québec, which includes as members diverse group of professionals in art therapy,
professionals in the creative arts therapies, students, and allied professionals. We also serve
the public by establishing and enforcing strict standards of ethics, competence, and practice
while expanding the field of art therapy in Québec through education and advocacy.

Should you require any additional information, please do not hesitate to contact the
undersigned at 514-582-1999 or by email at mriccardi@imagesetc.ca.

Sincerely,

Maria Riccardi, ATR, ATPQ, M.ED., M.A. | President of the Quebec Art Therapy Association
Lecturer at Concordia University and at the Université du Québec en Abitibi-Témiscamingue
Clinical Director of Clinic Images ETC. | Art Therapist, Career Counsellor and Psychotherapist
To Whom it may concern;

This letter is in support of Concordia University adding a Certification in Play Therapy to their current programs offered through the Creative Arts Therapies Department.

As the Canadian Representative for the North American Drama Therapy Association, I represent and advocate for the needs of Drama Therapists across Canada. There are currently close to 100 Drama Therapists across the country, many of whom find it difficult to find work as Drama Therapists because most parts of the country are yet unfamiliar with the depth and breadth of the skills and education that Drama Therapists have as graduates of the Concordia University Drama Therapy program.

Job postings for Play Therapists are currently far more plentiful across Canada than they are for Drama Therapists, and the addition of Certified Play Therapist to a Drama Therapist’s credentials will open many new doors for employment for Drama Therapists in many different settings including hospitals, schools and mental health service agencies.

There are many parts of our country in which there are very few Drama Therapists currently, and therefore educating the public about our profession and marketing becomes difficult without the support of greater numbers. The added credential of certified Play Therapist will allow these few to work in settings that have had no previous experience with Drama Therapy, and would now have the opportunity to see the added benefits that a Drama Therapist/Play Therapist brings to treating the needs of their clients.

Should you have any further questions regarding this letter, please do not hesitate to contact me at 204-290-0176.

Best Regards,

Csilla Przibislawsky
M.A. (C.A.T.), RDT, CCC
NADTA Canadian Representative
December 3, 2017

To: Academic Affairs, Concordia University

Re: Letter of Support – Proposal for a Graduate Certificate in Play Therapy by the Department of Creative Arts Therapies, Faculty of Fine Arts

As the President of the Quebec Drama Therapy Chapter (QDTC) of the North American Association of Drama Therapy (NADTA) I am writing this letter in full support of the Department of Creative Arts Therapies initiative to offer a Graduate Certificate in Play Therapy.

This certification option, as currently proposed, aside from adding to the therapeutic skill set of Drama Therapy students, will provide previous Creative Art Therapy graduates a C.E. pathway to receive the accreditation necessary to obtain a psychotherapy permit from the OPQ, exponentially strengthening the scope of practice and employability for Drama Therapists in Quebec. In turn this will increase QDTC member retention, giving current working professionals and new graduates of Concordia’s Drama Therapy Department extra initiative to stay and work in Montreal. Thus, and most importantly, it will allow more of the population to access and benefit from the therapeutic healing Creative Art Therapists provide.

The unanimous adaption of Bill 21 by Quebec’s National Assembly on June 19, 2009 put in order a process that after June 2012 fully denied graduates of the Creative Art Therapy Department the eligibility to join the Ordre des psychologues du Québec (OPQ) and henceforth practice psychotherapy in Quebec. Presently to be eligible to join the OPQ and practice psychotherapy, graduates of the CAT’s department must receive further accreditation/training. Drama Therapists are increasingly finding it more and more difficult to work in Montreal and greater Quebec, as the majority of job postings as well as insurance companies (for those in private practice) require a psychotherapy permit through the OPQ.

There is an ever-growing concern and constant discussion amongst our members about how to proceed in the face of Bill 21. Many Drama Therapists have either moved to other provinces within Canada or sought further training through other institutes such as: McGill University, The Argyle Institute or Medipsy’s C.E. programs. Concordia University would be wise to join the
trend and retain their students by also providing this additional training. As Play Therapy organically fits the scope of practice of Drama Therapists there is no doubt that this certification will be a popular and sought after option.

It is time for Drama Therapists to be realistic and take the necessary steps forward towards securing the future of our field in Quebec. I applaud the Creative Arts Therapy Department of Concordia University, for their foresight to claim Play Therapy as an essential addition to their program and for taking the initiative to dive into the future and adapt to this new reality of accreditation and licensure in Quebec.

The benefit for a Graduate Certificate in Play Therapy is boundless for Concordia University, its students and working professionals. Adopting the Play Therapy certification and enabling licensure of graduates will greatly push forward the accessibility, research, development, and recognition of the field of Drama Therapy in Quebec, throughout Canada and internationally.

Sincerely,

Rosaruby Glaberman M.A., RDT, CCC
President, Quebec Drama Therapy Chapter, NADTA
Registered Drama Therapist, Licensed Psychotherapist
Group Facilitator, Certified Canadian Councilor

Queen Elizabeth Health Complex
2100 Marlowe, Office 43
Montreal, QC H4A 3L5
r.glaberman@gmail.com, 514-402-0401
Bonnie Harnden  
Department of Creative Arts Therapies, Faculty of Fine Arts  

Re: Proposal for a Graduate Certificate in Play Therapy  

I am writing on behalf of the Canadian Association for Sandplay Therapy in support of Concordia’s establishment of a new Play Therapy Certificate programme. As the Canadian branch of the International Society for Sandplay Therapy we are responsible for the ongoing training and standards for Sandplay Therapy as established and taught by the ISST. We are pleased that the new Concordia Programme will include a segment on Sandplay Therapy, an important field of study in the area of Play therapy and Psychodynamic therapies. The Sandplay Therapy component of your programme (if taught by an approved ISST teacher) can be recognised as a segment of the ISST Certification Programme, and will, we believe, promote training in Sandplay Therapy, as well as provide your students with important exposure to this non-directive, largely non-verbal approach to therapy with children. Teaching these approaches at the university level will fill a need for continuing education and teach necessary skills for therapists in the community providing care to children and their families. We applaud this innovative step towards providing graduates and current practitioners in the community with an excellent source of expertise in Play Therapy and Sandplay Therapy approaches to working with children.  

Sincerely,  

Barbara Dalziel  

www.sandplaycanada.ca  www.jeudesable.ca  
email: barbara.dalziel@sympatico.ca  phone: 514-217-6022
To whom it may concern,

Letter of support for a certificate in Play Therapy

It is a pleasure to write this letter of support for the Certificate in Play Therapy. Since I started teaching at Concordia in the Creative Arts Therapies department in 2001, I have been teaching many different courses, ATRP 301, ATRP 600, ATRP 602, ATRP 613, 614, ATRP 639 and CATS 610, CATS 611. I think this new program in Play Therapy will be a great asset to our department on many points of view, to enrich our programs and respond to important needs.

The new program will allow students to develop therapeutic skills with children, adolescents, a clientele that is in high demand for adequate therapeutic services. Here is an example of how Play Therapy could make a difference. On December 5, 2017, Radio-Canada presented a documentary "Bye" on Video Game addiction, that may lead to suicide. It showed how adolescents presenting Internet addiction can get hooked on Video Games, isolated without any contact with others. Often, traditional models of psychotherapy are not efficient with some of these kids who for lack of adequate treatments may commit suicide. Play therapy can play a crucial role in reaching these kids in their space, help them through play to receive proper treatment.

The fact that the courses will be scheduled in summer is a great asset. It will give a chance to students to take clinical courses in summer when very few courses are offered. I have studied in two programs that offered summer classes, at Lesley University in Massachusetts and Sophia University in California. The summer classes were full in both programs. At Lesley students came from Europe and Israël to take summer classes. So I believe that this new play therapy program will draw some graduates in art therapy to take courses for their own development and also therapists from allied professions.

Another important point about this play therapy training is the fact that the program will develop courses that meet the requirement for compliance with Bill 21 on psychotherapy requirements. This will be good for our current students, as well as giving an opportunity to our graduates to take summer courses so meet the requirements for continuing education credits to maintain their licenses.

In conclusion, I can say that I am very excited and proud about this new program. I support completely such addition to our Creative Arts Therapies programs. It will be beneficial for our current students, our graduates and other professionals working in psychotherapy and our society for expanding the approach in psychotherapy.

Truly yours,

Nicole Paquet Ph.D. in Transpersonal Psychology,
Psychotherapist and Art therapist
Part-time faculty, Creative Arts Therapies Department
From: Bonnie Harnden
To: Mary Rawlins
Subject: Fwd: Thank You
Date: October-17-19 12:45:25 PM

Get Outlook for iOS

From: cpedemoncoeur <cpedemoncoeur@gmail.com>
Sent: Thursday, September 12, 2019 11:40 PM
To: Bonnie Harnden
Subject: Thank You

Greetings Bonnie,

I just wanted to drop you a quick note to thank you for inviting our daycare to be a part of your Summer Play Therapy Certificate program.

Your pilot project this past spring was educational for our teachers. Those who had the opportunity to participate and meet your two visiting professors from the U.S., enthusiastically expressed how insightful these workshops were in enriching their teaching practices. They also provided practical insight into how play therapy can be used in the classroom, thereby enriching the play experience of each child in their care. The hands-on sessions with your Play Therapy students and our children was also rewarding for both. It was wonderful to see the special attention each child received as they expressed themselves through play. This follows our own daycare philosophy that children learn through play.

Thanks again for thinking of us and partnering with us as you start your Fall semester’s Play Therapy Certification Program. We look forward to our children’s happy faces as they learn and express themselves through play.

Yours Sincerely,

Andria Mallozzi
Executive Director
Centre de la Petite Enfance de Mon Cœur
1355 boulevard René Levesque Ouest
Montreal, Quebec H3G 1T3
(514) 866-9941 ext. 413

Sent from my iPhone
Appendix 3

Current Research
Current Research


Appendix 4

Play Therapy Seminar: Summer 2019
CONCORDIA UNIVERSITY
SPRING PLAY THERAPY SEMINARS

THE CREATIVE ARTS THERAPY DEPARTMENT IS VERY PLEASED TO PRESENT PLAY THERAPY EXPERTS GARRY LANDRETH AND DEE RAY FROM THE UNIVERSITY OF NORTH TEXAS

May 6 & May 7 Presenter:
Garry Landreth Ed.D, LPC, RPT-S

Healing the Hurting Child: The Necessary Dimensions of Child-Centered Play Therapy

This workshop will focus on the perceptual world of the child, the dynamic elements of the relationship that facilitate the play therapy process, structuring the relationship in the playroom, “reading” themes in children’s play, the four healing messages needed by a child who is hurting, helping children develop self-control and self-responsibility. The ACT model of therapeutic limit setting, the language of facilitating change in children, guidelines for selecting appropriate toys and materials and a conceptual model of the process of change in play therapy.

Workshop activities will center around spontaneous demonstrations by Dr. Landreth dealing with specific problems in the play therapy experience, critique of video tapes of Dr. Landreth’s play therapy sessions and the art expressions of Ryan, a child who was dying. Handouts will be provided.

Garry Landreth, Ed.D, LPC, RPT-S, internationally recognized for his writings and work in promoting the development of child-centered play therapy, is a Regents Professor Emeritus in the Department of Counseling and founder of the Center for Play Therapy at the University of North Texas. Dr. Landreth is a frequent speaker at play therapy conferences around the world. His more than 150 journal articles, books and videos include co-author DVD CPRT In Action: Four Couples In A CPRT Group, and the 3rd edition of his award-winning book Play Therapy: The Art of the Relationship. Dr. Landreth’s other recent books are co-author Child Parent Relationship Therapy (CPRT): A 10-Session Filiial Therapy Model and an accompanying Child Parent Relationship Therapy (CPRT) Treatment Manual. His CPRT Model received the 2010 Best Practices in Parent/Family Education Award. Dr. Landreth is Director Emeritus of the Association for Play Therapy (APT). He received the APT Lifetime Achievement Award, the APT Research Award, and the Virginia Axline Distinguished Professional Award for his work in conceptualizing and advancing the child-centered approach to play therapy.

May 11 & 12 Presenter:
Dee Ray Ph.D., LPC-S, NCC, RPT-S

Basics in Child-Centered Play Therapy: Foundational Training

Children often have difficulty verbalizing their thoughts and feelings, which may produce obstacles for the child therapist or counselor. Child-Centered Play Therapy (CCPT) is a unique evidence-based counseling approach in which the relationship between therapist and child is the foundation for therapeutic change. In CCPT, the healing factor is identified as the relationship between play therapist and child. Relationship is based on clear communication between therapist and child, yet the child communicates through play. The therapist provides at-studious conditions and developmentally appropriate materials to facilitate free expression and self-directed play of the child. In a safe environment, the child moves toward self-enhancing behaviors and ways of being.

This workshop is intended to present step-by-step introductory methods on how to help children accurately express themselves to the counselor in their own language of play. This workshop will offer a process for developing healing relationships with children, as well as help counselors use play therapy to reach treatment goals. Play therapy will be described and demonstrated in detail regarding its use and effectiveness with challenging children who present in both community and school settings. Participants will learn the CCPT treatment protocol as well as actively engage in CCPT skills throughout the workshop experience.

Dee Ray, Ph.D., LPC-S, NCC, RPT-S is Distinguished Teaching Professor in the Counseling Program and Director of the Center for Play Therapy at the University of North Texas. Dr. Ray has published over 100 articles, chapters, and books in the field of play therapy, specializing in research specifically examining the process and effects of Child Centered Play Therapy. Dr. Ray is author of A Therapist’s Guide to Development: The Extraordinarily Normal Years, Advanced Play Therapy: Essential Conditions, Knowledge, and Skills for Child Practice, Child Centered Play Therapy Treatment Manual, and co-author of Group Play Therapy and Child Centered Play Therapy Research. She is a founding board member and past president of the Association for Child and Adolescent Counseling, as well as current board member of the Association for Play Therapy. She is founding editor of the Journal of Child and Adolescent Counseling, American Counseling Association Fellow, and recipient of the American Counseling Association Don Dinkmeyer Social Interest Award, Association for Humanistic Counseling Educator Award, Association for Play Therapy Outstanding Research Award, Top 25 Women Professors in Texas Award, and many others. Dr. Ray supervises counseling services to community clients at her university clinic and leads a school outreach program providing play therapy to hundreds of children each year.

