

### **NOTICE OF MEETING**

# There will be a meeting of the PROGRAM DEVELOPMENT COMMITTEE (PDC) Wednesday May 14, 2025 9:00-11:00am Location: Room 209 Assumption Hall or MS Teams AGENDA

1 **Approval of Agenda** 2 Minutes of April 17, 2025 PDC250417M 3 **Business Arising from the Minutes** 4 **Outstanding Business** 5 **Reports/New Business Chemistry and Biochemistry – Major Program Changes (Form B)** Nick Vukotic-Approval (Co-op Stream) PDC250514-5.1 5.2 Chemistry and Biochemistry – New Course Proposals (Form D) Nick Vukotic-Approval PDC250514-5.2 (Co-op Stream) \*5.3 Chemistry and Biochemistry – New Course Proposal Sirinart Ananvoranich-Approval (Form D) PDC250514-5.3 \*5.4 Biomedical Science – New Course Proposal (Form D) Isabelle Barrette Ng-Approval PDC250514-5.4 \*5.5 Political Science - New Course Proposals (Form D) **Lydia Miljan -**Approval PDC250514-5.5 \*5.6 **Computer Science (Graduate) Minor Program Changes (Form C)** Ziad Kobti-Approval PDC250514-5.6 \*5.7 Mathematics and Statistics – Minor Program Changes (Form C) **Abdulkadir Hussein-**Approval PDC250514-5.7 \*5.8 Physics – Minor Program Change (Form C) Steven Rehse-Approval PDC250514-5.8 \*5.9 Political Science – Minor Program Changes (Form C) **Lydia Miljan -**Approval PDC250514-5.9 \*5.10 Psychology (Graduate) – Minor Program Changes (Form E) Patti Fritz-Approval PDC250514-5.10 \*5.11 Science – Minor Program Changes (Form C) Claudio Verani-Approval PDC250514-5.11

*5.12	Social Work – Minor Program Changes (Form C)	Kristina Nikolova-Approval PDC250514-5.12
*5.13	Master or Applied Economics and Policy (MEAP) - Minor Program Change (Form C)	Sang-Chul Suh-Approval PDC250514-5.13
*5.14	Graduate Program Regulations - Minor Program Changes (Form C)	Patti Weir-Approval PDC250514-5.14
*5.15	Computer Science - Summary of Minor Course and Calendar Changes (Form E)	<b>Ziad Kobti</b> -Information PDC250514-5.15
*5.16	Economics - Summary of Minor Course and Calendar Changes (Form E)	<b>Nurlan Turdaliev-</b> Information PDC250514-5.16
*5.17	English - Summary of Minor Course and Calendar Changes (Form E)	Joanna Luft-Information PDC250514-5.17
*5.18	Engineering - Summary of Minor Course and Calendar Changes (Form E)	<b>Bill Van Heyst-</b> Information PDC250514-5.18
*5.19	Mathematics and Statistics – Summary of Minor Course and Calendar Changes (Form E)	<b>Abdulkadir Hussein</b> -Information PDC250514-5.19
*5.20	MAME- – Summary of Minor Course and Calendar Changes (Form E)	Bruce Minaker-Information PDC250514-5.20
*5.21	Physics- Summary of Minor Course and Calendar Changes (Form E)	Steven Rehse -Information PDC250514-5.21
*5.22	Political Science – Summary of Minor Course and Calendar Changes (Form E)	<b>Lydia Miljan-</b> Information PDC250514-5.22
*5.23	General Science – Program Learning Outcomes	Claudio Verani -Information PDC250514-5.23
*5.24	Visual Arts – Summary of Minor Course and Calendar Changes (Form E)	Bruce Kotowich - Information PDC250514-5.24
*5.25	Visual Arts – Minor Program Changes (Form C)	<b>Bruce Kotowich -</b> Approval PDC250514-5.25
5.26	Concurrent Bachelor of Education – Major Program Changes (Form B)	Ken Montgomery - Approval PDC250514-5.26

### 6 Other Business

### 7 Adjournment

Please carefully review the 'starred' (\*) agenda items. As per the June 3, 2004 Senate meeting, 'starred' item will not be discussed during a scheduled meeting unless a member specifically requests that a 'starred' agenda item be 'unstarred', and therefore open for discussion/debate. This can be done any time before (by forwarding the request to the secretary) or during the meeting. By the end of the meeting, agenda items which remain 'starred' (\*) will be deemed approved or received.

### University of Windsor Program Development Committee

5.1: Chemistry and Biochemistry – Major Program Changes (Form B)

Item for: Approval

Forwarded by: Faculty of Science

MOTION 1: That the Bachelor of Science Honours Chemistry, Bachelor of Science Honours Chemistry with thesis, Bachelor of Science Honours Biochemistry, Bachelor of Science Honours Biochemistry (Pharmacy Stream) and Bachelor of Science Honours Biochemistry (Pharmacy Stream) with thesis major program changes be approved. ^

MOTION 2: That the intership option be removed from the Combined Honours Chemistry and Combined Honours Biochemistry Programs.^

*^Subject to approval of the expenditures required.* 

### Rationale/Approvals:

- This proposal has been approved by the by the Department of Chemistry and Biochemistry Council, and Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council) and the Provost (February 11, 2025).
- Currently, the Bachelor of Science Honours Chemistry, Bachelor of Science Honours Chemistry with thesis, Bachelor of Science Honours Biochemistry, Bachelor of Science Honours Biochemistry with thesis, Bachelor of Science Honours Biochemistry (Pharmacy Stream), Bachelor of Science Honours Biochemistry (Pharmacy Stream) with thesis programs have an internship option which will be changed to a Co-op.
- In 2018, an internship option was added to all undergraduate programs in chemistry and biochemistry. However, the intent was not to extend this to combined programs and no students in combined programs have ever applied for this option.
- See attached.

### A. Basic Program Information

Faculty(ies)	Faculty of Science
Department(s)/School(s)	Chemistry and Biochemistry
Name of Program as it Will Appear on the Diploma (e.g., Bachelor of Arts Honours Psychology with thesis)	Honours Chemistry (with Co-op) Honours Chemistry with Thesis (with Co-op) Honours Biochemistry (with Co-op) Honours Biochemistry with Thesis (with Co-op) Honours Biochemistry (Pharmacy Stream) (with Co-op) Honours Biochemistry (Pharmacy Stream) with Thesis (with Co-op)
<b>Proposed Year of Offering*</b> [Fall, Winter, Spring]: *(subject to timely and clear submission)	
Mode of Delivery:	Field learning via work placements
Planned steady-state Student Enrolment (per section B.4.2)	Entry of 36 students per year
Normal Duration for Completion:	4.5 years
Will the program run on a cost-recovery basis?	No

### B. Major Program Changes - Overall Plan

### B.1 Objectives of the Program/Summary of Proposal (QAF section 2.1.1; Ministry section 4)

Please provide a rationale for the proposed change, including a brief statement about the direction, relevance and importance of the revised program. Describe the overall aim and intended impact of the revised program. Describe the consistency of the revised program with the institution's mission, goals and objectives as defined in its strategic plan. (to view the strategic plan go to: www.uwindsor.ca/president)

The Honours program with Co-op is intended to give students an opportunity to get hands-on experience in a real work environment. In collaboration with the Co-operative Education and Workplace Partnerships office, we will provide students with Chemistry and Biochemistry related work placements for 12 months. In keeping with the priorities of the University of Windsor strategic plan we have designed this stream to ensure an exceptional and supportive undergraduate experience that emphasizes independent learning, interdisciplinary opportunities, flexibility in degree completion pathways, and successful integration to the job market after graduation.

The changes and rational for this program changes includes the following:

- 1. Change in the work/study sequencing the change in the sequencing will allow for the previous internship program to qualify as a co-op program.
- 2. It will also reduce the overall time of the current internship programs to 4.5 years instead of 5 years as previously required.
- Students can alter their work/study sequencing and accept a 12-month or 16-month placement beginning in summer following 3<sup>rd</sup> year. Note, this would be an exception rather than the standard sequencing of the program.

### Intership Study Sequencing (5 years)

Year	Fall	Winter	Summer
1	Study	Study	Off
2	Study	Study	Off
3	Study	Study	Work term 1
4	Work term 2	Work term 3	Work/Off
5	Study	Study	

### Co-op Work/Study Sequencing (4.5 years)

Year	Fall	Winter	Summer
1	Study	Study	Off
2	Study	Study	Off
3	Study	Study	Work term 1
4	Work term 2*	Study	Work term 3
5	Study		

<sup>\*</sup>Work Term 1 and Work Term 2 must be completed as an 8-month continuous placement with the same employer. These terms cannot be split between two different employers.

The program will now have two points of admission:

- Direct admission to the Co-op streams through OUAC. Students can be registered for Co-op directly out of high school (or equivalent), but active participation will begin in fall of year 3. Only offered for fall intake, transfer students along with others can apply in fall of 3rd year.
- 2. Continue offering admission at the beginning of 3rd year for students not already enrolled.

Accordingly, the impetus for developing this program had been identified at the highest level of administration at the University of Windsor. Along with our existing undergraduate programs and streams in Biology, Chemistry and Biochemistry, we will continue to provide an exceptional undergraduate experience in the sciences. The proposed Honours program with Co-op builds on the unique connections of our department with industry allowing students to develop job readiness skills, test drive an occupation and/or organization and thereby expanding their natural network within Windsor/Essex, nationally or globally.

### **B.2** Changes to Program Content (QAF Section 2.1.4)

Evidence that the revised curriculum is consistent with the current state of the discipline or area of study.

The proposed curriculum combines the current curriculum in Chemistry and Biochemistry but also introduces a flexible work placement of 12-16 months of co-op work terms. The placement year will be integrated between the third and fourth year of Honours Chemistry and Biochemistry degrees. Therefore, it allows students to complete their first three years of degree while developing soft skills that are crucial for being successful in the job market. Additionally, the faculty in Chemistry and Biochemistry will work closely with the Co-op and Workplace Partnerships team to vet potential work placements to ensure the work integrated learning opportunity is relevant and meaningful to the field. The specific changes are outlined in section B.1

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### B.2.1 Unique or Innovative Curriculum, Program Delivery, or Assessment Practices (QAF Section 2.1.4)

State the unique or innovative curriculum, program delivery, or assessment practices distinguishing the revised program from existing programs elsewhere.

The changes made to the program offer increased flexibility in comparison to other co-op programs at Ontario based institutions. All Co-op students will participate in a mandatory job-readiness program (non-credit) offered by the Office of Co- operative Education and Workplace Partnerships. "Transform –Job Marketability Strategies and Techniques" is a modular job readiness program that prepares students to compete in the co-op job competition while also building skills and competencies students will use in their post-graduate job search and for future employment.

**Transform: Job Marketability Strategies and Techniques** is a mandatory, non-credit course that co-op and internship students must successfully complete to be eligible to remain in the co-op program. This course will provide students with essential job readiness skills to be successful in the job competition and provides information regarding co-op specific policies and procedures. The emphasis of this course is to provide students with the tools necessary to create targeted, relevant resumes and cover letters, as well as to guide students with reference list creation and interview preparation.

As part of this course, students will be able to:

- Identify co-op/internship requirements and expectations.
- Understand strategies involved in a job search, including writing a targeted resume and cover letter.
- Deconstruct a job posting.
- Reflect on skills, abilities and experiences that demonstrate personal brand.
- Create a reference list.
- Apply interview preparation techniques.
- Market oneself to the position and organization targeted.
- Recognize the importance of professional and non-verbal communication in the interview process.
- Understand the health and safety rights and responsibilities in the workplace (Ontario).

### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In <u>developing this new course</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum? Please consider these prompt questions and <u>additional Resources</u> including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- **How** have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the <u>TRC</u> and <u>University Principles</u> documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?
- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?

• Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

The Office of Experiential Learning and Co-operative Education and Workplace Partnership, and the Chemistry and Biochemistry Department within the Faculty of Science have collaborated to reflect on Indigenous (First Nations, Métis, or Inuit) considerations related to the proposed Chemistry and Biochemistry co-op program. In this section, we describe the steps we have undertaken and will take in the future. We recognize that this is an ongoing iterative process and are committed to continuing to reflect on Indigenous considerations into the foreseeable future.

### The Office of Experiential and Learning and the Co-operative Education and Workplace Partnership:

The Office of Experiential Learning and the Co-operative Education and Workplace Partnership office recognize the importance of Indigenizing and decolonizing experiential and work-integrated learning opportunities and improving access for Indigenous learners at the University of Windsor. Co-op education falls at the intersections of several of the Truth and Reconciliation Commission (TRC) of Canada's calls to action which cover education and employment, including:

#7. We call upon the federal government to develop with Aboriginal groups a joint strategy to eliminate educational and employment gaps between Aboriginal and non-Aboriginal Canadians;

#10. i. Improving education attainment levels and success rates;

iii. Developing culturally appropriate curricula;

#63. iii. Building student capacity for intercultural understanding, empathy, and mutual respect;

#92. ii. Ensure that Aboriginal peoples have equitable access to jobs, training, and education; opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects;

iii. Provide education for management and staff on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal—Crown relations. This will require skills based training in intercultural competency, conflict resolution, human rights, and anti-racism.

Our Co-operative Education and Workplace Partnerships office is at the beginning of its journey to have staff, students and employers embrace the necessary learning and unlearning to ensure inclusive partnerships with Indigenous communities and our Indigenous students, to work towards reconciliation, and efforts toward decolonization. Our office and staff recognize the importance of this work and want to do it properly, follow protocols and be respectful. In reading the TRC document, we recognize that to address the Calls to Action, we need to promote inclusivity and cultural sensitivity in our co-op program. Working closely with the University of Windsor's Office of the Vice-President, Equity, Diversity and Inclusion, we have examined ways we can support staff's understanding of colonization and white settler privilege, taking responsibility for confronting colonization, racism and oppressive practices with the outcome being to learn how to become an anti-racist practitioner. On June 16, 2022, Marium Tolson-Murtty conducted Becoming an Anti- Racist Practitioner for our staff. Prior to that, our Work-Integrated Learning Coordinators, who work directly with our co-op students, took part in an inclusive learning design workshop on December 7, 2021, put on by Sania Hameed and Atifa Karim from the University of Toronto to help staff better understand how to design, develop and deliver co-op curriculum that is inclusive of all students. The Manager of the department took part in an engaging live session on Indigenization in the postsecondary education sector as part of the Senior Administrator's University Course through the University of Manitoba on October 26, 2022. The session had Indigenous speakers from universities across Canada speak on the topic of Indigenization, including Dr. Sheila Cote-Meek from York University, Dr. Chris Anderson from the University of Alberta, Amanda Myran, formerly of the University of New Brunswick and Dr. Robin Thomas from the University of Victoria. In taking these workshops, we realize we need to further self-educate. We are at the exposure stage of our learning journey, and we are listening to diverse perspectives and gathering resources. In April 2023, the office reached out to its colleagues across Ontario and Canada in other co-op post-secondary institutions to better understand any specific best practices and learn of resources and successful services offered for Indigenous students at their respective institutions.

