

COUNCIL OF THE FACULTY OF SCIENCE



NOTICE OF MEETING

March 9, 2021

3pm – 4:30pm

via Zoom

AGENDA

1. Call to Order and Approval of Agenda
2. Chair's Remarks
3. Approval of February 9 2021 Minutes
4. Inquiries and Communications
 - 4.1 Senate Synopsis of meetings held on February 25, 2021
 - 4.2 Consultation on Revisions to Policy on Academic Honesty
5. Business Arising
6. Dean's Remarks
7. Associate Deans' and Head of Bethune College Remarks
8. Reports from Science Representatives on Senate Committees
9. Student Caucus Representative Report
10. Reports from Standing Committees of Council
 - 10.1 Executive Committee
 - 10.1.1 Vacancies report on the Standing Committees of FSc Council (items for action)
 - 10.2 Curriculum Committee (consent agenda items)
11. Other Business
 - 11.1 Faculty of Science Strategic Plan's presentation – Dean Wang

COUNCIL OF THE FACULTY OF SCIENCE



MINUTES

February 9, 2021

3pm – 4:30pm

via Zoom

1. Call to Order and Approval of Agenda

The Chair of Council, C. Storry, called the meeting to order and the Agenda was adopted.

2. Chair's Remarks

The Chair of Council, C. Storry welcomed members and there was some discussion surrounding Zoom features for moving and approving motions. It was decided that

3. Approval of January 12, 2021 Minutes

A motion was moved, seconded and carried to approve the Minutes.

4. Inquiries and Communications

4.1 Senate Synopsis of meetings held on January 28, 2021

4.2 Call for Nominations - 2021 Honorary Professorships

5. Business Arising

There was none.

6. Dean's Remarks

Dean Wang welcomed Faculty Council and gave an enrolment update: Winter 2020 undergraduate enrolment is 1% over the 2020-21 target, and 4.2% above the 2019-20 target. Master student enrolment is 2.2% lower in 2020-21 than it was in 2019-20. PhD student enrolment is 9.6% higher at this time in comparison to 2019-20. He thanked faculty, staff and students for their continued efforts.

Dean Wang reported that the 2020 Student Survey was complete and a summary will be released to faculty this week. The 2020 Faculty Survey has also been released for submissions.

Dean Wang reported that the Strategic Planning process is moving along as planned. The virtual townhall meeting held on January 25 was a major success with 80 attendees. He continued by sharing that the first Strategic Planning internal advisory board retreat held on January 28 included brainstorming, discussions and presentations; the second retreat will be held on February 25. Dean Wang added that the public launch of the Dean's Special Advisory Board was February 3 and asked for recommendations of Black leaders to join the Dean's Special Advisory Board.

Dean Wang highlighted York University & University of the Witwatersrand in South Africa signing a MOU to tackle COVID-19 led by Jude-Kong, supported by 1.2 million from the International Development and Research Centre.

Dean Wang congratulated Jianhong Wu and Niko Troje for being a part of the World's Top 2% of Scientists – Stanford University List.

Dean Wang reminded Council of the email he sent highlighting available resources for mental health and wellbeing.

7. Associate Deans' and Head of Bethune College Remarks

Associate Dean, Research & Graduate Education, Jennifer Steeves, gave a reminder that the NSERC USRA applications are due January 26. She advised council of the following scholarships that are available for Faculty of Science students: 2 Carswell scholarships, 12 Vernon Stong scholarships and 4 Dean's Award for Women in Science.

Associate Dean, Faculty Affairs, Gerald Audette reminded Faculty to submit their CVs and to indicate their intentions to go on Sabbatical by March. He added that a Post-Doctoral Fellowship for Black and Indigenous Scholars was announced this afternoon for up to 12 successful applications for the next 4 years.

Associate Dean, Students, Mike Scheid invited Council to a Committee on Teaching & Learning seminar with Dr. Ben Wiggins on February 17 at 12pm.

8. Reports from Science Representatives on Senate Committees

There were none.

9. Student Caucus Representative Report

Student Caucus received response letters back from the Director of Career Development and the Dean. Student Caucus will get together to read over the letter and respond as a group.

10. Reports from Standing Committees of Council

10.1 Executive Committee

10.1.2 Vacancies report on the Standing Committees of FSc Council (items for action)

The Chair of Council noted the upcoming vacancies, and terms that end in 2021.

11. Other Business

11.1 Facilitated Council discussions of Fall/Winter 2021-2022 planning - Mike Scheid

Mike Scheid facilitated a discussion surrounding how programs will be delivered online and what are the challenges associated with academic honesty. Council was given the opportunity to ask questions afterwards.

Attendance

Margaret	Hough
Hassan	Khan
Lisa	Philipps
Rachel	Duncan
Robin	Metcalfe
Gino	Lavoie
Gabriella	Gerzon
Aleeza	Qayyum
Pierre	Potvin
Joanne	Sequeira
Kyle	Belozarov
Ran	Lewin
Daniel	Kamel
Tom	Salisbury
Alice	Fours
Sameen	Ali
Jennifer	Chen
Areeba	Chaudhry
Rui	Wang
Michael	Scheid
Jennifer	Steeves
Robert	Tsushima
Stephanie	Domenikos (STS)
Brad	Sheeller
Derek	Jackson (FT Faculty)
Iain	Moyles
Stephen	Watson
Monique	Myers
cody	storry
Helen	McLellan
Elaheh	Abdollahi
Gerald	Audette
Hamed	Babazadeh
Christine	Le
Ali	Bashar
Tihana	Mirkovic
Robert	Cheung
Hila	Akbari
Rhonda	Lenton
Ailiya	Rizwan
Julie	Clark
Tina	Reddi

Almira	Mun
Thomas	Baumgartner
Ha	Au
Neal	Madras
amenda	chow
Anita	Khoshnik
Hovig	Kouyoumdjian
Julyana	Al-Hussain
Carl	Wolfe
Delwar	Hossain
John	Amanatides
Melissa	Hughes
Gemner	Sandoval
Sibonile	Siyakatshana
Vera	Pavri
Carol	McAulay
Stefanie	Bernaudo
Violeta	Gotcheva
Jessica	Sinha
Alex	Mills
Pat	Hall
Wendy	Booth
Maggie	Xu
Sormeh	Mehrabi



The Senate of York University

Synopsis

The 673rd Meeting of Senate held on Thursday, February 25, 2021 via Zoom

Remarks

The Chair of Senate, Professor Alison Macpherson of the Faculty of Health, welcomed Senators to the meeting. She acknowledged with sorrow the recent passing of Professor Emeritus Ian Sowton, a long-serving faculty member in the Department of English and Calumet College Head.

Comments made by President Lenton included the following:

- an update on Markham Centre Campus construction progress and ongoing academic planning and program development including a new quarterly newsletter that will first launch in March.
- an update on York's collaboration with McKenzie Health and the City of Vaughan regarding an innovative, community-focused health initiative that will provide opportunities for health-related research, epidemiology and data sharing, clinical placements and training, professional development education for health sector workers, digital health solutions, and more.
- the recent release of *Addressing Anti-Black Racism: A Framework on Black Inclusion* and the accompanying *Draft Action Plan on Black Inclusion – For Further Consultation*, and the plans for VP Equity, People and Culture, Sheila Cote-Meek and Professors Carl James and Andrea Davis to lead a virtual town hall on the framework and action plan on March 18.
- a report on a recent meeting of Ontario's university Presidents with Ross Romano, Minister of Colleges and Universities, advocating for more provincial support to offset the impacts on universities and its students as a consequence of the pandemic.
- optimism about the university's budget for 2021-2022 due to the efforts of the community to advance strategic enrolment management and careful budget and capital planning.
- acknowledgement of the efforts of all faculty and units across the university in continuing to advance the priorities of the university in the context of the ongoing impacts of the pandemic.

The Senate of York University

Synopsis

- highlights from the “Kudos” report, including the work of Sociology Professor Pat Armstrong who co-authored *Re-imagining Long-term Residential Care in the COVID-19 Crisis*, a report for the Canadian Centre for Policy Alternatives that provides government stakeholders with recommendations for improving long-term residential care.

The monthly “Kudos” report on the achievements of members of the York community can be accessed with other documentation for the meeting.

Reports

Fall 2021 Program Delivery Planning

Under the auspices of the Senate Executive Committee, the Provost delivered a presentation and engaged Senators in a facilitated discussion on planning assumptions and key elements being imagined for the new set of Principles to Guide Course Planning for the Fall 2021 term. Senators’ input was gratefully received and will inform planning for fall term course delivery and the resumption of in-person academic activities as circumstances allow.

Approvals

Having provided Notice of Motion to Senate in January, Senate approved the Senate Executive Committee’s recommendation for the membership and distribution of Senate for the period 1 July 2021 to 30 June 2023 with a maximum of 168 members.

On the recommendation of its Academic Standards, Curriculum and Pedagogy Committee, Senate approved, effective FW 2021-2022:

- Establishment of a Minor program in English Language Studies, housed within the English as a Second Language Section, Department of Languages, Literatures and Linguistics, Faculty of Liberal Arts & Professional Studies
- Establishment of a Disciplinary Certificate in Psychological Methods and Data Analysis, housed within the Department of Psychology, Faculty of Health
- Restructuring of the Specialized Honours BSc program in Environmental Science and changes to degree options, housed within the Department of Biology, Faculty of Science, and the Faculty of Environmental and Urban Change

The Senate of York University

Synopsis

- Changes to degree requirements for the Specialized Honours BFA program in Intermedia and to the program name, to Integrative Arts, housed within the Departments of Computational Arts and Visual Arts and Art History, School of the Arts, Media, Performance and Design
- Changes to coursework requirements for the BES programs in Environmental Arts and Justice, housed within the Faculty of Environmental and Urban Change

Committee Information Reports

Executive

The Executive Committee's information items included the following:

- its ongoing monitoring of the impact of the COVID-19 pandemic on academic activities including a decision on online proctoring of examinations and further actions pertaining to the disruption outlined in its written Report
- the launch of the search committee for York's next Chancellor
- the Senate consultation process pertaining to the renewal of the President's term
- its discussion on Post-pandemic Governance Delivery

Academic Policy, Planning and Research (APPRC)

APPRC reported on the following items its:

- preparations for the March planning forum
- discussion with the Vice-Presidents Research & Innovation Equity, People & Culture and on decolonizing research administration
- ongoing discussions about academic governance structures and processes for Markham Centre Campus, and its recent joint meeting with the Academic Standards, Curriculum and Pedagogy Committee (ASCP) on program planning for the Campus

Academic Standards, Curriculum and Pedagogy (ASCP)

ASCP's information items included an update on the Sessional Dates for SU2021 to 2024, reflecting a revised Fall 2021 Orientation Day, and the approval of a pilot for a

The Senate of York University

Synopsis

new winter term in Lassonde, beginning in Winter 2022 for undergraduate students. The following following minor changes were approved by the Committee:

Faculty of Environmental and Urban Change

Minor changes to coursework requirements for the BA programs in Global Geography
Minor changes to coursework requirements for the BES programs in Sustainable
Environmental Management

Faculty of Health

Minor change to admission requirements for the Internationally Educated Nurses and
the Second Entry BScN programs
Minor changes to degree requirements for the BHS Specialized Honours program in
Health Policy and Management

Faculty of Liberal Arts & Professional Studies

Minor changes to degree requirements for the BA Honours and Specialized Honours
programs in Sociology
Minor changes to degree requirements for the BA programs in Work and Labour
Studies
Minor changes to degree requirements for the BA (Honours) programs in Creative
Writing associated with a change in rubric for Creative Writing courses

Appeals

The Appeals Committee presented its annual reports for the 2019-2020 academic year on student appeals statistics, Faculty- and Senate-level petitions and appeals decisions, and Faculty-level academic honesty statistics.

Additional Information about this Meeting

Please refer to the full Senate agenda and supplementary material posted online with the Thursday, February 25, 2020 meeting for details about these items.

<https://secretariat.info.yorku.ca/senate/meeting-agendas-and-synopses/>

March Meeting of Senate

Senate's next meeting will be held at 3:00 pm on Thursday, March 25, 2021.

York University Senate

Memorandum

To: Faculty Councils
Petitions and Appeals Committees
Associate Deans Students

From: Chloë Brushwood Rose, Chair, Senate Academic Standards,
Curriculum and Pedagogy Committee
Jen Gilbert, Chair, Senate Appeals Committee

Date: 19 February 2021

Subject: Revisions to Senate *Policy on Academic Honesty*: Consultation on
proposed new Academic Conduct Policy and Procedures

The Senate Academic Standards, Curriculum and Pedagogy Committee (ASCP) and the Senate Appeals Committee (SAC) have undertaken a review of the Senate [Policy on Academic Honesty](#). Having prepared a draft Academic Conduct Policy and associated procedures, intended to supersede the existing Policy, ASCP and SAC invite you to participate in a consultation on the documents, guided by the questions on the pages that follow. Appended for your consideration are the draft Policy and Procedures and a briefing note outlining the background, process and principles of the Policy review.

We ask that undergraduate and graduate committees of Faculty Councils that deal with petitions and appeals include time on their upcoming meeting agendas to discuss the proposed new Policy and Procedures. Faculty Councils also may wish to hold discussions about the documents. In addition, this documentation may be circulated widely within your respective Faculties in order to ensure that feedback provided to ASCP and SAC represents a broad range of perspectives. Both coordinated responses from Councils, committees or Faculties and individual responses will be accepted. Following the consultation, ASCP and SAC will consider input and adjust the Policy and

Procedures as appropriate with a view to bringing forward a recommendation to Senate.

Please communicate input in writing to the Secretary of ASCP at hbarron@yorku.ca by 30 April 2020. Any questions you have may be directed to both the ASCP and SAC Secretaries (hbarron@yorku.ca and awasser@yorku.ca).

cc: Senate Executive Committee
Lyndon Martin, Vice-Provost Academic
Pascal Robichaud, University Secretary
Lara Ubaldi, Director, Student Advising and Academic Services
Hillary Barron, Secretary to ASCP
Amanda Wassermuhl, Secretary to SAC

Questions

1. As addressed in the briefing note, the high-level goals of the revisions to the Policy include:
 - adapting to new realities in the academic conduct landscape
 - streamlining investigation procedures to encourage formal resolution while maintaining alignment with principles of procedural fairness and natural justice
 - providing enhanced flexibility on sanctions
 - enhancing University-wide consistency in terms of procedures and documentation and record-keeping protocols
 - clarifying language and minimizing legalistic terminology

Drawing on your experience, do the proposed new Policy and Procedures achieve these goals?