May 6 9 am – 5 pm & May 7 9 am – 5 pm

May 11 9 am – 5 pm & May 12 9 am – 5 pm

Garry Landreth

Dee Ray

May 6  9 am – 5 pm & May 7  9 am – 5 pm 2019

Email Prof. Bonnie Harnden, MA, RDT to reserve your spot at: Bonnie.I.harnden@concordia.ca

Registration fees are payable by cheque to Concordia University

Fees for Students $100 per seminar ($150 for both)

Fees for Professionals $250 per seminar ($400 for both)

Deadline to submit fees: Monday, April 29, 2019

Bring cheque in person from Monday to Friday, 9am-3pm to:
Concordia University, Creative Arts Therapies Department
1395 Rene Lévesque Blvd. W, VA Building, Room 264

For more information, call 514-297-7308
Appendix 5

Breakdown of Attendees
Breakdown of Attendees

Total attendees: 83

- Creative Arts therapies Graduates: 11
- Concordia PhD Students INDI: 1
- Creative Arts Therapies Students: 20
- Concordia Clinical Psychology Students: 2
- Concordia Child Studies Students: 1
- McGill Master’s in Psychology Students: 4
- McGill Social Work Students: 1
- McGill Doctoral Students: 12
- Community Health Workers-Psychologists: 14
- School Board Counsellors: 1
- School Board Psychologists: 2
- Local Daycare workers: 8
- McGill Faculty (Psychology): 1
- Concordia Faculty: 5
Appendix 6

Survey Results for Play Therapy Seminar
Center for Play Therapy Fall Conference  
*University of North Texas (May 11-12, 2019)*

*Thank you for attending our workshop. Your comments are valuable, and we appreciate your feedback.*

**CCPT 101: Basics in Child-Centered Play Therapy**  
*Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer*

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1. Describe and demonstrate the use and effectiveness of CCPT in community and school settings
2. Identify and discuss the use and implementation of CCPT protocol
3. Demonstrate CCPT skills and attitudes

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content
2. Quality of learning aids (Handouts, Visual, etc.)

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

*Talks more about how teachers or professionals can implement some of the tools in everyday communication*

Describe major benefits you gained from this workshop:

*The power of giving child freedom*

Other:

*Incredible learned so much*

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

**A**] Comfort and convenience.  
1 2 3 4 5

**B**] Audio-Visual / Lighting  
1 2 3 4 5

What is your occupation?  
*educator/students*

What credentials(s) do you hold? Please circle all that apply  
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other:______

*Thank You...We hope to see you again!*
Center for Play Therapy Fall Conference  
*University of North Texas (May 11-12, 2019)*

Thank you for attending our workshop. Your comments are valuable, and we appreciate your feedback.

**CCPT 101: Basics in Child-Centered Play Therapy**

**Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainee, Certified CPRT-Trainer**

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1. Describe and demonstrate the use and effectiveness of CCPT in community and school settings
   - 1 2 3 4 \(\bigcirc\) 5

2. Identify and discuss the use and implementation of CCPT protocol
   - 1 2 3 4 \(\bigcirc\) 5

3. Demonstrate CCPT skills and attitudes
   - 1 2 3 4 \(\bigcirc\) 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content
   - 1 2 3 4 \(\bigcirc\) 5

2. Quality of learning aids (Handouts, Visual, etc.)
   - 1 2 3 4 \(\bigcirc\) 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

More space in the classroom and more role plays.

Describe major benefits you gained from this workshop:

Exposure to this approach and seeing the videos.

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 
   - 1 2 3 4 \(\bigcirc\) 5

B] Audio-Visual / Lighting
   - 1 2 3 4 \(\bigcirc\) 5

What is your occupation?

What credentials(s) do you hold? *Please circle all that apply*

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

Thank You... We hope to see you again!
Center for Play Therapy Fall Conference  
University of North Texas (May 11-12, 2019)

Thank you for attending our workshop. Your comments are valuable, and we appreciate your feedback.

CCPT 101: Basics in Child-Centered Play Therapy  
Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings  
   1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

Spare more discussion on the therapy theoretical background

Describe major benefits you gained from this workshop:

A refreshing approach for less judgmental, more focused on the individual youth.

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  
[Signature]

What credentials(s) do you hold? Please circle all that apply  
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

Thank You...We hope to see you again!
Center for Play Therapy Fall Conference  
*University of North Texas (May 11-12, 2019)*

*Thank you for attending our workshop. Your comments are valuable, and we appreciate your feedback.*

**CCPT 101: Basics in Child-Centered Play Therapy**

*Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer*

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1. Describe and demonstrate the use and effectiveness of CCPT in community and school settings  
   1 2 3 4 5

2. Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3. Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker's presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

*Thank you for the concrete + practical information!*

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  
*Art therapy student*

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  *Student*

Thank You...We hope to see you again!
Thank you for attending our workshop. Your comments are valuable, and we appreciate your feedback.

CCPT 101: Basics in Child-Centered Play Therapy

Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings 1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol 1 2 3 4 6

3- Demonstrate CCPT skills and attitudes 1 2 3 4 6

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 4 6

2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 6

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5

B] Audio-Visual / Lighting 1 2 3 4 6

What is your occupation? Therapy Student
What credentials(s) do you hold? Please circle all that apply
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other:_______

Thank You...We hope to see you again!
Center for Play Therapy Fall Conference
University of North Texas (May 11-12, 2019)

Thank you for attending our workshop. Your comments are valuable, and we appreciate your feedback.

CCPT 101: Basics in Child-Centered Play Therapy
Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings 1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol 1 2 3 4 5

3- Demonstrate CCPT skills and attitudes 1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? Student/Childcare Educator

What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: __________

Thank You... We hope to see you again!
Center for Play Therapy Fall Conference  
*University of North Texas (May 11-12, 2019)*

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**CCPT 101: Basics in Child-Centered Play Therapy**

*Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainee, Certified CPRT-Trainee*

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1. Describe and demonstrate the use and effectiveness of CCPT in community and school settings  
   1 2 3 4 5

2. Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3. Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Other:

I loved it so much thank you! 😊

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  

What credentials(s) do you hold? Please circle all that apply.

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:]

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CCPT 101: Basics in Child-Centered Play Therapy  
Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Introduction to this method and how to apply them to my own field

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  
Student  Music Therapy Intern

What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  BA

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  1 2 3 4 5  
2- Quality of learning aids (Handouts, Visual, etc.)  1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop: 

*How can be applied to dist. population - Child trust in child!!*

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  1 2 3 4 5  
B] Audio-Visual / Lighting  1 2 3 4 5

What is your occupation?  

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

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   1  2  3  4  5

2. Identify and discuss the use and implementation of CCPT protocol  
   1  2  3  4  5

3. Demonstrate CCPT skills and attitudes  
   1  2  3  4  5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   1  2  3  4  5

2. Quality of learning aids (Handouts, Visual, etc.)  
   1  2  3  4  5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

Longer

Describe major benefits you gained from this workshop:

Comprehensive overview of play therapy - ways of speaking

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1  2  3  4  5

B] Audio-Visual / Lighting  
   1  2  3  4  5

What is your occupation?  

Student

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

More videos and interactive play (But it was amazing)

Describe major benefits you gained from this workshop:

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A) Comfort and convenience.
   1 2 3 4 5

B) Audio-Visual / Lighting
   1 2 3 4 5

What is your occupation? 

What credentials(s) do you hold? Please circle all that apply  
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other:______

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1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop: Practical knowledge (how to implement components of play therapy)

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  
   Student

What credentials(s) do you hold? Please circle all that apply  
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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1. Ability to communicate the content
   - 1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)
   - 1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

I would have liked to see all the videos of the child.

Describe major benefits you gained from this workshop:

I got to experience it role play.

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.
   - 1 2 3 4 5

B] Audio-Visual / Lighting
   - 1 2 3 4 5

What is your occupation? Student

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:________

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)  

1- Ability to communicate the content  

2- Quality of learning aids (Handouts, Visual, etc.)  

COMMENTS (optional):  
What suggestions do you have that you feel would enhance this workshop?  

maybe more examples of more difficult cases  

Describe major benefits you gained from this workshop:  

knowledge on specific CCPT  

Other:  

FACILITIES  

Please rate the workshop facility. (1=poor/5=excellent)  

A] Comfort and convenience.  

B] Audio-Visual / Lighting  

What is your occupation? Drama Therapist  

What credentials(s) do you hold? Please circle all that apply  

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

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3- Demonstrate CCPT skills and attitudes  1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  1 2 3 4 5
2- Quality of learning aids (Handouts, Visual, etc.)  1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:
understanding of Child Center approach

Other:
Trusting the child to lead his own growth

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  1 2 3 4 5
B] Audio-Visual / Lighting  1 2 3 4 5

What is your occupation?  
What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:_______

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1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings
   1 2 3 (4) 5

2- Identify and discuss the use and implementation of CCPT protocol
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

It would be nice if the # of questions were limited. They were a lot of "if" questions likely come from new therapists. Which is great but takes a lot of time.

Describe major benefits you gained from this workshop:

The philosophy of CCPT the intro to the topic

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5

B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? PhD student

What credentials(s) do you hold? Please circle all that apply

LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: Psychiatrist

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**CCPT 101: Basics in Child-Centered Play Therapy**  
Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

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   1 2 3 4 5

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   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

[larger space?]

Describe major benefits you gained from this workshop:

[very applied skilled based and kept wanting more!]

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  
PhD candidate in Clinical Psychology

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: ________

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To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings
   1 2 3 4 5
   (Response: Not discussed)

2- Identify and discuss the use and implementation of CCPT protocol
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.
   1 2 3 4 5

B] Audio-Visual / Lighting
   1 2 3 4 5

What is your occupation? PhD - Counseling

What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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What is your opinion of the speaker's presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Much to absorb & bring into practice in my teaching!

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5

B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? Educator

What credentials(s) do you hold? Please circle all that apply

LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: MFA

Ant Educator

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COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Other:

FACILITIES

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A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? Psychologist RDT

What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:
Better understanding through lecture + practice of CCPT.

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation?

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COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

got the clear view of CCPT

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation?    Student

What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:        

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2- Quality of learning aids (Handouts, Visual, etc.)

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Other:

FACILITIES

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A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? ______________________

What credentials(s) do you hold? Please circle all that apply
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   1 2 3 4 5

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1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Helped me to work better with children who have... problems.

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation?

What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: Educator

Thank You... We hope to see you again!
Center for Play Therapy Fall Conference  
University of North Texas (May 11-12, 2019)

Thank you for attending our workshop. Your comments are valuable, and we appreciate your feedback.

CCPT 101: Basics in Child-Centered Play Therapy  
Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings  
   1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

CCPT 102!

Describe major benefits you gained from this workshop:

Knowledge, practice

Other:

Thank you

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation? Guidance Counselor

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: M.Ed

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2. Identify and discuss the use and implementation of CCPT protocol 1 2 3 4 5
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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content 1 2 3 4 5
2. Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

I can't think of anything.

Describe major benefits you gained from this workshop:

The role play and extensive clinical examples were very helpful to see how it occurs.

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? ____________

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  ______

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2. Identify and discuss the use and implementation of CCPT protocol 1 2 3 4 5

3. Demonstrate CCPT skills and attitudes 1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content 1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

Nothing—that was wonderful. Very applied & hands on!!

Describe major benefits you gained from this workshop:

knowledge, perspective, thinking, concrete skills for future clients

Other:

Fab!!!

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A) Comfort and convenience. 1 2 3 4 5

B) Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? Ph.D. student, Child Psychology

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC

Other: M.A. educational psychology

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To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings  [ ]

2- Identify and discuss the use and implementation of CCPT protocol [ ]

3- Demonstrate CCPT skills and attitudes [ ]

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content [ ]

2- Quality of learning aids (Handouts, Visual, etc.) [ ]

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Confidence that I knew what I needed to go forward.

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. [ ]

B] Audio-Visual / Lighting [ ]

What is your occupation?  
Psycho Logistic

What credentials(s) do you hold? Please circle all that apply  
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  
Ph.D.

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To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings  
   1 2 3 4(5)

2- Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

Perhaps limiting questions from attendees in order to cover more material

Describe major benefits you gained from this workshop:

New knowledge on a very valid therapeutic method/approach  
How to set limits in play therapy & reflect ch's behavior & feeling

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)  

Room somewhat crowded

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation?  

A] Play Therapist  
B] Other:

What credentials(s) do you hold? Please circle all that apply  
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other:  

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   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Understanding of the theoretical and practical foundations of play therapy

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  1 2 3 4 5
B] Audio-Visual / Lighting  1 2 3 4 5

What is your occupation? [ ] Clinical Psychology [ ] Student [ ] M.A. PhD candidate
What credentials(s) do you hold? Please circle all that apply
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other:

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3- Demonstrate CCPT skills and attitudes  1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?


longer! ☀

Describe major benefits you gained from this workshop:

The philosophy of trusting the child's inner self-direction

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  1 2 3 4 5
B] Audio-Visual / Lighting  1 2 3 4 5

What is your occupation? Student.

What credentials(s) do you hold? Please circle all that apply
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: M.A. in School psych.

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

This workshop was excellent! Truly!

Describe major benefits you gained from this workshop:

Hearing how Dee responds to children based on our questions as well as from the videos! Other: Learning how to be with the child and regulated.

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? M.A. student (in School/Applied Child Psych)

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:________

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 4 5
2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

[Blank]

Describe major benefits you gained from this workshop:

[Blank]

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? [ ] Psychologist [ ] Psychiatrist [ ] Counseling Psychologist [ ] Counselor [ ] Other: [Blank]

What credentials(s) do you hold? Please circle all that apply
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: [Blank]

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   1 2 3 4 5

2. Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3. Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

- Orientation to the attitude for CCPT - a philosophy that is applicable to many therapies.
- Role play Scenarios were great - may have some scripting for those having trouble coming up with ideas.

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  
*Art Therapist*

What credentials(s) do you hold? Please circle all that apply  
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: *Art Therapist*

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Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

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   1 2 3 4 5

2. Identify and discuss the use and implementation of CCPT protocol  
   
   1 2 3 4 5

3. Demonstrate CCPT skills and attitudes  
   
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   
   1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  
   
   1 2 3 4 5

**COMMENTS (optional):** Articles or chapters would have been helpful.

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

*Ability to apply CCPT skills, understand reasoning for applying specific intervention.*

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   
   1 2 3 4 5

B] Audio-Visual / Lighting  
   
   1 2 3 4 5

What is your occupation? **Art Therapist.**

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

lots of clearly articulated microskills + general stance guidance to help my students

Other:

Outstanding presenter!

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  RMFT  LCPC  Other:

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   1 2 3 4 5

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   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Thought it was great- could have listened for another day - great stories & advice

Describe major benefits you gained from this workshop:

Core reassurance of respecting the process of child-centered therapists.

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation? ____________ Art Therapist

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: ATR

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Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Only to even other topics such as group work, parent consultation in detail. But overall, this was amazing. We had a great time! We had a great time!

Describe major benefits you gained from this workshop:

- A relative move to my clients
- Feeling more relaxed in sessions, knowing the process and...
- Other: The child's ability...
- Knowing which tools were more useful and why...
- Including room setup and structure...

