A meeting of Executive of Council is scheduled for 24 November 2021, 2:30-4:30 p.m. via Zoom. As per Section 4.6.2 of the Council Rules and Regulations, meetings shall be closed except to persons invited to attend and members of Council who choose to attend as guests.

AGENDA

1. Approval of the Agenda

2. Approval of the Minutes of Meeting 27 October 2021 - circulated with the Agenda

3. Business Arising from the Minutes

4. Remarks from the Chair

5. Report from the University Secretary

6. Reports from Committees of Council
   6.1 Council Committee on the Faculty of Graduate Studies and Research, Appendix I, pp. 2-15
   6.2 Council Committee on Undergraduate Admissions and Studies, Appendix II, pp. 16-21

7. Graduand Lists
   7.1 Graduand Lists for Approval - Omnibus Motion - distributed confidentially
       7.1.1 Faculty of Education
       7.1.2 Faculty of Graduate Studies and Research
       7.1.3 Centre for Continuing Education
       7.1.4 La Cité universitaire francophone

8. Other Business

9. Adjournment
REPORT TO EXECUTIVE OF COUNCIL
FROM THE 12 NOVEMBER 2021 MEETING OF THE
COUNCIL COMMITTEE ON THE FACULTY OF GRADUATE STUDIES AND RESEARCH

ITEM(S) FOR APPROVAL:

1. FACULTY OF GRADUATE STUDIES AND RESEARCH

   1.1 New Programs – Multidisciplinary, Collaborative and Cotutelle Doctor of Philosophy Programs

**MOTION:** That the Multidisciplinary, Collaborative, and Cotutelle doctoral programs options be approved, effective 2022.

<table>
<thead>
<tr>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multidisciplinary PhD</strong> (partnership between two different programs/disciplines at the UofR):</td>
</tr>
<tr>
<td>Multidisciplinary PhD program fosters advanced inquiry and synthesis across disciplines with a focus on training PhD students in multidisciplinary methods and theories that address grand challenges. Candidates in this program will work under the co-supervision of Faculty members from two distinct disciplines and graduate programs and are required to translate research findings into real-world solutions.</td>
</tr>
<tr>
<td><strong>The Collaborative Partnership PhD (CPP) (partnership between UofR and other Canadian Universities):</strong></td>
</tr>
<tr>
<td>The Collaborative Partnership PhD Program trains outstanding doctoral students at the University of Regina and a partner Canadian University. The CPP program is intended to co-supervise highly qualified graduates, co-develop graduate programs, and accelerate strategic research collaboration between the University of Regina and other PhD granting postsecondary institutions.</td>
</tr>
<tr>
<td><strong>The Cotutelle PhD (partnership between UofR and an international university):</strong></td>
</tr>
<tr>
<td>The cotutelle (joint supervision) PhD requires an existing research collaboration between two supervisors from two postsecondary institutions. The Supervisors agree to co-supervise and combine the capacities of the two institutions to develop the skills and competencies of the PhD student and enhance scholarly networking and collaboration. PhD graduates enrolled in the Cotutelle or Collaborative Partnership PhD programs will write one dissertation and will be conferred a doctoral degree/parchment from each institution.</td>
</tr>
</tbody>
</table>

**Rationale:**

The new generation of PhD graduates are encouraged to rethink the dissertation content and defence, engage in interdisciplinary scholarship, acquisition of essential professional development skills, knowledge translation, and community engagement. They require diverse skills and competencies to effectively address the grand challenges facing our communities, industry and government partners. FGSR seeks to establish new collaborative PhD programs that address these needs and incentivize research collaboration within and outside the University of Regina. The proposed PhD program options prioritize innovation and collaboration as FGSR creates new opportunities for a doctoral experience that is inherently multidisciplinary, grounded in Indigenous knowledge, experiential, and globally engaged.

For additional information on these doctoral programs, please review **Attachment A**.

(end of Motion)
ITEM(S) FOR INFORMATION:

1.  FACULTY OF EDUCATION

   1.1  Course Changes

**MOTION:** That the following courses be changed, effective 2022-10.

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
</table>
| ED 920 - Seminar in Contemporary Issues in Education  
Note: This is a two semester PhD residency course offered from January to August.  
This course is intended to prepare doctoral students for their comprehensive examinations by broadening understanding of issues related to the changing context of education. It also provides an opportunity for students to explore issues that relate to their areas of research interest. | ED 920 - Seminar in Contemporary Issues in Education  
Note: This is a two semester PhD residency course offered from January to August.  
This course is intended to prepare doctoral students for their comprehensive examinations by broadening understanding of issues related to the changing context of education. It also provides an opportunity for students to explore issues that relate to their areas of research interest. |
| EFDN 899 - Capstone Synthesis Seminar: An Integration of Theory and Practice  
The capstone seminar provides a culminating experience for students enrolled in the course only route. This course provides an opportunity for the students to integrate and act on multiple learning experiences, including reading and analyzing research, as a way to bring deeper meaning to their graduate experiences as a whole. | EFDN 899 - Capstone Synthesis Seminar: An Integration of Theory and Practice  
The capstone seminar provides a culminating experience for students enrolled in the course only route. This course provides an opportunity for the students to integrate and act on multiple learning experiences, including reading and analyzing research, as a way to bring deeper meaning to their graduate experiences as a whole. ***Prerequisite: Must have completed 24 credit hours of 800 level courses before registering |

**Rationale:**

ED 920 has been offered as a regular graduate level course for one semester. The initial rational for EFDN 899 was “Students will participate in this seminar in their last class of a ten course program...” Newly admitted students are registering for this course at the start of their program, adding the prerequisite will eliminate these types of registration errors.
Proposal for Collaborative PhD Studies

Doctoral students require diverse skills and competencies to effectively address the grand challenges facing our communities, industry and government partners. FGSR will launch cutting-edge PhD programs and initiatives that address these needs though re-imagining doctoral education and training. The new generation of PhD graduates are encouraged to rethink the dissertation content and defence, engage in interdisciplinary scholarship, acquisition of essential professional development skills, knowledge translation, and community engagement.