2. Do the proposed sanctions provide sufficient options and flexibility at both the undergraduate and graduate levels?
3. Are there other relevant items that should be included in the University-level policy?
4. Taking into consideration your Faculty's existing petition and appeals structures and resources, are the new Policy and Procedures aligned with them or would modifications be required to implement the Policy and Procedures?

5. A new aspect of the Policy and Procedures being proposed in direct response to Faculties' advice and request relates to high volume academic misconduct. Do you think the proposed procedures for high volume academic misconduct address the current challenges in your Faculty?
6. Another new element being proposed is the Office of the University Registrar's jurisdiction over investigations related to admissions fraud. Taking into consideration your experience with allegations of this nature in your Faculty, what are your views on this possible change in practice and what are some of the procedural elements that will need to be addressed if this approach is pursued?
7. Given the current pandemic situation, you may wish to review the Policy and Procedures through the lens of remote course delivery in order to assess whether they address such circumstances sufficiently.

Appendices

- a. Briefing Note on Revisions to the Senate *Policy on Academic Honesty*
- b. Draft Academic Conduct Policy and Procedures

Briefing Note: Revisions to the Senate *Policy on Academic Honesty*

The Senate Academic Standards, Curriculum and Pedagogy Committee (ASCP) and the Senate Appeals Committee (SAC) wish to engage the University community in consultations on the draft Academic Conduct Policy and Procedures, intended to supersede the existing Senate [*Policy on Academic Honesty*](#).

Background

In March 2017, the Office of the Vice-Provost Academic, in collaboration with the AVP Teaching & Learning, convened a small working group to survey the landscape of academic integrity at York and beyond in view of the changing context in higher education as a result of technological advances and increased emphasis on collaborative learning and experiential education.¹ The Working Group was tasked with examining the Senate *Policy on Academic Honesty* and tools and procedures being utilized, and considering proactive preventative measures that could be implemented. To that end, the Working Group explored recent literature, participated in meetings of professional organizations and consulted with colleagues at York to deepen its understanding of the current context and identify challenges and issues.

The Working Group's activities culminated in a number of observations and recommendations about academic integrity at York, including the lack of sufficient and reliable data about the scope of academic honesty offences, the prevalence of informal resolution of offences and the underreporting of offences due in part to the real and perceived onerousness of administering the Policy, cross-Faculty administrative and communication challenges due to variation in unit- or Faculty-level processes, and the view of community members that academic integrity is not a visible part of the York culture. Accordingly, the Working Group recommended that a number of actions be undertaken, chief among them a comprehensive review of the Policy.

In response, in Winter 2020, ASCP and SAC convened the Academic Honesty Policy Review Working Group to develop a proposed new policy framework, based on a draft prepared by former University Secretary and General Counsel Maureen Armstrong.² The Policy Review Working Group's efforts from February to June 2020 culminated in the development of the draft Academic Conduct Policy and Procedures, which were

¹ The Working Group on Academic Integrity was comprised of Co-Chairs Amy Gaukel, Lassonde, and Mike Zryd, AMPD, and Tom Scott, Libraries, and Karthiga Sandrasri, AVP Teaching & Learning Office.

² The members of the Academic Honesty Policy Review Working Group were: Peter Avery (LA&PS), Suprakash Datta (SAC member, Lassonde), Rob Heynen (Chair; ASCP member, LA&PS), Amy Gaukel (Lassonde), Michael Scheid (Science), Mike Zryd (AMPD), Alice Pitt (then Vice-Provost Academic), with Secretariat support from Terry Carter, Amanda Wassermuhl and Kathryn White.

reviewed by ASCP and SAC in Fall 2020. At this time, ASCP and SAC invite the University community to review and provide input on the draft Policy and Procedures.

Principles

The principles underpinning the Policy Review Working Group's activities included:

- Adapting to new realities in the academic conduct landscape, such as contract cheating, falsified credentials and collaborative learning
- Streamlining investigation procedures to encourage formal resolution while maintaining alignment with principles of procedural fairness and natural justice, including:
 - allowing for the possibility of course director-led resolution within specified parameters
 - developing procedures specific to investigations of cases of high volume academic misconduct
- Providing enhanced flexibility on sanctions, including the addition of sanctions geared towards the graduate level
- Enhancing University-wide consistency in terms of procedures and documentation and record-keeping protocols, including the development of consistent record-keeping practices and language, and processes for communications across Faculties and units
- Clarifying language and minimizing legalistic terminology

The above principles resulted in a number of changes in the approach employed in the draft Policy and Procedures compared to that of the existing Policy, chief among them the removal of the requirement to hold an exploratory meeting for all investigations. This is replaced with the ability of course directors or other designated people (person of primary responsibility or their designate[s]) to handle the investigation and make a decision, and students having the ability to appeal those decisions.

Chronology

A chronology of major milestones in the Policy review to date are listed in the table below

Timing	Activity
March 2017	Working Group on Academic Integrity convened
Winter and Spring 2019	Findings and recommendations of Working Group on Academic Integrity conveyed to ASCP and Senate (summary available in the March 28, 2019 Senate agenda package)
Fall 2019	Draft Academic Conduct Policy and Procedures received from former University Secretary and General Counsel Maureen Armstrong
February 2020	First meeting of ASCP-SAC Academic Honesty Policy Review Working Group
May 2020	Review of draft Academic Conduct Policy by ASCP and its Coordinating & Planning Sub-Committee
June 2020	Final meeting of Policy Review Working Group
July to September 2020	Policy and Procedures updated to reflect input from Working Group and Office of the Counsel
October 2020	Review of updated draft Academic Conduct Policy and Procedures by SAC and ASCP's Coordinating & Planning Sub-Committee
November 2020	Review of updated draft Academic Conduct Policy and Procedures by ASCP
February 2021	Community consultations on draft Policy and Procedures launched
Spring 2021 (tentative)	ASCP and SAC review of consultation input and finalization of Policy and Procedures
Spring/Fall 2021 (tentative)	Senate review and approval of Policy



University Policy

Academic Conduct Policy and Procedures

Topic:	Academic Honesty and Student Appeals
Approval Authority:	Senate
Approval Date:	TBC
Effective Date:	TBC
Last Revised:	

1. Purpose and Principles

1.1. This Policy establishes the general obligation on all members of York University to maintain the highest standards of academic conduct by avoiding behaviours which can or do create unfair academic advantage or that unfairly disadvantage others. It identifies a range of actions that constitute academic misconduct and establishes sanctions, and outlines principles to guide the processes by which allegations of academic misconduct will be addressed.

1.2. This document is to be read in conjunction with the following University policies:

- a. Code of Student Rights & Responsibilities
- b. Senate Policy on Responsible Conduct of Research
- c. Student Professional Behaviour Policy (BScN)

1.3. This Policy is guided by the universal principles of the International Center for Academic Integrity as set out in its 2013 edition of the *Fundamental Values of Academic Integrity*, which defines academic integrity as “a commitment ... to six fundamental values: honesty, trust, fairness, respect, responsibility, and courage. From these values flow principles of behavior that enable academic communities to translate ideals to action.”

1.4. Where there are reasonable grounds to believe academic misconduct has occurred, the matter will be dealt with in accordance with principles of procedural fairness and natural justice. Specifically, the following will apply;

- a. the student will first be informed of the allegations against them and then will have access to the evidence against them;
- b. the student will be provided with an opportunity to respond to the allegations and evidence against them;
- c. the student will be informed of their right to have a Support Person throughout the process;
- d. while admissibility is not governed by the formal rules of evidence, appropriate weight will be given to evidence based on its credibility or reliability; and
- e. the student will have the right to request leave to appeal a decision.

1.5 Findings of academic misconduct are made according to a balance of probabilities and not bound by formal rules of evidence applicable in courts of law.

2. Scope and Application

2.1 This Policy applies to allegations of academic and research misconduct committed by:

- a. all students registered in an academic course and/or program, including non-degree activities;
- b. students who have submitted academic work for evaluation or academic records in order to gain admission to the University or reactivate their registration; and
- c. students who have graduated or withdrawn from the University where it is alleged that they engaged in academic misconduct while a registered student or in order to gain admission to the University, or reactivate their registration.

2.2. In place of or in addition to procedures under this Policy, the University may also invoke other University policies and any civil, criminal or other remedies that may be available to it as a matter of law.

3. Definitions

Academic Misconduct: Any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community. This

includes a wide range of behaviour including cheating, plagiarism, misrepresentation of identity or performance, fraudulent conduct and research misconduct. Detailed definitions of each form of academic misconduct are available in Section 4 of this Policy.

Bias: The existence of a lack of neutrality, which may have the outcome of influencing or affecting the application of this Policy and its associated procedures in an unfair manner.

Course Director (CD): The instructor or supervisor of a course.

Expulsion: Permanently terminating a person's right to continue as a student in the University and to reactivate their registration. Expulsion from the University may be imposed only by the Faculty Appeals Committee, which is recognized by a Faculty Council as the responsible body to assign this sanction.

Faculty Appeals Committee(s): The committees in each Faculty responsible for considering appeals relating to any decision taken by the Course Director (CD), PPR or PPR designate in relation to this Policy. Faculty Appeals Committees must have a minimum of three members, the majority of whom must be faculty members, and must be recognized by a Faculty Council as the body responsible for considering appeals relating to the Policy.

High Volume Academic Misconduct: Allegations of academic misconduct involving 10 or more students within one course where the breach is of the same nature and results in consistent outcomes.

Impartiality: Freedom from bias or prejudice, ensuring fairness and neutrality in the application of this Policy and its associated Procedures. Impartiality does not exist when a course director, PPR or PPR designate have a significant personal or professional relationship with the student they are investigating, or when the alleged academic misconduct directly impacts the course director, PPR or PPR designate. For example, if a student plagiarizes a course director's intellectual property.

Person of Primary Responsibility: Each Faculty and appropriate unit shall identify a person of primary responsibility (PPR) who shall coordinate the implementation of this Policy in their Faculty or unit. The PPR will normally be an Assistant or Associate Dean who is knowledgeable about Academic Conduct matters. The Faculty PPR is responsible for coordinating the activities of PPR designates, ensuring the consistent implementation of the Policy and reporting annually to Senate.

PPR Designate: Normally a UPD, GPD, or Department Chair who has been delegated authority for certain Academic Conduct matters by the PPR and who is knowledgeable about Academic Conduct matters.

Senate Appeals Committee: Senate Committee responsible for hearing appeals from members of the University regarding decisions of Faculty Appeals Committees in respect of petitions concerning academic regulations, grade re-appraisals and charges of academic misconduct.

Support Person: A student involved in an academic misconduct process may be assisted by a Support Person, who may be internal or external to the University and may include legal counsel, a peer or family member. At proceedings held at the Faculty-level and below, the support person may provide support and advice but may not speak on behalf of the student.

Suspension: A sanction of a variable but limited period during which the student may not register in the University. A student who is otherwise eligible to graduate, but is suspended, may not graduate until the suspension expires or is lifted. This sanction may be imposed only by a Faculty Appeals committee which is recognized by a Faculty Council as the responsible body to assign this sanction.

Student: Refers to individuals referenced in the Scope and Application, Section 2.1, of this Policy.

Student file, record, transcript: A student file is the official record of a student's academic misconduct case, to be kept in the student's home Faculty. A student's record is the electronic record housed in the Student Information System. A transcript is the official record of a student's academic history at York, providing a comprehensive summary of course enrolment, grades earned and academic decisions.

4. Policy

4.1 A clear understanding of and appreciation for good academic conduct and responsibility is fundamental to good scholarship. This Policy recognizes the general responsibility of all course directors to foster acceptable standards of academic conduct and of all students to be mindful of and abide by such standards.

4.2 While the consequences and sanctions of misconduct can vary significantly depending upon severity, all forms of academic misconduct violate the University's academic standards.

4.3 It is a breach of this Policy to engage in any form of academic misconduct. This encompasses a wide range of behaviour, including cheating, plagiarism, misrepresentation of identity or performance, fraud and research misconduct, and includes but **is not limited to the following**:

Cheating – the attempt to gain an improper advantage in an academic evaluation. Forms of cheating include but are not limited to:

- Obtaining a copy of all or parts of an examination, test or course material before it is officially available;
- Copying another person's answer to an examination question;
- Consulting an unauthorized source during an examination;
- Disrupting an academic evaluation by any means;
- Obtaining assistance by means of documentary, electronic or other aids that are not approved by the instructor;
- Changing a grade, score or a record of an examination result;
- Submitting the work one has done for one class or project to another class, or as another project, without the prior informed consent of the relevant instructors;
- Submitting work prepared in collaboration with one or more class member or other person when collaborative work on a project has not been authorized by the instructor;
- Preparing work in whole or in part for another that is to be submitted by a student for appraisal;
- Circumventing the anti-cheating safeguards when completing in-person or remote exams, tests or assignments; and
- Representing another's substantial editorial or compositional assistance on an assignment as the Student's own work.

Plagiarism – the misappropriation of the work of another whether published, unpublished or posted electronically, attributed or anonymous, without proper acknowledgement. This includes but is not limited to:

- Presenting all or part of another person's work as something one has written, where work includes, but is not restricted to, text, code, technical and creative production, and other forms that constitute intellectual property;
- Paraphrasing another's writing without proper acknowledgement;
- Representing another's artistic or technical work or creation as one's own;
- Reproducing without citation the same student's own work originally presented elsewhere; and

- Failing to follow proper citation practices, even if inadvertent. Citation practices may differ within Faculties and/or disciplines, and course directors must advise students of expectations.

Misrepresentation of personal identity or performance – includes but is not limited to:

- Submitting an assignment, exam or research that is stolen, donated or purchased;
- Impersonating someone or having someone impersonate you, whether in person, in writing or electronically;
- Falsifying one's identity, academic record or other admissions-related material for the purposes of gaining admission to the University or a program or access to a course, or seeking to reactivate their registration.

Fraudulent conduct – includes but is not limited to:

- Selling or offering for sale essays or other assignments, in whole or in part, with the expectation that these works will be submitted by a student for appraisal;
- Submitting work prepared in whole or in part by another person, whether for money or otherwise, and representing that work as one's own;
- Submitting altered, forged or otherwise falsified medical or other certificates or documents to gain a deadline deferral, extension, postponement or advantage under false pretences;
- Altering or having another person alter a grade on academic work after it has been marked;
- Altering, stealing or destroying the academic work of another to gain academic advantage or to disadvantage another;
- Accessing without authorization, stealing or tampering with course-related material or with library materials; and
- Using intellectual property of others for distribution, sale or indirect profit without permission or licence from the owner of rights in that material, including slides and presentation materials provided in a class or course.