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? School counselor / Drama Therapist in private practice

What credentials(s) do you hold? Please circle all that apply
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: Naturopaths

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**Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainee, Certified CPRT-Trainer**

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings  
   1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   Excellent!  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   Excellent!  
   Also concise, relevant  
   1 2 3 4 5

**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Renewed connection with our shared humanity  
That clients are more important and to be trusted

Other:

Thank you for all your dedication to organizing this workshop.

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation? [ ] SW [ ] CFT

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

learning how to do it. The philosophy

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation? Social Worker

What credentials(s) do you hold? Please circle all that apply

LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: BAC

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

Considerations for when working in less ideal settings, with more limited materials, etc.

Describe major benefits you gained from this workshop:

Re-think praise vs. encouragement.
Deep sense of trust for children’s ability to take care of themselves, self-regulate, actualize.

Other:

Excellent, engaging workshop, thank you!

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation? Music therapist

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: MTA  MT-BC

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**CCPT 101: Basics in Child-Centered Play Therapy**

Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainer, Certified CPRT-Trainer

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings  
   
2- Identify and discuss the use and implementation of CCPT protocol  
   
3- Demonstrate CCPT skills and attitudes  
   
What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   
2- Quality of learning aids (Handouts, Visual, etc.)  
   
**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

It would be helpful to learn more about mixed approaches. For instance using play therapy as a co-therapist, or couple and family therapists Describe major benefits you gained from this workshop:

Recognizing the logic behind the play therapy approach

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   
B] Audio-Visual / Lighting  
   
What is your occupation?  

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

Thank You...We hope to see you again!
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University of North Texas (May 11-12, 2019)

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To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

1- Describe and demonstrate the use and effectiveness of CCPT in community and school settings  1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol  1 2 3 4 5

3- Demonstrate CCPT skills and attitudes  1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Wonderful examples given. Practical advice and sentence structures that can be used. Appropriate levels of repetition in order for the skills to sink in.

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  1 2 3 4 5
B] Audio-Visual / Lighting  1 2 3 4 5

What is your occupation?  

What credentials(s) do you hold? Please circle all that apply 

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: BFA

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3- Demonstrate CCPT skills and attitudes 1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 4 5
2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

It was very good as is.

Describe major benefits you gained from this workshop:

Discerning case videos are very beneficial.

Other: The length of time to cover concepts allowed for a more in depth review.

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? School Psychologist

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: M.A.

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   1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes →amazing!
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop: I loved the examples + specific methods/case described. It made the information more accessible + applicable

Other: The video cases and case examples were so helpful

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5 →more open space/visibility could have helped
B] Audio-Visual/ Lighting 1 2 3 4 5

What is your occupation? Early childhood educator + course lectures
What credentials(s) do you hold? Please circle all that apply
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: M.Ed

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3. Demonstrate CCPT skills and attitudes  

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
2. Quality of learning aids (Handouts, Visual, etc.)

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

It was great. Thank you.

Describe major benefits you gained from this workshop:

Practical understanding of CCPT. I also feel empowered that this can be used in schools to help children. I look forward to learning more about this.

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   
B] Audio-Visual / Lighting

What is your occupation? Psychologist - School Setting

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

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   1 2 3 4 5

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   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

It was fine. There could always be more exploration.

Describe major benefits you gained from this workshop:

I appreciated learning to trust the child.
I appreciated the examples/role plays/demon.

Other:

Thank you.

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? Drama Therapist/Teacher

What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: C.C.C.

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   1 2 3 4 5

What is your opinion of the speaker's presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

- Make link to transferability with other approaches (as we work at creative (suggestion) therapist)

Describe major benefits you gained from this workshop:

- Reminder of my stance: the children lead the way. They are at the center of therapy
- I will reflect on it over the coming weeks. But I want to work as an art-therapist and also integrate play therapy.

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation? **Student art therapy**

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)
   1 2 3 4 5

**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

I learned key information about the usefulness and implementation of CCPT, which I hope to use in my future practice.

Other: ___

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation? ___

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: ___

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3- Demonstrate CCPT skills and attitudes 1 2 3 4 5

What is your opinion of the speaker's presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

It was wonderful. Street balance of lecture, demo, & practice

Describe major benefits you gained from this workshop:

Real felt experience of CCPT principles as modelled by the facilitator - a chance to keep reflect on my own orientation

Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 4 5
B] Audio-Visual / Lighting 1 2 3 4 5

What is your occupation? Drama Therapist

What credentials(s) do you hold? Please circle all that apply
LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other:__

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   1 2 3 4 5

2- Identify and discuss the use and implementation of CCPT protocol  
   1 2 3 4 5

3- Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

Recognize the accreditation.

Describe major benefits you gained from this workshop:

Learning about CCPT in a practical level

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  
MA  Drama  Therapy

What credentials(s) do you hold? *Please circle all that apply*

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content

2. Quality of learning aids (Handouts, Visual, etc.)

**COMMENTS** (optional):

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop:

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
B] Audio-Visual / Lighting

What is your occupation?  
What credentials(s) do you hold? *Please circle all that apply*  
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: __________

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CCPT 101: Basics in Child-Centered Play Therapy

Dee Ray, Ph.D., LPC-S, NCC, RPT-S, Certified CCPT-Trainee, Certified CPRT-Trainee

To what degree do you believe the following objectives were reached? (1=poor/5=excellent)

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2. Identify and discuss the use and implementation of CCPT protocol  1 2 3 4 5

3. Demonstrate CCPT skills and attitudes  1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  1 2 3 4 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop?

If it were longer, included the 102, just none of it, plus group CCPT

Describe major benefits you gained from this workshop:

Confidence in my ability to try using these tools in my work, a different, more open perspective from the more "traditional" one I'd been exposed to.

Other:

A better understanding of the reason for some of the structures

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A) Comfort and convenience  1 2 3 4 5
B) Audio-Visual / Lighting  1 2 3 4 5

What is your occupation? [Dance therapy MA student, Dance movement therapy intern]

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  1 2 3 4 5  
2- Quality of learning aids (Handouts, Visual, etc.)  1 2 3 4 5  

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?

Keep the focus on interaction, practiced respect, the atmos. is a good tool

Describe major benefits you gained from this workshop:
Knowledge about Play therapy protocols, structure and philosophy
Other:

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  1 2 3 4 5  
B] Audio-Visual / Lighting  1 2 3 4 5  

What is your occupation?  Student
What credentials(s) do you hold? Please circle all that apply
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other: ________

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   1 2 3 4 5

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   1 2 3 4 5

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   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

Describe major benefits you gained from this workshop: 

It was great to have videos to really help to clarify theory by seeing it modelled.

Other:

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  

What credentials(s) do you hold? Please circle all that apply

LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:

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   1 2 3 4 5

3. Demonstrate CCPT skills and attitudes  
   1 2 3 4 5

What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1. Ability to communicate the content  
   1 2 3 4 5

2. Quality of learning aids (Handouts, Visual, etc.)  
   (Small presentation handout) 1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop? **Better open room that allows people to move more easily if they need to & a space that people have better view of the presenter such as psychology classes at Loyola Building.**

Describe major benefits you gained from this workshop: **Training approach is valid even though psychoanalytic thought at school has a different stand.**

Other:  
The parent consultation seminar could be very helpful.

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5  

[the room was too cold!!]

What is your occupation?  
Art therapy student

What credentials(s) do you hold? Please circle all that apply  
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:  

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content 1 2 3 [ ] 5

2- Quality of learning aids (Handouts, Visual, etc.) 1 2 3 [ ] 5

COMMENTS (optional):

What suggestions do you have that you feel would enhance this workshop? 

It could be interesting to integrate a lot more video of various limit setting and therapeutic responses. As I got the sense that a lot of clinicians would have liked to see a few more scenarios that involved violence or risky behaviors. And as well that addressed suicide ideation.

Describe major benefits you gained from this workshop:

I really enjoyed the way the material was presented and leaving the handout for notes.

Other: 

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience. 1 2 3 [ ] 5
B] Audio-Visual / Lighting 1 2 3 [ ] 5

What is your occupation? Art therapist

What credentials(s) do you hold? Please circle all that apply

LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other: MA, ATPQ

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
   1 2 3 4 5

2- Quality of learning aids (Handouts, Visual, etc.)  
   1 2 3 4 5

**COMMENTS (optional):**

What suggestions do you have that you feel would enhance this workshop?

*Excellent, humble, knowledgeable, organized, awesome facilitator -- thank you!*

Describe major benefits you gained from this workshop:

*A deeper understanding of CCPT*  

Other:

 Voorhese

**FACILITIES**

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
   1 2 3 4 5

B] Audio-Visual / Lighting  
   1 2 3 4 5

What is your occupation?  

Registered Drama Therapist  

Order of Psychologists  

What credentials(s) do you hold? Please circle all that apply

LPC LPC-S LMHC LCSW RPT RPT-S NCC LMFT LCPC Other:  

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What is your opinion of the speaker’s presentation? (1=poor/5=excellent)

1- Ability to communicate the content  
2- Quality of learning aids (Handouts, Visual, etc.)

COMMENTS (optional):
What suggestions do you have that you feel would enhance this workshop?
- more practice sessions interspersed throughout the days

Describe major benefits you gained from this workshop:
- a new open-appreciation and deepened belief in the ability for children to care for themselves with support

FACILITIES

Please rate the workshop facility. (1=poor/5=excellent)

A] Comfort and convenience.  
B] Audio-Visual / Lighting

What is your occupation? Art Therapy  
What credentials(s) do you hold? Please circle all that apply  
LPC  LPC-S  LMHC  LCSW  RPT  RPT-S  NCC  LMFT  LCPC  Other:__________

Thank You... We hope to see you again!
Appendix 7

Curricula Vitae
### Employment History

<table>
<thead>
<tr>
<th>Period</th>
<th>Position</th>
<th>Institution</th>
<th>Location</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2011-Present</td>
<td><strong>Associate Professor - Tenured</strong></td>
<td>Concordia University, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Associate Professor in the Creative Art Therapies Practicum Coordinator</td>
</tr>
<tr>
<td>Fall 1995-Present</td>
<td><strong>Private Practitioner</strong></td>
<td></td>
<td>Montreal, Quebec</td>
<td>Working with couples, families and individual adolescents and adults</td>
</tr>
<tr>
<td>Summer 2008–April 2011</td>
<td><strong>Assistant Professor-Tenure Track</strong></td>
<td>Concordia University, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Assistant Professor in the Creative Art Therapies Department Option Coordinator (2008-2009) Practicum Coordinator</td>
</tr>
<tr>
<td>Fall 2005-Fall 2008</td>
<td><strong>Creative Arts Therapy Clinical Coordinator</strong></td>
<td>Montreal Children’s Hospital, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Coordinates staff and staffing issues, oversees all student placements in creative arts therapies</td>
</tr>
<tr>
<td>Fall 1998-Fall 2008</td>
<td><strong>Art and Drama Therapist-Emergency Room Follow-Up Team</strong></td>
<td>Montreal Children’s Hospital, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Brief and long-term therapy with adolescents who enter hospital through ER, including suicidal adolescents and their families</td>
</tr>
<tr>
<td>Fall 2007-Spring 2008</td>
<td><strong>Limited Term Appointment</strong></td>
<td>Concordia University, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Creative Arts Therapies Program</td>
</tr>
<tr>
<td>Fall 1999-Spring 2007</td>
<td><strong>Instructor, Part-time Faculty</strong></td>
<td>Concordia University, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Creative Arts Therapies Program</td>
</tr>
<tr>
<td>Fall 2005-Spring 2006</td>
<td><strong>Limited Term Appointment</strong></td>
<td>Concordia University, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Creative Arts Therapies Program</td>
</tr>
<tr>
<td>Fall 1998-2004</td>
<td><strong>Art &amp; Drama Therapist-Inpatient Child Psychiatry-7D</strong></td>
<td>Montreal Children’s Hospital, Montreal, Quebec</td>
<td>Montreal, Quebec</td>
<td>Play, Drama &amp; Art therapy with children hospitalized with psychiatric disorders</td>
</tr>
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</table>
Fall 1998 - 2003  
**Art & Drama Therapist-Adolescent Treatment Program**  
*Montreal Children’s Hospital, Montreal, Quebec*  
Art & Drama Therapy interventions - Groups and individual adolescents, conducted and led playback theatre project.

Fall 1998 - Spring 2000  
**Art & Drama Therapist**  
“Safe Haven” C.L.S.C.  N.D.G./Mtl. W, Montreal, Quebec  
Created treatment program combining drama, play, and art therapy to treat children and women who have witnessed and experienced conjugal violence, funded through grant from Sam Solomon trust foundation.

Winter 1997 - Fall 1998  
**Art Therapist**  
*ACCM - Aids Community Care Montreal, Montreal, Quebec*  
Art and Drama therapy group with HIV positive clients.

Winter 1995 - Summer 1996  
**Art Therapist**  
*ANAB - Anorexic and Bulimic Foundation, Montreal, Quebec*  
Art and Drama therapy groups with anorexic and bulimic clients.

Winter 1995 - Spring 1996  
**Art Therapist**  
*West Island Readaptation Centre, Montreal, Quebec*  
Created Art therapy program with handicapped adults.

1994 - 1995  
**Teaching Assistant**  
*Concordia University, Montreal, Quebec*  
Introduction to Drama Therapy - Dr. Stephen Snow.