In searching for resources and supports, we discovered the BC/Yukon chapter of the Association of Co-operative

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Education and Work-Integrated Learning (ACE-WIL) which has been identified as having a much more advanced model of how to incorporate an Indigenous lens in our co-op program. Their <u>Indigenous Resource Hub</u> has resources we can adapt, collaboratively and with permission, for our use on self-identifying, strategies and recommendations for access, retention and success in co-operative education and even strategies for recognizing and addressing tokenism in the hiring process. ACE-WIL recommends supporting Indigenous co-op students and employers by working to:

- 1. Create meaningful relationships with Indigenous communities and organizations: ACE-WIL recommends that co-op employers and educational institutions establish relationships with Indigenous communities and organizations to learn about their culture, history, and values, and to develop meaningful partnerships that will benefit both parties.
- 2. Develop culturally responsive programming: ACE-WIL suggests that co-op programs and employers develop culturally responsive programming that takes into account the unique needs and experiences of Indigenous students. This can include providing support for Indigenous students during their co-op placements, such as connecting them with Indigenous mentors, providing cultural training and awareness sessions, and offering resources for mental health and wellness. Prioritize Indigenous inclusion and representation: ACE-WIL recommends that co-op programs and employers prioritize Indigenous inclusion and representation by actively recruiting Indigenous students, creating Indigenous-specific co-op positions, and prioritizing Indigenous applicants in hiring processes.
- 3. Provide ongoing support and mentorship: ACE-WIL suggests that co-op programs and employers provide ongoing support and mentorship for Indigenous co-op students, including creating safe and supportive work environments, providing ongoing feedback and communication, and connecting students with mentors who have similar cultural backgrounds and experiences.
- 4. Continuously evaluate and improve Indigenous engagement strategies: ACE-WIL recommends that co-op programs and employers continuously evaluate and improve their Indigenous engagement strategies by gathering feedback from Indigenous students, tracking their success in the program, and adapting their programming to better meet the needs of Indigenous students and employers.

Over the course of 2025, our office will continue to develop our pool of resources and knowledge of how we can reach out to more Indigenous students to engage them in co-op and assemble these resources to be shared with students by 2026.

The Co-op program in the department of Chemistry and Biochemistry will support TRC recommendations which apply to education and employment. Looking at the TRC document, the 92<sup>nd</sup> Call to Action stands out as a way our Co-op Office can work towards reconciliation. We can respond by ensuring equitable access to training opportunities and employment advancement. Through our learning, we want to be able to recognize the right employers for our Indigenous students who have embraced Indigenous ways of knowing and who will empower our students and be supportive of them and seek out opportunities within Indigenous communities and workplaces. It is also a realistic goal for us to educate staff on Indigenous histories, including treaties and residential schools as well as having a solid understanding of the territory on which our building sits as we strive to build a strong enough understanding so we can work toward a genuine land acknowledgement.

As well, co-op presents an important opportunity to engage Indigenous-owned and led businesses in the local Windsor- Essex community and beyond (there are 17,417 private businesses with majority ownership by First Nations people, Métis or Inuit across Canada). Where co-op placements are with Indigenous-owned and led businesses, there may be additional benefits for Indigenous students in the form of:

- 1. Culturally Relevant Learning: Co-op can provide a culturally relevant approach to learning, which is important for Indigenous students. Indigenous students can learn more effectively when their cultural heritage and traditions are included in the learning process.
- 2. Personal Growth: Co-op can also support the personal growth and development of Indigenous students, by providing opportunities for them to develop their self-confidence, leadership skills, and social skills.
- 3. Community Connection: Co-op can help Indigenous students to connect with their communities and to

develop a sense of belonging. By working on projects that are meaningful to their communities, students can feel a sense of pride and ownership in their work.

A reported 30% of Indigenous majority-owned businesses reported labour shortages and (6.5%) planned to expand the current location of their business or organization in the next 12 months (see: <a href="StatsCan">StatsCan</a>). Indigenous students will be prioritized for placements at Indigenous-focused organizations and businesses, but we anticipate some will offer opportunities for non-Indigenous students to promote cross-cultural learning and exchange (this will be negotiated on a case-by-case basis).

The process that the proposed co-op program expansion will contribute to Indigenization and decolonization efforts will have 3 phases. The first phase will continue to be exploratory with helping staff gain more knowledge and gathering resources and best practices. We acknowledge we have gaps and will use this time to be intentional about how to advance in this area. This will continue throughout 2025. In 2025-2026, as part of phase 2 these resources will be made available to our students and our staff. Staff will become more comfortable accessing and using resources and be more knowledgeable in conversations with students seeking information about Indigenous opportunities. After 2026 we will expand into having employer resources to help understand and expand their knowledge of Indigenous ways of knowing and best practices in hiring and determining if there is a need for dedicated resources to ensure we are able to maintain the momentum. Our long-term strategy is to achieve the following:

- 1. Establish partnerships with Indigenous communities: The Co-op Office will establish partnerships with Indigenous communities to ensure that co-operative education programs are designed in a culturally sensitive manner that respects Indigenous perspectives and values.
- 2. Increase outreach and recruitment efforts: The Co-op Office will increase outreach and recruitment efforts targeted toward Indigenous students to ensure that they are aware of the co-operative education opportunities available to them.
- 3. Provide mentorship and support: The Co-op Office will provide mentorship and support to Indigenous students participating in Co-operative education programs. This will include access to Indigenous student advisors, peer support programs, and mentorship programs with Indigenous professionals.
- 4. Create targeted scholarships and bursaries: The Co-op Office will create targeted scholarships and bursaries for Indigenous students participating in co-operative education programs. This can help ease the financial burden on Indigenous students and provide them with the opportunity to participate in co-operative education programs.
- 5. Integrate Indigenous perspectives into co-operative education programs: The Co-op Office will integrate Indigenous perspectives into co-operative education programs to ensure that Indigenous students feel valued and supported. This can be achieved through initiatives such as the inclusion of Indigenous speakers, Indigenous case studies, and the incorporation of Indigenous knowledge and practices into course curricula.
- 6. Review and revise policies: The Co-op Office will review and revise its policies and practices to ensure that they are inclusive and equitable, and that they do not create barriers for Indigenous students to access co-op education.
- 7. Offer cultural support: The Co-op Office will offer cultural support to Indigenous students, such as access to Indigenous student services and resources, as well as opportunities to connect with other Indigenous students and mentors.

We recognize that co-op fees alone represent a considerable cost for many students. Our office consistently explores funding opportunities to support both students and employers. One such opportunity is the Indigenous Co-operative Internship program funded by Indigenous Services Canada, which provides funding to support Indigenous students enrolled in co-op programs. Additionally, some businesses have programs specifically designed for Indigenous co-op students (e.g., RBC National Indigenous Student Internship Program). We are committed to supporting students in accessing these opportunities and any others that may alleviate financial barriers.

### The Department of Chemistry and Biochemistry

The Inclusion of Indigenous content, perspectives, and material is an ongoing and evolving exercise integrally involving the department leadership.

The Department of Chemistry and Biochemistry, in partnership with the members of the University's AEC, will cyclically review its programs to identify aspects of various courses which have direct application or relevance to the Indigenous communities. The Faculty of Science has recently welcomed Professor Clint Jacobs, a recognized Indigenous Knowledge Holder as an expert in Indigenous-centred relationships to develop community-based initiatives in research, teaching and capacity development. As for faculty participation in this process, some faculty members along with Dr. Kenneth Ng and Dr. Phil Dutton (Associate Dean of Science) have taken the 'Pulling Together-Foundations series' taught by Jaimie Kechego which which was about, the role of colonization and how it continues to affect the Indigenous Peoples of Canada and defines the relationship between indigenous and non-indigenous people today. Dr. Phil Dutton (Associate Dean of Science) is also a co-PI on a grant that is focused on studying the Indigenization of curriculum across the Faculty of Science. We strongly encourage our faculty to engage in these types of initiatives/courses/workshops to better incorporate indigenous ways of knowing into their courses.

Faculty members within the department have been involved in these workshops and have started discussions with Jaimie Kechego. Our discussion will continue and be expanded to assist with the development of a database of Indigenous chemistry/biochemistry content as a resource for internal and external instructors. Furthermore, individual instructors within the Department of Chemistry and Biochemistry have reviewed course materials and identified areas where Indigenous content can be integrated to provide a holistic perspective of a topic. Concrete steps have already been taken for courses within the proposed program. For example, BIOC-3030, Natural Health Products and Their Mechanisms of Actions, now includes as part of its learning outcomes: Appraise the value of cultural knowledges from different traditions including First Nation's, and Ayurvedic practices and Discuss and relate the knowledge of traditional medicine of Canada's First Peoples.

Finally, leadership within the Department is engaged at the national research level. For example, our previous head of department, Professor Drew Marquardt leads a national co-organization which is organizing a research panel with CIFAR with speaker Bob Watts (Nuclear Waste Management Organization) – "Building Expertise through Inclusion: EDI and Indigenous Issues". Although this is not directly related to teaching, the subject matter helps further build knowledge and awareness of Indigenous issues.

Strategies we are working towards for Indigenizing Chemistry and Biochemistry Curriculum.

- 1. Incorporate Indigenous Knowledge in Course Content
  - Example: Materials/Medicinal Chemistry and Biochemistry: Introduce traditional Indigenous materials/ pigments/medicines and their chemical compounds (e.g., alkaloids, tannins, flavonoids, dyes, etc.).
- 2. Guest Lectures and Workshops
  - Invite Indigenous Knowledge Holders with a background in chemistry/biochemistry to lecture on scientific topics relevant to indigenous practices/community
- 3. Research Opportunities
  - Encourage research projects that align with Indigenous priorities, such as water purification methods or bio-based materials.
- 4. Curriculum Review and Development
  - Review current syllabi to identify opportunities to integrate Indigenous perspectives.
  - Partner with Indigenous advisors to ensure authentic and meaningful inclusion of Indigenous knowledge in chemistry courses.
- 5. Field-Based Learning
  - Look for chemistry and biochemistry related fieldwork opportunities where students can learn from or support Indigenous communities.
- 6. Support for Indigenous Students
  - Provide scholarships and research opportunities tailored to Indigenous issues or projects.

### 7. Faculty Training

- Encourage faculty participation in workshops and courses on Indiginziation to understand colonization's impact and Indigenous ways of knowing.
- 8. Evaluation and Feedback Mechanisms
  - Establish advisory committees including Indigenous Knowledge Holders
  - Gather feedback from students and Indigenous partners on to evaluate curriculum effectiveness and suggest improvements.

Although we are proud of the work currently in progress, we realize that there is much more to do, and we are committed to learning, unlearning and re-learning. We are committing to increasing our knowledge and understanding of the importance of Indigenizing all Chemistry and Biochemistry curriculum. Through this journey, we will identify Indigenous material and perspectives that are particularly relevant to our students and will expand on this question in future forms with our intents and actions.

### B.3 Changes to Program Name and Degree Designation/Nomenclature (QAF Section 2.1.1; Ministry section 1)

Explanation of the appropriateness of the proposed new name and degree designation for the program content and current usage in the discipline

Honours Chemistry and Biochemistry, with Co-op clearly put the emphasis on the work-integrated learning component and differentiate the stream with the other current possibilities in Honours Chemistry and Biochemistry'.

### **B.4 DEMAND FOR THE MODIFIED PROGRAM**

### B.4.1 Expected Impact of the Proposed Changes to Student and Market Demand

Describe the tools and methodology used to conduct the market assessment in support of the proposed program revisions. Provide Quantitative evidence of student and market demand for the revisions to the program, both within and outside the local region (e.g., responses/statistics from surveys, etc.).

Based on our experience with student requests for specific types of programs, the student demand for co-op and internship programs has been increasing over the past decade, primarily relating to student objectives of getting hands-on industrial experience and be more competitive for the job market upon graduation. We have seen a doubling of student registration in biology and biochemistry programs over the last decade, which is a significant indication of demand in these areas. We also believe offering a 4.5 year co-op program as a standard will be an attractive option for students, leading to increased enrolment, while still allowing for flexibility of students and employers with a 5 year option. Moreover, we've seen many new start-up companies appear in Canada with expertise in biochemical and chemical sciences. Having a complete year of placement in industry will, undoubtedly, increase the competitively of our students after graduation and raise the profile of our programs and institution.

Finally, at recruitment events (e.g., the Ontario University Fair, University of Windsor Open House), inquiries from potential students and parents regarding internship and co-op programs are booming. After several discussions with local and provincial industries, the interest from the industry in such program is also increasing.

### **B.4.1.1 Percentage of Domestic and International Students (Ministry section 5)**

Expected proportion (percentage) of domestic and international students. For graduate programs, identification of undergraduate or master's programs from which students would likely be drawn.

Chemistry/BioChem FTE enrolment for F2016 was 149 Domestic and 7 International. This ratio of 20:1 will likely not alter with the addition of the co-op.

### B.4.2 Estimated Enrolments (QAF section 2.1.9; Ministry section 5; Senate Co-op Policy)

Provide details on projected enrolments for the revised program in the following tables. For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning component.

Projected enrolment levels for the	First	Second	Third Year	Fourth Year	Fifth Year of
first five years of operation of the	Year of	Year of	of	of	Operation
revised program.	Operati	Operation	Operation	Operation	(Steady-state
(If the program is in operation, use actual and projected data.)	on				enrolment overall)
In the regular program (non-co-op)	XX	XX	XX	XX	XX
In the co-op/experiential learning stream (if applicable)	20	24	28	32	36
For co-op options: projected number of international students enrolled in the co-op stream	1	1	1	1	2

Annual projected student intake into the first year of the revised program:	20
(this may differ from the "first year of operation" projected enrolments which could include anticipated	
enrolments from students transferring into the second, third, or fourth year of the program)	
Annual projected student intake into the first year of the co-op/experiential learning version of the	20
revised program: (this may differ from the "first year of operation" projected enrolments which could	
include anticipated enrolments from students transferring into the second, third, or fourth year of the	
program)	

### B.4.3 New Involvement in a Collaborative Program/Changes to Collaborative Program (QAF section 1.6)

If this is a new collaborative program with another college/university, or revision to a collaborative program, identify partners and institutional arrangements for reporting eligible enrolments for funding purposes.

N/A

### B.4.4 Evidence of Societal Need for the Revised Program (Ministry section 6)

Describe the tools and methodology used to assess societal need. Elaborate on the

- 1) dimensions of (e.g., socio-cultural, economic, scientific, or technological),
- 2) geographic scope of (e.g., local, regional, provincial, or national), and
- 3) anticipated duration of, and trends in,

societal need for graduates of the modified program

Provide evidence that the proposed program revisions respond to societal need for graduates of the revised program and/or changes in the field, including sources of data and expert input or feedback collected to support this change in direction.

In 2015, the Premier's Highly Skilled Workforce Expert Panel was appointed to develop a strategy to help the province's current and future workforce adapt to the demands of a technology-driven knowledge economy. The panel identified expanding experiential learning opportunities is critical to success around skills development. Furthermore, they called upon Ontario post-secondary institutions to commit to strengthening and expanding experiential learning opportunities across their learning environments and committing to ensuring that every student has at least one by the time they graduate from post-secondary education.

Well-designed work-integrated learning programs benefits students, the university, and the host institution/employer and the community. Students benefit by gaining practical experience, skill/professional Page 10 of 38

development, networking, career exploration, enhanced transition into the workplace, future career success, personal growth and a greater awareness of self. Placement opportunities provide students with a unique learning environment to reinforce theory and concepts learnt within a traditional academic setting.

Employers benefit by gaining access to high-quality students for temporary employment, injection of new ideas and innovation, access to current theoretical knowledge and resources, development of employer's coaching and leadership skills while reinforcing prior education and training.

Co-operative education also strengthens and benefits the University by increasing community engagement, communication with government and industry, opportunities for curriculum enhancement with an applied content, enhanced student education, satisfaction and engagement, and enhanced student recruitment.

Finally, the worksite itself benefits from the inclusion of work-integrated learning by developing and maintaining a positive reputation, application of theoretical knowledge to the workplace, providing opportunities for evaluation, improved employee morale, and the ability to recruit strong 'work-ready' graduates.

### **B.4.5 Duplication** (Ministry section 7)

List similar programs offered by other institutions in the Ontario university system. Resources to identify similar programs offered in Ontario include <a href="www.electronicinfo.ca">www.electronicinfo.ca</a>, <a href="www.electronicinfo.ca/einfo.php">www.electronicinfo.ca/einfo.php</a>, and <a href="www.oraweb.aucc.ca/showdcu.html">www.oraweb.aucc.ca/showdcu.html</a>. Also, list similar programs in the geographically contiguous area, e.g., Michigan/Detroit.