Student Research Misconduct - any action or attempted action of misconduct in the collection, use or dissemination of research including but not limited to:

- Dishonest reporting of investigative results, either through fabrication or falsification;
- Taking or using the research results of others without permission or due acknowledgement;

- Misrepresentation or selective reporting of research results or the methods used;
- Knowingly publishing information that will mislead or deceive readers, including the falsification or fabrication of data or information, the failure to give credit to collaborators as joint authors or the listing as authors of others who have not contributed to the work; plagiarism is also considered a form of misconduct in publication;
- Disseminating data or other products of research done by or with a member of faculty or another student for publication or presentation without permission;
- Using or releasing ideas or data of others that were given with the express expectation of confidentiality; and
- Listing of potential collaborators without their agreement (see also Responsible Conduct of Research Policy, Section 4 a. ix.).

Violation of specific departmental or course requirements – Course directors may outline other specific academic conduct requirements as long as these are consistent with this Policy. Any additional requirements must be published in the course outline/syllabus.

4.4 Sanctions

- a. Violations of this Policy may lead to one or more of a range of sanctions, which may be imposed for individual or combined violations. Multiple violations of required remediation may compound sanctions. Sanctions **may include but are not limited to** the following:
 - i. Written warnings or reprimands
 - ii. Educational development actions. Completion of one of the below items may be required as a stand-alone consequence of a violation or may be in combination with other measures instead of a more severe sanction. In the event that actions are not completed, more serious sanctions will be applied.
 1. mandatory participation in educational activities relating to academic conduct
 2. required completion of an academic honesty assignment
 - iii. Course-based sanctions within the course where the finding of academic misconduct occurred:
 1. restrictions on the student’s ability to withdraw from the course
 2. resubmission of the piece of academic work in which the violation was committed, for evaluation with or without a grade sanction

3. the required completion of a make-up assignment or other form of assessment
 4. a lowered or failed grade (including a grade of zero or a failing grade) on the assignment in question
 5. a lowered or failed grade in the course
 6. a permanent grade of record wherein the grade assigned shall remain as the one grade of record for the course even if the course is repeated; this can be added to any other sanction
- iv. Research-based sanctions:
 1. required completion of a research survey paper
 2. revocation of research ethics approvals and required resubmission of ethics protocols
 3. denial of permission to use facilities of the University, including computer facilities, studios, and laboratories, for a designated period of time
 - v. suspension from the University for a definite period, from one term to up to six consecutive terms (two years), whether it is effective immediately or at the conclusion of the academic session during which the sanction is imposed; students may or may not be permitted to complete courses that are ongoing at the time of the decision but will be withdrawn from any courses in which they have registered and which would begin during the suspension
 - vi. expulsion from the University
 - vii. withholding or rescission of a York degree, diploma or certificate, or other credential offered by the School of Continuing Studies
 - viii. rescission of admission to the University
 - ix. transcript notation, which may be combined with any sanction but will always be included with suspensions, expulsions and the withholding or rescission of a degree, diploma, certificate or other credential

4.5 Suspension or expulsion from the University may only be imposed by the Faculty Appeals Committee recognized by a Faculty Council as the responsible body to impose these sanctions. Expulsions must be reported to the Senate Appeals Committee on behalf of Senate. Withholding or rescission of a degree may only be imposed by the

Faculty Appeals Committee with the approval of the Senate Appeals Committee on behalf of Senate.

4.6 Sanctions will be imposed having regard to all of the circumstances of the case including:

- a. whether it is a first or subsequent offence;
- b. the relative weight of the assignment in question;
- c. level of the student's academic experience;
- d. the severity of the conduct;
- e. whether the student has accepted responsibility for the conduct;
- f. the extent to which the integrity of the student evaluation process was impaired;
- g. the extent of the harm caused to the University, one or more of its members and/or third parties;
- h. whether the student is at the undergraduate or graduate level, as academic misconduct by a graduate student will generally result in more severe consequences than for undergraduate students; and
- i. extenuating circumstances or aggravating factors that may help explain the action taken by a student, with due weight to be attached to those circumstances.

4.7 Investigations

- a. Investigations of allegations of academic misconduct of a student may be initiated and conducted by a course director, the Person of Primary Responsibility (PPR), the PPR designate or, in cases of falsification of identity, academic record or other admissions-related material for the purpose of gaining admission to the University or reactivating registration, the PPR or PPR designate in the Office of the University Registrar
- b. An investigation may encompass multiple allegations of academic misconduct involving the same student.
- c. Each Faculty and the Office of the University Registrar shall designate a PPR, defined in Section 3, who shall coordinate the implementation of this Policy in their Faculty.
- d. The PPR may delegate authority for certain Academic Conduct matters to a PPR designate, defined in Section 3. Such delegations may vary according to the size of the Faculty, its departmental structure, and its disciplinary standards for academic conduct.

- e. Direct resolution by a course director: If a course director (CD) believes that a student in their course has engaged in academic misconduct or has been informed of alleged misconduct, the CD may investigate and resolve the case in accordance with principles of procedural fairness outlined in Section 1.4 above (including the students' right to notification, response, access to evidence and appeal) and the associated Academic Conduct Procedures, subject to the following conditions:
 - i. The course director must notify the PPR or PPR designate of their intention to investigate a case. If there is a record of previous academic misconduct by the student, the case must be processed by the Faculty PPR or PPR designate.
 - ii. The value of the assessment in question is less than or equal to 30% of the final grade.
 - iii. The only sanction that may be assigned by way of direct resolution is a lowered or failed grade on the assessment in question.
 - iv. The course director must report decisions to the PPR or PPR designate.
- f. Resolution by Faculty PPR: In any case that is not resolved through direct resolution by a course director, outlined in Section 4.7 e) the allegations shall be investigated and resolved at the Faculty level by the PPR or PPR designate, in accordance with principles of procedural fairness outlined in Section 1.4 and the associated Academic Conduct Procedures.
- g. High Volume Academic Misconduct: Cases of High Volume Academic Misconduct will be referred to the Faculty PPR or PPR designate to administer in accordance with the process outlined in the associated Academic Conduct Procedures.
- h. Impartiality: Impartiality, as defined in Section, is required of the CD, PPR or PPR designate investigating an academic misconduct case to ensure fairness and neutrality. If a student has reason to believe that the Course Director, PPR or PPR designate investigating their case is not impartial, they may request that the investigation be referred to another individual, as described in the associated Academic Conduct Procedures.

4.8 Normally, a decision is in force as soon as it is officially communicated to the student. Requests from students for a stay of sanction pending appeal may be addressed to the Chair of the Senate Appeals Committee who will make a determination.

4.9 Records and notations of decisions

- a. Sanctions will be noted on the student's record in the following manners:
 - i. sanctions noted in 4.4(a)(i) to (iv) inclusive will remain on the internal record for five years or until the student graduates, whichever is less;
 - ii. sanctions noted in 4.4(a)(v) to (viii) inclusive will remain on the internal record permanently.
- b. A record of each finding of academic misconduct will be maintained by the office of the responsible PPR or a central repository. The purpose of this record, which shall be kept separate from any other of the student's records, is to determine whether there has been a previous offence in the event a new case is opened, and to aid in determining sanctions in subsequent cases. Such a record of offences shall not be used for any other purpose.
- c. When no period is specified for a transcript notation, a student may petition to the Faculty Appeals Committee to have the notation removed after a period of five years from the date at which the notation was entered, with the exception of notation of expulsion from the University and withholding or rescinding a degree, diploma or certificate.
- d. Students may submit a petition for the destruction of permanent records of offences, as outlined in the Procedures. Such a petition cannot be submitted until at least five years after the decision. If the petition is granted, however, the record shall not be destroyed before the student is eligible to graduate.
- e. If, at any time in the investigation or process, it is determined that misconduct did not occur, the allegation will be dismissed and all records of the allegation destroyed.
- f. If the student is found to have committed academic misconduct in work related to a funded research project, the central Research Office shall be notified and determine whether to notify the granting agency.
- g. If a student from another institution enrolled in a joint program or attending York on Letter of Permission is found to have committed academic misconduct, notice of the findings will be sent to the other institution by the Office of the University Registrar.

4.11 Jurisdiction

- a. Allegations of academic misconduct in a course shall be dealt with by the Faculty offering the course. For students in joint programs or where allegations arise in more than one Faculty, the Faculty PPRs can agree that one of them will have jurisdiction over the proceedings.
- b. Allegations of academic misconduct pertaining to the falsification of one's identity, academic record or other admissions-related material for the purposes of gaining admission to the University, a program or course or reactivating registration shall be dealt with by the Office of the University Registrar.
- c. Should a matter arise for which there appears to be no clear Faculty jurisdiction, the Senate Appeals Committee shall determine which Faculty or unit shall have carriage of the matter.
- d. Where appropriate, academic misconduct allegations will be communicated to relevant units, such as a student's home Faculty or an academic program connected to the one in which the student is enrolled by way of cross-listed courses or joint programming.
- e. All findings of academic misconduct shall be communicated to the PPR and/or PPR designate in the student's home Faculty.

5. Roles and Responsibilities

5.1 All members of the University community (students, faculty, instructors, staff and invigilators) have responsibility for the maintenance of good academic conduct in all elements of academic life, including research, teaching, learning and administration. All members of the University have the responsibility to:

- a. detect and report incidents of academic misconduct in a timely manner to the designated unit or Faculty office;
- b. provide assistance and co-operation in investigations and adjudication processes; and
- c. engage in the promotion of education and related remedial activities associated with this Policy.

5.2 It is the responsibility of students to:

- a. be familiar with this Policy and comply with the principles of good academic conduct set out herein;
- b. use course and exam software in a manner that maintains academic standards.

5.3 It is the responsibility of course directors to:

- a. foster acceptable standards of academic conduct;
- b. report all suspected incidents of academic misconduct to the PPR or PPR designate whether the matter is resolved by the course director; and
- c. collect or assist in the collection of necessary information, to participate in any investigation and to be prepared to act as a witness at any hearing of the matter.

5.4 It is the responsibility of the persons charged with administering the Policy to comply with this Policy and its associated Procedures as well as any Faculty-level procedures.

6. Review

6.1 This policy will be reviewed every five (5) years or at such shorter interval as Senate deems necessary.

7. Appeals

7.1 Appeals of decisions taken by the CD, PPR or PPR designate in relation to this Policy may be appealed to the Faculty Appeals Committee recognized by a Faculty Council as the body responsible for considering appeals relating to the Policy.

7.2 Appeals of decisions of a Faculty Appeals Committee are considered by the Senate Appeals Committee.

8. Procedures

8.1. Reporting Suspicion of Academic Misconduct

- a. Any person who believes academic misconduct has occurred may report it to:
 - i. the course director of the course in which it has occurred,
 - ii. if not course related, the PPR or PPR designate of the Faculty in which the misconduct occurred (see Appendix for a list of faculty PPRs and PPR designates) who will undertake to ensure the information is communicated to the appropriate University authority,
 - iii. in matters involving academic misconduct of a graduate student, to the PPR or PPR designate in the Faculty of Graduate Studies who will undertake to inform the relevant supervisor or graduate program,
 - iv. in the case of suspected falsification of one's identity, academic record or other admissions-related material for the purposes of gaining admission to

the University, a program or course, or reactivating registration, to the Office of the University Registrar.

8.2. Responsibility for initiating and conducting an investigation

- a. Course Directors (CDs) may initiate and conduct an investigation of allegations of academic misconduct or may choose to refer the matter to the PRR or PPR designate. The Course Director may conduct an investigation only in situations where all of the following criteria are met:
 - i. The allegation consists of plagiarism or cheating in a course, in accordance with Section 4.3, and the assessment(s) in question is/are worth no more than 30% of the course grade within a course the CD is conducting;
 - ii. The student has no previous record of academic misconduct; and
 - iii. The CD must be impartial, as defined in Section 3.
- b. In cases where the CD decides not to conduct an investigation, or where the criteria in 7.3(a) are not met, the CD will refer the matter to the Person of Primary Responsibility (PPR) or PPR designate who will initiate and conduct an investigation.
- c. When the CD refers an investigation to the PPR, the responsibility for the decision lies with the PPR, who will consult with the CD on the provision of evidence and may invite the CD to any subsequent hearing on the matter.
- d. In cases where neither the CD nor the PPR have clear jurisdiction, an investigation will be initiated and conducted by the appropriate Faculty or University level body, to be identified by the Senate Appeals Committee.
- e. In cases where a student has reason to believe that the individual responsible for conducting the investigation is not impartial, they may request that the PPR or PPR designate refer the investigation to another individual. If the PPR or PPR designate agrees with the student's assessment, the investigation will be referred accordingly:
 - i. If the investigation was initially to be conducted by a CD, it will be referred to the PPR or PPR designate.
 - ii. If the investigation was initially to be conducted by a PPR or PPR designate, it will be referred to another PPR designate within the Faculty or unit.

- f. In cases of suspected falsification of one's identity, academic record or other admissions-related material for the purposes of gaining admission to the University, a program or course or reactivating registration, the PPR or PPR designate in the Office of the University Registrar will initiate and conduct an investigation.

8.3. General procedures for initiating and conducting an investigation

- a. Where there are reasonable grounds to believe there has been a breach of this Policy and an investigation is being initiated, the responsible authority as outlined in 8.2 will:
 - i. Notify the PPR or PPR designate who shall post a block on enrolment activity in the course. The student may not drop or be deregistered from the course for any reason, withdraw from the University, or obtain transcripts until a final decision is reached. A request by a student for a transcript to be sent to another institution or to a potential employer will be processed but, if the student is found to have performed academic misconduct, the recipients of the transcript will be provided automatically with an updated transcript.
 - ii. Notify the student in writing at the first available opportunity of the allegation and the evidence available and advise that a sanction may be imposed;
 - iii. Notify the PPR in other relevant units, such as a student's home Faculty or an academic program connected to the one in which the student is enrolled by way of cross-listed courses or joint programming, within no more than two calendar days of notifying the student.
 - iv. Advise the student, normally within no more than two calendar days, that they are not permitted to withdraw from the course and that a hold will be placed on the student's record pending the outcome of the investigation;
 - v. Inform the student of their right to provide a response to the allegation(s) and to be assisted by a Support Person if they choose. At the Faculty level and below, the Support Person may provide support and advice but may not speak on behalf of the student;
 - vi. Provide the student with sufficient time to respond either in writing or in person to the allegations, normally within 10 calendar days;

- vii. Share with the student any additional evidence that becomes available over the course of the investigation and provide the student with the opportunity to respond to it; and
- viii. Assess all available evidence, including but not limited to: reviewing documents and other records; reviewing audio or video recordings or photographs; reviewing evidence produced by plagiarism or cheating detection software; interviewing the student; interviewing witnesses; examining physical evidence.