In addition, the proposed PhD study programs prioritize innovation and collaboration as FGSR creates new opportunities for a doctoral experience that is multidisciplinary, grounded in Indigenous knowledge, experiential, and globally engaged:

**Multidisciplinary PhD (focus on Grand Challenges) (partnership between two different programs/disciplines at the UofR)**

Multidisciplinary PhD program fosters advanced inquiry and synthesis across disciplines with a focus on training PhD students in multidisciplinary methods and theories that address grand challenges. Candidates in this program will work under the co-supervision of Faculty members from two distinct disciplines and graduate programs and are required to translate research findings into real-world solutions.

**The Collaborative Partnership PhD (CPP) (partnership between UofR and other Canadian Universities)**

The Collaborative Partnership PhD Program trains outstanding doctoral students at the University of Regina and a partner Canadian University. The CPP program is intended to co-supervise highly qualified graduates, co-develop graduate programs, and accelerate strategic research collaboration between the University of Regina and other PhD granting postsecondary institutions.

**The Cotutelle PhD (partnership between UofR and an international university)**

The cotutelle (joint supervision) PhD requires an existing research collaboration between two supervisors from two postsecondary institutions. The Supervisors agree to co-supervise and combine the capacities of the two institutions to develop the skills and competencies of the PhD student and enhance scholarly networking and collaboration.

PhD graduates enrolled in the Cotutelle or Collaborative Partnership PhD programs will write one dissertation and will be conferred a doctoral degree/parchment from each institution.

The following conditions apply:

- Candidates must satisfy the minimum admission requirements of the FGSR (including English language proficiency requirement, if applicable) and those of the Host institution.
- Candidates must spend a period of their program of study at each institution. Upon completion of the agreed period of study at the Host institution, Candidates must return to the Home institution. Any extension of stay must be approved in writing by both institutions.
- Applicants must submit a rationale for Applying to the CPP/Cotutelle Program

**Tuition fees:**

- Students admitted through the University of Regina as the Home University pay tuition and fees as regularly admitted PhD students.
ATTACHMENT A

- Students admitted through the **Home** University may pay enrolment and other compulsory fees at the University of Regina (the Host University).
- Each institution in its capacity as **Host institution** may **provide tuition free scholarship**, i.e. a tuition fee waiver, for eligible Candidates from the **Home** institution for the duration of the Candidature at the **Host** institution.
ATTACHMENT A

Multidisciplinary PhD Program Framework

1. Introduction and background information

What are the multidisciplinary PhD programs?
Multidisciplinary PhD programs foster advanced inquiry and synthesis across disciplines with a focus on training PhD students in multidisciplinary methods and theories that address “grand challenges.” Candidates in this option will work under the co-supervision of faculty members from two distinct disciplines/graduate programs and are expected to translate research findings into real-world solutions. The outcome of the research should have significant multidisciplinary contribution.

Which universities in Canada have established similar PhD programs?
Below please find some universities offer similar PhD programs and the requirements of those programs:

<table>
<thead>
<tr>
<th>University</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western University(^1)</td>
<td>13 collaborative specializations including: Artificial Intelligence, Developmental Biology, Engineering in Medicine, Environment and Sustainability, Global Health Systems in Africa, Hazards, Risks, and Resilience, Migration and Ethnic Relations, Molecular Imaging, Musculoskeletal Health Research, Music Cognition, Planetary Science and Exploration, Scientific Computing, Transitional Justice and Post-Conflict Reconstruction</td>
</tr>
<tr>
<td>University of Toronto(^2)</td>
<td>Environmental Studies</td>
</tr>
<tr>
<td>Carleton University(^3)</td>
<td>9 programs including African Studies, Biochemistry, Bioinformatics, Chemical and Environmental Toxicology, Climate Change Collaborative Specialization, Data Science, Digital Humanities, Latin American and Caribbean Studies, Political Economy</td>
</tr>
<tr>
<td>University of Guelph(^4)</td>
<td>Neuroscience</td>
</tr>
<tr>
<td>University of Saskatchewan(^5)</td>
<td>Biostatistics</td>
</tr>
<tr>
<td>McMaster University(^6)</td>
<td>Astrobiology</td>
</tr>
</tbody>
</table>

Why does the University of Regina need to establish Multidisciplinary PhD program framework?
- To allow researchers/academic units at the University of Regina working together to develop leading-edge research opportunities and/or programs to address grand challenges facing our society.
- To provide an opportunity to tailor/design PhD students’ training to better fit innovative research needs.
- This framework will be used on a case-by-case PhD studies as FGSR will facilitate collaboration among different academic units to develop/formalize multidisciplinary PhD programs.

What are the requirements of Multidisciplinary PhD programs?
- Students enrolled in the multidisciplinary program option will normally take two additional courses from the other discipline outside their home discipline. The total required credits will be 66 credits.
- The student will be co-supervised by a professor from their home program/discipline and a professor from a collaborating program/discipline.
ATTACHMENT A

- The proposed research area should have significant multidisciplinary components (addressing a research topic by using a multidisciplinary approach and the potential to make contributions to multidisciplinary areas).
- The research proposal should be reviewed and approved by the two academic units and FGSR. The outcome of the research should demonstrate promising multidisciplinary contribution.