From the comprehensive list below of University's within Ontario offering internship and co-op programs, not having an option for work-integrated learning within a BioChemistry or Chemistry program is a disadvantage when it comes to recruitment and likely satisfaction during the program and post-graduation.

- University of Waterloo BioChemistry and Chemistry Co-op
- University of Guelph Biochemistry
- Brock University BioChemistry and Chemistry Co-op
- McMaster University Chemistry Co-op
- University of Toronto Scarborough BioChemistry Co-op
- University of Toronto Biochemistry Summer Internship
- University of Ontario Institute of Technology Chemistry Co-op
- Ryerson University Chemistry Co-op
- Queen's University BioChemistry Internship and BioChemistry Co-op
- University of Ottawa BioChemistry and Chemistry Co-op

### B.4.5.1 Demonstrate that Societal Need and Student Demand Justify Duplication (Ministry section 7)

If the revised program is similar to others in the system, demonstrate that societal need and student demand justify the duplication. Identify innovative and distinguishing features of the revised program in comparison to similar programs.

A distinguishable feature of this new co-op compared to other more established co-op and/or internship programs in Ontario is that students will have three years of study completed, quickly adding more value to the employer in the way of a technical skill set and maturity whereas other programs student typically start out in a junior placement in the Summer of their second year.

### **B.5 RESOURCES**

[The resource impact of a proposal is almost never neutral. Note: Proposers must also complete and submit the attached **Budget Summary** (Appendix A) with the revised program proposal.]

### **B.5.1** Resources Available

### B.5.1.1 Available Faculty and Staff Resources (QAF sections 2.1.7, 2.1.8, 2.1.9 and 2.1.10)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the program change(s). Please do not name specific individuals in this section.

No additional Faculty resources are required. The Office of Co-operative Education and Work-place Partnerships will endeavor to assign opportunity development (i.e., finding new placements), program administration, and job-readiness utilizing existing staffing; however, their operating/budget model enables scalability as this and other work-integrated learning programs grow.

### **B.5.1.1a Faculty Members Involved in the Delivery of the Program**

Complete the following table listing faculty members in the AAU offering the program as well as faculty members from other AAUs who are core to the delivery of the revised program. Indicate in the table the involvement of each faculty member in the revised and existing program(s) offered by the AAU.

Faculty Name and Rank (alphabetical)	Graduate Faculty member (for graduate programs only)	Program Affiliation: indicate faculty affiliation to the EXISTING program(s)	Program Affiliation: indicate faculty affiliation to the REVISED program
Category 1: Tenured Professors teaching exclusively in the AAU offering the program			
Ananvoranich, Sirinart, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Carmichael, Tricia Breen, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Dutton, Philip, Associate Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Eichhorn, Holger, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Gauld, James, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Green, James, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Harroun, Scott, Assistant Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Johnson, Samuel, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Marquardt, Drew, Associate Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Mundle, Scott, Associate Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Ng, Kenneth, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Pandey, Siyaram, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry
Rawson, Jeremy, Professor		Chemistry & Biochemistry	Chemistry & Biochemistry

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Rondeau-Gagné, Simon, Associate Professor	Chemistry and Biochemistry	Chemistry and Biochemistry
Trant, John, Associate Professor	Chemistry & Biochemistry	Chemistry & Biochemistry
Tong, Yufeng, Associate Professor	Chemistry & Biochemistry	Chemistry & Biochemistry
Vacratsis, Panayotis, Professor	Chemistry & Biochemistry	Chemistry & Biochemistry
Vukotic, Nicholas, Assistant Professor	Chemistry & Biochemistry	Chemistry & Biochemistry
Wang, Jichang, Professor	Chemistry & Biochemistry	Chemistry & Biochemistry

### B.5.1.1b Faculty Expertise Available and Committed to Supporting the Revised Program

Assess faculty expertise available and actively committed to supporting the revised program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in the revised program, and of the appropriateness of this collective faculty expertise to contribute substantially to the revised program. Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/clinical expertise needed to:

- sustain the program
- promote innovation, and
- foster an appropriate intellectual climate.

The current faculty in Chemistry and Biochemistry covers multiple areas of expertise, from fundamental biochemistry to advanced materials and nanotechnology. The current faculty can not only support students in a wide variety of areas but also possess multiple existing collaboration with local and national companies, including Angstrom Engineering, Proto Mfg. Ltd., Brilliant Matters, Jamieson, Catalent and Polyanalytik. Furthermore, our department also recently got approached by local greenhouses and wineries to build up new partnerships. Therefore, the current faculty in Chemistry and Biochemistry possess all the resources required to sustain a co-op program and promote new interactions with companies, directly creating new opportunities for our students.

In addition, the Office of Co-operative Education and Workplace Partnerships has significant experience developing placement opportunities for students across a wide-range of disciplines, including: engineering, business, computer science, and physics. Utilizing a team of employer engagement and relationship specialists the office manages relationships with nearly 4,000 regional, domestic, and international organizations. Opportunity development will be led by the Co-operative Education and Workplace Partnerships and supported by the Department of Chemistry and Biochemistry (i.e., lead identification, determination of placement suitability, etc.).

### B.5.1.1c Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program.

No Adjunct, Limited-term, and/or Sessional Faculty will be required for the new program

### **B.5.1.1d Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY)**

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### B.5.1.1e Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

### B.5.1.1f Other Available Resources (Ministry sections 3 and 4)

Provide evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities, including for example: staff support, library, teaching and learning support, student support services, space, equipment, facilitie, GA/TA

Faculty and staff resources are already committed to the delivery of the current honours program. Expansion of the program with co-op would require additional resources that will be provided by the office for work-integrated learnings. The current faculty in Chemistry and Biochemistry will contribute to the program by serving as coordinator contact resources.

### B.5.1.2 Resource Implications for Other Campus Units (Ministry sections 3 and 4)

Describe the reliance of the proposed program revisions on existing resources from <u>other</u> campus units, including for example: existing courses, equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources.

Provide relevant details.

N/A

### B.5.1.3 Anticipated New Resources (QAF sections 2.1.7, 2.1.8 and 2.1.9; Ministry section 4)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

### B.5.1.4 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

### B.5.1.5 Additional Resources Required – Resources Requested (QAF section 2.1.7 and 2.1.9)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program.

Current faculty & staff resources can support the anticipated increases in student numbers.

### B.5.1.5b Additional Institutional Resources and Services Required by all Affected Areas or Departments

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance.

Library Resources and Services:	None
Teaching and Learning Support:	None
Student Support Services:	None
Space and Facilities:	None
Equipment (and Maintenance):	None

### C. Program Details

### C.1 Admission Requirements (QAF section 2.1.2)

Describe new or changes to

- program-specific admission requirements,
- selection criteria,
- credit transfer,
- arrangements for exemptions or special entry, and
- alternative admission requirements, if any, for admission into the program, such as minimum average, additional language requirements or portfolios, recognition of prior work or learning experience (and how this will be assessed), etc.

Students may apply for the optional Co-op program either in the fall of 3<sup>rd</sup> year of study or when applying for admission to the university. Students applying through OUAC directly out of their grade 12 (or equivalent) year will be admitted based on academic achievement. Incoming students will have the option of choosing to participate in the degree programs with and without co-op. The co-op stream will have a higher minimum cumulative entry average requirement (75% vs. 70%). The Co-op portion of the degree will begin in the fall of 3<sup>rd</sup> year. Students who were not admitted or that did not apply to Co-op directly out of grade 12 (or equivalent) can apply for the Co-op program in September of their 3<sup>rd</sup> year of study. Third year Co-op applications are available through the Co-operative Education and Workplace Partnerships office.

Third-year students applying for the co-op stream, must meet the academic requirements listed below. Admission to the Co-op stream is competitive and based on assessment of an application process.

### **ACADEMIC STANDING**

Students admitted to Co-op directly out of high school (or equivalent) must maintain the academic requirements for continuation in the co-op stream in the fall of 3<sup>rd</sup> year.

Co-op Academic Requirements are:

- A minimum cumulative average of 65%;
- A minimum major average of 70%
- No more than one outstanding grade of 50% or lower on their transcript
- Maintain full-time status, with a minimum of 4 courses per study term.

There is no probationary period.

Student will be invited to apply for the co-op stream at the beginning of Year 3. They will be required to apply online and in some cases, may be interviewed as part of admission.

### C.1.1 Admission Requirements and Attainment of Learning Outcomes (QAF section 2.1.2)

Demonstrate that admission requirements for the revised program are sufficient to prepare students for successful attainment of the intended learning outcomes (degree level expectations) established for completion of the program.

Note: This is an addition to an existing program. Therefore, Year 1 to Year 4 are equivalent to current requirements, but the co-op stream requires additional work placement terms (between 3<sup>rd</sup> and 4<sup>th</sup> year) which is a degree requirement.

### **Total courses:**

Forty + three work placement courses

### C.2 Program Curriculum Structure/Program of Study (QAF sections 2.1.4 and 2.1.10)

Provide evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience.

NB: For graduate programs, provide evidence that each graduate student in the revised program is required to take a minimum of two-thirds of the course requirements from among graduate-level courses. Include course requirements with course numbers and course names. Identify in BOLD and STRIKETHROUGH the changes to program requirements.

Program Regulations for Internship Option in Chemistry and Biochemistry Programs

### **Internship Degree Requirements**

2-4 internship courses over and above 40 course degrees in Chemistry and Biochemistry programs.

CHEM-3909. Internship I CHEM-4908. Internship II

### Honours Chemistry (with/without Co-op)

**Degree Requirements** 

Total courses: forty courses

(a) CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, CHEM-3300, CHEM-3310, CHEM-3400, CHEM-3500, CHEM-3710, BIOC-2010, one BIOC or CHEM at 3XXX or 4XXX level, and three additional courses from CHEM 4XXX (excluding CHEM-4007). The following courses: CHEM-4007, CHEM-3909, CHEM-4908, cannot be counted as a 3XXX or 4XXX course for degree requirements.

- (b) MATH-1760 or MATH-1720, MATH-1730, PHYS-1400 and PHYS-1410;
- (c) MATH-1250 and a minimum of two additional courses from the following list: COMP-2067, MATH-2780, MATH-2790, PHYS-2200 or PHYS-3250;
- (d) four courses from Arts, Languages or Social Sciences. At least one of these courses must be selected from the following list of Indigenous Studies courses: GART/SOSC-1210, HIST-2460, HIST-2470, POLS-2000, POLS-3000, POLS-4000, ENGL-2320, PHIL-1350, PHIL-2300, PHIL-4260, POLS-2010;
- (e) nine courses from any area of study (CHEM-4007 is recommended).

Note: An internship option is available.

Note:

A co-op option is available which requires 3 work terms over and above the 40 courses required for degrees in Chemistry and Biochemistry programs.

CHEM-2980. Co-op Work Term 1

CHEM-3980. Co-op Work Term 2

CHEM-4980. Co-op Work Term 3

### Recommended Course Sequence

First Year: ten courses, including CHEM-1100, CHEM-1110, MATH-1250, MATH-1720, MATH-1730, PHYS-1400 and PHYS-1410.

Second Year: ten courses, including CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500 and CHEM-2510. (Recommended: fulfill at least two requirements from (c) above).

Third and Fourth Years: twenty courses, including BIOC-2010, CHEM-3210, CHEM-3300, CHEM-3310, CHEM-3400, CHEM-3500, CHEM-3710 and five additional Chemistry and Biochemistry courses at the 3XXX or 4XXX level (see (a) above).

Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study.

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### Honours Chemistry with Thesis (with/without Co-op)

**Degree Requirements** 

Total courses: forty courses

(a) CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, CHEM-3300, CHEM-3310, CHEM-3400, CHEM-3500, CHEM-3710, CHEM-4900, BIOC-2010, one CHEM or BIOC at 3XXX or 4XXX level, and one additional course from CHEM-4XXX (excluding CHEM-4007). The following courses: CHEM-4007, CHEM-3909, CHEM-4908, cannot be counted as a 3XXX or 4XXX course for degree requirements. (b) MATH-1760 or MATH-1720, MATH-1730, PHYS-1400 and PHYS-1410;

- (c) MATH-1250 and a minimum of two additional courses from the following list: COMP-2067, MATH-2780, MATH-2790, PHYS-2200 or PHYS-3250;
- (d) Four courses from Arts, Languages or Social Sciences. At least one of these courses must be selected from the following list of Indigenous Studies courses: GART/SOSC-1210, HIST-2460, HIST-2470, POLS-2000, POLS-3000, POLS-4000, ENGL-2320, PHIL-1350, PHIL-2300, PHIL-4260, POLS-2010;
- (e) Nine courses from any area of study (CHEM-4007 is recommended).

Note: An internship option is available.

### Note:

A co-op option is available which requires 3-4 work terms over and above the 40 courses required for degrees in Chemistry and Biochemistry programs.

CHEM-2980. Co-op Work Term 1

CHEM-3980. Co-op Work Term 2

CHEM-4980. Co-op Work Term 3

### Recommended Course Sequence

First Year: ten courses, including CHEM-1100, CHEM-1110, MATH-1250, MATH-1720, MATH-1730, PHYS-1400 and PHYS-1410.

Second Year: ten courses, including CHEM-2200, CHEM -2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500 and CHEM-2510. (Recommended: fulfill at least two requirements from (c) above).

Third and Fourth Years: twenty courses, including BIOC-2010, CHEM-3210, CHEM-3300, CHEM-3310, CHEM-3400, CHEM-3500, CHEM-3710, CHEM-4900, and three additional CHEM or BIOC courses at the 3XXX or 4XXX level (see (a) above).

Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study.

### **Combined Honours Chemistry Programs**

Programs combining Chemistry with another major will consist of the following:

**Degree Requirements** 

Total courses: forty.

- (a) Chemistry and Biochemistry: CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, CHEM-3300 (or CHEM-3310), CHEM-3400, and BIOC-2010; plus two additional courses at the 3XXX or 4XXX level.
- (b) Course requirements Other Subject: courses used to calculate the major average in the other subject area, as prescribed by that area of study.
- (c) MATH-1250, MATH-1760 or MATH-1720, MATH-1730, PHYS-1400, PHYS-1410 and PHYS-2200;
- (d) additional courses, if necessary, from any area of study to a total of forty courses.

### Note:-An internship option is available.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

### Honours Biochemistry (with/without Co-op)

**Degree Requirements** 

Total courses: forty courses

- (a) CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, BIOC-2010, BIOC-3100, BIOC-3110, BIOC-3130, BIOC-3581 (6-credit, 2 semester course) and four additional courses at the 3XXX or 4XXX level.
- (b) BIOL-1101, BIOL-1111, BIOL-2111, BIOM-2131, MATH-1760 or MATH-1720, MATH-1730, PHYS-1400, PHYS-1410 and STAT-2910;
- (c) Four courses from Arts, Languages or Social Sciences. At least one of these courses must be selected from the following list of Indigenous Studies courses: GART/SOSC-1210, HIST-2460, HIST-2470, POLS-2000, POLS-3000, POLS-4000, ENGL-2320, PHIL-1350, PHIL-2300, PHIL-4260, POLS-2010;
- (d) Seven courses from any area of study.

Note: An internship option is available.

Note:

A co-op option is available which requires 3 work terms over and above the 40 courses required for degrees in Chemistry and Biochemistry programs.

CHEM-2980. Co-op Work Term 1

CHEM-3980. Co-op Work Term 2

CHEM-4980. Co-op Work Term 3

**Recommended Course Sequence** 

Note: STAT-2910 can be taken anytime in second, third or fourth year.

First Year: ten courses, including BIOL-1101, BIOL-1111, CHEM-1100, CHEM-1110, MATH-1720, MATH-1730, PHYS-1400, PHYS-1410 and two other courses.