8.4. Direct Resolution by a Course Director

- a. If a CD believes that a student in their course has engaged in academic misconduct or has been informed of alleged misconduct under 8.1(a)(i), the CD will advise the PPR or PPR designate of the matter who shall immediately put a hold on the student record pending the outcome of any proceedings
- b. If, upon receipt of the notice from the CD, the PPR or PPR designate finds that the student has previous academic misconduct findings in their record, the PPR or PPR designate will initiate and conduct the investigation.
- c. If the CD elects to deal with the matter, subject to the conditions set out in 8.3(a), the CD will advise the student, in writing, of the suspected misconduct and supporting evidence, and provide an opportunity to respond. The student may respond within 10 calendar days in writing and/or request that a meeting (in-person, telephone, or video-conference) be held. The CD may determine the appropriate action having regard to the circumstances of the case.
- d. The maximum sanction that may be imposed by the CD is a grade of zero on the assessment in question if the value of the assessment is 30% or less. If, during the investigation, the CD uncovers additional allegations of academic misconduct, requiring a more severe sanction, then the CD will refer the matter to the PPR.
- e. If, during the course of the investigation, the CD finds evidence that other student(s) were active participants in the academic misconduct, the CD will refer the matter pertaining to the other student(s) to the PPR.
- f. The CD will report the outcome of the investigation to the PPR who will notify the student in writing of the decision and will keep that record. The student may appeal the decision to the Faculty Appeals Committee.

- g. If, after conducting the investigation, the CD is persuaded that no academic misconduct took place, the CD will advise the PPR. The PPR will communicate the outcome to the student. All records of the alleged incident will be destroyed.

8.5. PPR Investigation

- a. In cases where the CD decides not to conduct an investigation, or where the criteria in 8.3(a) are not met, the matter will be referred to the PPR or PPR designate to undertake an investigation and to decide on the matter.
- b. In cases where the PPR or PPR designate is not impartial, as defined in Section 3, the investigation will be referred to an alternative PPR or PPR designate.
- c. Where there are reasonable grounds to believe there has been a breach of this Policy and an investigation is being initiated, the PPR or PPR designate will follow the general procedures set out in Section 8.3(a).
- d. The PPR will advise the student, in writing, of the suspected misconduct and supporting evidence, and provide an opportunity to respond. The student may respond within 10 calendar days in writing and/or request that a meeting (in-person, telephone, or video-conference) be held. The PPR may determine the appropriate action having regard to the circumstances of the case.
- e. Once the investigation is completed, the PPR or PPR designate will determine, on a balance of probabilities whether a breach has occurred and will decide on an appropriate sanction having regard to the circumstances of the case and the sanction guidelines.
- f. The decision will be provided to the student in writing and will include the following:
 - i. a summary of the allegation(s) and relevant timelines;
 - ii. an overview of the investigation process including relevant timelines;
 - iii. a summary of the key evidence obtained during the investigation, including the response of the student to the allegation;
 - iv. an indication of which key evidence was considered credible and reliable;
 - v. the decision reached on a balance of probabilities and the reasons for the decision;
 - vi. the sanction, if any, being imposed including a rationale for the sanction; and
 - vii. if a sanction is being imposed, information regarding the student's right to appeal.

- g. Faculties and units are encouraged to use the template decision letters available on the Senate website to serve as a reference.
- h. A copy of the decision will be provided to the PPR in the student's home Faculty, if applicable, and the Office of the University Registrar.

8.6. High Volume Academic Misconduct

- a. High Volume Academic Misconduct is defined in Section 3.
- b. The CD will refer cases of high volume academic misconduct to the PPR or PPR designate. The PPR or PPR designate shall immediately put a hold on the students' records pending the outcome of the proceedings and review students' records to identify any previous academic misconduct findings. Those students with previous academic misconduct findings will be excluded from this process and the PPR or PPR designate will initiate and conduct a separate investigation following the procedures set out in Sections 8.3 and 8.5.
- c. The PPR or PPR designate will notify students in writing at the first available opportunity, normally within no more than two calendar days, that they are implicated in an investigation of high volume academic misconduct, that the students are not permitted to withdraw from the course, that a hold will be placed on their records pending the outcome of the investigation, and advise that a sanction may be imposed.
- d. The PPR or PPR designate will investigate at least five of the alleged breaches of misconduct, assessing all available evidence including but not limited to: reviewing documents and other records; reviewing audio or video recordings or photographs; reviewing evidence produced by plagiarism or cheating detection software; interviewing the student; interviewing witnesses; examining physical evidence. If the PPR or PPR designate concludes that academic misconduct of the same nature occurred in the majority of the cases, the decision may be applied to the other students implicated in the investigation.
- e. The PPR or PPR designate shall send a letter to the students referenced in section 8.6. c., providing a report with details of the findings and evidence and communicating the decision with the sanction(s).
- f. Upon receipt of the decision, the student may request, within 10 calendar days, that their case be reviewed individually by the PPR or PPR designate. The PPR or PPR designate will reassess the evidence and, if the original decision is confirmed, will impose a new sanction that may diverge from that assigned in the group decision.

- g. The PPR or PPR designate decision may be appealed to the Faculty Appeals Committee.

8.7. Records of Academic Misconduct Findings

- a. Records of academic misconduct findings will be kept in accordance with Section 4.9.
- b. In cases where a finding results in a sanction of transcript notation, the following language will be used:
 - i. For the withholding or rescission of a degree: “York degree withheld/rescinded by the University on (date of decision).”
 - ii. For suspension from the University: “Suspended by the University for academic misconduct for ___ months effective (date suspension starts).”
 - iii. For limitations on students’ registration: “Registration limited by the University for (dates of the terms for which limits were applied).”
 - iv. For removal from the student’s program of study: “Removed from program of study by the University for academic misconduct for ___ months effective (date suspension starts).”
 - v. For expulsion: “Expelled by the University for academic misconduct (effective date).”

8.8. Appeals

- a. Appeals relating to any decision taken by the Course Director (CD), PPR or PPR designate in relation to this Policy shall be considered by the Faculty Appeals Committee, as defined in Section 3.
- b. The student must submit a notice of appeal form to the Faculty Appeals Committee within ten calendar days of receiving the decision.
- c. Upon receipt of a notice of appeal, the Committee will notify the PPR or PPR designate and give them an opportunity to submit a response to the notice of appeal.
- d. All documents considered by the PPR or PPR designate will be considered by the Committee and a copy given to the student. The student may submit additional supporting documentation by no later than three calendar days prior to the hearing.

- e. The Committee also will provide the student with a copy of the procedures to be followed.
- f. All parties will receive not less than 15 calendar days' notice of the time and location of the hearing.
- g. Both parties must inform the committee of their intention to call witnesses and file names of these witnesses at least seven calendar days prior to the hearing.
- h. Only the committee members, Committee Secretary, PPR or PPR designate, the student and their Support Person, and the witnesses may be present at a hearing. The faculty member(s) or person(s) who reported the academic misconduct or other persons with knowledge of the allegation may attend as witness(es). Committee members shall be impartial in the academic misconduct investigation, as defined in Section 3. The student's Support Person may attend the Appeals Committee hearing but may not speak for the student.
- i. Witnesses shall be present at the hearing only while testifying, but exceptions may be made at the discretion of the Committee. The Chair of the Committee has full authority to assure an orderly and expeditious hearing. Any person who disrupts a hearing, or who fails to adhere to the rulings of the Committee may be required to leave.
- j. If a student fails to appear at a hearing after proper notice, the hearing may proceed, and the Committee may issue a decision, unless the student can establish, in advance of the hearing and to the satisfaction of the Committee, that there are circumstances beyond their control which make an appearance impossible or unfairly burdensome.
- k. Electronic recordings of hearings may be permitted if all parties agree. The Secretary is responsible for coordinating and maintaining the sole electronic record of the hearing.
- l. The Committee shall consider the facts and circumstances of the case, having purview to determine the decision and sanction.
- m. If a sanction is imposed that requires an alteration of a student's academic record, a copy of the decision of the Committee will be sent to the Office of the University Registrar for the sanction to be implemented. The decision will be retained by the Office of the University Registrar for a time consistent with Section 4.9.

- n. A record of the proceeding will be kept in the student's file to be housed in the home Faculty. The Record of the Proceeding shall include:
 - i. the allegation of academic misconduct and all documentary evidence filed with the Faculty committee
 - ii. notice of the Hearing
 - iii. decision of the committee
- o. The Secretary is responsible for ensuring all relevant records of the proceeding are included in the file and filed appropriately.
- p. The student may subsequently appeal the decision of the Faculty Appeals Committee to the Senate Appeals Committee (SAC) according to SAC criteria.

Legislative history:	
Date of next review:	
Policies superseded by this Policy:	Senate Policy on Academic Honesty
Related policies, procedures and guidelines:	

2020-2021 FSc Report on vacancies for Senate and FSc Standing Committees

Committee	Rules of Faculty Council - membership	Meeting time / Membership	Term		
			From	To	
Senate	According to the York University Secretariat based on the Senate Rules and Procedures governing the size and composition of Senate, the Faculty of Science shall have twelve members, including a minimum of two Chairs. According to The Rules of Council (Science), Faculty representation shall include the Director of Natural Science, three Department Chairs, and terms shall be for three years.	As per Senate website			
	Dean, Ex officio	R. Wang	Designated		
	Member at large	G. Audette	Designated		
	Member at large	E. Hessel, Physics & Astronomy	2019	2022	
	Member at large	C. Douglas (1yr replacement)	2019	2022	
	Member at large	T. Baumgartner, Chemistry	2018	2021	
	Member at large	B. Pietro, Chemistry	2019	2022	
	Member at large	M. H. Armour - 1 yr replacement	2019	2022	
	Member at large	N. Madras - 1 yr replacement	2020	2023	
	Department Chair	R. Tushima, Biology	2018	2021	
	Department Chair	R. Fournier, Chemistry	2019	2022	
	Department Chair	S. Watson, Mathematics & Statistics	2019	2022	
	Director of NAIS	J. Clark	Designated		
	Student representative	Juhana Al-Hussain	2020	2022	
Student representative	Romina Noormohammadi	2019	2021		
FSc Reps on Senate Committees					
Senate Executive	1 member from FSc	M. H. Armour	2018	2021	
Academic Policy, Planning and Research Committee (APPRC)	1 member from FSc	D. Solemi-Kotra	2020	2023	
Sub-Committee on Honorary Degrees & Ceremonials	1 member from FSc	M. N. Yousaf	2020	2023	
Executive Committee	The Executive Committee shall be chaired by the Chair of Council and include the Vice-Chair of Council, the Secretary of Council, and one member elected from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy, and Science and Technology Studies/Natural Science, the Dean of the Faculty of Science (ex officio), one student member of Council, and one of the staff members elected to Council.	The Executive Committee will normally meet the first Tuesday of each month (September to May) from 3:00pm - 4:30pm in LUM 305B			
	Chair of Council	C. Storry	2020	2021	
	Vice-Chair of Council	T. Salisbury	2020	2021	
	Dean, Ex officio	R. Wang	Designated		
	Asst. Dean - SEM & SEP	A. Mun	Designated		
	Staff representative	V. Gotcheva	2020	2021	
	Undergraduate Student Rep	Hia Akbari	2020	2021	
	Biology	D. Solemi-Kotra	2020	2023	
	Chemistry	S. Krylov	2019	2022	
	Math & Stats	N. Madras	2019	2022	
	Physics & Astronomy	S. Menary	2020	2021	
	STS	V. Pavri	2020	2023	
	APPC	The Academic Policy and Planning Committee shall include the Dean or designate (ex officio), the Master of Norman Bethune College and one member elected from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy, and Science and Technology Studies/Natural Science, one student member of Council, and one of the staff members elected to Council.	APPC will normally meet the last Thursday of each month (September to April) from 9:00 am - 10:30 am		
		Associate Dean, Faculty Affairs, Ex officio	G. Audette	Designated	
Head of Bethune College		J. Amanatides	Designated		
Undergraduate Student Rep		Rachel Duncan	2020	2022	
Elected staff representative		M. Xu	2020	2021	
Biology, also representing STS		J. Clark	2019	2022	
Chemistry		R. McLaren	2019	2022	
Math & Stats		Man Wah Wong - 1 year replacement ie, 2020-2021	2019	2022	
Physics & Astronomy		E. Hessel	2020	2021	
STS		Represented by J. Clark	2019	2022	
Curriculum Committee		The Curriculum Committee shall include the Dean and an Associate Dean (ex officio), the Chair or nominee from each teaching Division or Department, three members elected by Council and two student members of Council.	The Curriculum Committee will normally meet every last Tuesday of each month (September to April) from 1:30 pm - 3:00 pm		
	Member at Large	J. Clark	2019	2022	
	Member at Large	VACANT	2020	2023	
	Dean, Ex officio	R. Wang	Designated		
	Associate Dean - Students, Ex officio	M. Scheld	Designated		
	Undergraduate Student Rep	Etana Dhaigham	2020	2021	
	Undergraduate Student Rep	Jessica Sinha	2020	2021	
	Biology	S. Connor	2019	2022	
	Chemistry	P. Potvin	2019	2022	
	Math & Stats	J. Grigull (Winter) VACANT (fall)	2019	2022	
	Physics & Astronomy	S. Jerzak	2020	2021	
	STS	S. Domenikos	2020	2021	
	Member at Large	C. Rozins	2020	2023	

J. Lazenby on Sabbatical July 2020-June 2021

P. Lakin-Thomas, Biology on sabbatical, return to Senate July 1, 2021
D. Wilson on Sab. Starting May 2020 - April 30-2021