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**Academic Background**

1992 - 1994  
*Concordia University, Montreal, Quebec*  
M.A. Art Therapy

1987 - 1992  
*York University, Toronto, Ontario*  
B.A. Honours Psychology

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**Honours and Awards**

2019  
*The Concordia University President’s Excellence in Teaching Award*  
Montreal, Quebec

2016  
*The North American Drama Therapy Association Teaching Award*  
Seattle, Washington

2012  
*The North American Drama Therapy Association Research Award*  
New Haven, CT

*Faculty of Arts Academic Achievement List*  
York University, Toronto, Ontario
## Additional Training

<table>
<thead>
<tr>
<th>Year</th>
<th>Training</th>
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<tbody>
<tr>
<td>2019</td>
<td>Play Therapy Training – Parent/Child Relational Model</td>
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<tr>
<td></td>
<td>University of Texas</td>
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<tr>
<td>2018</td>
<td>Play Therapy Training - Advanced Supervision</td>
</tr>
<tr>
<td></td>
<td>University of Texas</td>
</tr>
<tr>
<td>2014</td>
<td>Play Therapy Certificate-La Mouline, France</td>
</tr>
<tr>
<td>2012-16</td>
<td>Somatic Experiencing Trauma Training</td>
</tr>
<tr>
<td>2004 - 2012</td>
<td>Psychoanalytic training program: includes seminars in developmental theory and the various schools of psychoanalytic thought and ongoing weekly supervision for patients in treatment</td>
</tr>
<tr>
<td>2004 - 2005</td>
<td>Developmental Transformations Training</td>
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<tr>
<td>2000-2002</td>
<td>Alternative Track Training in Drama Therapy</td>
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<tr>
<td>1996 - 1999</td>
<td>Marital and Family Therapy Program</td>
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<td></td>
<td>Argyle Institute</td>
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</table>

## Research

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Research Description</th>
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</thead>
</table>
| October 2009 - Present | Arts-based research performance autoethnography “You Arrive”: Trauma, Sexuality, and Individuation  
This is a research-based performance autoethnography, which draws theory from psychoanalysis, drama therapy, trauma theory, developmental psychology, and neurobiology. All of these concepts are woven together in a way that provides the audience with a profound experience of the theoretical material. “You Arrive” describes one woman’s transformation in therapy as she works through different developmental stages with her therapist. This performance is applicable to students and teachers, as well as parents and the non-therapeutic community.  
Theoretical concepts and the process of repair in therapy are illuminated in the performance through the use of film, text, music, narration and embodiment. Feedback is collected at each performance during a post-performance moderated discussion and is used to develop the piece further. |
March 2016 - Present

“Teach Me” Video Series
I have been working with the idea of performance as a learning experience for the last few years. Students in my classes now create performances at the end of their semester and explore through a process of associating to the theory we are learning and their lived experiences. I am working with the idea that if something is embodied (a theory for example) and performed, then the performer and the audience understand it in a more complex and experiential way. Ideas become knowledge when they are experienced.
This process has led me to create a YouTube channel where students can upload and share their performances if they wish. The second phase of this project is called "Teach me". I have begun to film drama therapists who are working in front-line settings talking about what they have learned from the ground-up. Three were piloted in the spring and summer of 2016. A local play therapist was interviewed in winter 2017. They are all interviewed about what they know in their bodies about trauma, and what DT and therapeutic skills they have found to be the most effective. These interviews will be edited with the filmed workshop all led in the department with the current second year cohort.

Standing in Grace: Expanding Our Capacity for Joy, Gratitude and Awe through Drama Therapy
I have begun to explore Drama therapies capacity to extend and enhance states of Awe, Joy and Gratitude. Current research shows that positive emotions have the capacity to promote health and support the regulation of the nervous system. Drama therapy, with its focus on embodiment, is an effective modality for harnessing the power of positive emotions to create a deeper, more embodied experience and may help counteract Traumas effects on the nervous system.

June 2017 - Present

May 2018
Voice Over Translation and Recording (French and English)

April 2018
Robert Landy (filmed interview for “Teach Me” Series and Workshop

March 2018
Standing in Grace” Exploring Drama Therapies Capacity to Expand States of Awe, Wonder and Gratitude - Creative Arts Therapies Week

November 2017
Performance “You Arrive” McGill Public Health And CATS students (Counseling Skills)

November 2017
Film Shoot (additional scenes) “You Arrive”

October 2017
NADTA Conference Boston: Standing in Grace
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>June 2017-Present</td>
<td><strong>You Arrive</strong>-Filming Screen Adaptation in French and English</td>
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<tr>
<td>June 2017</td>
<td><strong>Main film shoot June 2017</strong></td>
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<tr>
<td>May 2017</td>
<td><strong>Canadian Drama Therapy Conference; Awe, The Body and Drama Therapy</strong></td>
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<tr>
<td>December 2016</td>
<td><strong>Arts-based research performance auto-ethnography</strong></td>
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<tr>
<td>November 2016</td>
<td><strong>“You Arrive”: Trauma, Sexuality, and Individuation</strong></td>
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<tr>
<td></td>
<td>**Focus Groups-Concordia University community, mental Health Practi-</td>
</tr>
<tr>
<td></td>
<td>tioners, and students**</td>
</tr>
<tr>
<td>December 2016</td>
<td>**Esther Speckor, Play Therapist (filmed interview for “Teach Me” S-</td>
</tr>
<tr>
<td></td>
<td>eries and Workshop**</td>
</tr>
<tr>
<td>November 2016</td>
<td><strong>Arts-based research performance auto-ethnography</strong></td>
</tr>
<tr>
<td></td>
<td><strong>“You Arrive”: Trauma, Sexuality, and Individuation</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Concordia University, Creative Arts Therapies Department</strong></td>
</tr>
<tr>
<td>September 2016</td>
<td><strong>Filming “You Arrive” Play version</strong></td>
</tr>
<tr>
<td>June 2016-June 2017</td>
<td><strong>Adapting play script to screen play</strong></td>
</tr>
<tr>
<td>June 2016</td>
<td>**Focus groups with Mental Health practitioners and parents to de-</td>
</tr>
<tr>
<td></td>
<td>velop educational film and treatment guidelines and NADTA Board</td>
</tr>
<tr>
<td>October 2015</td>
<td><strong>Arts-based research performance auto-ethnography</strong></td>
</tr>
<tr>
<td></td>
<td><strong>“You Arrive”: Trauma, Sexuality, and Individuation</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Concordia University, Creative Arts Therapies Department</strong></td>
</tr>
<tr>
<td>November 2014</td>
<td>**French presentation of Arts-based research performance auto-eth-</td>
</tr>
<tr>
<td></td>
<td>nography “You Arrive”: Trauma, Sexuality, and Individuation**</td>
</tr>
</tbody>
</table>
|              | **Colloque Transmissions, loyautés et transformations : Enjeux contem-
|              | porains des soins en pédopsychiatrie Montreal, QC**                 |
| November 2014 | **Arts-based research performance auto-ethnography**                |
|              | **“You Arrive”: Trauma, Sexuality, and Individuation**               |
|              | **Concordia University Department of Creative Arts Therapies**       |
|              | **Montreal, QC**                                                    |
| November 2014 | **Arts-based research performance auto-ethnography**                |
|              | **“You Arrive”: Trauma, Sexuality, and Individuation**               |
|              | **McGill School of Social Work**                                     |
|              | **Montreal, QC**                                                    |
October 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
NADTA Conference
Montreal, QC

September 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Ottawa Hospital-Department of Social Work (annual retreat)
Ottawa, ON

September 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Ministry of Health-JASM Conference
Montreal, QC

May 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Ottawa Psychanalytic Community and residences Training Program at CHEO (Children’s Hospital of Eastern Ontario)
Ottawa, ON

May 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Jewish General Hospital
Montreal, QC

April 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Montreal Children’s Hospital
Montreal, QC

March 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
McGill School of Counselling Psychology
Montreal, QC

February 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
NADT Conference
New Haven, CT

February 2013

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Badshaw, LUNCH and LEARN
Montreal, QC
November 2012

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
CLSC Youth Mental Health Team
Montreal, QC

September 2012

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Badshaw, LUNCH and LEARN
Montreal, QC

June 2012

Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
McGill University School of Social Work
Montreal, QC

April 2012
March 2012  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
*Canadian Creative Arts Therapies Week*
*Montreal, QC*

February 2012  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
*Toronto Psychoanalytic Society & Institute Open House*
*Toronto, ON*

January 2012  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
*Concordia University and McGill University Counselling Departments*
*Montreal, QC*

December 2011  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
*Charles Le Moyne Hospital*
*Montreal, QC*

November 2011  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
*Expressive Therapies Summit*
*New York, NY*

November 2011  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
*National Association for Drama Therapy Annual Conference*
*San Francisco, CA*
October 2018  Expanding The Capacity for Joy, Awe and Gratitude and the resilient Nervous System  
Master Class Creative Arts Therapies Summit NY

September 2016  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation  
Israel, Tel Hai University

September 2016  Awe, Gratitude, The Body and Drama Therapy  
Tel Hai University Israel

July 2011  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation  
Collaborative Mental Health Care Conference  
Halifax, NS

June 2011  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation  
XXXVIIth Congress of the Canadian Psychoanalytic Society  
Ottawa, ON

June 2011  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation  
NYU Steinhardt School of Culture, Education, and Human Development  
New York, NY

November 2010 (Peer reviewed)  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation  
National Association for Drama Therapy Annual Conference  
Chicago, IL

November 2010 (By invitation)  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation  
Canadian Psychoanalytic Institute  
Montreal, ON

September 2010 (By invitation)  Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation  
CHEO Fundraiser  
Ottawa, ON
May 2010
(Peer Reviewed)
Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation (“Being the scaffold”)
Collaborative Mental Health Care Conference
Winnipeg, MB

May 2010
(By invitation)
Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
EMSB Guidance Counsellor Retreat
Laurentians, QC

April 2010
(By invitation)
Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation
Argyle Institute of Human Relations open house
Montreal, QC

November 2009
(Peer reviewed)
Arts-based research performance auto-ethnography
“You Arrive”: Trauma, Sexuality, and Individuation (“Being the scaffold”)
National Association for Drama Therapy Annual Conference
White Plains, NY

Fall 1997-Spring 1998
Research Assistant
Montreal Children’s Hospital ER Follow-up, Montreal, QC
Completed intake and follow up interviews with suicidal adolescents and their families

Fall 1994 - Winter 1994
M.A. Thesis Research
Douglas Hospital, Montreal, Quebec
Art and Drama therapy groups with anorexic and bulimic in-patients and out-patients; qualitative research, case studies

Fall 1992 - Spring 1993
Research Assistant
Allen Memorial Hospital, Montreal, Quebec
Organized and documented Art Therapy archives

Publications
2018  Translating Drama Therapy: Reflections on Clinical Practice with Complex Trauma  
Drama Therapy Review 2018 (volume 4 number 2) In press

2013  Drama Therapy and Trauma: Transforming Individuals, Communities and Classrooms  
Edited by David Read Johnson and Nisha Sajnani  
Book Chapter: Trauma Performed and Transformed

2012  Twelve-year follow-up of previously suicidal adolescents: Borderline personality disorder  
Canadian Journal of Psychiatry (In Press)  
Brian Greenfield, MD.; Sze Man Tse, D.C.E.; Bonnie Harnden, MA, RDT; Londa Daniel, MA

2010 (February)  Book Chapter  
Immigration and Suicide: An Overview  
Immigration and Suicide, Nova Science (New York), edited by L. Sher  
Brian Greenfield, MD.; Londa Daniel, MA; Bonnie Harnden, MA, RDT

2008 (November)  Book Review: Supervision of Drama Therapy, edited by Phil Jones and Ditty Dokter  
Canadian Art Therapy Association Journal (2008) Volume No. 1  
Bonnie Harnden, MA, RDT

2008 (October 1st)  Becoming a psychoanalyst  
Bonnie Harnden, MA, RDT

2008 (November 17th)  Previously suicidal adolescents: Predictors of six-month outcome  
Brian Greenfield , M.D.; Sze Man Tse, D.E.C.; Jean-Marc Guile, M.D.; Geoffrey Dougherty, M.D.C.M.; Bonnie Harnden MA, RDT  
(Co-investigator; Funded by Hogg family foundation $165,000)

2006  Profile of a Metropolitan North American Immigrant Suicidal Adolescent Population  
Brian Greenfield, MD, FRCP, ABPN; Cécile Rousseau; Joshua Slatkoff MA; Maxime Lewkowsk, MSc.; Michael Davis, MB, ChB, DRCP, FRAC; Sébastien Dube, MSc; Myrna E Lashley, PhD; Isabelle Morin, MSc; Patti Dray, MA, CCC; Bonnie Harnden, MA, RDT  
(Co-investigator; Funded by NHRDPC $160,000)
2006

**Outpatient Art Therapy**

Bonnie Harnden, MA, RDT; Allen Rosales, MA; Brian Greenfield, MD

**Additional Peer-reviewed Conference Presentations**

**June 2017**

*Awe, The Body and Drama therapy*

*First Canadian Drama Therapy Conference*

*Winnipeg, Manitoba*

**October 2008**

*Let Me Be Your Carried One*

_by David Read Johnson, Bonnie Harnden, Joan Witig and Ann Smith,*

*Developmental Transformations Conference, NY, NY*

**April 2004**

*Working with Children Using the Developmental Method*

*Developmental Transformations Conference, NY, NY*

**April 2004**

*Psychoanalysis on its feet: the link between Developmental Transformations (Drama Therapy) and Psychoanalysis*

*Developmental Transformations Conference, NY, NY*

**August 2000**

*Resilience Building with High Risk Children and Adolescents*

*The Canadian Mental Health Conference “Roots of Resiliency” St. Johns, Newfoundland*

**October 2000**

*Experiencing Connectedness*

*Based on clinical work at the Montreal Children’s Hospital Adolescent program, using an Art and Music Therapy intervention with adolescents in long-term treatment: Convergence Conference, Montreal, QC*

**July 1994**

*Art and Drama Therapy Groups with Women with Eating Disorders*

*The Quebec Association of Art Therapists Annual Conference*

**Additional Visiting Lectures/ Presentations**

**April 2010**

*Importance of Playfulness in Human Development*

*CBC Radio One Presents Sunday-@-the-Segal*

*Segal Centre for Performing Arts*

*Montreal, QC*

**March 2010**

*Using Drama Therapy in Family Therapy*

*Creative Arts Therapies Week*

*Montreal, QC*
January 2007  
 **Winnicott and the holding environment**  
 *Guest Lecturer - CEGEP Marie –Victorin*  
 Montreal, QC

April 2006  
 **Therapy skills and family therapy: Attachment injuries and how to treat them**  
 *Guest Lecturer McGill Graduate counselling program*  
 Montreal, QC

June 2005  
 **Why is my Teen so Moody?**  
 What is normal teenage behaviour and when to worry  
 *McGill School of Continuing Education Public Lecture Series, “Health Matters” Montreal Children’s Hospital Amphitheatre*  
 Montreal, QC

Spring 2004  
 **Family Systems Theory**  
 *Guest Lecturer*  
 *McGill Division of Child Psychiatry Lecture Seminar Series*  
 Montreal, QC

Spring 2003 – Fall 2003  
 **The Impact of Divorce at Different Stages of Development, Single Parenting, and Fathering**  
 *Guest Lecturer*  
 *McGill Division of Child Psychiatry Lecture Seminar Series*  
 Montreal, QC

January 2002  
 **Introduction to the Patient: Working with divorced and divorcing families - the alliance with parents and children**  
 *Lecturer*  
 *McGill Faculty of Medicine, McGill University*  
 Montreal, QC

Spring 2002-Fall 2002  
 **The Impact of Divorce at Different Stages of Development, Single Parenting, and Fathering**  
 *Guest Lecturer*  
 *McGill Division of Child Psychiatry Lecture Seminar Series*  
 Montreal, QC

Spring 2001-Fall 2001  
 **The Impact of Divorce at Different Stages of Development, Single Parenting, and Fathering**  
 *Guest Lecturer*  
 *McGill Division of Child Psychiatry Lecture Seminar Series*  
 Montreal, QC

Spring 2001  
 **High Conflict Divorce and its Impact on Children and Adolescents**  
 *Guest Lecturer*  
 *McGill Division of Child Psychiatry Lecture Seminar Series*  
 Montreal, QC
May 2001  
**Building Resilience with Adolescents in Foster Care**  
*Case Conference, Montreal Children’s Hospital*  
Montreal, QC