Second Year: ten courses, including BIOL-2111, BIOM-2131, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, BIOC-2010 and one other course.

Third and Fourth Years: twenty courses, including CHEM-2200, CHEM-3210, BIOC-3100, BIOC-3110, BIOC-3130, BIOC-3581 (6-credit, 2 semester course) and four additional courses at the 3XXX or 4XXX level.

Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study.

### Honours Biochemistry with Thesis (with/without Co-op)

**Degree Requirements** 

Total courses: forty courses.

- (a) CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, BIOC-2010, BIOC-3100, BIOC-3110, BIOC-3130, BIOC-3581 (6-credit, 2 semester course), CHEM-4900 (6-credit, 2 semester course) and two additional CHEM or BIOC courses at the 3XXX or 4XXX level.
- (b) BIOL-1101, BIOL-1111, BIOL-2111, BIOM-2131, MATH-1760 or MATH-1720, MATH-1730, PHYS-1400, PHYS-1410 and STAT-2910;
- (c) Four courses from Arts, Languages or Social Sciences. At least one of these courses must be selected from the following list of Indigenous Studies courses: GART/SOSC-1210, HIST-2460, HIST-2470, POLS-2000, POLS-3000, POLS-4000, ENGL-2320, PHIL-1350, PHIL-2300, PHIL-4260, POLS-2010;
- (d) Seven courses from any area of study, and CHEM-4007 is recommended.

Note: An internship option is available.

Note:

A co-op option is available which requires 3 work terms over and above the 40 courses required for degrees in Chemistry and Biochemistry programs.

CHEM-2980. Co-op Work Term 1 CHEM-3980. Co-op Work Term 2 CHEM-4980. Co-op Work Term 3

### Recommended Course Sequence

Note: STAT-2910 can be taken anytime in second, third or fourth year.

First Year: ten courses, including BIOL-1101, BIOL-1111, CHEM-1100, CHEM-1110, MATH-1720, MATH-1730, PHYS-1400, PHYS-1410 and two other courses.

Second Year: ten courses, including BIOL-2111, BIOM-2131, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, BIOC-2010 and one other course.

Third and Fourth Years: twenty courses, including CHEM-2200, CHEM-3210, BIOC-3100, BIOC-3110, BIOC-3130, BIOC-3581 (6-credit, 2 semester course), CHEM-4900 (6-credit, 2 semester course) and two additional CHEM and BIOC courses at the 3XXX or 4XXX level.

Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study.

### Honours Biochemistry (Pharmacy Stream)(with/without Co-op)

**Degree Requirements** 

Total courses: forty courses.

- (a) 20 Courses: CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, BIOC-2010, BIOC-3100, BIOC-3110, BIOC-3130, BIOC-3581 (6-credit, 2 semester course), BIOC-3310, BIOC-4050 and two additional CHEM/BIOC courses at the 3XXX or 4XXX level (CHEM-3310 is recommended).
- (b) 10 Courses: BIOL-1101, BIOL-1111, BIOL-2111, BIOL-2071, BIOM-2131, MATH-1720, MATH-1730, PHYS-1400, PHYS-1410 and STAT-2910;
- (c) 4 Courses: ENGL-1001 and three courses from Arts, Languages or Social Sciences; CMAF-2100 strongly recommended). At least one of these three courses must be selected from the following list of Indigenous Studies courses: GART/SOSC-1210, HIST-2460, HIST-2470, POLS-2000, POLS-3000, POLS-4000, ENGL-2320, PHIL-1350, PHIL-2300, PHIL-4260, POLS-2010;
- (d) 6 courses from any area of study; BIOM-2021, BIOL-2040, BIOL-2050 strongly recommended.

Note: An internship option is available.

Note:

A co-op option is available which requires 3 work terms over and above the 40 courses required for degrees in Chemistry and Biochemistry programs.

CHEM-2980. Co-op Work Term 1

CHEM-3980. Co-op Work Term 2

CHEM-4980. Co-op Work Term 3

Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study.

### Honours Biochemistry (Pharmacy Stream) with Thesis (with/without Co-op)

**Degree Requirements** 

Total courses: forty courses.

- (a) 20 Courses: CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, BIOC-2010, BIOC-3100, BIOC-3110, BIOC-3130, BIOC-3581 (6-credit, 2 semester course), BIOC-3310, BIOC-4050 and CHEM-4900 (6-credit, 2 semester course).
- (b) 10 Courses: BIOL-1101, BIOL-1111, BIOL-2111, BIOL-2071, BIOM-2131, MATH-1720, MATH-1730, PHYS-1400, PHYS-1410 and STAT-2910;

- (c) 4 Courses: ENGL-1001 and three courses from Arts, Languages or Social Sciences; CMAF-2100 strongly recommended (DRAM-2100 is strongly recommended). At least one of these three courses must be selected from the following list of Indigenous Studies courses: GART/SOSC-1210, HIST-2460, HIST-2470, POLS-2000, POLS-3000, POLS-4000, ENGL-2320, PHIL-1350, PHIL-2300, PHIL-4260, POLS-2010;
- (d) 6 courses from any area of study; BIOM-2021, BIOL-2040, BIOL-2050, CHEM-3310 strongly recommended.

Note: An internship option is available.

### Note:

A co-op option is available which requires 3 work terms over and above the 40 courses required for degrees in Chemistry and Biochemistry programs.

CHEM-2980. Co-op Work Term 1

CHEM-3980. Co-op Work Term 2

CHEM-4980. Co-op Work Term 3

Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study.

### **Combined Honours Biochemistry Programs**

Programs combining Biochemistry with another major will consist of the following:

### **Degree Requirements**

Total courses: forty.

- (a) Chemistry and Biochemistry: CHEM-1100, CHEM-1110, CHEM-2200, CHEM-2300, CHEM-2310, CHEM-2400, CHEM-2410, CHEM-2500, CHEM-2510, CHEM-3210, BIOC-3100, BIOC-3110, BIOC-3130, BIOC-2010, and one additional course at the 3XXX or 4XXX level.
- (b) Course requirements-Other Subject: courses used to calculate the major average in the other subject area, as prescribed by that area of study.
- (c) BIOL-1101, BIOL-1111, BIOL-2111, BIOM-2131, MATH-1760 or MATH-1720, MATH-1730, PHYS-1400, and PHYS-1410:
- (d) additional courses, if necessary, from any area of study to a total of forty courses.

### Note: An internship option is available.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

### Description of thesis option for all programs (if applicable):

If co-op or internship is being done in conjunction with the thesis option, the degree will become a 5-year program with thesis being taken at the beginning of year 5.

Provide requirements for the Co-op/Experiential Learning Component AND a description of how the program requirements differ for students who complete the experiential learning option and those who opt not to (if applicable). [If the co-op/experiential learning component is new (not part of the existing stand-alone program), a PDC Form B is required]:

### **CO-OP JOB PROCESS**

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a Co-op position is competitive. Co-op/Internship students will apply for work opportunities as advertised by the Co-op & Workplace Partnerships office using an Internet-based software program (mySuccess) and employers will make interview and hiring decisions. Students are also encouraged to seek Co-op/Internship

employment outside of the advertised postings by completing a guided job search process facilitated by Co-op & Workplace Partnerships.

### WITHDRAWING FROM THE CO-OP PROGRAM

The deadline to withdraw from the co-op program and receive a fee refund for the current study term is the 1<sup>st</sup> Friday of classes. Students participating in the Transform program in the fall of 3<sup>rd</sup> year, will have an extended withdrawal deadline date provided by Co-operative Education & Workplace Partnerships.

Students that choose to withdraw from the co-op program cannot re-join the co-op program at a future date.

Once students have accepted an offer of employment for a work term, they must remain in the co-op program until they have completed their work term requirements. Failure to complete the work term and/or work term requirements (as per the work term course outlines) will result in a non-pass grade for that work term course, and they may be required to withdraw from the co-op stream. The co-op fee for the work term is non-refundable.

### **CO-OP REQUIREMENTS**

Students must successfully complete 3 work terms to be eligible for the co-op designation. Although we strive to provide co-op opportunities for all students, placements are not guaranteed as students must be selected for employment by the employer.

Chemistry/Biochemistry co-op students must remain full-time students and typically follow a standardized work/study sequence schedule. Faculty advisors can assist with course scheduling. Work/study sequence changes are possible and must be approved by the WIL Coordinator and faculty advisor.

### **WORK TERM REQUIREMENTS**

Chemistry/Biochemistry internship students will be registered for a work term course for each four-month term of their placement. This course will be evaluated on a pass-fail basis. To receive a passing grade, students must complete the course assignments listed on the course outline for each work term.

### Explain how credit will be awarded for the experiential learning component (length of component, credit weighting, etc.):

Each work term will appear on a student's transcript as a pass/fail. The senior work term can be repeated up to 4 times provided the placement is with the same employer and the work terms are consecutive placements. Subsequent senior work terms will be for no credit.

The Transform module (Job-readiness & Professional Development) is a program requirement but non-credit and does not hold credit weight.

### Guidelines for experiential learning/co-op work term reports:

A work term assignment at the end of each of the 4 month terms will be requested from students during their placement year.

### General length of experiential learning/co-op work term:

Minimum of three work terms is required to qualify for designation 'with co-op'. Each work term has to be a minimum of 12 weeks at 35 hours a week (420 hours) or more ideally 16 weeks at 35 to 40 hrs/week.

### Is the completion of the experiential learning/co-op component a requirement of the program?

Yes. However, students who are unable to complete the mandatory work-integrated learning placements may return to the general degree program (without Co-op).

### C.3.1 For Graduate Program ONLY (QAF sections 2.1.3 and 3; Senate Co-op Policy)

### **C.3.1.1 Normal Duration for Completion**

Provide a clear rationale for program length that ensures that the revised program requirements can be reasonably completed within the proposed time period.

N/A

### **C.3.1.2** Program Research Requirements

For research-focused graduate programs, provide a clear indication of the nature and suitability of the major research requirements for completion of the revised program.

N/A

### C.3.1.3 New or Changes to Fields in a Graduate Program (optional)

 $Where\ fields\ are\ contemplated,\ provide\ the\ following\ information:$ 

The master's program comprises the following fields: ...[list, as applicable]

The PhD program comprises the following fields: ...[list, as applicable]

N/A

### **C.3.2** For All Program Proposals

### C.3.2.1 New or Changes to Standing Required for Continuation in Program

Minimum average requirements for continuation in the program.

Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars]. Specify new or changes to standing required for continuation in the experiential learning option or co-op option of the revised program, where applicable.

For continuation in the experiential learning option, student needs to be successful in the Transform module (i.e., job readiness and professional development), associated work terms, and reflective activities.

### C.3.2.2 New or Changes to Standing Required for Graduation

Minimum average requirement to graduate in the program.

Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars]. Specify new or changes to standing required for graduation in the experiential learning option or co-op option of the revised program, where applicable.

For continuation in the experiential learning option, student needs to be successful in the Transform module (i.e., job readiness and professional development), associated work terms, and reflective activities

### C.3.2.3 New or Changes to Suggested Program Sequencing

Provide suggested program sequencing for each year of the revised program, ensuring that all pre-requisites are met in the sequencing. Where applicable, provide work/study/placement sequencing for each year of the experiential learning/co-op version of the revised program. Please ensure that all pre-requisites are met in the sequencing. For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

### Standard Co-op Work/Study Sequence

Year of Study	Fall Semester	Winter Semester	Summer Semester
Year 1	Study	Study	Off
Year 2	Study	Study	Off
Year 3	Study Admissions/Transform Job Readiness Program)	Study	CHEM-2980 Work Term 1
Year 4	CHEM-3980 Work Term 2*	Study	CHEM-4980 Work Term 3
Year 5	Study	Done	

<sup>\*</sup>Work Term 1 and Work Term 2 must be completed as an 8-month continuous placement with the same employer. These terms cannot be split between two different employers.

### C.4 NEW OR CHANGES TO LEARNING OUTCOMES (Degree Level Expectations)(QAF section 2.1.1, 2.1.3, and 2.1.6) COMPLETE THIS TABLE FOR UNDERGRADUATE PROGRAMS

In the following table, provide the specific learning outcomes (degree level expectations) that constitute the overall goals of the Combined program or Concurrent offering (i.e., the intended skills and qualities of graduates of this program). Link each learning outcome to the <u>Characteristics of a University of Windsor Graduate</u>" by listing them in the appropriate rows. A learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate. All University of Windsor programs should produce graduates able to demonstrate each of the nine characteristics. Program design must demonstrate how students acquire all these characteristics. All individual courses should contribute to the development of one or more of these traits: a program in its entirety must demonstrate how students meet all of these outcomes through the complete program of coursework. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes (degree level expectations).

For Combined Programs and Concurrent Offerings: The program learning outcomes would include the outcomes for the two standalone programs with a few additional outcomes to reflect the benefits of pursuing the two disciplines in an integrated manner. [For learning outcome A, the integration of knowledge can be within a program and between the two programs.] For programs with an Experiential Learning or Co-op Option: Include learning outcomes for the program with a few additional outcomes highlighted to reflect the benefits of pursuing the experiential learning/co-op option.

### C.4.1 Revised Program Structure and Regulations Ensure Learning Outcomes Can be Met

Describe how the revised program's structure and regulations ensure that the specified learning outcomes can be met by successful students.

The revised program structure includes 3 four-month mandatory paid experiential learning placements within an organization. By facilitating a concrete experience students and reflective observation students can gain knowledge or skills from their experience leading to active experimentation, or trying out and testing new skills and abilities. This experiential learning cycle continues as source of learning and development while reinforcing degree learning outcomes throughout the placement period and into their final year of academic study.

### C.4.2 Impact of Experiential Learning Component on Attainment of Learning Outcomes

**For programs with a proposed experiential learning or co-op component:** describe how the experiential learning/co-op component changes the emphasis or the means of achieving the intended learning outcomes for the program.

The experiential piece of the Chemistry/Biochemistry degree will help reinforce learning occurring in the classroom by create opportunities for students to be exposed to the practical applications of theory and concepts learned. During and after a work term, students are required to reflect on their experience and when returning to their

studies in fourth year have a set of experiences and practical concepts they can integrate back into their classroom learning.

### C.4.3 Mode of Delivery (QAF section 2.1.5)

Demonstrate that the proposed modes of delivery are appropriate to meet the new or revised program learning outcomes. Discuss online vs. face-to-face (e.g., lecture, seminar, tutorial, lab) modes of delivery, as well as specialized approaches intended to facilitate the acquisition of specific skills, knowledge, and attitudes.

Work Term Course – takes place when students are in industry
Work Term Placements in industry - placements are on-site, hybrid or remote
Transform (Job-readiness) – Hybrid

### .4 NEW OR CHANGES TO LEARNING OUTCOMES (Degree Level Expectations)(QAF section 2)

In the following table, provide the specific learning outcomes (degree level expectations) that constitute the overall goals of the Combined program or Concurrent offering (i.e., the intended skills and qualities of graduates of this program). Link each learning outcome to the <u>Characteristics of a University of Windsor Graduate</u>" by listing them in the appropriate rows. A learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate. All University of Windsor programs should produce graduates able to demonstrate each of the nine characteristics. Program design must demonstrate how students acquire all these characteristics. All individual courses should contribute to the development of one or more of these traits: a program in its entirety must demonstrate how students meet all of these outcomes through the complete program of coursework. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes (degree level expectations).

For Combined Programs and Concurrent Offerings: The program learning outcomes would include the outcomes for the two standalone programs with a few additional outcomes to reflect the benefits of pursuing the two disciplines in an integrated manner. [For learning outcome A, the integration of knowledge can be within a program and between the two programs.]

For programs with an Experiential Learning or Co-op Option: Include learning outcomes for the program with a few additional outcomes highlighted to reflect the benefits of pursuing the experiential learning/co-op option.