M.H. Armour to serve 1 year, 2020-2021

J. Heffernan on Sabbatical Jul 1, 2020 - Jun 2021

2020-2021 FSc Report on vacancies for Senate and FSc Standing Committees

Committee	Rules of Faculty Council - membership	Meeting time / Membership	Term	
			From	To
CEAS	The Committee on Examinations and Academic Standards shall consist of an Associate Dean (ex officio), five members elected by Council from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy and Science and Technology Studies/Natural Science, and one student member of Council.	CEAS will normally meet every alternate Wed / Thurs from 1:00 - 3:00 pm year round.		
	In addition to the above membership of the committee, Council shall elect an alternate member from each of the Departments specified above. The alternate member shall be the person polling the next highest number of votes to those elected to the committee from each Department. The alternate for the student member will be selected by the Science Student Caucus from one of its Members at Large. An alternate can only vote in the event that first elected members are not in attendance.			
	Associate Dean - Students, Ex officio	M. Scheid	Designated	
	Undergraduate Student Rep	Alli Bashar	2020	2021
	Undergraduate Student Rep	Sormah Hamedani	2020	2021
	Biology	C. Jang/ALT S. Connor	2019	2022
	Chemistry	H. Kouyoumdjian / R. McLaren / T. Mirkovic	2020/2018	2023/2021
	Math & Stats	M.Chen (Fall) Y. Wu (Winter) ALT C. Fu	2020/2019	2023/2022
	Physics & Astronomy	M. Horbatsch- P. Delaney (Sept - Nov), William van Wijngaarden (Dec - Feb), Saeed Rastgoo (Mar - May)	2020	2021
	STS	T. Elwicks/ Rogerson	2020/2023	2020/2023
Petitions	The Petitions Committee for the purpose of hearing student petitions shall consist of an Associate Dean (ex officio), six members of Council, and two student members of Council. The Committee may divide the workload by splitting the Committee membership into two panels of four people each. A quorum shall consist of either (a) two faculty voting faculty members and one student member or (b) three voting faculty members.	Each panel meets once a month on Wednesday or Thursday from 2:30 pm - 4:00 pm		
	Associate Dean, Ex officio	M. Scheid	Designated	
	Undergraduate Student Rep	Yashna Maneek	2020	2021
	Undergraduate Student Rep	Hassan Khan	2020	2021
	Member at Large	K. Belozeroz	2020	2023
	Biology	A. Mills	2020	2022
	Chemistry	W. J. Pietro	2019	2022
	Physics & Astronomy	N. Bartel (member in Fall ALT in Winter)/N. Bozorgnia ALT in Fall & member in Winter	2020	2021
	Math & Stats	Y. Gao	2019	2022
	STS	S. Domenikos	2020	2021
Member at Large	VACANT	2020	2023	
SRC T & P Committee	The Committee on Tenure and Promotions shall consist of one currently tenured member from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy and Science and Technology Studies/Natural Science elected by Council, and one student member of Council. No member of the Committee shall be a member of another Tenure and Promotions Committee at any time during their tenure on this committee.	SRC T & P Committee will normally meet the last Friday of each month (September to May) from 9:00 am - 11:00 am in LUM 305B		
	In addition to the above membership of the committee, Council shall elect an alternate member from each of the Units mandated above. The alternate member shall be the person polling the next highest number of votes to those elected to the committee from each Department. The alternate for the student member shall be selected by the Science Student Caucus from one of its Members-at-Large on an annual basis. An alternate can only vote in the event that existing members are not in attendance.			
	Associate Dean - Faculty, Ex officio	G. Audette	Designated	
	Undergraduate Student Rep	Daniel Kamel	2020	2021
	Graduate Student Rep	Si Jia (Molly) Hu	2020	2021
	Biology	K. Hudak / ATL Jean-Paul Paluzzi	2020/2020	2023/2023
	Chemistry	D. Wa/ALT V. Soukhanova	2020/2019	2023/2022
	Physics & Astronomy	W. Taylor/ALT D. Harris	2020	2021
	Math & Stats	S. Wang ALT Y. Gao	2019	2022
	STS	D. Lungu/ALT Vacancy	2018	2021
CoTL	Currently, the Committee on Teaching and Learning shall consist of a minimum of two faculty members from each department, the Associate Dean - Students, one Librarian, one staff member, one undergraduate student, and two graduate students. In addition to other members invited as provided for by the Rules, Graduate students and staff nominees will indicate their interest in serving on the committee in writing to the committee, who will then approve by majority vote.	CoTL normally meets every third Thursday of each month (September to May) from 10:00 am - 11:30 am		
	Associate Dean - Students, Ex officio	M. Scheid	Designated	
	Graduate Student Representative	Gabriella Gerzon	2020	2021
	Graduate Student Representative	VACANT	2020	2021
	Undergraduate Student Rep	Areeba Chaudhry	2020	2021
	Steady Librarian	Iris-Katryn Malmets	Designated	
	IT Representative	V. Golcheva	Designated	
	Teaching Commons Rep	Y. Su	Designated	
	Staff representative, Elected	D. Hossain	2020	2021
	Biology	D. Golemi-Kotra	2020	2023
Biology	C. Jang	2020	2023	
Chemistry	T. Mirkovic	2020	2023	
Chemistry	C. Caputo	2018	2021	
Physics & Astronomy	C. David	2020	2021	
Physics & Astronomy	E. Hyde	2020	2021	
Math & Stats	G. Monette	2020	2023	
Math & Stats	I. Pollakov (6 month replacement - Jul - Dec 2020)	2018	2021	
STS	R. Marushia	2019	2022	
Committee on Research & Awards	The Committee on Research and Awards shall consist of one member elected by Council from each of Biology, Chemistry, Mathematics and Statistics, Science and Technology Studies/Natural Science, and Physics and Astronomy, one student member of Council and an Associate Dean (ex officio) who will serve as the Chair.	The Research & Awards Committee will meet when grants and awards need to be adjudicated.		
	Associate Dean - Research & Graduate Education, ex officio	J. Steeves	Designated	
	Undergraduate Student Rep	Samoon Ali	2020	2021
	Biology	R. Kwong	2020	2023
	Chemistry	M. Yousef (1 year replacement)	2019	2022
	Physics & Astronomy	A. Kumarakrishnan	2020	2021
	Math & Stats	Hualping Zhu	2019	2022
	STS	H. Misset	2020	2023
	The Appeal Committee for the purpose of hearing student appeals shall consist of four elected faculty members from Science units, an Associate Dean (ex officio) and two student members of Council. A quorum shall consist of either (a) two faculty members and one student member or (b) three faculty members.	Meeting is held once a month and times are polled by the Committee Secretary.		
	Associate Dean - Faculty, ex officio	G. Audette	Designated	
Undergraduate Student Rep	Yurii Kuryevskiy	2020	2021	
Undergraduate Student Rep	Tanya Rajwani	2020	2021	
Member at Large	R. Fournier	2019	2022	
Biology	N. Kovinich	2020	2023	
Chemistry	M. Hempstead	2020	2023	
Physics & Astronomy	S. Rastgoo	2020	2021	
Math & Stats	A. Wong	2020	2023	
STS	M.H. Armour	2018	2021	

S. Connor to serve 1 year
T. Mirkovic to serve 1 year
M. Chen-Sabbatical Jan 2021-Jun 2021
J. Lazenby on Sabbatical July 2020-June 2021

Liang on Sab. Jan. 1, 2021-June 2021

W. Liu on Sabbatical - July 2020- Dec 2020

S. Morin on Sab. Starting July 1, 2020-2021

2020-2021 FSc Report on vacancies for Senate and FSc Standing Committees

Committee	Rules of Faculty Council - membership	Meeting time / Membership	Term			
			From	To		
Graduate Education Program	<p>To provide broad review and commendation to Council via the Academic Policy and Planning Committee of all proposals received from Graduate Programs with respect to: New Course Proposals, Course Change Proposals, Minor Changes to Program/Graduate Diploma Academic Requirements, Major Modifications to Program/Graduate Diploma Academic Requirements, New Graduate Fields, New Graduate Diplomas, New Graduate Degree Programs</p> <p>The Graduate Education Committee shall consist of:</p> <ul style="list-style-type: none"> - Associate Dean – Research & Graduate Education (ex officio) - Graduate Program Director (or designate who must be a member of the graduate program) of each Graduate Program in the Faculty of Science - one graduate student member from any Graduate Program within the Faculty of Science - one full-time faculty member from the Faculty of Health or Lassonde School of Engineering who is appointed to teach in any FSc graduate program - A member at large with knowledge of graduate programming, and experience with curriculum approvals at the Faculty-level. <p>The Chair of the Committee is selected by the voting members of the Committee for a one-year term.</p>	Meeting is held				
			Associate Dean – Research & Graduate Education (ex officio)	J. Steeves	Designated	
			Biology	B. Stutchbury	2020	2023
			Chemistry	R. McLaren	2020	2022
			Physics & Astronomy	M. Johnson	2020	2023
			Math & Stats	S. Moghadas	2020	2023
			STS	K. Birch	2020	2021
			Member from Faculty of Health OR Lassonde	VACANT		
			Member at Large	VACANT		
			Graduate student	Elle Abdollahi	2020	2021
EDI	<p>The purpose of the Committee on Equity, Diversity & Inclusivity is to provide broad review and leadership to Council on matters of Equity, Diversity and Inclusivity issues with respect to:</p> <ul style="list-style-type: none"> • Tenure and Promotions • Hiring and Retention of members form EDI groups • Approaches to addressing gender bias in the workplace • Research engaging equity recognized groups • Workload and service contributions of EDI members • EDI experiences in Teaching and Learning <p>The Equity, Diversity and Inclusivity committee shall consist of:</p> <ul style="list-style-type: none"> • Associate Dean, Faculty Affairs (ex officio) • Associate Dean, Research & Graduate Education (ex officio) • One primary and one alternate member from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy and Science & Technology Studies. • Two graduate students or postdoctoral fellow/visitors (one primary and one alternate) from any graduate program within the Faculty of Science • One undergraduate student 	Meeting is held TBD				
			Associate Dean - Faculty, ex officio	G. Audette	Designated	
			Associate Dean, Research & Graduate Education (ex officio)	J. Steeves	2020	2023
			Undergraduate Student Rep	Ailiya Rizwan	2020	2022
			Graduate Student / Post Doc Representative	Oiga Andriyevska	2020	2022
			Graduate Student / Post Doc Representative	VACANT	2020	2022
			Biology	D. Bazely	2020	2023
			Chemistry	C. Lo	2020	2023
			Physics & Astronomy	D. Harris	2020	2023
			Math & Stats	A. Chow	2020	2023
			STS	V. Pavri	2020	2023

Curriculum Committee Report



February 2020

The Faculty of Science Curriculum Committee has reviewed proposals for changes to course information and degree requirements and recommends to the Executive Committee that the following changes be submitted to Council for approval.

Details regarding these proposals (and regarding other minor changes to Calendar/Repository course descriptions and prerequisites which were approved by the Committee but are not reported here) are included in the working papers of February 23, 2020, meeting of the Curriculum Committee, which are on file for your inspection in the Office of the Dean, with all members of the Curriculum Committee or by contacting the Secretary of the Committee at tinar@yorku.ca

1.2 GEOGRAPHY

1.2.1 Non-Major Modification: GIS and Remote Sensing Certificate, Undergraduate Certificate

This proposal is brought forward by Prof. Julie Clark for information only

1.3 MATH

1.3.1 Change in calendar copy: SC/MATH 1505 6.0 Split – SC/MATH 1506 3.0 and SC/MATH 1507 3.0

1.3.2 Change in cross-listing: SC/1280 3.0 “Principles of Risk Management and Insurance”

Non-Major Modification Program Changes

1. Program: GIS & Remote Sensing Certificate in legacy Department of Geography
 2. Degree Designation: Undergraduate Certificate - EUC
 3. Type of Modification: (Example: changes to degree / admission requirements) **Reduction of certificate core requirement by 6.0 credits; title change; retire BES GIS & Remote Sensing Certificate and minor modification of Geography's GIS & Remote Sensing Certificate.**
 4. Effective Date: **Sept 2021**
-

5. State what the changes are (Example: increase / decrease to the number of major credits)

We are revising the AP/Geography's GIS and Remote Sensing Certificate and retiring the ES/BES GIS and Remote Sensing Certificate. Through this, there will be a reduction of core requirement by 9.0 credits: The requirement of GEOG 1000 6.0 or 1400 6.0 and GEOG 2420 3.0 are changed to prerequisites; and replaced with a list of elective courses relevant to the certificate. We are also proposing a title change for certificate, as well as title changes for the core courses.

6. Provide the rationale for the proposed changes that is rooted in the program learning outcomes. **With the establishment of the new EUC faculty, the legacy certificates in AP/Geography and ES/BES need to be combined into one certificate. We are retiring the BES GIS/RS certificate and modifying the GEOG GIS/RS certificate. Two main actions are to clean up course offerings (i.e., get rid of cross listings) that are no longer necessary and change the certificate title. The new title is a better reflection of the modified program.**
7. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives. **See Appendix A for the learning outcomes and mapping.**
8. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

We emailed three units on the use of LE/EECS 1530 3.00 Computer Use: Programming; ITEC 1010 3.0 Information and Organizations; ESSE 4220 3.00: Remote Sensing of the Earth's Surface and ESSE 4230 3.00: Remote Sensing of the Atmosphere as electives (see Appendix B).

9. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No new additional resources are required. The certificate will be supported by existing staff, Faculty members and resources. By reducing the core requirements by 9.0 credits means that there is more flexibility in student choices and less demand to offer all the core courses for the certificate.

10. Provide a summary of how students currently enrolled in the program will be accommodated.

The Geomatics certificate is the most popular certificate from our legacy programs. Currently, we have 36 students enrolled. Given that the changes to the certificate are minor, students who are currently enrolled in either certificate programs will not be impacted because the courses will continue to be offered. Should there be a need, at the course level, students will be accommodated through our existing grand-parented rules effective Fall 2021-Summer 2026. It is assumed that, if necessary, discretion will be used in order to accommodate any students inadvertently disadvantaged by rules implemented by the new Faculty.

11. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar. **See Appendix C.**

Appendix A. Geomatics Program Learning Outcomes

I = key ideas, concepts or skills related to LO are introduced

R = reinforced Students are developing and becoming increasingly proficient in demonstrating the learning outcomes; The LO is reinforced with feedback.

M = students master the material by demonstrating the LO with high level of independence and a level of understanding and sophistication expected upon graduation.