March 2001  
**Introduction to the Patient: How to build an alliance with families and family systems theory**  
Guest Lecturer  
*McGill Faculty of Medicine, McGill University*  
Montreal, QC

Spring 2000-Fall 2000  
**The Impact of Divorce at Different Stages of Development, Single Parenting, and Fathering**  
Guest Lecturer  
*McGill Division of Child Psychiatry Lecture Seminar Series*  
Montreal, QC

June 2000  
**Safe Haven - Working with Children from High Conflict and Violent Families**  
*Grand Rounds, Department of Psychiatry, Montreal Children’s Hospital*  
Montreal, QC

January 1996  
**Bridging Disciplines: The combination of Art and Drama therapies together as a clinical intervention**  
Guest Lecturer, graduate Drama Therapy class, Concordia University  
Montreal, QC

April 1995  
**Starving for Expression inside the Secret Theatre**  
Presentation of thesis material and findings. Sponsored by the Drama Therapy Circle of Montreal  
Montreal, QC

September 1995  
**Making Links: Art and Drama Therapy**  
A workshop, co-lead with Dr. Stephen Snow on the integration of Art and Drama Therapies. Sponsored by the Art Therapy Unit and Concordia University  
Montreal, QC

<table>
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<tr>
<th>Date of Application</th>
<th>Date of Acceptance</th>
<th>Title of Project</th>
<th>Granting Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2018</td>
<td>November 2018</td>
<td><strong>Awe, Gratitude and the resilient Nervous System</strong></td>
<td>Raschkwon Foundation</td>
<td>$10,000</td>
</tr>
<tr>
<td>March 2018</td>
<td>May 18/18</td>
<td><strong>Play Therapy Support</strong></td>
<td>Raschkwon Foundation</td>
<td>$29,311.05</td>
</tr>
</tbody>
</table>
February 2014  May 2015  “You Arrive”  Ministry of Economy, Innovation and Exports (MDEIE)  $305,555.000

January 2014  June 2015  “You Arrive”  Howard Webster Foundation  $100,000

March 2013  July 2013  You Arrive Performances  Foundation of Greater Montreal  $10,000

March 2013  April 5 2013  “You Arrive” (Pilot manual)  Concordia University SEED Funding  $13,385

October 2010  June 2011  “You Arrive”  CIHR  $87,885.10

December 2004  May 2005  Creative Arts Therapy Library  Montreal Children’s Hospital Auxiliary  $2,500

December 2002  May 2003  Playback Theatre Project  Montreal Children’s Hospital Auxiliary  $13,000

December 2001  May 2002  Playback Theatre Project  Montreal Children’s Hospital Auxiliary  $8,000

December 2000  April 2001  Playback Theatre Project  Montreal Children’s Hospital Auxiliary  $4,500

December 2000  April 2001  Materials for New Creative Arts Therapies Room  Montreal Children’s Hospital Auxiliary  $2,500

March 1999  September 1999  Safe Haven: Play Therapy  Sam Solomon Trust Foundation  $20,000

November 1997  March 1998  Safe Haven: Play Therapy  Sam Solomon Trust Foundation  $13,000

**Internal Funding**

September 2014  January 2015  “You Arrive”  ARRE  $8900

September 2013  January 2014  “You Arrive” (Pilot Manuel)  SEED Funding  $13,385

September 2008  October 2010  “You Arrive”  ARRE  $10,000
### September 2010

**You Arrive**  
SSHRC Travel  
$1440

### April 2010

**You Arrive**  
SSHRC Travel  
$1,000

## Academic Service

<table>
<thead>
<tr>
<th>Academic Service</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| **Drama Therapy Practicum Coordinator** | 2008-Present  
• Updating practicum site file  
• Student placement and insurance  
• Chair, supervision meetings  
• Maintaining contact with on-site supervisors  
• Revising practicum handbook  
• Organizing yearly supervisor’s tea (inviting, room-booking, catering)  
• Meeting with students to discuss practicum placement issues  
• Meeting with on-site supervisors to discuss site issues  
• Visiting new and on-going sites  
• Researching new sites  
• Mediating problems between on-site supervisors and students (if needed) |
| **Drama Therapy Option Coordinator** | 2008-Aug 2010  
• Meet with part-time and full-time faculty to discuss program issues  
• Meet with students individually and in groups to discuss program  
• Meet with prospective students and address preliminary inquiries  
• Facilitate job-searching and create community links for graduate students  
• Organize community events  
• Program promotions (met with interested students, wrote letters to undergraduate psychology and theatre departments)  
• Initiated a team to create an extensive CATS Drama Therapy brochure |
| **Creative Arts Therapies Research Committee** | 2008-present  
• Attend monthly meetings to review student proposals and discuss student research projects |
| **Creative Arts Therapies Department Committee** | 2008-Present |
| **Creative Arts Therapies Curriculum Committee** | 2008-Present |
2009-2010 **Departmental Hiring Committee**
One Tenure track position in Art Therapy (successful)
One Tenure track position in Music Therapy (failed)
One Tenure track position in Music Therapy (successful)

2008-2009 **Departmental Hiring Committee**
One Tenure track position in Art Therapy (failed)
Two LTA positions in Art Therapy (successful)
One LTA position in Drama Therapy (successful)

2008, 2010 **Faculty of Fine Arts Student Request Committee**

**August 2008** **Arts-Based Research Review Committee**
Student: Michelle Baer
Title: Clowning Around: An Exploration of Life Behind the Nose

**August 2006** **Arts-Based Research Review Committee**
Student: Riva Kominski
Title: Performance Art as Healing Ritual for Self-mutilators

**Community Service**

2009-2012 **North American Drama Therapy Association (NADTA)**
Canadian Representative to the Board
Responsibilities:
- Played critical role in renaming the body from the National Association of Drama Therapy (NADT) to the North American Drama Therapy Association (NADTA) to include Canada.
- Organize monthly meetings with the Canadian Board
- Organize chapter meetings
- Attend board meetings in Spring and Fall in New York
- Write board reports on chapter activities and community activities in Canada
- Write articles for Drama Scope on Drama Therapy development in Canada, highlighting the work of Canadian drama therapists
- Attend bi-monthly conference calls
- Helped organize Creative Arts Therapy week (helped with room bookings, finding and contacting appropriate speakers, finding volunteers)
- Presented at Creative Arts Therapies week
North American Drama Therapy Association (NADTA)
Program Chair
Responsibilities:
• Organized national conference
• Oversaw submissions for conference submissions and selected from applicants
• Invited keynote presenter
• Organized room bookings for presentations
• Planned keynote presentation at hotel
• Coordinated with hotel staff for room bookings and presentation
• Organized audio-visual equipment
• Put together teams of volunteers
Susan Ward MA, RDT/BCT
susan.ward@concordia.ca
susandt_1999@yahoo.com

700 47th Avenue
Lachine, Quebec
H8T 2R1
Home: 514 634 3616
Work: 514 263 3800 ext. 6349
Cell: 438 390 4074

Languages: English, Francais

Education:

<table>
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<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2019</td>
<td>Child Parent Relationship Training Center for Play Therapy UNT Level 101</td>
</tr>
<tr>
<td>2019</td>
<td>Child-Centered Play Therapy Level 102</td>
</tr>
<tr>
<td>2018</td>
<td>Child-Centered Play Therapy Level 101</td>
</tr>
<tr>
<td>2018</td>
<td>Intensive Supervision in CCPT Center for Play Therapy UNT 24 hours of group and individual practice and supervision</td>
</tr>
<tr>
<td>2016</td>
<td>ARC Model of Trauma-Informed Therapy Trauma Center at Justice Resource Institute 11 hours over 2 days</td>
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<tr>
<td>2014</td>
<td>Certificate Play Therapy (IPTN) Training in non-directive play therapy Approximately 60 hours over two weeks</td>
</tr>
<tr>
<td>2014</td>
<td>The Brief Therapy Conference 29 hours over 4 days</td>
</tr>
<tr>
<td>2013</td>
<td>The Evolution of Psychotherapy Conference &amp; 2017 41 hours over 5 days</td>
</tr>
<tr>
<td>2011</td>
<td>Centre d’expertise Marie-Vincent</td>
</tr>
</tbody>
</table>
Training in working with children and adolescents who have been sexually abused
45 hours

2010 McGill University Health Centre
CBT Training and Research Program
30 hours of training in CBT with adults and children

2004 McGill University Health Centre
Incredible Years Parent Training Facilitation Program
21 hours over 3 days
Facilitated by the Webster-Stratton Training Team

2003 Argyle Institute for Human Relations
Marriage and Family Therapy Program
3 years post-graduate training

2002 Hincks Dellcrest Centre
Narrative Therapy Intensive
7 days facilitated by Michael White

1999 Concordia University
Master of Arts - Creative Arts Therapies
Drama Therapy Option
Supervisors: Christine Novy and Stephen Snow

1993 McGill University
Graduate Diploma in Elementary School Education

1986 Concordia University
Graduate Diploma in Institutional Administration
Specialization in Arts and Public Administration

1977 Concordia University
Bachelor of Fine Arts - Theatre Performance
Magna Cum Laude

Career Experience:

CSSS de la Montagne
Equipe Sante Mentale Jeunesse
Natalie Zirnhelt
2009 to the present

Montreal Children’s Hospital
Department of Child Psychiatry
2003-2009
Preschool Day Treatment Centre  2003-2007
Westmount Park Kindergarten Project  Dr. Joyce Canfield

Outpatient Psychiatry  2007-2009
Children and adolescent team  Dr. Martin Gauthier

Concordia University  2006 to the present
Part-time faculty
Creative Arts Therapies Department

Private Practice  2001 to the present
Therapy for children, adolescents, families and individuals

CLSC Lac Saint-Louis  Summer 1999
Expressions Program  Joanne Kielo

The Children’s Theatre  1999-2001
Drama teacher for children ages 4-9
Responsible for mounting a production each year

English Montreal School Board  1994-2000
Lester B. Pearson School Board
Substitute teacher in regular English and French Immersion classes and special education classes

Strategic Learning Centre  1995-2003
Individual academic tutor for children and adolescents experiencing learning difficulties; specializing in writing, math and study skills

YMCA of Canada  1984-1993
Employment Initiatives Program  Scott Haldane

Special Projects:
Montreal Children’s Hospital  2000-2003
Adolescent Day Treatment Program
Playback Theatre Project

Playback Theatre of Montreal  1994 to the present
Founding member, actor, conductor

**Biography Laboratory**
Collaborative Research Projective
Narrative and Drama Therapies

Christine Novy
Conferences: North American Association for Drama Therapy
   Attendee since 1997
   Presenter at 7 conferences
   Conference Chair for first conference in Montreal 2007
   Program Chair for second Montreal conference 2013

World Infant Mental Health Conference 2006
Paris, France
Presented research from the MCH Preschool Day Treatment Team

Play Therapy International 2010
Marrakech, Morocco
Presented on drama/play therapy

In addition, I have presented my work in drama therapy and in Playback Theatre at many local organizations and conferences:

Friends for Mental Health
Jewish Eldercare Development Seminars
The Alzheimer’s Society
The Recreation Therapy Conference
Convergence, Creative Arts Therapies Conference - Concordia University
Maimonides Geriatric Centre
Place Kensington - Seniors Residence

I have taught the following courses in the Creative Arts Therapies Department:

Introduction to Drama Therapy
Group and Family Drama Therapy
Drama Therapy Practicum Supervision both first and second year students
Drama Therapy Methods, Processes and Assessment Models I and II
Readings in Drama Therapy
Thesis Advisor

I have supervised drama, art and music therapy students at the Montreal Children's Hospital and in my position at the CSSS de la Montagne.
JESSICA KAREN BLEUER
M.A., M.ED., RDT, OPQ (Registered Drama Therapist, Psychotherapist Permit)
4044 Evelyn, Montreal, Quebec, H4G 1P7

EMPLOYMENT HISTORY: TEACHING & CURRICULUM

Limited Term Appointment, Full-Time Lecturer & Supervisor Montreal, CA
Concordia University, Drama Therapy Program Sept. 2012- May 2015 & 2017-Present
- Taught masters & undergraduate level drama therapy courses (total of 32, three-credit courses, 96 credits)
- Supervised students’ clinical placement.
- Supervised students’ final research papers.

Practicum Coordinator Sept.2017-Present

Part-Time PhD Reserve Student Course Instructor Montreal, CA
Part-Time Lecturer & Supervisor September 2015-May 2017
- Taught master’s level supervision course (total of 4, three-credit courses, 12 credits)
- Supervised students’ clinical placement.
- Supervised students’ final research papers.

Adjunct Lecturer Boston, USA
Leslie University Summer & Fall Semesters, 2014 & 2015
- Taught in person and on-line class on Power Privilege and Oppression to graduate students.
- Topics covered: microaggressions, working across difference, learning about privilege, racism, sexism, homophobia, transphobia, ableism, classism, ageism, Islamophobia, anti-Semitism and other forms of religious intolerance.

Gender Based Violence Trainer & Curriculum Developer Toronto, CA
Urban Alliance on Race Relations 2010-2011
- Developed, facilitated and supervised the development of gender based violence support workshops for youth workers.
- Supervised social service placement students in working with underserved youth.

Popular Theatre Instructor for Summer Institute Toronto, CA
University of Toronto, Transformative Learning Centre Summer Institute 2005-2010
- Instructed graduate and undergraduate university students, professors, social workers, therapists and educators to employ popular theatre techniques in their individual work settings.
- Recruited students & designed 20-hour popular theatre course.
EMPLOYMENT HISTORY
THERAPY, CULTURAL EQUITY, & HEALTH PROMOTION

Drama Therapist & Psychotherapist  
Montreal / Toronto, CA  
Private Practice, (OPQ Permit)  
2010-Present
- Drama Therapy, Psychodynamic, Humanistic, and Anti-Oppression Psychotherapeutic Approaches
- Facilitate individual, couples, family sessions for children, adolescents and adults: Anxiety, depression, isolation, self-esteem, racism, sexual orientation, interpersonal relationships, trauma, abuse, family and couple distress and suicidal ideation.

Cultural Equity Consultant  
Montreal/Toronto, CA  
Private Consulting Practice  
2010- Present
- Train educators about accountable learning spaces, addressing cultural equity and cultural ruptures in the classroom
- Train therapists to engage in cultural humility around power, privilege and oppression
- Facilitate organizations in strategic development for business, educational institutions and non-for-profits around cultural equity and inclusion
- Facilitate cross cultural initiatives
- Teach conflict resolution, supportive listening and non-violent communication skills
- Selected previous contracts at Dawson College, Holocaust Memorial Centre, Jack.Org, Lakehead University, Lower Canada College, Mcgill University, Ontario Science Centre, Public Service Alliance of Canada, Schools without Borders, Teesri Duniya Theatre.