### **Programs:**

Honours Biochemistry (with/without thesis) (with Co-op)

Honours Chemistry (with/without thesis) (with Co-op)

Honours Biochemistry (Pharmacy Stream) (with/without thesis) (with Co-op)

### PROGRAM TITLE: Bachelor of Science Honours Biochemistry (with and without thesis) DEPARTMENT/FACULTY: Chemistry and Biochemistry

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute. At the end of this program, the successful student will know and be able to:		COU-approved Undergraduate Degree Level Expectations
A. Explain and apply the major theories and concepts of chemistry and biochemistry	A. the acquisition, application and integration of knowledge	1.Depth and Breadth of Knowledge     2.Knowledge of Methodologies     3. Application of Knowledge

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Duramana Lagrania a O Lagran da	Chanastania i a a a facilità de la compansión de la compa	
Program Learning Outcomes (Degree Level Expectations)  This is a sentence completion exercise. Please	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.  At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
Also applies to D)		5.Awareness of Limits of Knowledge
Explain and apply the scientific method as it relates to biochemistry research and societal issues. Also applies to B, C, H, I)		
For Co-op: Utilize theory with workplace practice to solvechemistry and/or biochemistry problems (also applies to C).		
B. For Co-op: Operate standard and modern laboratory instruments for solving practical chemical or biochemical problems (Also applies to C)	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	Depth and Breadth of Knowledge     Knowledge of Methodologies     Application of Knowledge     Awareness of Limits Knowledge
Collect, read, evaluate, and analyze relevant scientific literature to address a specific biochemistry area. (Also applies to C and D)		
<b>For Thesis:</b> Develop a hypothesis and select an appropriate methodology to test the hypothesis (Also applies to C, D, F, I.)		
C. Access and effectively utilize the primary research literature for solving chemical and biochemical problems. (Also applies to D)	C. critical thinking and problem-solving skills	<ol> <li>Depth and Breadth of Knowledge</li> <li>Knowledge of Methodologies</li> <li>Application of Knowledge</li> <li>Awareness of Limits of Knowledge</li> </ol>
Correctly interpret experimental data and the accuracy of the results. (Also applies to D.)		
D. Write a formal scientific paper and report with the correct structure (e.g., include proper citations, references, etc.)	D. literacy and numeracy skills	<ul><li>4.Communication Skills</li><li>5. Awareness of Limits of Knowledge</li></ul>
Take formal laboratory notes and record work performed in a manner consistent with scientific protocols in the workplace.		

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Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.  At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to demonstrate:	COU-approved Undergraduate Degree Level Expectations
E. Effectively use safe laboratory practice (e.g use and handling of chemicals)  For Co-op: Identify and apply teamwork protocols to facilitate constructive and co-operative approaches to teamwork activities. (Also applies to F, G)	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
F. Produce an effective oral and written communication on a scientific subject.  Qualitatively summarize and objectively present data.  Prepare written laboratory reports using conventional scientific style.  For Co-op: Convey complex scientific data or concepts in an easy-to-understand way for diverse audiences	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity
G. Participate constructively and cooperatively in small group activities.	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
H.  Describe examples that illustrate the functionality and diversity of chemistry and biochemistry .  Design innovative solutions to demonstrate scientific concepts.	H. creativity and aesthetic appreciation	Knowledge of Methodologies     Application of Knowledge     Autonomy and Professional     Capacity
I.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

PROGRAM TITLE: Bachelor of Science Honours Chemistry (with and without thesis)

**DEPARTMENT/FACULTY: Chemistry and Biochemistry** 

Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute. At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to demonstrate:	COU-approved Undergraduate Degree Level Expectations
A.  Explain and apply the major theories and concepts of chemistry in all four traditional sub-disciplines (analytical, inorganic, organic, and physical) (Also applies to D.)  Explain and apply the scientific method as it relates to chemistry research and societal issues. (Also applies to B, C, H, I.)  For Co-op: Utilize theory with workplace practice to solve chemistry and/or biochemistry problems	A. the acquisition, application and integration of knowledge	1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge
B. Collect, read, analyze, synthesize and evaluate relevant scientific literature to address a specific chemistry-relevant problems (Also applies to C, D.) For Co-op: Operate laboratory instruments for solving practical chemical problems. (Also applies to C.) For Thesis: Develop a hypothesis and select an appropriate methodology to test that hypothesis (Also applies to C, D, F, I.)	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	Depth and Breadth of Knowledge     Knowledge of Methodologies     Application of Knowledge     Awareness of Limits Knowledge
C. Access and effectively utilize the primary research literature for solving chemical problems. (Also applies to D.)  Correctly interpret experimental data and the accuracy of the results. (Also applies to D.)	C. critical thinking and problem-solving skills	Depth and Breadth of Knowledge     Knowledge of Methodologies     Application of Knowledge     Awareness of Limits of Knowledge

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Program Learning Outcomes (Degree Level Expectations)	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute. At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	Degree Level Expectations
D. Write a formal scientific paper and report with the correct structure (e.g., include proper citations, references, etc.)  For Co-op: Take formal laboratory notes and record work performed in a manner consistent with scientific protocols in the workplace.	D. literacy and numeracy skills	4.Communication Skills 5. Awareness of Limits of Knowledge
E. Effectively use safe laboratory practice (e.g use and handling of chemicals)  For Co-op: Identify and apply teamwork protocols to facilitate constructive and co-operative approaches to teamwork activities. (Also applies to F, G)	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
F. Produce an effective oral and written communication on a chemistry subject.  Qualitatively summarize and objectively present data.  Prepare written laboratory reports using Conventional scientific style.  For Co-op: Convey complex scientific data or concepts in an easy-to-understand way in the workplace or workplace reports.	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity
G. Participate and contribute constructively and cooperatively to team work activities.	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute. At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to demonstrate:	COU-approved Undergraduate Degree Level Expectations
H. Describe examples that illustrate the functionality and diversity of chemical systems. Use scientific concepts in designing solutions to chemistry problems.	H. creativity and aesthetic appreciation	Knowledge of Methodologies     Application of Knowledge     Autonomy and Professional     Capacity
I.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

PROGRAM TITLE: Bachelor of Science Honours Biochemistry (with and without thesis) Pharmacy Stream DEPARTMENT/FACULTY: Chemistry and Biochemistry

Program Learning Outcomes (Degree Level Expectations)  This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.  At the end of this program, the successful student will know and be able to:  A.  Explain and apply the major theories and concepts of chemistry and biochemistry pharmacology. (Also applies to D.)  Explain and apply the scientific method as it relates to biochemistry research and societal issues. (Also applies to B, C, H, I.)  For Co-op: Utilize theory with workplace practice workplace to solve chemistry and/or biochemistry problems (also applies to C).	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to demonstrate:  A. the acquisition, application and integration of knowledge	1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge
B. For Co-op: Operate standard and modern laboratory instruments for solving chemical or biochemical/drug-related problems in the workplace. (Also applies to C.)  Collect, read, evaluate, and analyze relevant scientific literature to address a specific biochemistry area. (Also applies to C, D.)  For Thesis: Develop a hypothesis and select an appropriate methodology to test the hypothesis (Also applies to C, D, F, I.)	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	Depth and Breadth of Knowledge     Knowledge of Methodologies     Application of Knowledge     Awareness of Limits Knowledge
C. Access and effectively utilize the primary research literature for solving chemical, biochemical and drug problems in the workplace. (Also applies to D.)  Correctly interpret experimental data and the accuracy of the results. (Also applies to D.)	C. critical thinking and problem-solving skills	Depth and Breadth of Knowledge     Knowledge of Methodologies     Application of Knowledge     Awareness of Limits of Knowledge

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Program Learning Outcomes (Degree Level	Characteristics of a	COU-approved Undergraduate
Expectations)	University of Windsor	Degree Level Expectations
This is a sentence completion exercise. Please	Graduate	
provide a minimum of 1 learning outcome for each of the boxes associated with a graduate		
attribute.		
At the end of this program, the successful	A UWindsor graduate will	
student will know and be able to:	have the ability to	
	demonstrate:	
	D. P	A Construction CLIN
D. Write formal scientific papers and reports	D. literacy and numeracy skills	4.Communication Skills 5. Awareness of Limits of Knowledge
with the correct structure (e.g., include	381113	3. Awareness of Limits of Knowledge
proper citations, references, etc.		
For Co-op: Take formal laboratory notes and		
record work performed in a manner		
consistent with scientific protocols in the workplace.		
Workplace.		
E.	E. responsible behaviour to	5. Awareness of Limits of
Effectively use safe laboratory practice (e.g	self, others and society	Knowledge
use and handling of chemicals).		6. Autonomy and Professional
For Co. on Identify and apply teamwork		Capacity
For Co-op: Identify and apply teamwork protocols to facilitate constructive and co-		
operative approaches to teamwork activities.		
(Also applies to F, G)		
F	F. interpersonal and	4. Communication Skills
Produce effective oral and written communication on a scientific subject.	communications skills	6. Autonomy and Professional Capacity
Qualitatively summarize and objectively		Сарасіту
present data.		
Prepare written laboratory reports using		
conventional scientific style.		
For Co-op: Convey complex scientific data or		
concepts in an easy-to-understand way for		
diverse audiences.		
G	G. teamwork, and personal	4. Communication Skills
Participate constructively and cooperatively in small group activities.	and group leadership skills	6. Autonomy and Professional  Capacity
H.	H creativity and aasthatic	2. Knowledge of Methodologies
''.	H. creativity and aesthetic appreciation	Application of Knowledge
	Ch. seeses	, ,

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Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.  At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to demonstrate:	COU-approved Undergraduate Degree Level Expectations
Describe examples that illustrate the functionality and diversity of chemistry and biochemistry.  Design innovative solutions to demonstrate scientific concepts (Also applies to C, I.)		6. Autonomy and Professional Capacity
I. Apply organizational, problem-solving and mentoring skills to engage in self-directed learning and professional development activities.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

### C.5 Student Workload

Provide information on the expected workload per course credit (3.0) of a student enrolled in this revised program. (For assistance with this exercise, proposers are encouraged to contact the Centre for Teaching and Learning.)

Expected Workload per 3.0 Course Credit/Week	Average Time <i>per week</i> the Student is Expected to Devote to Each Component Over the Course of the Program	
Lectures		
Tutorials		
Practical experience		
Service or experiential learning	35 to 40 hours/week over 12 to 16 weeks per term (minimum 420 hours per term on a relevant work term	
Independent study		
Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.)		
Studying for tests/examinations		
Other: [specify]		
Compare the student workload for this program with other similar programs in the AAU:		

### D. MONITORING AND EVALUATION (QAF section 2.1.6)

Describe and explain the appropriateness of the proposed methods of assessing student achievement given the new or revised intended learning outcomes and degree level expectations.

Work placements are monitored by the Co-operative Education and Workplace Partnership office which facilitates students engaging in the placement, reflecting on the experience, identification of new learning and development,

and active experimentation of new skills and abilities. Final reflective assessments are evaluated for student achievement of learning outcomes by assigned faculty from the Department of Chemistry and Biochemistry.

### D.1 Plan for Documenting And Demonstrating Student Performance Consistent with Learning Outcomes

Describe the plan for documenting and demonstrating student performance level and demonstrate its consistency with the new or revised stated learning outcomes and degree level expectations.

### E. NEW OR REVISIONS TO EXPERIENTIAL LEARNING/CO-OP COMPONENT ONLY (Senate Co-op Policy)

[Complete this section ONLY if the program change includes new or revisions to the experiential learning/co-op component involving paid or unpaid placements.]

### **E.1 Experiential Learning Component and Nature of Experience**

Describe the new or revised experiential learning component and the nature of the experience (field placement, required professional practice, service-learning, internship, etc.)

### Co-op:

- Work term is developed in partnership with an employer and approved by the program as a suitable learning environment:
- Student is engaged in productive work for which the student receives remuneration;
- o Curriculum supports student learning goals, personal evaluation, and reflection;
- Student's performance in the workplace is supervised and evaluated by the student's employer;
- Student's progress during their work term is monitored by the Co-operative Education and Workplace Partnerships team;
- Both work and academic terms are full-time and follow a formalized sequence. A work term is defined as a minimum of 12 weeks and/or 420 hours full-time paid experience.

### E.2 Knowledge and Skills Brought to the Workplace

Provide a description of the knowledge and skills that students will be bringing to the workplace/placement based on the revised curriculum.

- Understanding of the fundamentals of chemistry and biology and the key principles of biochemistry and molecular biology.
- o Awareness of the major issues at the forefront of the discipline.
- Ability to assess primary papers critically.
- o Good "quantitative" skills such as the ability to accurately and reproducibly prepare reagents for experiments.
- Ability to dissect a problem into its key features.
- Ability to design experiments and understand the limitations of the experimental approach.
- o Ability to interpret experimental data and identify consistent and inconsistent components.
- Ability to design follow-up experiments.
- Ability to work safely and effectively in a laboratory.
- Awareness of the available resources and how to use them.
- Ability to use computers as information and research tools.
- Ability to collaborate with other researchers
- Ability to use oral, written and visual presentations to present their work to both a science literate and a science non-literate audience.
- Ability to think in an integrated manner and look at problems from different perspectives.
- Awareness of the ethical issues in the molecular life sciences.

### **E.3 Evidence of Availability of Placements**

Provide evidence of the availability of an adequate number of positions of good quality both inside and outside the Windsor area for the new or revised co-op/experiential learning option (including names and contact information of potential employers, written statements or surveys from potential employers; and employer feedback concerning the

hiring of graduates). Provide a summary of the types of positions that would be suitable at each level of work-term. How will these placements/opportunities be developed? [NB: For co-op programs, the majority of Ontario placements should qualify for the Co-op Education tax credit. See Policy on Co-op Programs for more details.]

Preliminary opportunity development has been undertaken by the Co-operative Education and Workplace Partnerships office, including labour market review, identification of existing employers, associations, and funding streams (i.e., SWPP, etc.). The employer engagement and relationship management teams strongly believe that a suitable number of high quality placements can be developed to support the program. The Co-operative Education and Workplace Partnerships office will have responsibility for placement opportunity development with support from the Department of Chemistry and Biochemistry.

### E.4 Mechanism for Supervision of Placements (QAF section 2.1.9)

Describe the mechanism that will be established for the supervision of the new or revised experiential learning placements.

Placements are supervised by both the University (via Co-operative Education and Workplace Partnerships) and the Employer. In the workplace, supervision is provided by an identified manager, supervisor, or peer who is responsible for:

- assisting the intern in establishing learning objectives;
- advise, mentor, instruct, guide, and refer the intern to other appropriate resources;
- confirm the intern's understanding and ability to use the knowledge and skills;
- reinforce learning through recognition and feedback;
- periodically evaluate the intern.

During the work term, the Co-operative Education and Workplace Partnerships team will conduct a site visit, which typically lasts 30 – 45 minutes and provides an opportunity for the student and employer to review the placement with a WIL Coordinator or an Employer Relations Coordinator, including work term goals, highlight any needs or concerns, clarify direction for the final report and discuss options for subsequent work terms.

### **E.5 Fees Associated with Experiential Learning Component**

Provide information on the fees associated with the new or revised experiential learning component, if applicable. NB: all proposed fees must be approved as part of the University's operating budget, via the Ancillary Fee Committee.

Students will be assessed co-op fees upon acceptance and start of Transform (job readiness & professional development) programming. Co-op fees continue to be assessed for a total of 7\* consecutive terms. Fees are set and approved by the Ancillary Fee Committee.

\* The fee schedule is subject to revision pending Board of Governors approval. Standard co-op fees are typically distributed over 8 consecutive terms. However, this program's course sequence does not allow for 8 consecutive payments (see Table 1: Full Work/Study Sequence). After consultation with the Cashier's Office, the fee structure will be adjusted to 7 consecutive payments, differing from the standard 8-term distribution. Study terms will incur the standard fee, while work terms will have an increased fee to account for the difference. This adjustment ensures all undergraduate co-op students pay the same total co-op fee (see Table 2: Fee Breakdown for Chemistry / Biochemistry Co-op).