2. Eligibility and admission processes
   - Students will be admitted into the home program through the regular admission process.
   - Students normally enrolled in the first year of their PhD studies are eligible to make such a request.
   - Prospective students may express their interests to participate in the Multidisciplinary PhD option through their supervisors based on the nature of their research topic.
   - PhD students whose thesis research has potential to make significant contribution in multidisciplinary can make request through their supervisors. **An application process will be developed by FGSR.**
   - The supervisor at the home program/discipline and the student identify a potential co-supervisor at the host program and discuss this opportunity between home and host program/discipline.
   - The student, their co-supervisors and the academic units establish a multi-disciplinary PhD training agreement. The training agreement should include course requirements, supervision expectations, tentative supervisory committee membership, and progress report timelines etc. A template of the agreement will be provided as an appendix of this proposal. Academic units and FGSR review and approve the agreement.
   - The home program/discipline handles all student-related processes in collaboration with FGSR.

3. Supervisory committee, Changing supervisor, Progress report, Thesis submission and defense
   - A tentative supervisory committee should be established in the initial agreement. The supervisory committee should have balanced contributions from **two distinct disciplines.**
   - The supervisory committee should include at least one member from each academic unit, an internal external member at the University of Regina.
   - Students should submit annual progress reports in accordance with PhD student requirements and policies.
   - Changing supervisors may lead to the termination of the agreement.

4. Conferring of Degree
   Upon completion of the appropriate requirements, students will receive the degree from the home program/discipline; a notation will be made on the students’ transcript that indicates they have participated in multidisciplinary PhD training.

5. Intellectual Property and Publications
   Separate agreements shall be written for research that may lead to licensing or revenue generation activities.

6. Other non-academic issues (TBD)
ATTACHMENT A

Reference:

1. https://grad.uwo.ca/academics/collaborative.html
2. https://www.rotman.utoronto.ca/Degrees/PhD/Academics/MajorAreasofStudy/Collaborative-Doctoral-Programs/Collaborative-Doctoral-Program-in-Environmental-Studies
3. https://graduate.carleton.ca/programs/collaborative-specializations
4. https://ovc.uoguelph.ca/biomedical-sciences/graduate-programs/collaborative-and-interdisciplinary-programs
6. https://gs.mcmaster.ca/program/astrobiology-collaborative-program/ (https://origins.mcmaster.ca/education/graduate/how-our-program-works)
ATTACHMENT A

Collaborative Partnership PhD Programs

1. Introduction and background information

What is the Collaborative Partnership PhD programs?
Collaborative Partnership PhD program is a joint enrollment PhD program between two domestic universities in Canada. The Collaborative Partnership PhD Program trains outstanding doctoral students at the University of Regina and a partner Canadian University. The CPP program is intended to co-supervise highly qualified graduates, co-develop graduate programs, and accelerate strategic research collaboration between the University of Regina and other PhD granting postsecondary institutions.

Students enrolled in this program will:
- Pay tuition only at the home university;
- Pay other fees, insurance and living expenses at the host university;
- Spend about equal time at both universities;
- Write one thesis under the co-supervision of a supervisor at the home university and another supervisor at the host university;
- Receives two degrees with indication that the degree was completed as a dual degree program;

Why does the University of Regina need to establish the Collaborative Partnership PhD programs?
- This proposal is to provide a framework/tool for academic units to establish/strengthen collaborations with other Canadian universities/institutes;
- Further enhance the collaboration between the University of Regina and other Canadian Institutes;
- Attract high quality PhD students from other Canadian universities;
- Provide faculty members with new opportunities to develop collaborations with other Canadian universities; and
- Foster richer student experiences.

2. Eligibility and admission processes

Eligibility
- Any full time student registered in a Ph.D. program at the University of Regina is eligible to participate the collaborative partnership PhD programs.
- Students from other Canadian universities apply for a collaborative partnership agreement with the University of Regina should meet the PhD admission requirements at the University of Regina.
- In general, students in the first four semesters of their PhD studies are eligible.

Admission to the Collaborative Partnership PhD programs (UofR as home university)
- Students meet the admission condition of the host university. The supervisors of the students have established collaborations with the faculty members at the host university.
- Students must submit a rationale for applying to the Collaborative Partnership Program.
- Students get preapproval from the supervisors and the academic units.
- Students apply for collaborative partnership admission with the host university and get accepted.
- The students, their host supervisors and the academic units discuss with the students’ home universities to reach an agreement.
- UofR sign the agreement provided by the host university.
**ATTACHMENT A**

**Admission to the Collaborative Partnership PhD programs (UofR as host university)**
- Students meet the same requirements as regular PhD students including ELP requirement;
- The co-supervisors of the students at their home universities have established collaborations with the faculty members at the University of Regina.
- Students submit their PhD application through FGSR’s online application portal. (A new category in the on-line application system will be created, so the students can specify the application is for this program)
- The students, their host supervisors and the academic units discuss with the students’ home universities to reach an agreement (the template of the agreement will be provided in the appendix).
- FGSR accept the student as a Collaborative Partnership PhD student.
- UofR and the home university sign the agreement and the University of Regina sends the letter of acceptance (with indication of the nature of the program) and the signed agreement to the student, home university and supervisors.

3. **Registration, Fees and Funding arrangements**

**Registration (UofR as home university):**
- Students register as regular students each term at the UofR and pay the same tuition and fees as regular PhD students
- When the students go to the host university, the students’ should remain registered at the UofR and some fees at the UofR will be waived.