	Certificate Learning outcomes:	Proficiency with Geographic Information Systems software	Knowledge of a range of spatial analysis techniques	Proficiency with quantitative methods	Ability to apply spatial analysis across environmental domains
Core Courses					
GEOG 2340 3.00 Introduction to Geomatics	integrate computer science, geosciences with certain branches of engineering and cartography; have an understanding of the historical developments of geoinformatics; have an understanding of various aspects of geographical analysis	I	I	I	
GEOG 3340 3.00 Fundamentals of Geographic Information Systems (GIS)	understand the fundamental theory of Geographic Information Science behind GIS and associated tools to generate awareness of what GIS can be used for planning and resource management; be proficient in the use of GIS and associated tools to conduct spatial analyses and to build effective maps that can convey complex environmental information to intended audience and stakeholders; ability to apply spatial analysis to address applied problems and/or research questions and to be able to adopt a systematic approach in data collection, analysis, manipulation and presentation of geographic data and information; ability to apply theory to practice and to develop necessary skills in using GIS and associated tools for advanced analysis and modelling techniques.	I	I		I

GEOG 3440 3.00 Remote Sensing for Earth Observation	Understand the process of examining, measuring, and studying our planet from a distance; understand the science of energy interactions at or near the surface of the earth; understand the theoretical utility and application of remote sensing techniques.	I	R	R	I
GEOG 4340 3.00 Spatial analysis and problem solving with Geographic Information Systems (GIS)	implement project planning and management in GIS; ability to develop and assess spatial databases; ability to explore data analysis of spatial and aspatial databases; understand a variety of spatial analytical and modelling techniques	M	M	M	M
GEOG 4440 3.00 Processing and Analysis of Earth Observation Data	working knowledge of sophisticated methods and techniques for collecting, processing, and analyzing remote sensing data; understand theories and practices of undertaking remote sensing projects; apply remote sensing in geographical analyses and environmental monitoring	M	M	M	M
Electives					
EECS 1530	develop understanding of computers; develop elementary programming skills; develop and strengthen general problem-solving skills and logical thinking through the writing and understanding of well-structured computer programs	I		I	
ITEC 1010 Information and organizations	The value and importance of information to organizations, how it is used, stored and processed; emphasizes the uses of information technologies of various kinds, the benefits of the technologies, and the associated costs and problems; use of desktop applications.			I	

EATS 4220 Remote Sensing of the Earth's Surface	[understand the physical principles of the remote sensing of the earth's surface; measure signatures of natural targets using laboratory instruments as well as from digital images] ^a		R		
EATS 4230 Remote Sensing of the Atmosphere	[understand atmospheric radiation; atmospheric spectroscopy; inversion theory; satellites; instrumentation; space platforms and future technology.] ^a	R	R		
ENVS 4523 Systems Thinking: How everything is connected to everything else, and what to do about it	articulate a range of systems thinking concepts and theories such as general systems theory and complex systems theory; apply systems concepts to observations of the world; express the relationship of systems epistemology to problem solving methods and frameworks (such as the ecosystem approach) in environmental studies; apply at least one systems-based method to an environmental problem; ability to do an agent-based modelling.	R		R	M
ENVS 3406 3.00 Conservation Planning	to provide a basic overview of landscape ecology; to provide specific knowledge of some relevant techniques (in the fields of statistics, modelling and GIS); to provide a chance to practice techniques in relevant conservation planning cases; to provide some skills in presenting visual information in academic presentations	R	R	R	R

^aLearning outcomes were not provided in the course syllabi, so we developed one basic one for each course.

Appendix B. Consultation with other units

Consultation	
Oct 2020. Emailed Suprakash Datta on the confirmation of the continued use of LE/EECS 1530 3.00 Computer Use: Programming in the GIS/RS certificate.	Computer Science, Suprakash Datta, confirmed Oct 9 2020
Jan 29 2021 Emailed UPD of Information Technology, Zijiang Yang zyang@yorku.ca on the use of ITEC 1010 3.0 Information and Organizations as an elective.	
Oct 9 2020, Oct 25, 2020 and Jan 14, 2021. Emailed Sunil B Bisnath <sbisnath@yorku.ca> ; Baoxin Hu baoxin@yorku.ca on the confirmation of the continued use of ESSE 4220 3.00: Remote Sensing of the Earth's Surface ESSE 4230 3.00: Remote Sensing of the Atmosphere On Jan 29 sent them the full proposal.	No reply as of Jan 29, 2021

Appendix C. Side by Side Calendar

GEOG GIS Certificate

Geographic Information Systems and Remote Sensing

York University students may earn a Certificate in Geographic Information Systems and Remote Sensing concurrent with fulfillment of the requirements of a Bachelor's Degree.

The Certificate is designed for students to learn theory and techniques of GIS and RS and their applications in urban and natural environments with the aid of the state-of-the-art software packages. Possible job opportunities after obtaining the certificate include various industries such as banks, energy/hydro, environmental planning, mining, real estate, and federal, provincial or municipal governments (e.g., environment, health, natural resources, urban and regional planning). This certificate is open to students concurrently enrolled in any of York University's undergraduate programs and to students who already hold a BA or BSc degree in Geography or Environmental Science from York University.

~~In order to be awarded the Certificate in Geographic Information Systems and Remote Sensing, students must achieve and maintain a cumulative grade point average of 6.00 (B) on the York University courses required for that Certificate, and achieve an overall cumulative grade point average of 5.00 (C+) in all courses.~~

~~Note: students who have been exempted from the 1000-level requirement may substitute six~~

EUC Geomatics Certificate

CERTIFICATE IN **GEOMATICS: GEOGRAPHIC INFORMATION SYSTEMS (GIS) AND REMOTE SENSING (24 CREDITS)**

Geomatics encompass the art, science and technology involved in collecting, managing and communicating geographically-referenced information. The Certificate prepares students with hands-on technical training. Students develop skills in spatial analysis applications, topographical surveying, geospatial database development, cartographic communication, and project planning and management.

The Certificate in **Geomatics: Geographic Information Systems and Remote Sensing (GEOM)** may be completed either as a direct entry or concurrently with a **Bachelor's or Honours** degree program at York University. Direct entry candidates **who previously** completed an undergraduate degree in a related field must have a minimum grade point average of 5.00/9.00 (**C+**). Individuals without an undergraduate degree but who have previous relevant work experience may also apply to the **certificate**.

Students must register in the certificate program after completing 24 credits. Applications are available from the Office of Student and Academic Services (OSAS) in **HNES 137**.

To qualify for the certificate, students must complete 24 credits, including:

Prerequisites:

GEOG 1000 6.0 The world today: an introduction to world geography or GEOG 1401 3.0 Weather and climate or GEOG 1402 3.0The dynamic earth (or equivalent) and GEOG 2420 3.00 Introductory Statistical Analysis in Geography. Students who have

additional credits which must be approved by the Department of Geography

:

~~P/GEOG 1000 6.00 Intro to World Geography or AP/GEOG 1400 6.00 Physical Geography (cross-listed to: SC/GEOG 1400 6.00) or AP/GEOG 1410 6.00 Introduction to human geography;~~

AP/GEOG 2340 3.00 (cross-listed to: SC/GEOG 2340 3.00);

~~AP/GEOG 2420 3.00 Geoinformatics: introduction (cross-listed to: SC/GEOG 2420 3.00);~~

AP/GEOG 3340 3.00 Geoinformatics GIS I (cross-listed to: SC/GEOG 3340 3.00);

AP/GEOG 3440 3.00 Geoinformatics: Remote Sensing I (cross-listed to: SC/GEOG 3440 3.00);

AP/GEOG 4340 3.00 GeoInformatics GIS II (cross-listed to: SC/GEOG 4340 3.00);

AP/GEOG 4440 3.00 GEOG 4440: Geoinformatics: Remote Sensing II (cross-listed to: SC/GEOG 4440 3.00);

previously attained/earned post-secondary credentials in the introductory Statistical Analysis in Geography are exempted from this prerequisite.

Core Courses (15 credits) *title changes

EU/GEOG 2340 3.00 Introduction to Geomatics*

EU/GEOG 3340 3.00 **Fundamentals of Geographic Information Systems (GIS)**

EU/GEOG 3440 3.00 **Remote Sensing for Earth Observation**

EU/GEOG 4340 3.00 **Spatial analysis and problem solving with Geographic Information Systems (GIS)**

EU/GEOG 4440 3.00 **Processing and Analysis of Earth Observation Data**

Elective Courses: (9 credits of which 6 credits must be at the 3000 or 4000 level) and students must undertake a geomatics oriented assignment in each electives course verified by the course director.

GEOG 3380.00 Urban Social Analysis
ESSE 4220 3.00: Remote Sensing of the Earth's Surface

ESSE 4230 3.00: Remote Sensing of the Atmosphere
 ENVS 4523 3.0 Systems Thinking: How everything is connected to everything else, and what to do about it
 ENVS 3406 3.00 Conservation Planning
 LE/ECS 1530 3.00 Computer Use: Programming

Additional courses may be considered as electives subject to the pre-approval of the Certificate coordinator.

Graduating with a certificate:
 Students in the Geomatics Certificate must maintain a cumulative grade point average of 5.00 (C+) in their degree program and a minimum grade point average of 6.00 (B) in the 24 credits required for the certificate.

Students must apply to \Graduate using the Certificate form, which is available on the York University current students website. Certificates will not be conferred until candidates have successfully completed an undergraduate degree program if they are simultaneously enrolled in a degree and a certificate program.

~~BES GIS Certificate~~ – to be retired

~~CORE (24.00 credits)~~

~~ENVS 1000 6.00: Earth in Our Hands~~

~~ENVS 2009 3.00: Quantitative Methods in Environmental Studies~~

~~ENVS 3520 3.00: Applications of Geographic Information Systems in Environmental Studies~~

~~ENVS 3521 3.00: Geoinformatics: Remote Sensing I~~

~~ENVS 4520 3.00: Geographical Information Systems Applications in Environmental Studies~~

~~ENVS 4521 3.00: Geoinformatics: Remote~~

Sensing II

AND

3.00 credits from the list of elective courses

Elective courses

ESSE 4220 3.00: Remote Sensing of the Earth's Surface

ESSE 4230 3.00: Remote Sensing of the Atmosphere

ENVS 3710 3.00: Landscape Ecology

ENVS 4522 3.00: Web GIS

GEOG 2340 3.00: Geoinformatics: Introduction (CCE: GEOG 2350 3.00)

GEOG 3140 3.00: Retailing, Shopping, Society and Space

GEOG 4240 3.00: The Planning of Urban Public Facilities

Other courses that may be considered as electives are LE/EECS 1530 3.00 and ES/ENVS 4523 3.00 Systems Thinking in Environmental Studies: Theory and Methodologies

MINIMUM REQUIREMENTS FOR MULTIPLE CERTIFICATES

Students may acquire more than one certificate during the course of their studies provided that at least 18.00 credits in each certificate program are unique to the specific certificate.

RESIDENCY REQUIREMENTS

York University's residency requirement for Undergraduate certificate programs is 18.00 credits for certificate programs requiring up to 36.00 credits, and 50% of

the required credits for certificates comprising more than 36.1 credits. Normally, for Undergraduate certificate programs requiring 18.00 credits or less, all credits are completed at York.

Program Proposal

1. Program:

Actuarial Science (Faculty of Science)

Applied Mathematics (Faculty of Science)

International Dual Degree in Mathematics and Statistics (Faculty of Science)

Mathematical Biology (Faculty of Science)

Mathematics (Faculty of Science)

Mathematics for Education (Faculty of Science)

Statistics (Faculty of Science)

2. Type of Modification:

Changes to About Pages.

3. Effective Date:

Fall 2021

4. Provide a general description of the proposed changes to the program.

The full year course MATH 1505 has been split into two 3.0 credit courses, MATH 1506 and MATH 1507.

5. Provide the rationale for the proposed changes that is rooted in the program learning outcomes.

No change to learning outcomes.

6. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives. If changes to the admission requirements are being proposed, comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

No change in mapping of program requirements to program learning outcomes.

7. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

These changes are the result of consultation with the Mathematics and Statistics Department.

8. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No resource implications.

9. Provide a summary of how students currently enrolled in the program will be accommodated.

The course requirements specifically still allow the current 6-credit first-year MATH courses to be used to satisfy requirements.

10. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

See attached.

1. Changes to the FSc Actuarial Science About page

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)</p>	<p>Change To:</p> <p>Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1506 3.00 and SC/MATH 1507 3.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1506 3.00 and SC/MATH 1507 3.00.)</p>
---	---

2. Changes to the FSc Applied Mathematics About page

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>4. Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the</p>	<p>Change To:</p> <p>Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1506 3.00 and SC/MATH 1507 3.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1506 3.00 and SC/MATH 1507 3.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus</p>
---	---

<p>sole exception to this statement is the student for whom SC/MATH 1505 6.00 is a "terminal" calculus course.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>	<p>with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1506 3.00 and SC/MATH 1507 3.00 are "terminal" calculus courses.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>
--	--

3. Changes to the FSc International Dual Degree in Mathematics and Statistics (Honours BSc) About Page

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>4. Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1505 6.00 is a "terminal" calculus course.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>	<p>Change To:</p> <p>4. Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1506 3.00 and SC/MATH 1507 3.00 are "terminal" calculus courses.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>
---	--

4. Changes to the FSc Mathematical Biology About Page

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>4. Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1505 6.00 is a "terminal" calculus course.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>	<p>Change To:</p> <p>Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1506 3.00 and SC/MATH 1507 3.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1506 3.00 and SC/MATH 1507 3.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1506 3.00 and SC/MATH 1507 3.00 are "terminal" calculus courses.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>
---	---

5. Changes to the FSc Mathematics About Page

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>4. Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or</p>	<p>Change To:</p> <p>Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or</p>
--	---

SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)	SC/MATH 1550 6.00, or SC/MATH 1506 3.00 and SC/MATH 1507 3.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1506 3.00 and SC/MATH 1507 3.00.)
---	---

6. Changes to the FSc Mathematics For Education About Page

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>4. Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1505 6.00 is a "terminal" calculus course.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>	<p>Change To:</p> <p>Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1506 3.00 and SC/MATH 1507 3.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1506 3.00 and SC/MATH 1507 3.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1506 3.00 and SC/MATH 1507 3.00 are "terminal" calculus courses.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>
--	---

7. Changes to the FSc Statistics About Page

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

Change From:	Change To:
<p>4. Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1505 6.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1505 6.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1505 6.00 is a "terminal" calculus course.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>	<p>Calculus courses for first-year students. Students must carefully note the requirements of their programs of study before choosing a first-year calculus course. In some cases, where no calculus is required beyond first year, a program might accept six credits of a "second digit 5" University calculus course like SC/MATH 1530 3.00 plus SC/MATH 1540 3.00, or SC/MATH 1550 6.00, or SC/MATH 1506 3.00 and SC/MATH 1507 3.00. (Note that SC/MATH 1520 3.00 is a prerequisite for all of these except SC/MATH 1506 3.00 and SC/MATH 1507 3.00.)</p> <p>A student with at least one 12U (or equivalent) course in mathematics, but without a high school calculus course, must begin the study of calculus with SC/MATH 1520 3.00. (As noted above, the sole exception to this statement is the student for whom SC/MATH 1506 3.00 and SC/MATH 1507 3.00 are "terminal" calculus courses.) SC/MATH 1520 3.00 is literally intended to be the York equivalent of a high school calculus course.</p>

Program Proposal

1. Program:

Biology (Faculty of Science)
Environmental Biology (Faculty of Science)

2. Degree Designation:

Bachelor Program, Biology
Specialized Honours Program, Biology

Honours Major Program, Biology

Honours Double Major Program, Biology

Honours Major/Minor Program, Biology

Specialized Honours in Biology (Honours IBSC), Biology

Honours Major/Minor Program (IBSC)

Bachelor Program, Environmental Biology

Honours Major Program, Environmental Biology

Honours Double Major, Environmental Biology

Honours Major/Minor Program, Environmental Biology

3. Type of Modification:

Changes to program requirements.