Table 1: Full Work/Study Sequence

Year of Study	Fall	Winter	Summer
Year 1	T1 - Study No Fee	T2 - Study No Fee	Off - No Fee
Year 2	T3 - Study No Fee	T4 - Study No Fee	Off - No Fee
Year 3	T5 - Study Fee #1	T6 - Study -Fee #2	Work Term 1 -Fee #3
Year 4	Work Term 2 - Fee #4	T7 - Study -Fee #5	Work Term 3 -Fee #6
Year 5	T8 – Study- Fee #7		

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### PROGRAM DEVELOPMENT COMMITTEE MAJOR PROGRAM CHANGES FORM B

Table 2: Fee Breakdown for Chemistry / Biochemistry Co-op

Fee Breakdown					
Schedule			Amount	Example	
	Fee #1	Study	X/8	\$460.00	
Year 3	Fee #2	Study	X/8	\$460.00	
	Fee #3	Work Term 1	(X - (X/2))/3	\$613.33	
	Fee #4	Work Term 2	(X - (X/2))/3	\$613.33	
Year 4	Fee #5	Study	X/8	\$460.00	
	Fee #6	Work Term 3	(X - (X/2))/3	\$613.33	
Year 5	Fee #7	Study	X/8	\$460.00	
Total			X	\$3,680.00	

X= Total Standard Undergraduate Co-op Fee

#### Typical Biomedical Science co-op placements (non-exhaustive list)

Positions could be held in both the public and private sector

Quality Assurance Co-op

**Quality Lab Analyst** 

Research/Laboratory Assistant

Micro and Viro Co-op Student

Research and Development Student

Pharmaceutical Science and Technology Student

Research and Evaluation Assistant

Junior Policy Analyst

R and D Analytical Chemist

Genetic Research Assistant

Research Chemist

**Actuarial Analyst** 

Stem Cell Assay Technician

#### E.6 AAU Council Approval of New or Revised Co-op Component

Please obtain signatures for the following statement for new/revised co-op programs.

Before a determination can be made regarding the feasibility of a co-op program, there must be a clear indication of support for the program from the AAU. Support implies that the area will provide ongoing departmental funding to establish a co-op faculty representative who will liaise with the Centre for Career Education in the operation of the program and that the area will ensure that an adequate number of faculty members in the AAU or program contribute to the co-operative education program by grading work-term reports, attending and evaluating work-term presentations, assisting in the job development process, establishing a departmental co-op committee as appropriate, etc. (see Policy on Co-op Programs, Summary of AAU/Faculty Member Involvement in a Co-operative Education Program, for more on the role of the AAU and faculty members). This commitment must be agreed to by the AAU Council at a meeting at which the development or modification of a co-op program was considered and approved.

Signed agreement by the AAU Head, acting as chair of the AAU Council, that AAU members support the development
of the co-op program.*
Signature of AAU Head*:
[Electronic approval by way of UWin email shall also constitute a signature.]

Signature of Executive Director of the Co-op, Career and Employment Services: <u>Marie Mills</u> [Electronic approval by way of UWin email shall also constitute a signature.]

### PROGRAM DEVELOPMENT COMMITTEE MAJOR PROGRAM CHANGES FORM B

#### E.7 Guidelines for the Establishment of New/Revised Co-op Programs: CHECKLIST

#### Final Overview:

Please complete this checklist to ensure that the Senate-approved guidelines for the establishment of a new co-op program have been addressed.

#### Does the proposal:

- include the endorsement of/involvement by the Centre for Career Education?
- adequately describe the academic program?
- include a strong rationale for co-operative education?
- lacktriangle list the types of positions suitable to students at the junior, intermediate and senior work-term?
- articulate the possibility for international placements at a later point?
- orovide for a reasonable proportion of international students to obtain appropriate placement opportunities?
- include a plan to monitor the availability of work placements on an ongoing basis?
- articulate specific learning outcomes (degree level expectations) and co-op requirements?
- include a commitment by the department to adequately support the program by funding a co-op faculty representative?
- include a commitment by the department to adequately support the program by ensuring that an adequate number of faculty members are willing to grade work term assignments, assist in the job development process, etc.?

#### Will the program:

- attract a sufficient number of students including students from outside of the Windsor-Essex region (a minimum annual intake of 20 students enrolled in the co-op component)?
- be able to attract and sustain an adequate number of positions of good quality both inside and outside of the Windsor-Essex region?
- provide year-round availability of students to the workplace in some manner?
- meet the requirements for accreditation by the Canadian Association of Co-operative Education (see guidelines)?

#### **APPENDIX A – BUDGET SUMMARY SHEET**

Not applicable – No additional funds or expenses will be required for the program change.

Appendix B - Canadian University's Biomedical Science Co-op Programs

Toronto Univer	to Metropolitan rsity	University of Guelph	University of Waterloo	Brock University	University of British Columbia	Simon Fraser University	University of Calgary
Website: Click he	ere nedical nce mistry ogy	Click here  Biochemistry Biological and Pharmaceutical Chemistry Biomedical Toxicology Chemistry Chemical Physics Biological and Medical Physics	Click here  • Biotechnolog y/Chartered Professional Accountancy • Biochemistry • Biology • Chemistry • Biological and Medical physics • Medicinal Chemistry • Pharmacy • Kinesiology and Health Sciences	Click here  Biochemistry Biotechnology Biological Science Chemistry	Click here  • Biochemistry  • Biology  • Chemistry  • Pharmacology  • Microbiology and Immunology	Click here  • Biomedical Research  • Environmental Chemistry  • Medical Research  • Pharmaceutical Research	Click here  • Biological Sciences • Chemistry • Data Science

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### PROGRAM DEVELOPMENT COMMITTEE MAJOR PROGRAM CHANGES FORM B

#### Appendix B -Canadian University's Biomedical Science Co-op Programs (continued)

_	University of Alberta	Laurier	University of Manitoba	University of Ottawa	Trent University	Acadia University	McMaster University
Website:	Click here	Click here	Click here	<u>Click here</u>	Click here	Click here	<u>Click here</u>
Co-op Progra ms:	Science Internship Program	<ul> <li>Biochemistry and Biotechnology</li> <li>Biology</li> <li>Chemistry</li> <li>Honours Science</li> <li>Health Sciences</li> <li>Environmental Science</li> </ul>	<ul> <li>Biochemistry</li> <li>Biological Sciences</li> <li>Chemistry</li> <li>Genetics</li> <li>Microbiology</li> </ul>	<ul> <li>Biomedical Science</li> <li>Biochemistry</li> <li>Biopharmaceur ical Science</li> <li>Chemistry</li> <li>Biotechnology</li> <li>Environmental Science</li> <li>Biology</li> </ul>		Biology     Chemistry     Environmen tal Science	<ul> <li>Biochemistr y</li> <li>Biology and Pharmacolo gy</li> <li>Chemical Biology</li> <li>Chemistry</li> <li>Medical and Biological physics</li> </ul>

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#### University of Windsor Program Development Committee

\*5.2: Chemistry and Biochemistry – New Course Proposals (Form D)

Item for: Approval

Forwarded by: Faculty of Science

MOTION: That the following courses be approved:^

CHEM-2980. Co-op Work Term CHEM-3980. Co-op Work Term CHEM-4980. Co-op Work Term

^Subject to approval of the expenditures required.

#### Rationale/Approvals:

- This proposal has been approved by the by the Department of Chemistry and Biochemistry Council, and Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council), and the Provost.
- See attached.

	FORM D					
TITLE OF PROGRAM(S)/CERTIFICATE(S):	Honours Chemistry (with Co-op) Honours Chemistry with Thesis (with Co-op) Honours Biochemistry (with Co-op) Honours Biochemistry with Thesis (with Co-op) Honours Biochemistry (Pharmacy Stream (with Co-op) Honours Biochemistry (Pharmacy Stream) with Thesis (with Co-op)					
DEPARTMENT(S)/SCHOOL(S):	Chemistry and Bioc	hemistry				
FACULTY(IES):	Science					
Proposed change(s) effective as of* [Fall, *(subject to timely and clear submission)	Winter, Spring]: Fa	II 2025				
·	the third person ar	d should provide a general outline of the course ich might be covered in the course, should also be				
application of theory and the development students with an enriched learning opportun a placement has been confirmed the student term requirements. Students who fail to conwill receive a non-pass on their academic tra	of transferable skills. ity to integrate acade must remain in the ( mplete their work te anscript for that wor	P20 hours) career-related setting with a focus on the The Co-op work experience is designed to provide smic theory and concepts in an applied setting. Once Co-op program until they have completed their work rm requirements, as per work term course outline, k term, and may be required to withdraw from Coucation program. Offered on a pass/non-pass basis).				
Does the course include experiential learning	~	•				
For definitions go to: <a href="https://www.uwindso">https://www.uwindso</a> applied research	r.ca/cces/1423/expe	riential-learning-definitions field work				
capstone clinic co-op community service learning creative performance or exhibit (for visual entrepreneurship field experience or site visit	al and performing art	industry/community consulting project interactive simulations internship – full-time internship – part-time				
No experiential learning in this course						
A.3 Other Course Information						
Please complete the following tables.						

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Breakdown of contact hours/week

**Delivery format** 

Credit weight	Total contact hours	In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture	Lab/ Tutorial	Onli ne	Co-op/ practicum/ex periential learning
3.0	420				Work-Integrated Learning				Minimum 35 hours/ week

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:		Replacing old course*** [provide old course number]
Students must be enrolled in the Co-	-	N/A	N/A	Yes for Co-op students	N/A
op program.				students	

Students are able to repeat **CHEM-4980 – Co-op Work Term III** up-to one additional time; thereby, extending their placement from 12-months to 16-months.

\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.

Will students be able to obtain credit for the new course and the course(s) that it is replacing? N/	√A
--	----

Is the new course a required course in one or more programs?

_X	_ Yes[A minor program change proposal (PDC Form C) or <u>major program change proposal (PDC Form B)</u> must b	e
	submitted with the new course proposal (PDC Form D)]	

No

If yes, list all programs for which this course will be required:

Honours Chemistry (with Co-op)

Honours Chemistry with Thesis (with Co-op)

Honours Biochemistry (with Co-op)

Honours Biochemistry with Thesis (with Co-op)

Honours Biochemistry (Pharmacy Stream (with Co-op)

Honours Biochemistry (Pharmacy Stream) with Thesis (with Co-op)

#### **B. RATIONALE**

#### **B.1** Course Goal(s)

Please provide a statement about the purpose of the course within the program of study or as an option.

The chemistry and biochemistry degree programs with co-op is intended to give students an opportunity to get handson experience in a real work environment. In collaboration with the Co-operative Education and Workplace Partnerships office, we will provide students with work placements for 12 months relevant to their field of study.

#### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In <u>developing this new course</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and additional Resources including disciplinary examples:

- What process has your department/Faculty used to consider Indigenization?
- **How** have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the TRC and University Principles documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?
- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

The Office of Experiential Learning and Co-operative Education and Workplace Partnership, and the Department of Chemistry and Biochemistry have collaborated to reflect on Indigenous (First Nations, Métis, or Inuit) considerations related to the proposed co-op programs.

#### The Office of Experiential and Learning and the Co-operative Education and Workplace Partnership:

The Office of Experiential Learning and the Co-operative Education and Workplace Partnership office recognize the importance of Indigenizing and decolonizing experiential and work-integrated learning opportunities and improving access for Indigenous learners at the University of Windsor. Co-op education falls at the intersections of several of the Truth and Reconciliation Commission (TRC) of Canada's calls to action which cover education and employment, including:

#7. We call upon the federal government to develop with Aboriginal groups a joint strategy to eliminate educational and employment gaps between Aboriginal and non-Aboriginal Canadians;

#10. i. Improving education attainment levels and success rates;

iii. Developing culturally appropriate curricula;

#63. iii. Building student capacity for intercultural understanding, empathy, and mutual respect;

#92. ii. Ensure that Aboriginal peoples have equitable access to jobs, training, and education; opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects;

iii. Provide education for management and staff on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal—Crown relations. This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism.

Our Co-operative Education and Workplace Partnerships office is at the beginning of its journey to have staff, students and employers embrace the necessary learning and unlearning to ensure inclusive partnerships with Indigenous communities and our Indigenous students, to work towards reconciliation, and efforts toward decolonization. Our office and staff recognize the importance of this work and want to do it properly, follow protocols and be respectful. In reading the TRC document, we recognize that to address the Calls to Action, we need to promote inclusivity and cultural sensitivity in our co-op program. Working closely with the University of Windsor's Office of the Vice-President, Equity, Diversity and Inclusion, we have examined ways we can support staff's understanding of colonization and white settler privilege, taking responsibility for confronting colonization, racism and oppressive practices with the outcome being to learn how to become an anti-racist practitioner. On June 16, 2022, Marium Tolson-Murtty

conducted *Becoming an Anti-Racist Practitioner* for our staff. Prior to that, our Work-Integrated Learning Coordinators, who work directly with our co-op students, took part in an inclusive learning design workshop on December 7, 2021, put on by Sania Hameed and Atifa Karim from the University of Toronto to help staff better understand how to design, develop and deliver co-op curriculum that is inclusive of all students. The Manager of the department took part in an engaging live session on Indigenization in the post-secondary education sector as part of the Senior Administrator's University Course through the University of Manitoba on October 26, 2022. The session had Indigenous speakers from universities across Canada speak on the topic of Indigenization, including Dr. Sheila Cote-Meek from York University, Dr. Chris Anderson from the University of Alberta, Amanda Myran, formerly of the University of New Brunswick and Dr. Robin Thomas from the University of Victoria. In taking these workshops, we realize we need to further self-educate. We are at the exposure stage of our learning journey, and we are listening to diverse perspectives and gathering resources. In April 2023, the office reached out to its colleagues across Ontario and Canada in other co-op post-secondary institutions to better understand any specific best practices and learn of resources and successful services offered for Indigenous students at their respective institutions.

In searching for resources and supports, we discovered the BC/Yukon chapter of the Association of Co-operative Education and Work-Integrated Learning (ACE-WIL) which has been identified as having a much more advanced model of how to incorporate an Indigenous lens in our co-op program. Their <u>Indigenous Resource Hub</u> has resources we can adapt, collaboratively and with permission, for our use on self-identifying, strategies and recommendations for access, retention and success in co-operative education and even strategies for recognizing and addressing tokenism in the hiring process. ACE-WIL recommends supporting Indigenous co-op students and employers by working to:

- Create meaningful relationships with Indigenous communities and organizations: ACE-WIL recommends that coop employers and educational institutions establish relationships with Indigenous communities and organizations to learn about their culture, history, and values, and to develop meaningful partnerships that will benefit both parties.
- 2. Develop culturally responsive programming: ACE-WIL suggests that co-op programs and employers develop culturally responsive programming that takes into account the unique needs and experiences of Indigenous students. This can include providing support for Indigenous students during their co-op placements, such as connecting them with Indigenous mentors, providing cultural training and awareness sessions, and offering resources for mental health and wellness.
- Prioritize Indigenous inclusion and representation: ACE-WIL recommends that co-op programs and employers
  prioritize Indigenous inclusion and representation by actively recruiting Indigenous students, creating
  Indigenous-specific co-op positions, and prioritizing Indigenous applicants in hiring processes.
- 4. Provide ongoing support and mentorship: ACE-WIL suggests that co-op programs and employers provide ongoing support and mentorship for Indigenous co-op students, including creating safe and supportive work environments, providing ongoing feedback and communication, and connecting students with mentors who have similar cultural backgrounds and experiences.
- 5. Continuously evaluate and improve Indigenous engagement strategies: ACE-WIL recommends that co-op programs and employers continuously evaluate and improve their Indigenous engagement strategies by gathering feedback from Indigenous students, tracking their success in the program, and adapting their programming to better meet the needs of Indigenous students and employers.