**Registration (UofR as host university):**
- Students should register at the University of Regina when the program starts (the program starting date should be specified in the agreement) until the program complete.
- FGSR will work with Registrar’s Office for registration code and process.

**Scholarship and funding**
- Students with University of Regina as home university are eligible for all scholarship available for regular PhD students.
- Students with University of Regina as host university are not eligible for FGSR’s scholarships, but will be qualified for research stipend provided by the supervisor and/or academic unit.

4. **Supervisory committee, Changing supervisor, Progress report, Thesis submission and defense**
- Participating students will be required to write a single thesis which will lead to a single oral defense normally at the home institution. The thesis committee, evaluation and defense process should meet University of Regina’s requirements.
- A supervisory committee should set in the agreement. The supervisory committee should have balanced contribution from both universities. The requirement of supervisory committee should include at least one member from the academic unit, an internal external member at the University of Regina and members at the partner university.
- Changing supervisor during the course of the collaborative agreement may cause the termination of the agreement.
- Students should submit annual progress report per the requirement of regular PhD students.

5. **Conferring of Degree**
ATTACHMENT A

Upon completion of the appropriate requirements, students will receive a diploma from each university, each diploma carrying a notation to the effect that the degree was obtained through a collaborative agreement. In addition, a notation will be made on the students’ transcript that indicates they have participated in a collaborative partnership agreement between the two institutions. The names of both participating institutions will be indicated on each diploma and the transcript.

6. Intellectual Property and Publications
   • The Graduate Student owns the copyright on their thesis. If the thesis contains confidential material that should not be available in the public domain, there is a maximum time period of one (1) year for which a thesis may be withheld from availability to the University of Regina Library, the National Library of Canada and the PU Library.
   • Should any collaboration result in the potential for intellectual property development, the parties shall immediately meet through designated representatives and seek an equitable and fair understanding as to ownership and other property interests that may arise. Spate agreements should be developed to document those understandings.

7. Other non-academic issues (TBD)
ATTACHMENT A

Cotutelle PhD Program

1. Introduction and background information

What is the Cotutelle PhD program?
Cotutelle PhD program is a joint enrollment PhD program between two universities at two different countries (home university and host university).
Students enrolled in this program will:
- Pay tuition only at the home university;
- Pay other fees, insurance and living expenses at the host university;
- Spend about equal time at both universities;
- Write one thesis under the co-supervision of a supervisor at the home university and another supervisor at the host university;
- Receives two degrees with indication that the degree was completed as a dual degree program;

Which universities in Canada have established Cotutelle PhD Programs? (have a table and put the link on the reference)
- University of Saskatchewan
- University of Ottawa
- UBC
- Concordia University
- Carleton University
- Waterloo
- SFU
- McMaster
- Queen’s
- McGill
- Calgary
- Guelph
- Ontario Tech
- Western
- Montreal
- Lakehead
- Laval
- Memorial
- Victoria
- Alberta
- York
- Sherbrooke

Why does the University of Regina need to establish the Cotutelle PhD program?
- Further enhance the university’s international reputation and partnerships;
- Attract high quality PhD students and expand research capacities;
- Provide faculty members with new opportunities to develop international collaborations;
- Provide domestic PhD students opportunities to gain international experience.
2. Eligibility and admission processes

Eligibility
- Any full time student registered in a Ph.D. program at the University of Regina is eligible for a cotutelle agreement.
- Students from other universities apply for a cotutelle agreement with the University of Regina should meet the PhD admission requirements at the University of Regina.
- In general, students in the first four semesters of their PhD studies are eligible for cotutelle agreements.

Admission to the Cotutelle PhD program (UofR as home university)
- Students meet the admission condition of the host university. The supervisors of the students have established collaborations with the faculty members at the host university.
- Students get preapproval from the supervisor and the academic unit
- Students apply for cotutelle admission with the host university and get accepted
- The students, their host supervisors and the academic units discuss with the students’ home universities to reach the cotutelle agreement.
- UofR sign the agreement provided by the host university.

Admission to the Cotutelle PhD program (UofR as host university)
- Students meet the same requirements as regular PhD students including ELP requirement;
- The co-supervisors of the students at their home universities have established collaborations with the faculty members at the University of Regina.
- Students submit their Cotutelle PhD application through FGSR’s online application portal. (The student or their supervisor should inform FGSR that the application is for Cotutelle PhD program)
- The students, their host supervisors and the academic units discuss with the students’ home universities to reach the cotutelle agreement.
- UofR and the home university sign the agreement.

3. Registration, Fees and Funding arrangements

Registration (UofR as home university):
- Students register as regular students each term at the UofR and pay the same tuition and fees as regular PhD students
- When the students go to the host university, the students’ should remain registered and some fees at the UofR will be waived.

Registration (UofR as host university):
- Students should register at the University of Regina when the program starts (the program starting date should be specified in the agreement) until the program complete.
- FGSR will work with Registrar office for registration code and process.

Scholarship and funding
- Students with University of Regina as home university are eligible for all scholarship available for regular PhD students.
- Students with University of Regina as host university are not eligible for FGSR’s scholarships, but will be qualified for research stipend provided by the supervisor and/or academic unit.
ATTACHMENT A

4. Supervisory committee, Changing supervisor, Progress report, Thesis submission and defense
   - Participating students will be required to write a single thesis which will lead to a single oral defense
     normally at the home institution. The language of the thesis will be in English. The thesis committee
     and evaluation and defense process should follow both universities’ requirement.
   - A supervisory committee should set in the cotutelle agreement. The supervisory committee should
     have balanced contribution from both universities. The requirement of supervisory committee
     should include at least one member from the academic unit, an internal external member at the
     University of Regina and members at the partner university.
   - Changing supervisor during the course of cotutelle agreement may cause the termination of the
     agreement.
   - Students should submit annual progress report per the requirement of regular PhD students.
   - An External examiner is required per the requirement of regular PhD students.