4. Effective Date:

Fall 2021

5. Provide a general description of the proposed changes to the program.

The full year course MATH 1505 has been split into two 3.0 credit courses, MATH 1506 and MATH 1507.

6. Provide the rationale for the proposed changes that is rooted in the program learning outcomes.

No change to learning outcomes.

7. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives. If changes to the admission requirements are being proposed, comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

No change in mapping of program requirements to program learning outcomes.

8. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

These changes are the result of consultation with the Mathematics and Statistics Department.

9. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No resource implications.

10. Provide a summary of how students currently enrolled in the program will be accommodated.

The course requirements specifically still allow the current 6-credit first-year MATH courses to be used to satisfy requirements.

11. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

See attached.

Changes to the FSc Biology Program Requirements

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

Change From:	Change To:
<p>Bachelor Program A. General education: non-science requirement: 12 credits; mathematics: SC/MATH 1505 6.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>Honours Programs SPECIALIZED HONOURS PROGRAM Students may follow a stream in biology, biomedical science or biotechnology.</p> <p>A. General education: non-science requirement: 12 credits; mathematics: SC/MATH 1505 6.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>HONOURS MAJOR PROGRAM (BSC) In addition to the Biology Honours Major, students may follow a stream in biomedical science.</p> <p>Biology Honours Major A. General education: non-science requirement: 12 credits; mathematics: SC/MATH 1505 6.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>HONOURS DOUBLE MAJOR PROGRAM All Honours BSc degree candidates should consult departmental advisers as early as possible concerning course requirements for particular Honours Double Major programs. Possible subject combinations for Honours Double Major</p>	<p>Bachelor Program A. General education: non-science requirement: 12 credits; mathematics SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>Honours Programs SPECIALIZED HONOURS PROGRAM Students may follow a stream in biology, biomedical science or biotechnology.</p> <p>A. General education: non-science requirement: 12 credits; mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>HONOURS MAJOR PROGRAM (BSC) In addition to the Biology Honours Major, students may follow a stream in biomedical science.</p> <p>Biology Honours Major A. General education: non-science requirement: 12 credits; mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>HONOURS DOUBLE MAJOR PROGRAM All Honours BSc degree candidates should consult departmental advisers as early as possible concerning course requirements for particular Honours Double Major programs. Possible subject combinations for Honours Double Major</p>

BSc degree programs are listed under Undergraduate Degree Programs in the Faculty of Science Undergraduate Degree and Certificate Programs section. Students should consult with a departmental advisor to plan their studies in order to meet the requirements for both majors and their prerequisites.

A. General education:

non-science requirement: 12 credits;
mathematics: ~~SC/MATH 1505 6.00~~, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;

HONOURS MAJOR/MINOR PROGRAM

An Honours Major in biology may be combined with an Honours Minor in another subject area in an Honours Major/Minor BSc degree program. Possible subject combinations are listed under Undergraduate Degree Programs in the Faculty of Science Undergraduate Degree and Certificate Programs section.

Students may follow a stream within the Honours Major/Minor program in Biomedical Science (stream requirements are listed under the Biology Honours Major program). This stream may be combined with other approved science minors.

A. General education:

non-science requirement: 12 credits;
mathematics: ~~SC/MATH 1505 6.00~~, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;

SPECIALIZED HONOURS IN BIOLOGY (HONOURS IBSC)

A. General education:

non-science requirement: 12 credits (may be satisfied in whole or part by courses in the international component);
mathematics: ~~SC/MATH 1505 6.00~~, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;

BSc degree programs are listed under Undergraduate Degree Programs in the Faculty of Science Undergraduate Degree and Certificate Programs section. Students should consult with a departmental advisor to plan their studies in order to meet the requirements for both majors and their prerequisites.

A. General education:

non-science requirement: 12 credits;
mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;

HONOURS MAJOR/MINOR PROGRAM

An Honours Major in biology may be combined with an Honours Minor in another subject area in an Honours Major/Minor BSc degree program. Possible subject combinations are listed under Undergraduate Degree Programs in the Faculty of Science Undergraduate Degree and Certificate Programs section.

Students may follow a stream within the Honours Major/Minor program in Biomedical Science (stream requirements are listed under the Biology Honours Major program). This stream may be combined with other approved science minors.

A. General education:

non-science requirement: 12 credits;
mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;

SPECIALIZED HONOURS IN BIOLOGY (HONOURS IBSC)

A. General education:

non-science requirement: 12 credits (may be satisfied in whole or part by courses in the international component);
mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;

<p>HONOURS MAJOR PROGRAM (IBSC) Students may follow a stream within the Honours Major program in biomedical science.</p> <p>A. General education:</p> <p>non-science requirement: 12 credits (may be satisfied in whole or part by courses in the international component). mathematics: SC/MATH 1505 6.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>HONOURS MAJOR/MINOR PROGRAM (IBSC) Students may follow a stream within the Honours Major/Minor program in biomedical science (stream requirements are listed under the Biology Honours Major program). This stream may be combined with other approved science minors.</p> <p>A. General Education:</p> <p>non-science requirement: 12 credits (may be satisfied in whole or part by courses in the international component); mathematics: SC/MATH 1505 6.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p>	<p>HONOURS MAJOR PROGRAM (IBSC) Students may follow a stream within the Honours Major program in biomedical science.</p> <p>A. General education:</p> <p>non-science requirement: 12 credits (may be satisfied in whole or part by courses in the international component). mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>HONOURS MAJOR/MINOR PROGRAM (IBSC) Students may follow a stream within the Honours Major/Minor program in biomedical science (stream requirements are listed under the Biology Honours Major program). This stream may be combined with other approved science minors.</p> <p>A. General Education:</p> <p>non-science requirement: 12 credits (may be satisfied in whole or part by courses in the international component); mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00, or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p>
--	--

Changes to the FSc Environmental Biology Requirements

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>Bachelor Program A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students</p>	<p>Change To:</p> <p>Bachelor Program A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students</p>
---	---

<p>interested in taking additional environmental studies courses; mathematics: SC/MATH 1505 6.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>Honours Programs HONOURS MAJOR PROGRAM A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students interested in taking additional environmental studies courses; mathematics: SC/MATH 1505 6.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00. (Note: students intending to combine environmental biology with applied mathematics, chemistry, computer science, earth and atmospheric science, mathematics, mathematics for education, physics and astronomy or statistics should not take SC/MATH 1505 6.00.);</p> <p>HONOURS DOUBLE MAJOR PROGRAM All BSc Honours degree candidates should consult departmental advisors as early as possible concerning course requirements for particular Honours Double Major programs. Possible subject combinations for BSc Honours Double Major degree programs are listed in the Undergraduate Degree and Certificate Programs section of the Faculty Rules.</p> <p>A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students interested in taking additional environmental studies courses; mathematics: SC/MATH 1505 6.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00. (Note: students intending to combine environmental biology with applied mathematics, chemistry, computer science, earth and atmospheric science, mathematics,</p>	<p>interested in taking additional environmental studies courses; mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00;</p> <p>Honours Programs HONOURS MAJOR PROGRAM A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students interested in taking additional environmental studies courses; mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00. (Note: students intending to combine environmental biology with applied mathematics, chemistry, computer science, earth and atmospheric science, mathematics, mathematics for education, physics and astronomy or statistics should not take SC/MATH 1506 3.00 and SC/MATH 1507 3.00.);</p> <p>HONOURS DOUBLE MAJOR PROGRAM All BSc Honours degree candidates should consult departmental advisors as early as possible concerning course requirements for particular Honours Double Major programs. Possible subject combinations for BSc Honours Double Major degree programs are listed in the Undergraduate Degree and Certificate Programs section of the Faculty Rules.</p> <p>A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students interested in taking additional environmental studies courses; mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00. (Note: students intending to combine environmental biology with applied mathematics, chemistry, computer science, earth and atmospheric</p>
--	--

<p>mathematics for education, physics and astronomy or statistics should not take SC/MATH 1505 6.00.);</p> <p>HONOURS MAJOR/MINOR PROGRAM An Honours Major in environmental biology may be combined with an Honours Minor in another subject area in a BSc Honours Major/Minor degree program. Possible subject combinations are listed in the Undergraduate Degree and Certificate Programs section of the Faculty Rules.</p> <p>A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students interested in taking additional environmental studies courses: mathematics: SC/MATH 1505 6.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00. (Note: students intending to combine environmental biology with applied mathematics, chemistry, computer science, earth and atmospheric science, mathematics, mathematics for education, physics and astronomy or statistics should not take SC/MATH 1505 6.00.);</p>	<p>science, mathematics, mathematics for education, physics and astronomy or statistics should not take SC/MATH 1506 3.00 and SC/MATH 1507 3.00.);</p> <p>HONOURS MAJOR/MINOR PROGRAM An Honours Major in environmental biology may be combined with an Honours Minor in another subject area in a BSc Honours Major/Minor degree program. Possible subject combinations are listed in the Undergraduate Degree and Certificate Programs section of the Faculty Rules.</p> <p>A. General education:</p> <p>non-science requirement: 12 credits. EU/ENVS 1000 6.00 is recommended for students interested in taking additional environmental studies courses: mathematics: SC/MATH 1506 3.00 and SC/MATH 1507 3.00 or six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00. (Note: students intending to combine environmental biology with applied mathematics, chemistry, computer science, earth and atmospheric science, mathematics, mathematics for education, physics and astronomy or statistics should not take SC/MATH 1506 3.00 and SC/MATH 1507 3.00.);</p>
--	---

Program Proposal

1. Program:

Chemistry (Faculty of Science)
Biochemistry (Faculty of Science)

2. Degree Designation:

Specialized Honours Program Stream in Pharmaceutical and Biological Chemistry,
Chemistry

3. Type of Modification:

Changes to program requirements.

4. Effective Date:

Fall 2021

5. Provide a general description of the proposed changes to the program.

The full year course MATH 1505 has been split into two 3.0 credit courses, MATH 1506 and MATH 1507.

6. Provide the rationale for the proposed changes that is rooted in the program learning outcomes.

No change to learning outcomes.

7. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives. If changes to the admission requirements are being proposed, comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

No change in mapping of program requirements to program learning outcomes.

8. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

These changes are the result of consultation with the Mathematics and Statistics Department.

9. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No resource implications.

10. Provide a summary of how students currently enrolled in the program will be accommodated.

The course requirements specifically still allow the current 6-credit first-year MATH courses to be used to satisfy requirements.

11. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

See attached.

Changes to the FSc Chemistry Program Requirements

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

Change From:	Change To:
<p data-bbox="394 537 818 642">SPECIALIZED HONOURS PROGRAM STREAM IN PHARMACEUTICAL AND BIOLOGICAL CHEMISTRY</p> <p data-bbox="394 646 846 1108">A degree program stream of interest as an entry into the field of pharmaceutical (medicinal) chemistry or for those wishing to explore biologically relevant topics and issues from a chemical perspective. It is suitable for employment in the pharmaceutical and related industries, and in government laboratories, as well as for graduate work in areas of biological chemistry, including medicinal chemistry and structural biology.</p> <p data-bbox="394 1146 656 1178">A. General education:</p> <p data-bbox="298 1220 837 1356">non-science requirement: 12 credits; mathematics: SC/MATH 1013 3.00; SC/MATH 1014 3.00; or SC/MATH 1505 6.00 with a minimum grade of B;</p>	<p data-bbox="873 537 1395 642">SPECIALIZED HONOURS PROGRAM STREAM IN PHARMACEUTICAL AND BIOLOGICAL CHEMISTRY</p> <p data-bbox="971 646 1409 1146">A degree program stream of interest as an entry into the field of pharmaceutical (medicinal) chemistry or for those wishing to explore biologically relevant topics and issues from a chemical perspective. It is suitable for employment in the pharmaceutical and related industries, and in government laboratories, as well as for graduate work in areas of biological chemistry, including medicinal chemistry and structural biology.</p> <p data-bbox="971 1184 1232 1215">A. General education:</p> <p data-bbox="873 1257 1412 1425">non-science requirement: 12 credits; mathematics: SC/MATH 1013 3.00; SC/MATH 1014 3.00; or SC/MATH 1506 3.00 and SC/MATH 1507 3.00 with a minimum grade of B in both courses;</p>

Program Proposal

1. Program:
Geography (Faculty of Science)

2. Degree Designation:

Bachelor, Honours, Honours Double Major, Honors Major/Minor

3. Type of Modification:

Changes to program requirements.

4. Effective Date:

Fall 2021

5. Provide a general description of the proposed changes to the program.

The full year course MATH 1505 has been split into two 3.0 credit courses, MATH 1506 and MATH 1507.

6. Provide the rationale for the proposed changes that is rooted in the program learning outcomes.

No change to learning outcomes.

7. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives. If changes to the admission requirements are being proposed, comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

No change in mapping of program requirements to program learning outcomes.

8. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

These changes are the result of consultation with the Mathematics and Statistics Department.

9. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a

statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No resource implications.

10. Provide a summary of how students currently enrolled in the program will be accommodated.

The course requirements specifically still allow the current 6-credit first-year MATH courses to be used to satisfy requirements.

11. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

See attached.

Changes to the FSc Geography Program Requirements

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

Change From:	Change To:
<p>Bachelor Program A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1505 6.00;</p>	<p>Bachelor Program A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1506 3.00 and SC/MATH 1507 3.00;</p>
<p>Honours Programs Specialized Honours Program A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1505 6.00;</p>	<p>Honours Programs Specialized Honours Program A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1506 3.00 and SC/MATH 1507 3.00;</p>
<p>Honours Double Major Programs A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1505 6.00;</p>	<p>Honours Double Major Programs A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1506 3.00 and SC/MATH 1507 3.00;</p>
<p>Honours Major/Minor Program A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1505 6.00;</p>	<p>Honours Major/Minor Program A. General education:</p> <p>non-science requirement: 12 credits; mathematics: six credits from SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1506 3.00 and SC/MATH 1507 3.00;</p>

Program Proposal

1. Program:

Neuroscience (Faculty of Science)

2. Degree Designation:

BSc, Honours BSc, iBSc in Neuroscience

3. Type of Modification:

Changes to program requirements.