Over the course of 2023, our office will continue to develop our pool of resources and knowledge of how we can reach out to more Indigenous students to engage them in co-op and assemble these resources to be shared with students by 2024.

Extending co-op to chemistry and biochemistry will support TRC recommendations which apply to education and employment. Looking at the TRC document, the 92<sup>nd</sup> Call to Action stands out as a way our Co-op Office can work towards reconciliation. We can respond by ensuring equitable access to training opportunities and employment advancement. Through our learning, we want to be able to recognize the right employers for our Indigenous students who have embraced Indigenous ways of knowing and who will empower our students and be supportive of them and

seek out opportunities within Indigenous communities and workplaces. It is also a realistic goal for us to educate staff on Indigenous histories, including treaties and residential schools as well as having a solid understanding of the territory on which our building sits as we strive to build a strong enough understanding so we can work toward a genuine land acknowledgement.

As well, co-op presents an important opportunity to engage Indigenous-owned and led businesses in the local Windsor-Essex community and beyond (there are 17,417 private businesses with majority ownership by First Nations people, Métis or Inuit across Canada). Where co-op placements are with Indigenous-owned and led businesses, there may be additional benefits for Indigenous students in the form of:

- 1. Culturally Relevant Learning: Co-op can provide a culturally relevant approach to learning, which is important for Indigenous students. Indigenous students can learn more effectively when their cultural heritage and traditions are included in the learning process.
- 2. Personal Growth: Co-op can also support the personal growth and development of Indigenous students, by providing opportunities for them to develop their self-confidence, leadership skills, and social skills.
- 3. Community Connection: Co-op can help Indigenous students to connect with their communities and to develop a sense of belonging. By working on projects that are meaningful to their communities, students can feel a sense of pride and ownership in their work.

A reported 30% of Indigenous majority-owned businesses reported labour shortages and (6.5%) planned to expand the current location of their business or organization in the next 12 months (see: <a href="StatsCan">StatsCan</a>). Indigenous students will be prioritized for placements at Indigenous-focused organizations and businesses, but we anticipate some will offer opportunities for non-Indigenous students to promote cross-cultural learning and exchange (this will be negotiated on a case-by-case basis).

The process that the proposed co-op program expansion will contribute to Indigenization and decolonization efforts will have 3 phases. The first phase will continue to be exploratory with helping staff gain more knowledge and gathering resources and best practices. We acknowledge we have gaps and will use this time to be intentional about how to advance in this area. This will continue throughout 2023. In 2024-2025, as part of phase 2 these resources will be made available to our students and our staff. Staff will become more comfortable accessing and using resources and be more knowledgeable in conversations with students seeking information about Indigenous opportunities. After 2025 we will expand into having employer resources to help understand and expand their knowledge of Indigenous ways of knowing and best practices in hiring and determining if there is a need for dedicated resources to ensure we are able to maintain the momentum. Our long-term strategy is to achieve the following:

- 1. Establish partnerships with Indigenous communities: The Co-op Office will establish partnerships with Indigenous communities to ensure that co-operative education programs are designed in a culturally sensitive manner that respects Indigenous perspectives and values.
- 2. Increase outreach and recruitment efforts: The Co-op Office will increase outreach and recruitment efforts targeted toward Indigenous students to ensure that they are aware of the co-operative education opportunities available to them.
- 3. Provide mentorship and support: The Co-op Office will provide mentorship and support to Indigenous students participating in Co-operative education programs. This will include access to Indigenous student advisors, peer support programs, and mentorship programs with Indigenous professionals.
- 4. Create targeted scholarships and bursaries: The Co-op Office will create targeted scholarships and bursaries for Indigenous students participating in co-operative education programs. This can help ease the financial burden on Indigenous students and provide them with the opportunity to participate in co-operative education programs.
- 5. Integrate Indigenous perspectives into co-operative education programs: The Co-op Office will integrate Indigenous perspectives into co-operative education programs to ensure that Indigenous students feel valued and supported. This can be achieved through initiatives such as the inclusion of Indigenous speakers, Indigenous case studies, and the incorporation of Indigenous knowledge and practices into course curricula.

- 6. Review and revise policies: The Co-op Office will review and revise its policies and practices to ensure that they are inclusive and equitable, and that they do not create barriers for Indigenous students to access co-op education.
- 7. Offer cultural support: The Co-op Office will offer cultural support to Indigenous students, such as access to Indigenous student services and resources, as well as opportunities to connect with other Indigenous students and mentors.

We recognize that co-op fees alone represent a considerable cost for many students. Our office consistently explores funding opportunities to support both students and employers. One such opportunity is the Indigenous Co-operative Internship program funded by Indigenous Services Canada, which provides funding to support Indigenous students enrolled in co-op programs. Additionally, some businesses have programs specifically designed for Indigenous co-op students (e.g., RBC National Indigenous Student Internship Program). We are committed to supporting students in accessing these opportunities and any others that may alleviate financial barriers.

#### **B.3 LEARNING OUTCOMES (QAF section 2)**

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

#### CHEM-2980. Co-op Work Term

Course Learning Outcomes This is a sentence completion exercise. At the end of this course, the successful student will know and be able to:  A. Apply theoretical concepts from chemistry to real-world workplace scenarios.	Characteristics of a University of Windsor Graduate  A U of Windsor graduate will have the ability to demonstrate:  B. the acquisition, application and integration of knowledge
B. Create a list of relevant professionals in a field of interest.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Identify the skills required to apply academic theory to decision making in practice.	C. critical thinking and problem-solving skills
D. Identify and self-assess the basic skills and competencies required in the workplace.	D. literacy and numeracy skills
E. Recognize the norms of workplace culture and meet basic workplace expectations (also applicable to H).	E. responsible behaviour to self, others and society
F. Communicate effectively in writing using proper tone, structure, spelling and grammar.	F. interpersonal and communications skills
G. Contribute constructively and co-operatively to group dynamics and teamwork activities.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I. Reflect on academic and career goals, as well as individual strengths, weaknesses, and preferences.	I. the ability and desire for continuous learning

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#### **B.4** Demand for Course

Please provide as much information on projected enrolment as possible.

Projected enrolment levels for the first 5 years of the	Year 1	Year 2	Year 3	Year 4	Year 5
new course.	20	24	28	32	36

#### **B.4.1 Impact of New Course on Enrolment in Existing Courses**

What will be the impact of offering the new course on enrolments in existing courses in the program or Department?

None.

#### C. RESOURCES

### C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

Co-operative Education, as a form of work-integrated learning, is undertaken with the purpose of integrating theory and practice and with the understanding that the main focus of such experience is learning through working. Students are encouraged to reflect on the relationship between theory and field experience (i.e., co-op) in order to identify and understand how each informs the other. As such, existing faculty within the Department assess reflection associated with each work term, such as work term reports, poster presentations, chat rooms or blogs monitored by the faculty, etc.

### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

The Co-operative Education and Workplace Partnerships Office will provide the majority of the support associated with the development, matching, and monitoring of placements. Placements are monitored in an effort to ensure that all parties are fulfilling their roles and responsibilities. This office has substantial experience supporting similar programs, such as co-op (undergraduate and graduate) and internships, now supporting over 1,800 students per year in work-integrated learning programs.

### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### **C.5 Planned Reallocation of Resources and Cost-Savings**

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

#### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

### C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	Program offering done in collaboration with the Co-op & Workplace Partnerships office, which adds/subtracts resources based on enrolment and funding available via placement fees.
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

#### A. NEW COURSE PROFILE

Course # and Title: CHEM-3980, Co-op Work Term

#### A.1 Calendar Description

Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.

Supervised experience in an approved, paid, full-time (minimum 420 hours) career-related setting with a focus on the application of theory and the development of transferable skills. The Co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. Once a placement has been confirmed the student must remain in the Co-op program until they have completed their work term requirements. Students who fail to complete their work term requirements, as per work term course outline, will receive a non-pass on their academic transcript for that work term, and may be required to withdraw from Co-op. (Prerequisite: Students must be enrolled in a Co-operative education program. Offered on a pass/non-pass basis).

#### A.2 Experiential Learning Categories

Does the course include experiential learning? Check all that apply.					
For definitions go to: <a href="https://www.uwindsor.ca/cces/1423/experiential-learning-definitions">https://www.uwindsor.ca/cces/1423/experiential-learning-definitions</a>					
applied research	field work				
capstone	industry/community consulting project				
clinic	interactive simulations				
	internship – full-time				
community service learning	internship – part-time				
creative performance or exhibit (for visual and performing arts)	professional practicum				
entrepreneurship	research project				
field experience or site visit	study abroad				
labs					
No experiential learning in this course					
A.3 Other Course Information					
Please complete the following tables.					

Credit	Total		Delivery format			Breakdown of contact hours/week			rs/week
weight	contact hours	In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture	Lab/ Tutorial	Online	Co-op/ practicum/ experienti al learning
3.0	420				Work integrated learning				Minimum 35 hours/ week

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed		Replacing old course***
			with:	course?	[provide old course number]
Students must be enrolled in a co-				Yes	

operative		(for students	
education program		enrolled in a co-	
		op program)	

Students are able to repeat **CHEM-4980 – Co-op Work Term III** up-to one additional time; thereby, extending their placement from 12-months to 16-months.

\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.

Will students be able to obtain credit for the new course and the course(s) that it is replacing? N/A

#### Is the new course a required course in one or more programs?

X_	$\_$ Yes[A minor program change proposal (PDC Form C) or major program change proposal (PDC Form B) must be
	submitted with the new course proposal (PDC Form D)]

No

If yes, list all programs for which this course will be required:

Honours Chemistry (with Co-op)

Honours Chemistry with Thesis (with Co-op)

Honours Biochemistry (with Co-op)

Honours Biochemistry with Thesis (with Co-op)

Honours Biochemistry (Pharmacy Stream (with Co-op)

Honours Biochemistry (Pharmacy Stream) with Thesis (with Co-op)

#### **B. RATIONALE**

#### **B.1** Course Goal(s)

Please provide a statement about the purpose of the course within the program of study or as an option.

The chemistry and biochemistry degree programs with co-op is intended to give students an opportunity to get handson experience in a real work environment. In collaboration with the Co-operative Education and Workplace Partnerships office, we will provide students with work placements for 12 months relevant to their field of study.

#### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In <u>developing this new course</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and <u>additional Resources</u> including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- How have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the TRC and University Principles documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form (such as learning outcomes)
  or in the course syllabus where appropriate?

Refer to answer for CHEM-2980.

#### **B.3 LEARNING OUTCOMES (QAF section 2)**

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

#### CHEM-3980. Co-op Work Term

Course Learning Outcomes	Champatonistics of a University of Miller descri
Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
·	
At the end of this course, the successful student will know and be	A U of Windsor graduate will have the
able to:	ability to demonstrate:
A. Articulate specific disciplinary competencies, professional skills,	C. the acquisition, application and
and technical knowledge and describe how these can be integrated	integration of knowledge
to foster successful workplace performance. (Also applicable to D)	
B. Access information effectively by searching relevant databases	B. research skills, including the ability to
and selecting relevant, appropriate, and authoritative sources. (Also	define problems and access, retrieve
applicable to C & D)	and evaluate information (information
	literacy)
C. Apply industry practices, issues, technologies and skills developed	C. critical thinking and problem-solving
in the workplace to their academic studies.	skills
D.	D. literacy and numeracy skills
E. Create a clearly defined career path and action plan.	E. responsible behaviour to self, others and
	society
F. Consistently and competently use teamwork skills .	F. interpersonal and communications skills
Communicate effectively in written and oral formats with colleagues	
and stakeholders.	
Use self-assessment to consistently improve performance. (Also	
applicable to G)	
G.	G. teamwork, and personal and group
	leadership skills
H.	H. creativity and aesthetic appreciation

Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
I. Articulate how their experiences, classroom, and community have contributed to personal growth.	the ability and desire for continuous     learning

#### **B.4 Demand for Course**

Please provide as much information on projected enrolment as possible.

Projected enrolment levels for the first 5 years of the	Year 1	Year 2	Year 3	Year 4	Year 5
new course.	20	24	28	32	36

#### **B.4.1 Impact of New Course on Enrolment in Existing Courses**

What will be the impact of offering the new course on enrolments in existing courses in the program or Department?

None

#### C. RESOURCES

### C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

Co-operative Education, as a form of work-integrated learning, is undertaken with the purpose of integrating theory and practice and with the understanding that the main focus of such experience is learning through working. Students are encouraged to reflect on the relationship between theory and field experience (i.e., co-op) in order to identify and understand how each informs the other. As such, existing faculty within the Department assess reflection associated with each work term, such as work term reports, poster presentations, chat rooms or blogs monitored by the faculty, etc.

### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

The Co-operative Education and Workplace Partnerships Office will provide the majority of the support associated with the development, matching, and monitoring of placements. Placements are monitored in an effort to ensure that all parties are fulfilling their roles and responsibilities. This office has substantial experience supporting similar

programs, such as co-op (undergraduate and graduate) and internships, now supporting over 1,800 students per year in work-integrated learning programs.

### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

#### C.6 Additional Resources Required - Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

### <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	Program offering done in collaboration with the Co-op & Workplace Partnerships office, which adds/subtracts resources based on enrolment and funding available via placement fees.
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

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#### A. NEW COURSE PROFILE

Course # and Title: CHEM-4980, Co-op Work Term

#### A.1 Calendar Description

Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.

Supervised experience in an approved, paid, full-time (minimum 420 hours) career-related setting with a focus on the application of theory and the development of transferable skills. The Co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. Once a placement has been confirmed the student must remain in the Co-op program until they have completed their work term requirements. Students who fail to complete their work term requirements, as per work term course outline, will receive a non-pass on their academic transcript for that work term, and may be required to withdraw from Co-op. (Prerequisite: Students must be enrolled in a Co-operative education program. Offered on a pass/non-pass basis).

#### A.2 Experiential Learning Categories

Does the course include experiential learning? Check all that apply.					
For definitions go to: <a href="https://www.uwindsor.ca/cces/1423/experiential-learning-definitions">https://www.uwindsor.ca/cces/1423/experiential-learning-definitions</a>					
applied research	field work				
capstone	industry/community consulting project				
clinic	interactive simulations				
	internship – full-time				
community service learning	internship – part-time				
creative performance or exhibit (for visual and performing arts)	professional practicum				
entrepreneurship	research project				
field experience or site visit	study abroad				
labs					
No experiential learning in this course					
A.3 Other Course Information					
Please complete the following tables.					

weight	Total	Delivery format			Breakdown of contact hours/week				
	contact hours	In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture	Lab/ Tutorial	Online	Co-op/ practicum/ experienti al learning
3.0	420				Work-Integrated learning				Minimum 35 hours/ week

Pre-requisites	Co-requisites	Anti-requisites		· ·	Replacing old course*** [provide old course number]
Students must be enrolled in a co-	· ·	N/A	N/A	Yes	N/A

operative		(for students	
education program		enrolled in a co-	
		op program)	

Students are able to repeat **CHEM-4980 – Co-op Work Term III** up-to one additional time; thereby, extending their placement from 12-months to 16-months.

\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.

Will students be able to obtain credit for the new course and the course(s) that it is replacing? N/A

#### Is the new course a required course in one or more programs?

X	$M_{\perp}$ Yes[A minor program change proposal (PDC Form C) or major program change proposal (PDC Form B) must be
	submitted with the new course proposal (PDC Form D)]
	NI

\_\_\_No

If yes, list all programs for which this course will be required:

Honours Chemistry (with Co-op)

Honours Chemistry with Thesis (with Co-op)

Honours Biochemistry (with Co-op)

Honours Biochemistry with Thesis (with Co-op)

Honours Biochemistry (Pharmacy Stream (with Co-op)

Honours Biochemistry (Pharmacy Stream) with Thesis (with Co-op)

#### **B. RATIONALE**

#### **B.1** Course Goal(s)

Please provide a statement about the purpose of the course within the program of study or as an option.