5. Conferring of Degree
   Upon completion of the appropriate requirements, students will receive a diploma from each university,
   each diploma carrying a notation to the effect that the degree was obtained through a cotutelle
   agreement. In addition, a notation will be made on the students’ transcript that indicates they have
   participated in a cotutelle agreement between the two institutions. The names of both participating
   institutions will be indicated on each diploma and the transcript.

6. Intellectual Property and Publications
   - The Graduate Student owns the copyright on their thesis. If the thesis contains confidential material
     that should not be available in the public domain, there is a maximum time period of one (1) year for
     which a thesis may be withheld from availability to the University of Regina Library, the National
     Library of Canada and the PU Library.
   - Should any collaboration result in the potential for intellectual property development, the parties
     shall immediately meet through designated representatives and seek an equitable and fair
     understanding as to ownership and other property interests that may arise. Spate agreements
     should be developed to document those understandings.

7. Other non-academic issues

Reference:
1. https://grad.usask.ca/admissions/alternate-applicants/cotutelle-program.php#AbouttheCotutelleProgram
2. https://www.uottawa.ca/graduate-studies/students/cotutelles
3. https://www.grad.ubc.ca/faculty-staff/program-initiated-admissions/joint-phd-co-tutelle
5. https://gradstudents.carleton.ca/program-options/cotutelle/
ATTACHMENT A

12. https://graduatestudies.uoguelph.ca/prospective-students/cotutelle
17. https://www.fesp.ulaval.ca/etudes/cotutelle-de-these
20. https://www.ualberta.ca/graduate-studies/about/graduate-program-manual/section-8-supervision-oralexaminations-and-program-completion/8-7-doctoral-degrees.html
21. https://gradstudies.yorku.ca/current-students/regulations/degree-types/
22. https://www.usherbrooke.ca/international/fr/etudiants-udes/cotutelles-de-theses/
REPORT TO EXECUTIVE OF COUNCIL
FROM THE 2 NOVEMBER 2021 MEETING OF THE
COUNCIL COMMITTEE ON UNDERGRADUATE ADMISSIONS AND STUDIES

ITEM(S) FOR APPROVAL:

1. FACULTY OF SCIENCE

1.1 New Minor – Indigenous Knowledge and Science

Submitted in partnership with First Nations University of Canada

MOTION: To create a Minor in Indigenous Knowledge and Science, effective 2022.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Minor in Indigenous Knowledge and Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>CHEM 101</td>
</tr>
<tr>
<td>3.0</td>
<td>ENVS 100 or ENVS 200</td>
</tr>
<tr>
<td>3.0</td>
<td>INDG 100</td>
</tr>
<tr>
<td>3.0</td>
<td>Indigenous Language 100-level</td>
</tr>
<tr>
<td>12.0</td>
<td>Four approved electives from lists A and B (at least one (1) elective course must be from List A)</td>
</tr>
<tr>
<td>24.0</td>
<td>Subtotal</td>
</tr>
</tbody>
</table>

Approved electives for the Minor in Indigenous Knowledge and Science

Note that courses from List A are preferred.

List A (With Indigenous content in the course description)
- ADMN 436AM - Natural Resource Development from an Indigenous Perspective
- BIOC 200 - Medicinal Plants and Culture
- ENVS 100 - Introduction to Indigenous Environmental Science
- ENVS 200 - Indigenous Environmental Law
- INDG 222AD - Indigenous and Traditional Ecological Knowledge
- INDG 236 - Indigenous Economic, Environmental and Geographic Systems
- INDG 290AE - Indigenous Ecological Knowledge and Resource Management
- PHYS 140 - Physics of Energy and the Environment
- INHS 100
- INHS 101

List B (No Indigenous content in the course description)
- BIOL 100 - Biology I - From Cells to Organisms
- BIOL 101 - Biology II - Organisms in their Environment
- BIOL 275 - Ecology
- BIOL 276 - Environmental Biology
- BIOL 316 - Conservation Biology
- CS 100 - Introduction to Computers
- CS 110 - Programming and Problem Solving
- GES 200 - Introduction to Environmental Studies
Appendix II, Page 17

- GES 400 - Environmental Impact Assessment
- GES 120 - Human Geography
- GES 121 - Physical Geography
- GES 325 - Biogeography
- GES 326 - Environment and Resource Management
- GEOL 102 - Environmental Geology
- GEOL 270 - Earth Resources and the Environment
- GEOL 329 - Soils and Sediment Analysis
- IDS 100 - Interdisciplinary Studies: Historical Issues
- IDS 290AD - Ecomuseums: Community Engagement for Sustainability
- MATH 101 - Introductory Finite Mathematics I
- MATH 108 - Mathematical Problems, Ideas and Personalities
- PHIL 275 - Environmental Ethics
- PHIL 282 - Philosophical Issues in Sustainable Development
- PHIL 370AF - Environmental Ethics and Public Policy

Rationale:

The minor will allow students to complete courses with significant Indigenous content. The minor can be completed by any students registered in Arts, Science, Kinesiology, or Media, Arts, and Performance programs. Four approved electives are currently included in the proposed minor. A multidisciplinary science course with significant Indigenous content is being developed and will be added to the minor in the future. As well, when other Science courses with Indigenous content will be developed, they will be required in the minor and the number of approved electives will decrease.