Psychotherapist, & Cultural Humility Trainer  
Montreal, CA  
McGill University Counselling Service  
2017-2018
- Co-facilitated a weekly support group for racialized students (2017 Spring Semester).
- Consulted on the development of a racialized student psychotherapy support group.
- Co-facilitated a cultural humility training for Counsellors and Psychotherapists at McGill (February 2018).

Diversity Chair, Board of Directors (volunteer position)  
North America  
North American Drama Therapy Association  
January 2015-2018
Creating intentional spaces for mutual learning on topics of equity & social justice in clinical practice.
- Facilitated Racial Justice Dialogue Series; conference calls on clinically relevant equity issues.
- Facilitated Diversity Forums at annual conference.
- Supported members in learning how to access cultural responsibility guidelines set by the NADTA.
Drama Therapist
Expression La Salle
Montreal, CA
2011-2012
- Facilitated drama therapy sessions for individuals and groups of adults working through depression, anxiety, life transition, attachment traumas and past experiences of sexual, physical and emotional violence.

Drama Therapy Intern
2008-2009
- Facilitated drama therapy sessions for individuals and one group.

School Counsellor
Agence Ometz
Montreal, CA
2011-2012
- Provided counseling for children between 5-12 years of age and their families.
- Supported families in navigating different social welfare systems.

Psychotherapist (clients aged 12 to 26 years old)
Central Toronto Youth Services, Pride & Prejudice Program
Toronto, CA
2010-2011
- Facilitated psychotherapeutic sessions about sexual orientation, gender identity, coming out, self-esteem, homophobia and transphobia.
- Facilitated post-traumatic trauma therapy work for clients who survived emotional, physical and sexual abuse.

Curriculum Coordinator, Health Promotion Instructor
Pearson College Seminar on Youth Leadership
Victoria, CA
Summer 2008
- Programmed health promotion workshops addressing youth sexual health.
- Created & delivered workshops on the social determinants of health, sexual health, anti-oppression, ally building, HIV/AIDS, gender, and conflict resolution.
- Evaluated program curriculum.

Youth Wellness Coordinator
Volunteer Toronto
Toronto, CA
2006-2007
- Programmed youth volunteer initiatives that addressed health and wellness (self-care workshops, addressing social isolation, community-building and the social determinants of health).
- Facilitated youth committee dedicated to programming around UN Development Goals.
- Traumatic trauma therapy work for clients who survived emotional, physical and sexual abuse.

Global Village Assistant
2006 International AIDS Conference
Toronto, CA
2006
- Conceptualized & Facilitated 3 mainstage HIV Wellness-Networking Events.
- Organized logistics for international HIV organization delegates.
EMPLOYMENT HISTORY: RESEARCH

Drama Therapist, Acting Project Coordinator
Montreal, CA
Concordia University Associate Professor Yehudit Silverman, led Research 2015
- Coordinated and recruited participants for an interfaith arts project between young Jewish, Muslim and Christian participants.

Multicultural Suicide Awareness and the Arts
Concordia University Associate Professor Yehudit Silverman, led Research
Funded by SSHRC, FQRSC & Concordia 2009-2010
- Facilitated drama therapy groups about suicide for young adults, members of LGBTQ communities, and older adults.
- Co-Supervised art therapy interns in the coordination of the conference.

Arts-Based Research Consultant
Toronto, CA
Centre for Addiction & Mental Health 2011-2012
- Created Research Dissemination Strategy by transforming interview transcripts about access to assisted reproductive technologies for Lesbian, Gay, Bisexual, Transgendered & Queer people into forum theatre piece.
- Directed research team in the production of the script to be performed for medical service providers.

Arts-Based Research Consultant & Focus Group Facilitator
Toronto, CA
University of Toronto Associate Professor Izumi Sakamoto led Research Project 2009-2011
- Trained research team in using creative arts methodologies to use in focus groups.
- Facilitated groups of newcomers to inquire about systemic barriers keeping them out of the workforce.
- Engaged Research Dissemination through a theatrical presentation of data at two different conferences.

French Group Facilitator
Toronto, CA
George Brown Orientation to Ontario Project Summer 2010
- Facilitated focus groups about a standardized settlement program to French-speaking settlement workers, newcomers and government representatives.
- Co-designed focus groups & communicated results with curriculum developers and researchers.

ACADEMIC BACKGROUND
Somatic Experiencing Trauma Training  
Completed Beginner & Intermediate Training (144 Hours)  
Montreal, QC  
2017-2019

Play Therapy Training  
2012-Present

*Healing the Hurting Child: The Necessary Dimensions of Child-Centered Play Therapy (6 credit hours) – Garry Landreth – Concordia University Spring Play Therapy Seminars  
May 2019

*Basics in Child-Centered Play Therapy: Foundational Training (6 credit hours) – Dee Ray
Concordia University Spring Play Therapy Seminars  
May 2019

*CATS 631- Introduction to Play Therapy with Liliana Lowenstein (3 credit course)
Concordia University  
July 2018

*Supervision in Play Therapy (6 continuing education hours)
Center for Play Therapy – University of Texas  
June 2018

*Play Therapy with Toddlers and Preschoolers
Center for Play Therapy – University of Texas  
June 2018

*What is Theraplay?
Center for Play Therapy – University of Texas  
June 2018

*Challenges in Child-Centered Play Therapy
Center for Play Therapy – University of Texas  
June 2018

*Group Play Therapy
Center for Play Therapy – University of Texas  
June 2018

*Animal Assisted Play Therapy
Center for Play Therapy – University of Texas  
June 2018

*Assessment and Treatment Planning in a Play Therapy Context
Canadian Association for Play Therapy  
July 2012

PhD - INDI, Department of Applied Human Sciences  
Concordia University  
September 2014- Present

Using a NevForum Theatre
Marriage and Family Therapy, The Argyle Institute for Human Relations  
2011-2013

Completed Two Years of Three Year Program

Masters in Creative Arts Therapy, Concordia University  
2009

Masters in Adult Education & Community Development  
University of Toronto  
2005

Canadian Institute for Conflict Resolution  
St. Paul University

- TPN-1 Becoming a Third Party Neutral
- TPN-2 Developing Facilitation Skills for Groups in Conflict

Bachelors in Sociology  
McGill University  
2002

AWARDS & MEMBERSHIP
2018 North American Drama Therapy Association Raymond Jacobs Diversity Award

2016 YMCA Volunteer Peace Medal

Registered Drama Therapist (RDT), North American Drama Therapy Association

Psychotherapy Permit, Ordre des Psychologues du Quebec (OPQ)

SERVICE

North American Drama Therapy Association (NADTA)

*Diversity Chair, Board of Directors*, 2014-2018

- Co-founded Drama Therapy Against White Supremacy Campaign
- Inaugurated the Racial Justice Dialogues Series and the Diversity Call Series
- Initiated NADTA Position Statements, Translated Statements into Spanish

World Alliance of Drama Therapy Association

*2018-2019*

- Translated sections of the website into Spanish

Concordia University - MA Drama Therapy Curriculum Development

- Co-Designing Curriculum Reform Exploration - Striving for Accreditation from Order des Psychologues du Quebec (OPQ) *2017-Present*
- Support in Designing Graduate Play Therapy Certificate *2018-2019*


- Created new Practicum Sites, Maintained Relationship with Established Sites

Creative Arts Therapies Supervision Committee

*Chair of Supervision Committee*, 2012-2015 & 2017-2019

- Collaborated on Suicide Assessment Policy for Interns
- Collaborated on Bringing Trauma Training to Concordia Interns, Faculty & Supervisors

Creating Supervision Policies Subcommittee

*2017-2019*

Creative Arts Therapies Curriculum Committee

*2012-2015 & 2017-2019*

Creative Arts Therapies Research Committee

*2012-2015 & 2017-2019*

Drama Therapy Admissions Committee

*2012-2015 & 2017-2019*

Directed Recruitment Dossier

*2012-2015*

- Presented Introduction to Drama Therapy Workshops in 8-10 classrooms per year

Facilitate yearly Creative Arts Therapies Week Drama Therapy Workshop *2013-2015, 2018, 2019*
PUBLICATIONS


CONFERENCE PRESENTATIONS & WORKSHOPS

7/13


Bleuer, J. (2019, October). *Dealing with Difficult Moments in the Classroom.* Workshop presented to Teaching Assistants for Interdisciplinary Studies, FFAR, Concordia University MA/PhD Programs, Montreal, Quebec.

Bleuer, J. (2019, May). *Using Play & Creativity for Group and Individual Interventions in Schools.* Workshop presented for Summer Institute for School Psychology hosted by McGill University & the Department of Educational and Counselling Psychology, Montreal, QC.


Bleuer, J. (2019, April). *Preparing to Listen to Traumas : Supports and Limits.* Workshop presented for Acts of Listening Lab, Emotional Resilience While Performing Traumatic Narratives, Concordia University, Montreal, QC.

McClaughlin, H. & Bleuer, J. (2019, April). *Film Screening & Discussion: The Hidden Face of Suicide,* Concordia University, The Creative Arts Therapy Department, Montreal, QC.


Fourth Wall: Engaging Therapeutic Performance to Expand Our Impact on Communities, 39th Annual North American Drama Therapy Association (NADTA) Conference, Kansas, MI.


Bleuer, J. & Boyard, Fl. (2018, October). Suicide Assessment & Prevention Training. Workshop presented at McGill University for students in various MA & PhD Psychology Programs, Montreal, QC.


Bleuer, J. (2018, July). Drama Therapy Applications to Counter Radicalization, Full-Day Workshop presented at Concordia International Graduate Summer School on Counter-radicalization Education, Montreal, QC.


Bleuer, J. (2018, March). Drama Therapy & the Process of Saying Goodbye. Workshop presented at The Creative Therapies in the Helping Professions: Psychotherapy & Spiritual Care, St. Paul University, Ottawa, ON.

Bleuer, J. (2018, March). The Power to Be who they Choose to Be, Inclusion in the Classroom. Workshop presented to Faculty at Lower Canada College Private High School, Montreal, QC.


Bleuer, J., Boyard, F., Chivi, M. & Yalaoui, M. (2017, October). Depressed or Oppressed? Racialized Students on Campus and Our Mental Health, Panel presented at McGill University in conjunction with McGill Counselling Services and The Social Equity & Diversity Office, Montreal, QC.


Bleuer, J., Seabrook, D., Hummel, E., Collins, K. (2017, March; 2017, January & 2016, December; 2017). Cultivating Hope, Open Group for Students in Light of Recent US Election, World Events, and the Increase in Overt Prejudice And Discrimination in Canada, Therapeutic workshop presented in conjunction with The Creative Arts Therapies Department, Concordia Multi-faith and Spirituality Centre and International Students Centre, Concordia University, Montreal, QC.

Bleuer, J. (2017, January). Microaggressions Workshop for Mental Health Practitioners, Workshop presented at Concordia University, Montreal, QC.


Bleuer, J., Al Mhamied, A., & Swaid, K. (2016, March). Working Together Syrians, Montrealers & Refugees: Re-envisioning the role for the Creative Arts Therapist. Workshop presented in conjunction with Montreal Therapy Centre, Concordia Syrian Student Association, North American Drama Therapy Association, Quebec Chapter at Concordia University, Montreal, QC.


Bleuer, J. (2015, March). Cultural Competence for Mental Health Professionals. Encountering Difference through the Creative Arts Therapies, Workshop presented for Creative Arts Therapy Week, Concordia University, Montreal, Quebec.

Silverman, Y. & Bleuer, J. (2014, June). L’art thérapie comme stratégie d’intervention, Workshop presented at Centre for Research and Intervention on Suicide and Euthanasia (CRISE), 11e Institut d’Été sur les Pratiques Emergentes en Prévention du suicide, l’Université du Québec à Montréal (UQAM), Montreal, QC.

Bleuer, J. & Boyard, F. (2013, November). The Quebec Charter of Values: Promoting Dialogue with our Neighbours. Workshop presented in conjunction with Concordia University’s Creative Art Therapy Department, Montreal, QC.

Bleuer, J. (2011, October). Two-Day Street Theatre Training for Unions. Two-day workshop presented to Public Service Alliance of Canada, Toronto, ON.

Bleuer, J. (2011, October). The Human Library. Workshop presented for The Montreal Holocaust Memorial Centre, Montreal, QC.


Bleuer, J. (2010, June). Drama Therapy & Conflict Resolution Workshop. Presented for South Asian Women’s Centre, Montreal, QC.

Bleuer, J. (2010, March). Drama Therapy for Anti-Oppression Workshop. Presented for Ontario Science Centre, Host Employees., Toronto, ON.

## TEACHING ACTIVITIES

### COURSES TAUGHT AT CONCORDIA UNIVERSITY 2014-2019

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Winter 2019</td>
<td>DTHY 614/4</td>
<td>Drama Therapy Practicum Supervision II</td>
</tr>
<tr>
<td>Winter 2019</td>
<td>CATS 639/4GA</td>
<td>Interdisciplinary Topics: Cross-Cultural Competence in the Creative Arts Therapies</td>
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<tr>
<td>Winter 2019</td>
<td>CATS 643/4GA</td>
<td>Interdisciplinary Topics: Ethics in Research in the Creative Arts Therapy</td>
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<tr>
<td>Fall 2018</td>
<td>CATS 210</td>
<td>Introduction to Creative Arts Therapies</td>
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<tr>
<td>Fall 2018</td>
<td>DTHY 613/2A</td>
<td>Drama Therapy Practicum Supervision I</td>
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<td>Fall 2018</td>
<td>DTHY 604/2A</td>
<td>Drama Therapy and Groups</td>
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<tr>
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<td>CATS 641/2 GA</td>
<td>Interdisciplinary Topics: Ethics in Clinical Practice in the Creative Arts Therapies</td>
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<tr>
<td>Summer 2018</td>
<td>DTHY 301</td>
<td>Introduction to Drama Therapy</td>
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<tr>
<td>Winter 2018</td>
<td>DTHY 614/4A</td>
<td>Drama Therapy Practicum Supervision II</td>
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<tr>
<td>Winter 2018</td>
<td>DTHY 624/4A</td>
<td>Advanced Drama Therapy Practicum Supervision II</td>
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<td>Winter 2018</td>
<td>CATS 643/4A</td>
<td>Interdisciplinary Topics: Ethics in Research in the Creative Arts Therapies</td>
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<tr>
<td>Winter 2018</td>
<td>CATS 636/4BB</td>
<td>Independent Study</td>
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<tr>
<td>Winter 2018</td>
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<td>Interdisciplinary Topics: Cross-Cultural Competence in the Creative Art Therapies</td>
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<td>Fall 2017</td>
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<td>Drama Therapy Practicum Supervision I</td>
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<td>CATS 210/2A</td>
<td>Introduction to Creative Arts Therapies</td>
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<td>Fall 2017</td>
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<td>Interdisciplinary Topics: Ethics in Clinical Practice in the Creative Arts Therapies</td>
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<td>Summer 2017</td>
<td>DTHY 301/1G &amp; CATS 631/1 GC</td>
<td>Introduction to Drama Therapy</td>
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<td>DTHY 624/4B</td>
<td>Advanced Drama Therapy Practicum Supervision II</td>
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<td>Advanced Drama Therapy Practicum Supervision I</td>
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<tr>
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<td>Drama Therapy Practicum Supervision II</td>
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<td>Advanced Drama Therapy Practicum Supervision II</td>
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<td>CATS 639/4A</td>
<td>Interdisciplinary Topics: Cross-Cultural Competence in the Creative Art Therapies</td>
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<tr>
<td>Fall 2014</td>
<td>CATS 611/2A</td>
<td>Counselling Skills for Creative Arts Therapists</td>
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<tr>
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<td>CATS 641/2A</td>
<td>Interdisciplinary Topics: Ethics in Clinical Practice in the Creative Arts Therapies</td>
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<td>Advanced Drama Therapy Practicum Supervision I</td>
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<tr>
<td>Fall 2014</td>
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<td>Introduction to Drama Therapy</td>
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<tr>
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<td>DTHY 600/4A</td>
<td>Current Approaches to Drama Therapy</td>
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<tr>
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<td>DTHY 614/4A</td>
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<td>Child and Adolescent Drama Therapy</td>
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<td>Summer 2013</td>
<td>DTHY 301/1GA</td>
<td>Introduction to Drama Therapy</td>
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<td>DTHY 600/4A</td>
<td>Current Approaches to Drama Therapy</td>
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<td>DTHY 644/2A</td>
<td>Child and Adolescent Drama Therapy</td>
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Appendix 8
Affiliation Agreement Between Centre de la Petite Enfance de Mon Coeur and Concordia
AFFILIATION AGREEMENT