4. Effective Date:

Fall 2021

5. Provide a general description of the proposed changes to the program.

The full year course MATH 1505 has been split into two 3.0 credit courses, MATH 1506 and MATH 1507.

6. Provide the rationale for the proposed changes that is rooted in the program learning outcomes.

No change to learning outcomes.

7. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives. If changes to the admission requirements are being proposed, comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

No change in mapping of program requirements to program learning outcomes.

8. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

These changes are the result of consultation with the Mathematics and Statistics Department.

9. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No resource implications.

10. Provide a summary of how students currently enrolled in the program will be accommodated.

The course requirements specifically still allow the current 6-credit first-year MATH courses to be used to satisfy requirements.

11. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

See attached.

1. Changes to the FSc Neuroscience Program-Specific Degree Requirements

Rationale: The Math 1505 6.0 credit course is going to be split into two 3.0 credit courses, Math 1506 and Math 1507.

<p>Change From:</p> <p>Basic science requirement: a minimum of 15 credits as follows:</p> <p>six credits in mathematics selected from: SC/MATH 1013 3.00 or SC/MATH 1014 3.00 and SC/MATH 1505 6.00</p>	<p>Change To:</p> <p>Basic science requirement: a minimum of 15 credits as follows:</p> <p>six credits in mathematics selected from: SC/MATH 1013 3.00 or SC/MATH 1014 3.00 and SC/MATH 1506 3.00 or SC/MATH 1507 3.00</p>
---	---

Program Proposal

1. Program:

Science (Faculty of Science)

2. Degree Designation:

Bachelor Program

Honours Program

3. Type of Modification:

Changes to program requirements.

4. Effective Date:

Fall 2021

5. Provide a general description of the proposed changes to the program.

The full year course MATH 1505 has been split into two 3.0 credit courses, MATH 1506 and MATH 1507.

6. Provide the rationale for the proposed changes that is rooted in the program learning outcomes.

No change to learning outcomes.

7. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives. If changes to the admission requirements are being proposed, comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

No change in mapping of program requirements to program learning outcomes.

8. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

These changes are the result of consultation with the Mathematics and Statistics Department.

9. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No resource implications.

10. Provide a summary of how students currently enrolled in the program will be accommodated.

The course requirements specifically still allow the current 6-credit first-year MATH courses to be used to satisfy requirements.

11. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

See attached.

COMMITTEE ON ACADEMIC STANDARDS, CURRICULUM AND PEDAGOGY TEMPLATE

NEW COURSE PROPOSAL FORM

Faculty:
Indicate all relevant
Faculty(ies)

FSc / MATH

Department:
Indicate department and
course prefix (e.g.
Languages, GER)

MATH

Date of Submission:

--

Course Number:
Special Topics courses
Include variance (e.g.
HUMA 3000C 6.0,
Variance is "C")

1280

Var:

--

Academic Credit Weight:
Indicate both the fee, and
MTCU weight if different from
academic weight (e.g. AC=6,
FEE=8, MET=6)

3

3

Course Title:
The official name of the
course as it will appear in
the Undergraduate
Calendar and on the
Repository

Principles of Risk Management and Insurance

Short Title:
Appears on any
documents where space
is limited - e.g.
transcripts and lecture
schedules - **maximum
40 characters**

Risk Management and Insurance

With every new course proposal it is the Department's responsibility to ensure that new courses do not overlap with existing courses in other units. If similarities exist, consultation with the respective departments is necessary to determine degree credit exclusions and/or cross-listed courses.

Brief Course Description:

Maximum 2000 characters

(approximately 300 words including spaces and punctuation).

The course description should be carefully written to convey what the course is about. It should be followed by a statement of prerequisites and co-requisites, if applicable. This description appears in the calendar.

For editorial consistency, and in consideration of the various uses of the Calendars, verbs should be in the present tense (i.e., "This course analyzes the nature and extent of...", rather than "This course will analyze...")

This course deals with the notion of risk and the ways to manage it, by exploring the general framework of risk management for businesses, individuals and societies, and by focusing on the role of insurance as a risk transfer mechanism. **More specifically, the course categorizes and studies those risks that are associated with financial markets (liquidity risk, pricing risk, credit risk, among other financial risks) as well as those risks that arise from operations of an enterprise, regulations, digital transformation, the impacts of the environment or a catastrophe (among other non-financial risks). Also, the course examines in detail the various aspects of the insurance mechanism as a route to manage some of the aforementioned risks.** The course combines classical lectures with biweekly presentations by visiting risk professionals, thus immersing the students into theory and practice of modern risk management.

Prerequisites:

None

Generic Course Description:

This is the description of the "Parent / Generic course" for Special Topics courses under which variances of the "Generic" course can be offered in different years (Max. 40 words). Generic course descriptions are published in the calendar.

List all degree credit exclusions, prerequisites, integrated courses, and notes below the course description.

Expanded Course Description:

Please provide a detailed course description, including topics / theories and learning objectives, as it will appear in supplemental calendars.

This course offers an introduction to the ubiquitous presence of risk in society, the available risk management mechanisms, and related public policy issues. The course starts with the general notion of risk management, and it then focuses on insurance with its role of a risk transfer mechanism in modern risk management.

The course covers topics such as the concept of risk, risk assessment and evaluation, principles of risk management, nature of the insurance device, and specific insurance types such as life, health, personal property, liability, and homeowners insurance. The course is designed with experiential education in mind to offer students first-hand experience on practical aspects of concepts learned in class. Frequent in-class visitors, case studies, and experiments will be used to engage students with the material and provide opportunities for interaction and networking with seasoned professionals in the field of risk management and insurance.

The course is introductory and targets a broad audience without prior knowledge or experience in the field of risk management. Accordingly, the learning outcomes detailed below are broadly consistent with the first four levels of Bloom's cognitive taxonomy: remember, understand, apply, and analyze.

Remember

Upon successfully completing the course, the student should be able to

- **Describe**

- major types of **financial and non-financial risks**
- the objectives and steps in the risk management process
- the requirements of an insurable risk from the viewpoint of a private insurer
- the major types of insurance
- the steps in the process of settling a claim
- the common types of deductibles that appear in insurance contracts
- the financial impact of premature death on the different types of families
- the basic characteristics of term life insurance, ordinary life insurance, whole life insurance, and current assumption life insurance
- the suggestions to follow when purchasing life insurance
- the basic characteristics of a fixed annuity, variable annuity, and equity-indexed annuity
- the key characteristics of long-term care insurance, disability-income insurance contracts, and supplementary health insurance
- the basic characteristics of group term life insurance
- the basic features of private retirement plans
- the liability coverage in the personal auto policy

- **Identify**

- major pure risks associated with financial insecurity
- major insurable and uninsurable risks in our society
- basic parts of any insurance contract
- major homeowners policies for homeowners, condominium owners, and returns and exclusions that apply to their coverages
- the parties that are insured for liability coverage under a personal auto policy and major factors that determine the cost of auto insurance to consumers
- the major liability loss exposures of business firms

- **Discuss**

- how risk is a burden to society
- how life insurance premiums are calculated

Understand

Upon successfully completing the course, the student should be able to

Explain

- the meaning of risk
- the major methods of handling risk
- the law of large numbers and its implications for risk management and insurance
- the major risk control techniques
- the major risk-financing techniques
- the basic characteristics of insurance
- the social benefits and social costs of insurance
- the steps in the underwriting process
- the reasons for reinsurance and the various types of reinsurance treaties
- the importance of insurance company investments and identify the various types of investments of insurers
- how coinsurance works in a property insurance contract
- how losses are paid when more than one insurance contract covers the same loss
- the needs approach for estimating the amount of life insurance to own
- the interest-adjusted surrender cost index and net payment cost index for determining the cost of life insurance
- the underwriting principles followed in group insurance
- the insured's duties after a loss occurs
- the personal liability coverage
- the suggestions that consumers should follow when shopping for different types of insurance
- duties imposed on the insured after an accident or loss
- explain the basic provisions in the different insurance contracts

Apply

- apply the principles of risk management to a personal risk management program
- given a specific loss situation, explain whether the insurance policy would cover the loss

Analyze

- distinguish between pure risk, speculative risk, and enterprise risk
- distinguish between defined-contribution and defined-benefit retirement plans
- how a business income loss is determined under the business income coverage form

The course will be mandatory for Actuarial Majors in the Department of Mathematics, FSc. Also, it is a core requirement for the Diploma in Risk and Insurance Management offered by the Risk and Insurance Studies Centre at York. Students can also use the course as a building block in their preparation for the Risk and Insurance Management Society's (RIMS) Certified Risk Management Professional examination (RIMS-CRMP certificate) as well as examinations for related designations such as Associate in Risk Management (ARM) and/or Canadian Risk Management (CRM).

Course Design:

Indicate how the course design supports students in achieving the learning objectives. For example, in the absence of scheduled contact hours what role does student-to-student and/or student-to-instructor communication play, and how is it encouraged?

Detail any aspects of the content, delivery, or learning goals that involve "face-to-face" communication, non-campus attendance or experiential education components.

Alternatively, explain how the course design encourages student engagement and supports student learning in the absence of substantial on-campus attendance.

The course will have the traditional three-hour-per-week lecture component. The uniqueness of the course lays in the involvement of a variety of seasoned risk professionals from Financial Services, which are to visit and present biweekly, sharing their knowledge, enthusiasm and view of risk management and insurance with the students. The course is going to use various case-studies and experiments, which along with the aforementioned visitors are presumably going to impact students' engagement favorably.

Instruction:

1. Planned frequency of offering and number of sections anticipated (every year, alternate years, etc.).
2. Number of department members currently competent to teach the course.
3. Instructor(s) likely to teach the course in the coming year.
4. An indication of the number of contact hours (defined in terms of hours, weeks, etc.) involved, in order to indicate whether an effective length of term is being maintained **OR** in the absence of scheduled contact hours a detailed breakdown of the estimated time students are likely to spend engaged in learning activities required by the course.

- 1) every year, 3 lectures per week
- 2) five in Math and Stats
- 3) Ed Furman, Alexey Kuznetsov, Tom Salisbury, two new hires that are to start July 2020

Evaluation:

A detailed percentage breakdown of the basis of evaluation in the proposed course must be provided.

If the course is to be integrated, the additional requirements for graduate students are to be listed.

If the course is amenable to technologically mediated forms of delivery please identify how the integrity of learning evaluation will be maintained. (e.g. will "on-site" examinations be required, etc.)

15% home assignments
35% midterm examination
50% final examination

Bibliography:

A READING LIST MUST BE INCLUDED FOR ALL NEW COURSES

The Library has requested that the reading list contain complete bibliographical information, such as full name of author, title, year of publication, etc., and that you distinguish between required and suggested readings. A statement is required from the bibliographer responsible for the discipline to indicate whether resources are adequate to support the course.

Also please list any online resources.

If the course is to be integrated (graduate/ undergraduate), a list of the additional readings to be required of graduate students must be included. If no additional readings are to be required, a rationale should be supplied.

LIBRARY SUPPORT STATEMENT MUST BE INCLUDED.

Textbook:

Rejda, G.E. and McNamara, M.J. *Principles of Risk Management and Insurance*. Pearson, 13th Edition.

Recommended reading:

O'Neil, C. Weapons of Math Destruction. Crown Books.

Shrader-Frechette, K. Risk Analysis and Scientific Method: Methodological and Ethical Problems with Evaluating Societal Hazards. D.Reidel Publishing Company.

Other Resources:

A statement regarding the adequacy of physical resources (equipment, space, etc.) must be appended. If other resources will be required to mount this course, please explain

COURSES WILL NOT BE APPROVED UNLESS IT IS CLEAR THAT ADEQUATE RESOURCES ARE AVAILABLE TO SUPPORT IT.

Risk and Insurance Studies Centre will be providing the required in kind / in cash support to ensure the involvement of the guest speakers from the risk management and insurance sector. Also, it seems that the Spencer Educational Foundation is going to be involved as well.

Course Rationale:

The following points should be addressed in the rationale:

How the course contributes to the learning objectives of the program / degree.

The relationship of the proposed course to other existing offerings, particularly in terms of overlap in objectives and/or content. If inter-Faculty overlap exists, some indication of consultation with the Faculty affected should be given.

The expected enrolment in the course.

Actuarial Science (AS) Program in Math and Stats, FSc.

AS has been quite successful in that the satellite internships have been providing students with the much-desired real-world experience, thus complementing the theoretical insights delivered by the intensive rigorous curriculum. As a result, the 2018 alumni have been mostly placed in Actuarial Analyst positions in various businesses (e.g., Mercer, Sun Life, Canada Life, RBC Insurance, Aviva, to name just a few). The weakness of the program remains its in-depth focus on separate aspects of insurance business in particular and quantitative risk management in general, while the big picture is rarely mentioned. Thus, it is not uncommon for the graduates of the program to miss the forest for the trees. The proposed course will become a mandatory course for AS majors, and it will address the just-mentioned problem by providing a comprehensive and overarching discussion of the principles of risk management and insurance. The course is vital for educating high-quality risk professionals, and, importantly, it furnishes York students with a presumable competitive advantage, as many actuarial science programs do not boast similar courses in the corresponding curricula.

Diploma in Risk and Insurance Management (DRIM)

The course is a core requirement of DRIM, a diploma offered by the Risk and Insurance Studies Centre at York. DRIM is supported by the Academic Innovation Fund Tier 1 grant of the Office of Associate Vice President Teaching and Learning

Students can also use the course as a building block in their preparation for the Risk and Insurance Management Society's Certified Risk Management Professional examination (RIMS-CRMP certificate) as well as for examinations for related designations such as Associate in Risk Management (and/or Canadian Risk Management (CRM)).

We have not been able to find a similar course within various undergraduate program curricula currently available at York.

Faculty and Department Approval for Cross-listings:

If the course is to be cross-listed with another department, this section needs to be signed by all parties. In some cases there may be more than two signatures required (i.e. Mathematics, Women's Studies). In the majority of the cases either the Undergraduate Director or Chair of a unit approves the agreement to cross-list. All relevant signatures must be obtained prior to submission to the Faculty curriculum committee.

Dept:	_____	_____	_____
	Signature (Authorizing cross-listing)	Department	Date
Dept:	_____	_____	_____
	Signature (Authorizing cross-listing)	Department	Date
Dept:	_____	_____	_____
	Signature (Authorizing cross-listing)	Department	Date

Accessible format can be provided upon request.