(end of Motion)

1.2 Program Revisions – Diploma in General Science

**MOTION:** To include the minor in Indigenous Knowledge and Science as a concentration option in the Diploma in General Science, effective 202220

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Diploma in General Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>BIOL 100</td>
</tr>
<tr>
<td>3.0</td>
<td>BIOL 101</td>
</tr>
<tr>
<td>3.0</td>
<td>CHEM 104</td>
</tr>
<tr>
<td>3.0</td>
<td>CHEM 105 or 140</td>
</tr>
<tr>
<td>3.0</td>
<td>CS 110</td>
</tr>
<tr>
<td>3.0</td>
<td>ENGL 100</td>
</tr>
<tr>
<td>3.0</td>
<td>ENGL 110</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 102</td>
</tr>
<tr>
<td>3.0</td>
<td>MATH 103 or 110</td>
</tr>
<tr>
<td>3.0</td>
<td>MATH 111 or 112</td>
</tr>
<tr>
<td>3.0</td>
<td>PHYS 109 or 111</td>
</tr>
<tr>
<td>3.0</td>
<td>PHYS 119 or 112</td>
</tr>
<tr>
<td>3.0</td>
<td>STAT 100 or 160</td>
</tr>
<tr>
<td>12.0 – 18.0</td>
<td>Completion of a Concentration in Science*</td>
</tr>
</tbody>
</table>
Options include: Biology, Biochemistry, Chemistry, Geology, Indigenous Knowledge and Science, Applied Mathematics, Pure Mathematics, Statistics, Physics

<table>
<thead>
<tr>
<th>3.0</th>
<th>One Arts, La Cité, or Media, Art, and Performance course</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0-6.0</td>
<td>Science, Arts, La Cité, or Media, Art, and Performance course(s)</td>
</tr>
<tr>
<td>60.0</td>
<td>Total: 65% PGPA and 60% UGPA</td>
</tr>
</tbody>
</table>

*For the purposes of the Diploma in General Science, requirements for a Concentration in Science corresponds with the Minor requirements outlined in the Department section for each discipline.*

**Rationale:**

It is stated in the program template: “For the purposes of the Diploma in General Science, requirements for a Concentration in Science corresponds with the Minor requirements outlined in the Department section for each discipline”; therefore, the new Indigenous Knowledge and Science minor is now included in the program template as a concentration option.

(end of Motion)

### 1.3 Program Revisions – Bachelor of Science and Bachelor of Science Honours in Environmental Geoscience

**MOTION:** To revise the Bachelor of Science in Environmental Geoscience and the Bachelor of Science Honours in Environmental Geoscience as outlined, effective 2022.

a) Change the Geology 241 requirement to GEOL 241, GEOL 270 or GES 207.
b) Remove GES 207, 303, 309, 321, and GES 429 or GEOL 429 as requirements
e) Add note * in order to qualify for APEGS, these three courses must be APEGS accepted.
f) Add 3.0 credit hours Science elective (APEGS Approved)
g) Add 3.0 credit hours INDG 100, 104, 200, 201, 236, ENVS 100, 200, ANTH 241AK, GES 344, 396AI, BIOC 200, RLST 290AN, ADMN 436AM, or other course with a core Indigenous component.

**BSc in Environmental Geoscience**

Refer to the faculty [Time Limits, Graduation Requirements, and Conferral of Degrees](#) and the BSc sections for additional important information.

<table>
<thead>
<tr>
<th>CURRENT</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit hours</td>
<td>BSc in Environmental Geoscience Required Courses</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 102</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 201</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 210</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 211</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 240</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 241</td>
</tr>
</tbody>
</table>
### BSc Honours in Environmental Geoscience

Refer to the faculty **Time Limits, Graduation Requirements, and Conferral of Degrees**, and the BSc sections for additional important information. Students planning an honours program should consult with the Head of the Geology Department.