CREATIVE ARTS THERAPIES
2019-2021

BETWEEN:

Centre de la Petite Enfance de Mon Cœur, a corporation duly incorporated under the Loi sur les Centres de la petite enfance et autres services de garde à l’enfance, L.R.Q. c. S-41, and having its head office at 1355 René Lévesque Ouest, City of Montréal, Province of Quebec, H3G 1T3 herein acting and represented by Andria Mallozzi, duly authorized as he/she/they so declare(s);

Hereafter referred to as the “Institution”

AND

Concordia University, a corporation duly incorporated by the Concordia University Act, S.Q. 1948, c. 91 as amended by S.Q. 1959-60, c. 191 and S.Q. 2006, c. 69 having its head office at 1455 de Maisonneuve Blvd. West, suite GM 801, City of Montreal, Province of Quebec H3G 1M8, herein represented by Catherine Wiid, Dean, Faculty of Fine Arts, duly authorized as she so declares;

Hereafter referred to as the “University”

1. Definitions

1.1. In the present Agreement, the following terms are defined as follows:

1.1.1. Institution: A facility which offers care and/or services including but not limited to health care, educational, and/or social services.

1.1.2. Department: Refers to the University’s Department of Creative Arts Therapies.
1.1.3. Student or Students: Any person or people registered and in good standing in a program offered by the Department.

1.1.4. Practicum: The period of time in which the Student spends outside the University gaining Clinical Experience in the Institution.

1.1.5. Clinical Experience: Experience gained through and at the Institution and which contributes to the practical experience of the Student. The clinical experience consists of observation and interaction the whole under the supervision of qualified Supervisory Personnel.

1.1.6. Clinical Resources: All that which, at the Institution, in terms of the Client, personnel, equipment, locale or otherwise, contributes to the student’s clinical training, regardless of their program of university study of first, second, or third cycle, concerning health or social services.

1.1.7. Supervisory Personnel: All people responsible for the Student during his or her Practicum. These personnel are comprised of either University personnel, professional personnel from the Institution, whom, in an Institution, assume one or most of these teaching functions.

1.1.7.1. the organization and supervision of the Practicum to be completed by each Student;
1.1.7.2. The progress of the Clinical Experience;
1.1.7.3. The evaluation of the Clinical Experience acquired by the Student completing the Practicum, in cooperation, if necessary, with other professional personnel of the Institution.

1.1.8. Client: Any person or people receiving services (ex: health, education, social services) at the Institution.

2. The University’s Obligations

2.1. The University shall be responsible for:

2.1.1. Administering and offering programs of study in the applicable domains of the programs offered by the Department;
2.1.2. Providing, as an intermediary, proper pedagogical services, organization and supervision of the Practicum;

2.1.3. Providing, if required and when necessary, a written description of the learning objectives of the Practicum, the Clinical Experience sought, suggestions as to methodology and evaluation and a description of the planned Clinical Experience as described in the Department's "Practicum Handbook";

2.1.4. Planning the Practicum, as required, in collaboration with the administration of the Institution. Such planning may include determining the numbers of Students placed at the Institution for the Practicum, the ratios of Students to Supervisory Personnel from the Institution, the schedule of the Practicum, the whole in view of the pedagogical goals of the Practicum;

2.1.5. Advising the Institution of any significant change relating to the Practicum, at least fifteen (15) days prior to the beginning of the Practicum, or, if the change occurs later than fifteen (15) days prior to the beginning of the Practicum, within a reasonable delay from the time when the University becomes aware of the significant change;

2.1.6. Obtaining and maintaining, throughout the Practicum, appropriate insurance coverage for the Students;

2.1.7. Informing Students of their obligation to keep all Client information confidential.

3. The Institution's Obligations

3.1. The Institution shall be responsible for:

3.1.1. Fully respecting the Practicum guidelines as set out and described in the Department's "Practicum Handbook" and discussing, as required, the abovementioned guidelines with the University's Supervisory Personnel;

3.1.2. Providing supervision and guidance to the Student throughout the Practicum and providing the Department with evaluations of the Student per the Department's request and in a timely manner;
3.1.3. Coordinating, as needed, the use of the Clinical Resources in accordance with the plans prepared by the Institution and by the University;

3.1.4. Informing the Students of the Institution’s applicable policies and regulations.

4. Shared Obligations

4.1. The University and the Institution are jointly responsible for:

4.1.1. Unless the parties agree to a different schedule, ensuring that the Practicum takes place from Monday to Friday;

4.1.2. In exceptional circumstances, (ex: a serious breach of the Institution’s rules or policies) the Institution may, in consultation with the University, decide to exclude a Student from its premises or program. In such a case, the Institution shall communicate its decision to exclude a Student to the Department’s Supervisory Personnel who will subsequently inform the Student of such exclusion;

4.1.3. Adopting a communication strategy between the Supervisory Personnel, the Institution and the Department that will ensure that the Practicum runs smoothly and that the learning objectives of the Student and the University are being met;

4.1.4. If necessary, and prior to the beginning of the Practicum, the Student and the Supervisory Personnel from the University may visit the Institution’s facilities and Clinical Resources in order to become familiar with the facilities and the functioning of the Institution.

5. Collective agreements applicable to employees of the Institution do not apply to the Student or the Supervisory Personnel of the University and the Department. However, “employee discounts” at the Institution (ex: parking rates and cafeteria discounts) may be negotiated by the parties and/or offered by the Institution on a case-by-case basis.

6. The Institution is solely responsible for and maintains full authority over the services provided to the Client.

7. All notices under this Agreement must be made in writing and shall be delivered by email, registered mail or fax to the following addresses:
In the case of the University to:

Rebecca Taylor-Duclos, Dean, Faculty of Fine Arts
Concordia University
1455 de Maisonneuve Blvd. West
Suite S-EV 2761
Montreal, Quebec H3G 1M8
Fax: 514-848-4599

With a copy to:

Guylaine Vaillancourt, Music Therapy Practicum Coordinator
Concordia University
Creative Arts Therapies Department
1455 de Maisonneuve O.
Suite VA-271-1
Montreal, Quebec H3G 1M8
Phone: (514) 848-2424 ext 5670
Fax: (514) 848-4969

In the case of the Institution to:

Andria Mallozzi
CPE de Mon Cœur
Email: cpedemoncoeur@gmail.com
Fax: 514-866-4866

8. This Agreement is valid for two (2) years from the date of its signature and is automatically renewed for consecutive and successive terms of one (1) year unless either party gives written notice to the other of its intention not to renew at least thirty (30) days before the expiration of the then present term.

9. The parties have requested that this Agreement be drawn up in the English language. Les parties ont exigé que cette Entente soit rédigée en langue anglaise.

SIGNATURES APPEAR ON NEXT PAGE
THE PARTIES HAVE SIGNED ON: October 28, 2019

Per CONCORDIA

Rebecca Duclos, Dean
Faculty of Fine Arts
Creative Arts Therapies Department
Concordia University

Per the INSTITUTION

Andria Mallozzi, Executive Director
Centre de la Petite Enfance de Mon Cœur
Appendix 9
Course Syllabi
Proposed Syllabus for PLTH 501
Play Therapy 1, Introduction to Play Therapy

Course Description
This course introduces the history, major models, and processes of play therapy. The basic model of child-centered play therapy, which evolved from the humanistic psychotherapy model, is explored through both theory and practice. Topics such as trauma, negative life experiences, the impact of these experiences on the brain and the child’s development are introduced and will continue to be explored in other course material. This course introduces students to the four structures which contain a play therapy session. Evaluation and assessment in play therapy are addressed. The course covers common themes in play therapy acknowledging cultural diversity of clients, record-keeping, preparation for ending of the therapy relationship and the essential materials for an effective and culturally responsive playroom.

Learning Objectives
1. Familiarity and understanding of the major models and processes of play therapy;
2. Thorough understanding of CCPT, the four structures inherent in its theoretical approach and its practical applications to a variety of childhood experiences;
3. Understand and apply play therapy interventions from a CCPT perspective.

Proposed Evaluation Criteria and Assignments
1. Attendance at all classes and practice sessions.
2. Daily journal of learning, questions, reflections that demonstrate an understanding of play therapy concepts in theory and practice.
3. Final essay exploring a particular aspect of play therapy. Possible topics could include an historical perspective, in-depth exploration of a model other than CCPT, or CCPT with a particular presenting issue.
Proposed Syllabus for PLTH 502
Play Therapy 2, Cognitive Behavioural Child-Centered Play Therapy

Course Description
Prerequisite: PLTH 501
This course focuses on the theories and techniques that inform CBT and their application in play therapy. Topics include the cognitive model and cognitive behavioural therapy assessment and evaluation, session structure, and directive interventions in play therapy.

Learning Objectives
1. Thorough understanding of the theoretical foundation of CBT including assessment, evaluation and implementation;
2. Ability to apply CBT play therapy interventions in a variety of play therapy situations;

Proposed Evaluation and Assignments
1. Attendance at all classes and practice sessions;
2. In class presentation focused on an aspect of CBT that supports an aspect of play therapy. The presentation should include an experiential component.
3. Final essay which explores the similarities and differences between classic CBT and child-centered CBT in a play therapy context.
Proposed Syllabus for PLTH 503
Play Therapy 3, Child-Centered Group Play Therapy

Course Description
Prerequisites PLTH 501, PLTH 502
This course emphasizes the philosophy and rationale for group work with children and pre-adolescents. Focus is on the goals of group therapy, the role of the play therapist, screening and selection of group members, play and activities at various developmental levels, and planning and structuring sessions. Building on PLTH 502, this course covers when to integrate CBT into child-centered group play therapy.

Learning Objectives
1. Thorough understanding of the rationale for group play therapy with children and pre-adolescents;
2. Thorough understanding of the logistics of group play therapy as well as the benefits and the challenges of working in a group context;
3. Ability to facilitate a group play therapy session attending to appropriateness of group intervention for particular clients, structure of group session, and choice of developmentally appropriate interventions.

Proposed Evaluation Criteria and Assignments
1. Attendance at all classes and practice sessions;
2. In class group therapy role-play which highlights the benefits and challenges of group play therapy;
3. Final essay outlining the development of the group play therapy model and how it has impacted the profession. This essay could also explore the integration of CBT into a group play therapy model.
Proposed Syllabus for PLTH 504  
Play Therapy 4, Relational Play Therapy and Filial Play Therapy  

Course Description  
Prerequisites: PLTH 501, PLTH 502 and PLTH 503  
This course focuses on the history, theoretical foundations, research, and practical application of relational and filial play therapy. In particular, students examine the techniques and models to work with parents including the Guerney, VanFleet and Landreth models based on attachment and self-regulation theories. Students learn techniques to support the attunement of parents to their children and facilitate a more secure attachment and the strengthening of family bonds.  

Learning Objectives  
1. Thorough understanding of the rationale for including parent/care-givers in the play therapy process;  
2. Thorough understanding of the theoretical foundations and the practical applications of the identified models;  
3. Demonstrated ability to support parents/caregivers in their attunement to their children through the relationship models.  

Proposed Evaluation Criteria and Assignments  
1. Attendance at all classes and practice sessions.  
2. In-class role play demonstrating the application to one of the identified models;  
3. Final essay exploring the research pertaining to parent involvement in CCPT and the potential benefits to children.
Proposed Syllabus for PLTH 505
Play Therapy 5, Neurobiology and Attachment in Play Therapy

Course Description
Prerequisites: PLTH 501, PLTH 502, PLTH 503, and PLTH 504
In this course, students study basic neurobiological attachment theories within child-centered play therapy. This course focuses on understanding how trauma impacts development and the treatment of trauma using child-centered play therapy.

Learning Objectives
1. Thorough understanding of how the brain and the nervous system are impacted by adverse childhood experiences;
2. Thorough understanding of how play therapy supports the repair after trauma;
3. Demonstrated ability to engage in play therapy interventions which support meaning-making after trauma.

Proposed Evaluation Criteria and Assignments
1. Attendance at all classes and practice Sessions;
2. In-class role play demonstrating an understanding of the developmental delays which may occur as a result of adverse childhood experiences;
3. Final essay exploring the relationships between development, trauma, attachment and play therapy intervention.
INTERNAL MEMORANDUM

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

From: Christophe Guy, Vice-President, Research and Graduate Studies, Chair, Research Committee of Senate

Date: November 22, 2019

Subject: University Recognition of Research Unit – Thermal Spray and Surface Engineering Research Centre (TSSE)

The Research Committee (of Senate) met on November 22, 2019 to review the submission dossier of the Thermal Spray and Surface Engineering Research Centre (TSSE), 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 TSSE met the criteria outlined in the Policy for Research Units.

<table>
<thead>
<tr>
<th>Research Unit</th>
<th>Category</th>
<th>Director</th>
<th>Faculty</th>
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<tbody>
<tr>
<td>Thermal Spray and Surface Engineering Research Centre (TSSE)</td>
<td>Emerging Research Centre (with an Emerging Infrastructure Platform)</td>
<td>Co-Directors: Dr. Ali Dolatabadi Dr. Christian Moreau (Mechanical, Industrial &amp; Aerospace Engineering)</td>
<td>Gina Cody School of Engineering and Computer Science</td>
</tr>
</tbody>
</table>

The Research Committee is therefore pleased to recommend to Senate that it grant University-recognized status to the Thermal Spray and Surface Engineering Research Centre (TSSE) in accordance with the Policy on Research Units (VPRGS-8).