<table>
<thead>
<tr>
<th>CURRENT</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0 GEOL 307 or BIOL 456</td>
<td>3.0 GEOL 307 or BIOL 456</td>
</tr>
<tr>
<td>3.0 GEOL 314</td>
<td>3.0 GEOL 314</td>
</tr>
<tr>
<td>3.0 GEOL 329 or GES 329</td>
<td>3.0 GEOL 329 or GES 329</td>
</tr>
<tr>
<td>3.0 GEOL 353</td>
<td>3.0 GEOL 353</td>
</tr>
<tr>
<td>3.0 GEOL 396 or GES 411</td>
<td>3.0 GEOL 396 or GES 411</td>
</tr>
<tr>
<td>3.0 GEOL 429 or GES 429</td>
<td>3.0 GEOL 460</td>
</tr>
<tr>
<td>3.0 GEOL 460</td>
<td>3.0 GES 121</td>
</tr>
<tr>
<td>3.0 GES 121</td>
<td>3.0 GES 203</td>
</tr>
<tr>
<td>3.0 GES 203</td>
<td>3.0 GES 323</td>
</tr>
<tr>
<td>3.0 GES 207</td>
<td>3.0 GES 327</td>
</tr>
<tr>
<td>3.0 GES 303</td>
<td>3.0 ONE of: GEOL 340, GES 303, 309, 321, 333, 325, 327, BIOL 356, ENEV 321, 322, 334, 363, or 384*</td>
</tr>
<tr>
<td>3.0 GES 321</td>
<td>3.0 CHEM 104</td>
</tr>
<tr>
<td>3.0 GES 323</td>
<td>3.0 CHEM 105</td>
</tr>
<tr>
<td>3.0 GES 327</td>
<td>3.0 CS 110</td>
</tr>
<tr>
<td>3.0 CHEM 104</td>
<td>3.0 MATH 110</td>
</tr>
<tr>
<td>3.0 CHEM 105</td>
<td>3.0 PHYS 109 and 119 or PHYS 111 and 112</td>
</tr>
<tr>
<td>3.0 CS 110</td>
<td>3.0 STAT 100 or 160</td>
</tr>
<tr>
<td>3.0 MATH 110</td>
<td>3.0 BIOL 100 or 101</td>
</tr>
<tr>
<td>3.0 PHYS 109 and 119 or PHYS 111 and 112</td>
<td>3.0 One Science elective (APEGS approved)</td>
</tr>
<tr>
<td>3.0 MATH 110</td>
<td>3.0 ONE of: INDG 100, 104, 200, 201, 236, ENVS 100, 200, ANTH 241AK, GES 344, 396AI, BIOC 200, RLST 290AN, ADMN 436AM or other course with core indigenous component.</td>
</tr>
<tr>
<td>3.0 STAT 100 or 160</td>
<td>87.0 Subtotal: Major Requirements 65.00% Major GPA required</td>
</tr>
<tr>
<td>3.0 BIOL 100 or 101</td>
<td>3.0 ENGL 100</td>
</tr>
<tr>
<td>87.0 Subtotal: Major Requirements 65.00% Major GPA required</td>
<td>3.0 ENGL 110</td>
</tr>
<tr>
<td>3.0 ENGL 100</td>
<td>12.0 Four Arts, La Cité, or Media, Art, and Performance electives</td>
</tr>
<tr>
<td>3.0 ENGL 110</td>
<td>3.0 One Science, Arts, La Cité, or Media, Art, and Performance elective</td>
</tr>
<tr>
<td>12.0 Four Arts, La Cité, or Media, Art, and Performance electives</td>
<td>3.0 One Science elective</td>
</tr>
<tr>
<td>3.0 One Science, Arts, La Cité, or Media, Art, and Performance elective</td>
<td>9.0 Three Open electives</td>
</tr>
<tr>
<td>3.0 One Science elective</td>
<td>120.0 Total: 65.00% Program GPA required</td>
</tr>
<tr>
<td>9.0 Three Open electives</td>
<td></td>
</tr>
<tr>
<td>120.0 Total: 65.00% Program GPA required</td>
<td></td>
</tr>
</tbody>
</table>
### CURRENT

<table>
<thead>
<tr>
<th>3.0</th>
<th>GEOL 211</th>
<th>3.0</th>
<th>GEOL 211</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GEOL 240</td>
<td>3.0</td>
<td>GEOL 240</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 241</td>
<td>3.0</td>
<td>GEOL 241, GEOL 270, or GES 207</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 307 or BIOL 456</td>
<td>3.0</td>
<td>GEOL 307 or BIOL 456</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 314</td>
<td>3.0</td>
<td>GEOL 314</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 329 or GES 329</td>
<td>3.0</td>
<td>GEOL 329 or GES 329</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 353</td>
<td>3.0</td>
<td>GEOL 353</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 396 or GES 411</td>
<td>3.0</td>
<td>GEOL 396 or GES 411</td>
</tr>
<tr>
<td>6.0</td>
<td>GEOL 400AC (or GEOL 400AA and 400AB), or GES 499AC (or GES 499AA and 499AB)</td>
<td>6.0</td>
<td>GEOL 400AC (or GEOL 400AA and 400AB), or GES 499AC (or GES 499AA and 499AB)</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 413 or higher; or GES 409 or higher</td>
<td>3.0</td>
<td>GEOL 413 or higher; or GES 409 or higher</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 429 or GES 429</td>
<td>3.0</td>
<td>GEOL 460</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 460</td>
<td>3.0</td>
<td>GES 121</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 121</td>
<td>3.0</td>
<td>GES 203</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 203</td>
<td>3.0</td>
<td>GES 323</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 207</td>
<td>3.0</td>
<td>GES 327</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 327</td>
<td>3.0</td>
<td>CHEM 104</td>
</tr>
<tr>
<td>3.0</td>
<td>CHEM 104</td>
<td>3.0</td>
<td>CHEM 105</td>
</tr>
<tr>
<td>3.0</td>
<td>CHEM 105</td>
<td>3.0</td>
<td>MATH 110</td>
</tr>
<tr>
<td>3.0</td>
<td>CS 110</td>
<td>3.0</td>
<td>PHYS 109 and 119 or PHYS 111 and 112</td>
</tr>
<tr>
<td>3.0</td>
<td>STAT 100 or 160</td>
<td>3.0</td>
<td>STAT 100 or 160</td>
</tr>
<tr>
<td>3.0</td>
<td>MATH 110</td>
<td>3.0</td>
<td>BIOL 100 or 101</td>
</tr>
<tr>
<td>3.0</td>
<td>PHYS 109 and 119 or PHYS 111 and 112</td>
<td>3.0</td>
<td>One Science elective (APEGS approved)</td>
</tr>
<tr>
<td>3.0</td>
<td>STAT 100 or 160</td>
<td>3.0</td>
<td>One of: INDG 100, 104, 200, 201, 236, ENVS 100, 200, ANTH 241AK, GES 344, 396AI, BIOL 200, RLST 290AN, ADMN 436AM or other course with core indigenous component.</td>
</tr>
<tr>
<td>3.0</td>
<td>BIOL 100 or 101</td>
<td>96.0</td>
<td>Subtotal: Major Requirements 75.00% Major GPA required</td>
</tr>
<tr>
<td>96.0</td>
<td>Subtotal: Major Requirements 75.00% Major GPA required</td>
<td>3.0</td>
<td>ENGL 100</td>
</tr>
<tr>
<td>3.0</td>
<td>ENGL 100</td>
<td>3.0</td>
<td>ENGL 110</td>
</tr>
<tr>
<td>3.0</td>
<td>ENGL 110</td>
<td>12.0</td>
<td>Four Arts, La Cité, or Media, Art, and Performance electives</td>
</tr>
<tr>
<td>12.0</td>
<td>Four Arts, La Cité, or Media, Art, and Performance electives</td>
<td>3.0</td>
<td>One Science elective</td>
</tr>
<tr>
<td>3.0</td>
<td>One Science elective</td>
<td>3.0</td>
<td>One Open elective</td>
</tr>
<tr>
<td>3.0</td>
<td>One Open elective</td>
<td>120.0</td>
<td>Total: 70.00% Program GPA required</td>
</tr>
</tbody>
</table>