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

Thank you.
November 10, 2019

Dr. Christophe Guy
Vice-President Research and Graduate Studies
Concordia University

Dear Dr. Guy,

With this letter, I would like to express my strong support for the recognition of the Thermal Spray and Surface Engineering (TSSE) as a University Research Centre. TSSE is being led by Dr. Moreau and Dr. Dolatabadi as co-directors. TSSE has developed world-class interdisciplinary research collaborations on thermal spray technologies with national and international partners. The impact of research being conducted in TSSE will be in multidisciplinary areas, including microelectronics, aerospace, automotive, environmental protection, and buildings. The current area of research is focused on the development of new thermal spray coating technologies involving suspension thermal spray, vacuum cold spray, and liquid cold spray processes. In addition, the proposed center aims at advancing the current state-of-the-art diagnostic tools for thermal spray processes. In this respect, Dr. Moreau (Centre Co-Director) has already contributed to two of the three leading particle diagnostic tools currently being used in the thermal spray industry. Therefore, the centre is very well positioned to continue the advancement of these systems.

Another research area involves the development of new computational tools in modeling and simulation of thermal spray processes. Dr. Dolatabadi (Centre Co-Director) is a leader with international recognition in this area. This research area will also benefit from Dr. Paraschivoiu’s expertise in modeling, simulation, and algorithm development, which has been demonstrated in several multinational projects. Furthermore, the research centre aims at greatly enhancing the understanding of the phenomena involved in thermal spray processes while investigating the environmental impact and sustainability aspects while pursuing industrial applications of the newly developed technologies. As such, any sector that requires surface engineering (including advanced materials, composites, aerospace, transportation, manufacturing and nano/micro-technologies) would greatly benefit from the research being carried out at the research centre. In this respect, it is important to mention that the vision and objectives of the Research Centre are directly aligned with the Concordia strategic plan, CRC being hosted by the Centre, and CFI funding received by the Centre.

In terms of composition, TSSE has 13 members, of which ten are permanent and 3 are affiliate. The members are: Dr. E. Bonaccurso, Dr. R. Chromik, Dr. A. Dolatabadi, Dr. F. Haghighat, Dr. M. Hojjati, Dr. I. Karimfazli, Dr. R. Lima, Dr. S. Lloyd, Dr. M. Medraj, Dr. C. Moreau, Dr. M. Paraschivoiu, Dr. M. Pugh, Dr. S. Rahaman, and Dr. P. Wood-Adams.

The centre members have been successful in securing major and prestigious research grants, including the 2017-2022 NSERC Strategic Network entitled Next Generation Thermal Spray Processes and Coatings Network (Green-SEAM) with a budget of $9,040,000 under the leadership of Dr. Moreau, Canada Research Chair Tier 1 in Thermal Spray and Surface Engineering held by Dr. Moreau with a budget of 1.4 M$, Canada Foundation for Innovation support for the Quebec Network for Electron Microscopy of Materials with a total amount of 29 M$ co-held with
other researchers from Quebec Universities, and 2016-19 NSERC-CRD/CARIC grant on Super-Ice Phobic surfaces to prevent ice formation on aircrafts with a total budget of $611,328 under the leadership of Dr. Dolatabadi. Furthermore, the research centre has received a major research infrastructure totaling more than 3.2 M$.

The centre members have a very strong record in HQP training in the aforementioned interdisciplinary theme of surface engineering design across multiple domains. Over the past 6 years, 23 students (8 MASc, 10 PhDs and 5 PDF) have been trained by the centre members. In terms of joint research publications, the centre members have co-authored 21 research publications and more than 4 IP developments that are patentable.

TSSE researchers have benefited from the strong support and investment in terms of space and equipment from the Ginal Cody School of Engineering and Computer Science. Moreover, they will continue to benefit from the Faculty Research Support (FRS) program, which provides $10,000 per annum for up to three years for each doctoral student and $5,000 per annum for up to two years for each Masters’ student subject to satisfactory performance and compliance with the FRS program guidelines. In addition, the School will offer each Co-Director of TSSE a half-course remission for assuming this important role in accordance with the School course remission policy.

I wholeheartedly express my strongest support to the application of the Thermal Spray and Surface Engineering (TSSE) for recognition as a University Research Centre. As a Faculty Research Centre, TSSE already has a strong record of successful collaboration between TSSE researchers and other university researchers. TSSE has articulated a strong vision and objectives/ milestones for the proposed Centre. Establishment of TSSE as a University Research Centre would enable Concordia researchers to build on their recent successes and be recognized internationally in the areas of thermal spray and surface engineering.

Sincerely,

Amir Asif, PhD, P.Eng
Dean and Professor
Gina Cody School of Engineering and Computer Science
Thermal Spray and Surface Engineering (TSSE) Research Centre
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 Research Centre (with an Emerging Infrastructure Platform)

Evaluation Criteria Requirements

Centre mission, research program and objectives:

- The Thermal Spray and Surface Engineering (TSSE) Research Centre will be a leading academic-based organization with strong ties to industry that develops relevant scientific knowledge for understanding and for expanding the science and technology of surface engineering with a focus on thermal spray technology.
- The research of the TSSE Research Centre focuses on developing new solutions to the high demand of the industry for advanced coatings with improved resistance to environmental degrading factors such as high temperature, wear, corrosion and erosion under often severe service conditions.
- The Centre will develop functional coatings and smart devices integrated on manufactured components addressing the needs of the industry for energy harvesting, health monitoring, durable hydrophobic and icephobic surfaces, heating elements, large metallic/ceramic membranes for gas separation, etc.
- Five research themes with examples of projects:
  o Environmental Protection (Next-generation of thermal barrier coatings for gas turbine engines, Development of liquid impingement and cavitation erosion resistant coatings, etc.);
  o Functional Coatings (Super-icephobic surfaces, Coatings for electric heaters and heat management, Self-lubricating wear resistant coatings, etc.);
  o Process and Coating Development (Modeling of SPS deposition, Diagnostics of SPS deposition, Vacuum cold spray system, Liquid accelerated cold spray, etc.);
  o Performance and Characterization Assessment (Characterization and testing ice-phobic and water-phobic surfaces, Characterization of residual stress in SPS coatings, etc.); and
  o Life cycle assessment (Developing Embedded life cycle assessment tools to enable surface engineering solutions with superior environmental performance).

Directorship:

- Two co-Directors: Dr. Ali Dolatabadi and Dr. Christian Moreau (both from Mechanical, Industrial & Aerospace Engineering).
- Initial term lengths of each co-Director is of three years.

Research centre membership and demonstration of collaborative research activities:

- As listed in the application documents, the TSSE Research Centre is comprised of eleven Concordia researchers, one industry researcher affiliated with Concordia and two external researchers. The Concordia researchers come from four departments in two Faculties. In the Gina Cody School of Engineering and Computer Science, from the Departments of Mechanical, Industrial and Aerospace Engineering (Dolatabadi, Hojjati, Karimfazli, Medraj, Moreau, Paraschivoiu, Pugh), Building, Civil and Environmental Engineering (Haghighat, Rahaman), and Chemical and Materials Engineering (Wood-Adams), and in the John Molson School of Business, from the Department of Management (Lloyd).
Eight of the Concordia researchers are listed as regular members (Dolatabadi, Haghighat, Karimfazli, Lloyd, Medraj, Moreau, Pugh, Rahaman).

The affiliated industry researcher is Dr. Elmar Bonaccurso (senior scientist and project manager at Airbus Central R&T), who is an affiliate of the Department of MIAE. The other external members are Dr. Rogerio Lima (NRC) and Dr. Richard Chromik (McGill).

The TSSE Research Centre regular members include one Canada Research Chair T1 (Moreau) and two CURC T1 (Dolatabadi and Haghighat).

The TSSE Research Centre builds on extensive collaborations between Drs. Moreau and Dolatabadi, who hold numerous external team grants together and have both been successful in securing research infrastructure funding. Most of the research infrastructure that is at the heart of the infrastructure platform was acquired through their efforts.

In addition, they have significant existing collaborations with other members of the Research Centre:
- Moreau, Dolatabadi and Pugh (Development of super-hydrophobic coatings since 2011);
- Dolatabadi, Moreau and Medraj (co-supervision of students on the development of novel thermal barrier coatings and erosion resistant coatings);
- Dolatabadi and Medraj (CRIAQ project to develop erosion resistant coatings and surface treatment for Rolls-Royce Canada);
- Dolatabadi, Moreau, Pugh and Paraschivoiu (large scale Canada-EU project to develop novel and durable super-icephobic coatings, in collaboration with Airbus and P&WC);

There is evidence of co-authored publications by members of the Centre, mostly between Drs. Moreau and Dolatabadi, but also involving Drs. Pugh, Medraj and Karimfazli.

External research partnerships and cooperation with scholars from outside Concordia:

- The recently created NSERC Green Surface Engineering for Advanced Manufacturing (Green-SEAM) Strategic Network is a large collaborative project that brings together a group of 28 research leaders to develop and deploy innovative surface engineering and spray technologies across key industrial sectors in the Canadian economy. It involves many of the Research Centre members, notably Dr. Lloyd for the study of life cycle assessment.
- CFI Inter-institutional applications with McGill (Chromik, IF 2014) and for the RQMEM (Sherbrooke, McGill, UdeM, Poly, Laval, etc., IF 2017) were successful. Strong Concordia leadership for the research theme central to the program of the TSSE Research Centre.

Training of graduate students:

- Twenty-three graduate students and postdoctoral fellows have been co-supervised by TSSE Research Centre members over the past six years (again mostly between Drs. Moreau and Dolatabadi, but also involving Drs. Pugh, Rahaman, Paraschivoiu, Medraj, Bonaccurso, Hojjati and Karimfazli).

Governance structure:

- Co-Directors: The co-Directors are responsible for the scientific direction and administration of the Centre. They oversee the coordination of the activities including student training, outreach and special events, as well as managing communications both within the TSSE Research Centre and externally to partner institutions, external members, funding agencies and the community. The co-Directors have the day-to-day responsibility for staff operations as well as ensuring that the Centre conforms to the relevant Collective Agreements and policies in effect within the University, and are responsible for the budget, annual reports and other review materials.
- Scientific Committee: The Scientific Committee of the TSSE Research Centre is comprised of all full members, affiliated members and external collaborators. The Committee will meet semi-annually for
planning, assessing and providing guidance for the activities and research projects of the Centre, to discuss and select research project ideas, and to review performance and strategic directions.

- **Advisory Committee**: The Advisory Committee of the TSSE Research Centre is comprised of the two co-Directors, two GCS faculty members that are not members of the Centre, two representatives of the industrial collaborators of the Centre and one representative of the national labs. The Committee will meet annually to discuss the activities, projects and outcomes of the Centre. The Advisory Committee will provide strategic advice on establishing priorities and delivering outcome-oriented research based on successful models from other research institutions.

- **Collaboration and shared use of research facilities**: While the laboratories supervised by the individual members of the TSSE Research Centre will continue functioning independently and being administered by each member, the Centre will facilitate access, collaboration and use of the facilities.

**Designated resources for the research centre:**

- **Physical resources**: The TSSE Research Centre infrastructure is comprised of several equipment systems installed in various laboratories on the SGW campus:
  - Thermal Spray and Multiphase Flow Lab, administered by the Co-directors. This laboratory, located on the 14th floor of the Hall Building, was recently established. It includes the following equipment and infrastructure:
    - Robotized thermal spray coating booth
    - Plasma spray coating system equipped with suspension feeder
    - High velocity oxygen fuel (HVOF) spray coating system
    - Axial III plasma spray with nanofeeder fully computerized system
    - Vacuum cold spray system
    - Liquid accelerated cold spray
    - M3 Supersonic HVAF spray gun
    - Fiber laser cladding machine (4kw power)
    - Additional spray booth
  - Laboratory on the 12th floor of the EV building (12.154), that includes the following equipment and infrastructure:
    - Other In-flight micro- and nanodroplet / particle diagnostics systems: Particle Image Velocimetry (PIV) system, Phase Doppler Particle Analyzer (PDPA), High speed imaging and shadowgraphy system
  - Laboratory on the 13th floor of the EV building (13.401), that includes the following equipment and infrastructure:
    - Mercury porosity meter Autopore IV 9500 (30K Psi with 1 HP chamber)
    - Automatic polisher and cutter
    - Olympus inverted metallographic microscope
  - Laboratory of Dr. Medraj on the 13th floor of the EV building:
    - Water erosion rig
  - Laboratory on the 14th floor of the EV building (14.154), that includes the following equipment and infrastructure:
    - Icing wind tunnels: IR camera, High resolution 3D scanner, Online monitoring of spray flow via PIV and PDPA

- **Human resources**:
  - The thermal spray coating fabrication systems are closely supported by a research associate (Dr. Ben Ettouil), who has over 10 years of experience in this field.
  - The characterization systems and labs will be coordinated and supported by another research associate (material scientist with expertise and experience in thermal spray technology and coating characterization).
Operating funding:

- Significant operating funding from external research grants and contracts, from CFI Infrastructure Operating Funds, and from various internal programs.
- The OVPRGS Centre/Platform funding would be used to help cover remuneration costs for the research associate(s), for an administrative assistant, and for training, communication and supplies.

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

- In addition to formally establishing the Advisory Committee structure for the TSSE Research Centre and develop its website, it is expected that the Centre, through the multi-disciplinary and applied nature of its activities, will notably enable its members to:
  o Develop new thermal spray coating techniques and increase technology readiness level to be attractive for commercialization;
  o Develop new diagnostic tools and improve existing ones;
  o Investigate the industrial applications of newly-developed technologies;
  o Greatly enhance the understanding of the phenomena involved in thermal spray processes; and
  o Employ the life cycle assessment (LCA) approach for evaluating impact and sustainability of various technologies.
- A new faculty member with expertise in thermal spray and surface engineering should be hired soon; it is expected that this person will join the Centre.
- Expected collaborations to be developed with other recognized research units (CONCOM, CeNSR) and national labs (NRC Boucherville).
- Taking advantage of the Green-SEAM Network connections to establish new collaborations within the framework of the TSSE Research Centre.
- Development of a centralized reservation system for using the facilities (to be implemented through the Center’s webpage) in order to facilitate access of students and other HQP.
- As many research facilities require training for the users, training workshops, online tutorials and safe operating procedures will be created and made available as appropriate for the Center researchers.
- It is expected that collaborations will emerge with the soon-to-be-established material characterization laboratory, currently being built in the second basement of the EV building (CFI funding for acquisition of state-of-the-art scanning electron microscopy (SEM) infrastructure through the RQMEM network).