**In order to qualify for APEGS registration, these three courses must be APEGS accepted.**

### PROPOSED

<table>
<thead>
<tr>
<th>3.0</th>
<th>GEOL 211</th>
<th>3.0</th>
<th>GEOL 211</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GEOL 240</td>
<td>3.0</td>
<td>GEOL 240</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 241</td>
<td>3.0</td>
<td>GEOL 241, GEOL 270, or GES 207</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 307 or BIOL 456</td>
<td>3.0</td>
<td>GEOL 307 or BIOL 456</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 314</td>
<td>3.0</td>
<td>GEOL 314</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 329 or GES 329</td>
<td>3.0</td>
<td>GEOL 329 or GES 329</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 353</td>
<td>3.0</td>
<td>GEOL 353</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 396 or GES 411</td>
<td>3.0</td>
<td>GEOL 396 or GES 411</td>
</tr>
<tr>
<td>6.0</td>
<td>GEOL 400AC (or GEOL 400AA and 400AB), or GES 499AC (or GES 499AA and 499AB)</td>
<td>6.0</td>
<td>GEOL 400AC (or GEOL 400AA and 400AB), or GES 499AC (or GES 499AA and 499AB)</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 413 or higher; or GES 409 or higher</td>
<td>3.0</td>
<td>GEOL 413 or higher; or GES 409 or higher</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 429 or GES 429</td>
<td>3.0</td>
<td>GEOL 460</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOL 460</td>
<td>3.0</td>
<td>GES 121</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 121</td>
<td>3.0</td>
<td>GES 203</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 203</td>
<td>3.0</td>
<td>GES 323</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 207</td>
<td>3.0</td>
<td>GES 327</td>
</tr>
<tr>
<td>3.0</td>
<td>GES 327</td>
<td>3.0</td>
<td>CHEM 104</td>
</tr>
<tr>
<td>3.0</td>
<td>CHEM 104</td>
<td>3.0</td>
<td>CHEM 105</td>
</tr>
<tr>
<td>3.0</td>
<td>CHEM 105</td>
<td>3.0</td>
<td>MATH 110</td>
</tr>
<tr>
<td>3.0</td>
<td>CS 110</td>
<td>3.0</td>
<td>PHYS 109 and 119 or PHYS 111 and 112</td>
</tr>
<tr>
<td>3.0</td>
<td>STAT 100 or 160</td>
<td>3.0</td>
<td>STAT 100 or 160</td>
</tr>
<tr>
<td>3.0</td>
<td>MATH 110</td>
<td>3.0</td>
<td>BIOL 100 or 101</td>
</tr>
<tr>
<td>3.0</td>
<td>PHYS 109 and 119 or PHYS 111 and 112</td>
<td>3.0</td>
<td>One Science elective (APEGS approved)</td>
</tr>
<tr>
<td>3.0</td>
<td>STAT 100 or 160</td>
<td>3.0</td>
<td>One of: INDG 100, 104, 200, 201, 236, ENVS 100, 200, ANTH 241AK, GES 344, 396AI, BIOL 200, RLST 290AN, ADMN 436AM or other course with core indigenous component.</td>
</tr>
<tr>
<td>3.0</td>
<td>BIOL 100 or 101</td>
<td>96.0</td>
<td>Subtotal: Major Requirements 75.00% Major GPA required</td>
</tr>
<tr>
<td>96.0</td>
<td>Subtotal: Major Requirements 75.00% Major GPA required</td>
<td>3.0</td>
<td>ENGL 100</td>
</tr>
<tr>
<td>3.0</td>
<td>ENGL 100</td>
<td>3.0</td>
<td>ENGL 110</td>
</tr>
<tr>
<td>3.0</td>
<td>ENGL 110</td>
<td>12.0</td>
<td>Four Arts, La Cité, or Media, Art, and Performance electives</td>
</tr>
<tr>
<td>12.0</td>
<td>Four Arts, La Cité, or Media, Art, and Performance electives</td>
<td>3.0</td>
<td>One Science elective</td>
</tr>
<tr>
<td>3.0</td>
<td>One Science elective</td>
<td>3.0</td>
<td>One Open elective</td>
</tr>
<tr>
<td>3.0</td>
<td>One Open elective</td>
<td>120.0</td>
<td>Total: 70.00% Program GPA required</td>
</tr>
</tbody>
</table>

*In order to qualify for APEGS registration, these three courses must be APEGS accepted.*
Rationale:

As a result of the hiring of two new faculty members in the area of environmental geology and the retiring of a faculty member teaching few classes in this program, and the new University Strategic Plan, the curriculum committee revised the courses and the structure of the program. Items (a) through (e) are made to increase the course options within the different streams, Item (f) is to ensure the program is APEGs compatible, and item (g) is to comply with the new strategic plan.

(End of Motion)