The chemistry and biochemistry degree programs with co-op is intended to give students an opportunity to get handson experience in a real work environment. In collaboration with the Co-operative Education and Workplace Partnerships office, we will provide students with work placements 12 months relevant to their field of study.

#### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In <u>developing this new course</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and <u>additional Resources</u> including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- **How** have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the TRC and University Principles documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form (such as learning outcomes)
  or in the course syllabus where appropriate?

Refer to answer for CHEM-2980.

#### **B.3 LEARNING OUTCOMES (QAF section 2)**

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

#### CHEM-4980. Co-op Work Term

THE INT - 4300: CO-OP WORK TETTI	
Course Learning Outcomes	Characteristics of a University of Windsor
This is a sentence completion exercise.	Graduate
At the end of this course, the successful student will know and be	A U of Windsor graduate will have the ability
able to:	to demonstrate:
A. Provide concrete examples of their own integration of theory and workplace experience.	A. the acquisition, application and integration of knowledge
B. Clearly articulate potential career options and develop an appropriate plan to effectively pursue these options.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Perform required tasks and seek feedback on performance. (Also applicable to D).	C. critical thinking and problem-solving skills
D.	D. literacy and numeracy skills
E Consistently adapt to professional expectations while engaging with workplace culture.(also applicable to H).	E. responsible behaviour to self, others and society
Identify necessary communication and/or teamwork skills and self-assess their ability to use these skills in the workplace (Also applicable to G)	F. interpersonal and communications skills
G. Incorporate both external assessments and self-assessments to actively improve performance. (Also applicable to H).	G. teamwork, and personal and group leadership skills
H. See E	H. creativity and aesthetic appreciation
I. Articulate the impact of workplace dynamics on their	I. the ability and desire for continuous
performance and reflect on how their performance affects	learning
workplace dynamics.	

#### **B.4** Demand for Course

Please provide as much information on projected enrolment as possible.

Projected enrolment levels for the first 5 years of the	Year 1	Year 2	Year 3	Year 4	Year 5
new course.	20	24	28	32	36

#### **B.4.1 Impact of New Course on Enrolment in Existing Courses**

What will be the impact of offering the new course on enrolments in existing courses in the program or Department?

None.

#### C. RESOURCES

### C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

Co-operative Education, as a form of work-integrated learning, is undertaken with the purpose of integrating theory and practice and with the understanding that the main focus of such experience is learning through working. Students are encouraged to reflect on the relationship between theory and field experience (i.e., co-op) in order to identify and understand how each informs the other. As such, existing faculty within the Department assess reflection associated with each work term, such as work term reports, poster presentations, chat rooms or blogs monitored by the faculty, etc.

### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

The Co-operative Education and Workplace Partnerships Office will provide the majority of the support associated with the development, matching, and monitoring of placements. Placements are monitored in an effort to ensure that all parties are fulfilling their roles and responsibilities. This office has substantial experience supporting similar programs, such as co-op (undergraduate and graduate) and internships, now supporting over 1,800 students per year in work-integrated learning programs.

### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### **C.5 Planned Reallocation of Resources and Cost-Savings**

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

#### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

### <u>C.6.1</u> Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	Program offering done in collaboration with the Co-op & Workplace Partnerships office, which adds/subtracts resources based on enrolment and funding available via placement fees.
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

#### University of Windsor Program Development Committee

\*5.3: Chemistry and Biochemistry – New Course Proposal (Form D)

Item for: Approval

Forwarded by: Faculty of Science

MOTION: That the following courses be approved: ^
CHEM-4200. Molecular, health, and Environmental Data Science

^Subject to approval of the expenditures required.

#### **Rationale/Approvals:**

- This new course proposal has been approved by the Department of Chemistry and Biochemistry Council and the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	BScH-Chemistry, BScH-Biochemistry					
DEPARTMENT(S)/SCHOOL(S):	Chemistry and Biochemistry					
FACULTY(IES):	Science					
Proposed change(s) effective as of* [Fall, Winter, Spring]: Winter 2027						

#### A. NEW COURSE PROFILE

\*(subject to timely and clear submission)

Course # and Title: CHEM-4200. Molecular, Health, and Environmental Data Science

#### A.1 Calendar Description

Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.

Data Science introduces the application of computational and statistical techniques to data analysis, with a focus on real-world problem-solving. Students in the course will explore key tools and frameworks for data analysis, with hands-on projects in domains such as healthcare, forensics, chemistry, and environmental sciences, environmental compliance regulations. This course is distinguished by its emphasis on practical implementation, the handling of diverse data types and structures, and the integration of machine learning and visualization tools for data-driven scientific decision-making. Topics covered include data acquisition and cleaning, exploratory data analysis, statistical modeling, supervised and unsupervised learning, feature engineering, and model evaluation. (Prerequisites: Semester 5 standing or above in a Science program).(3 lecture hours per week, 3 lab hours per week.)

#### **A.2 Experiential Learning Categories**

Does the course include experiential learning? Check all that apply.							
For definitions go to: <a href="https://www.uwindsor.ca/cces/1423/experier">https://www.uwindsor.ca/cces/1423/experier</a>	<u>ntial-learning-definitions</u>						
applied research	field work						
capstone	industry/community consulting project						
clinic	interactive simulations						
Со-ор	internship – full-time						
community service learning	internship – part-time						
creative performance or exhibit (for visual and performing arts)	professional practicum						
entrepreneurship	research project						
field experience or site visit	study abroad						
labs							
No experiential learning in this course							

#### A.3 Other Course Information

Please complete the following tables.									
Credit	Total	Delivery format				Breakdown of contact hours/week			
weight	contact hours	In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture	Lab/ Tutorial	Online	Co-op/ practicum/ experienti al learning
3.0	72	72				3	3		

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed	Required	Replacing old course***
			with:	course?	[provide old course number]
Semester 5				No	N/A
standing or above					
in a Science					
program					

\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.

#### **B. RATIONALE**

#### **B.1** Course Goal(s)

Please provide a statement about the purpose of the course within the program of study or as an option.

The fields of chemistry and biochemistry are increasingly data-driven. From computational chemistry and bioinformatics to spectroscopy, reaction modeling, and drug discovery, modern research and industry applications rely heavily on data analysis, machine learning, and statistical modeling. However, traditional chemistry and biochemistry programs often lack structured coursework to equip students with these essential data science skills. The introduction of the Molecular, health, and environmental data science course addresses this gap by integrating data-driven methodologies with core chemical and biochemical principles. The course is focused on data science techniques, computational simulations, and modeling using python for molecular/physical sciences and environmental-related programs. It is designed for students with no programming experience. It does not cover bioinformatics or genomics as these aspects are covered in other courses (namely BIOC 4010 and BIOM 4570) currently available within the Faculty of Science.

#### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In <u>developing this new course</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and <u>additional Resources</u> including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- **How** have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the <u>TRC</u> and <u>University Principles</u> documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?
- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?

• Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

The Molecular, Health, and Environmental Data Science course integrates Indigenous perspectives into environmental monitoring, health analytics, and molecular research. It includes discussions on Indigenous Data Sovereignty and the First Nations Principles of OCAP® (Ownership, Control, Access, and Possession) as they relate to healthcare data collection. Case studies will examine Indigenous-led machine learning models for disease tracking, emphasizing community ownership of health data. In molecular research, machine learning applications in natural product chemistry will integrate Indigenous knowledge, alongside ethical discussions on genomic data collection in Indigenous communities, informed by case studies of research misconduct. The course also explores Indigenous environmental monitoring methodologies, comparing them with conventional compliance regulations. Students will analyze data from Indigenous-led land stewardship programs alongside remote sensing and predictive modeling.

A guest lecture from an Indigenous scholar in bioinformatics or environmental data governance will introduce land-based data collection projects and Indigenous-led environmental initiatives. Additionally, students will complete a reflection assignment on ethical AI in Indigenous contexts, focusing on responsible machine learning in health diagnostics. The course will focus on real-world applications to ensure the students develop data science skills while respecting and integrating Indigenous knowledge systems.

#### **B.3 LEARNING OUTCOMES (QAF section 2)**

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

	urse Learning Outcomes is is a sentence completion exercise.	Characteristics of a University of Windsor Graduate		
<u>At</u>	the end of this course, the successful student will know and able to:	A U of Windsor graduate will have the ability to demonstrate:		
A.	Apply data acquisition and cleaning techniques to ensure the accuracy and reliability of datasets used for analysis.	A. the acquisition, application and integration of knowledge		
В.	Identify and apply appropriate statistical models and machine learning algorithms for different types of data problems.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)		
C.	Explain when it is appropriate to use Exploratory Data Analysis (EDA) versus more advanced predictive or prescriptive modeling techniques.	C. critical thinking and problem-solving skills		
D.	Conduct statistical analysis and performance evaluation of models using quantitative metrics.	D. literacy and numeracy skills		
E.	Identify and adhere to ethical considerations in data science, including data privacy, bias mitigation, and responsible AI practices.	E. responsible behaviour to self, others and society		
F.	Present data-driven findings clearly, accurately, and effectively using visualizations, reports, and presentations.	F. interpersonal and communications skills		

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Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
G. Work collaboratively on data science projects, contributing to problem-solving and model development in a team setting.	G. teamwork, and personal and group leadership skills
H. Apply innovative data science techniques and creative problem-solving to generate meaningful insights from data.	H. creativity and aesthetic appreciation
I. N/A	I. the ability and desire for continuous learning

#### **B.4 Demand for Course**

Please provide as much information on projected enrolment as possible.

Projected enrolment levels for the first 5 years of the	Year 1	Year 2	Year 3	Year 4	Year 5
new course.	15	15	30	30	30

#### **B.4.1 Impact of New Course on Enrolment in Existing Courses**

What will be the impact of offering the new course on enrolments in existing courses in the program or Department?

N/A

#### C. RESOURCES

### C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do <u>not</u> name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from <u>other</u> campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

N/A

### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

There is no reliance on adjunct, limited-term or sessional faculty for this course as the required expertise to teach this course is available within the chemistry and biochemistry faculty members.

### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

None

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

This course be taken primarily by students in place of one of the Special Topics courses currently being taught by a faculty member with a small number of students. It is anticipated that this course will attract a larger cohort of students across the faculty. Special Topics courses are not required and thus the teaching of the faculty member can be reallocated to this course.

#### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

### <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

#### University of Windsor Program Development Committee

\*5.4: Biomedical Sciences – New Course Proposal (Form D)

Item for: Approval

Forwarded by: Faculty of Science

MOTION: That the following courses be approved: A BIOM-2400. Cellular and Molecular Neuroscience

^Subject to approval of the expenditures required.

#### **Rationale/Approvals:**

- This new course proposal has been approved by the Department of Biomedical Sciences Council and the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Biomedical Sciences		
DEPARTMENT(S)/SCHOOL(S):	Biomedical Sciences		
FACULTY(IES):	Sciences		
Proposed change(s) effective as of* [Fall,	, Winter, Spring]: Fall 2025		
*(subject to timely and clear submission)			

#### A. NEW COURSE PROFILE

Course # and Title: BIOM-2400. Cellular and Molecular Neuroscience

#### A.1 Calendar Description

Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.

This course will provide students with an understanding of how neurons function in normal and disease conditions from a cellular and molecular perspective. Students will learn the electrical properties of neurons and the ways in which electrical signals are generated, received, and integrated for neuronal communication. This course will also focus on the molecular mechanisms underlying neuronal communication and synaptic plasticity in the nervous system. Cellular and molecular mechanisms of diseases of the nervous system will also be covered. This course will provide the necessary background for upper-level BIOM neuroscience courses. Prerequisite (BIOL-1101 and BIOL-1111). (3 lecture hours per week).

#### A.2 Experiential Learning Categories

Does the course include experiential learning? Check all that apply.						
For definitions go to: <a href="https://www.uwindsor.ca/cces/1423/experiential-learning-definitions">https://www.uwindsor.ca/cces/1423/experiential-learning-definitions</a>						
applied research	field work					
capstone	industry/community consulting project					
clinic	interactive simulations					
Со-ор	internship – full-time					
community service learning	internship – part-time					
creative performance or exhibit (for visual and performing arts)	professional practicum					
entrepreneurship	research project					
field experience or site visit	study abroad					
labs						
No experiential learning in this course						

#### **A.3 Other Course Information**

Please complete the following tables.									
Credit	Total	Delivery format			Breakdown of contact hours/week				
weight	contact hours	In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture	Lab/ Tutorial	Online	Co-op/ practicum/ experienti al learning
3	36	36	0	0	0	3	0	0	0

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Pre-requisites	Co- requisites	Anti-requisites		Replacing old course*** [provide old course number]
BIOL-1101, BIOL 1111				

\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.

Will students be able to obtain credit for the new course and the course(s) that it is replacing? N/A

#### **B. RATIONALE**

#### **B.1** Course Goal(s)

Please provide a statement about the purpose of the course within the program of study or as an option.

The Department of Biomedical Sciences currently has two upper-level neuroscience courses (BIOM 3400 Neurobiology of the Synapse and BIOM 4440 Neurophysiology). Additionally, three other upper-level neuroscience courses (BIOM 3200 Systems Neuroscience, BIOM 4500 Molecular Basis of Behaviour, and BIOM 4540 Regenerative Neurobiology and Disease) are being added. The newly created BIOM 2400 Cellular and Molecular Neuroscience course will serve to prepare students for all five of these upper-level courses and provide the necessary cellular and molecular neuroscience background for students to take these courses. BIOL 2480 Principle of Neuroscience currently serves as a survey course to provide students with a basic understanding of the basic principles of neuroscience but does not cover cellular and molecular neuroscience in enough detail to adequately prepare students for upper-level BIOM neuroscience courses. Furthermore, BIOL 2480 does not provide students with an understanding of how neuronal function is altered in disease conditions, which is essential knowledge for students in Biomedical Sciences. BIOL 2480 and BIOM 2400 can exist as complementary courses, since the content of each course is quite different from one another.

#### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In <u>developing this new course</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and additional Resources including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- How have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the TRC and University Principles documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?
- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?

Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

As a Department of Biomedical Sciences, we are committed to decolonizing and Indigenizing our teaching and research practices. We recognize that many of our courses and practices do not yet incorporate Indigenous knowledges or ways of knowing, and that we have much to learn and re-learn, and much work to do to successfully meet our commitment. We strive to Indigenize Biomedical Sciences curriculum by integrating Indigenous perspectives, knowledge systems, and cultural practices into the educational framework. These are some strategies we are trying to implement for our Biomedical Sciences courses and programs:

- Incorporate Indigenous Health Issues: Include topics related to Indigenous health disparities, traditional medicine, Indigenous health knowledge and community health practices into the curriculum and individual courses where applicable. As an example, BIOM 3750 (Cancer Undergraduate Research Education) has a module in the syllabus that students have to complete for grades. Each student will complete the Cancer Care Ontario Indigenous Relationship and Cultural Awareness Courses. The courses to complete are: 1. First Nations, Inuit and Métis Culture, Colonization and the Determinants of Health and 2. The Need for Cultural Competence in Healthcare.
- 2. Guest Lectures and Workshops: Invite Indigenous scholars and practitioners to share their knowledge and experiences with students in our courses.
- 3. Research Opportunities: Encourage students to engage in research that addresses Indigenous health issues, ensuring that the research is community-informed and ethically conducted. In collaboration with our partner (the We-Spark Health Institute), grants have been awarded that have centered on Indigenous peoples and to address the huge health disparities between Indigenous and non-Indigenous peoples. This disparity has its roots in colonization. As revealed by the Truth and Reconciliation and Murdered and Missing women's reports much of the history of Indigenous peoples in Canada was minimized or erased. This negatively impacted the health and lives of many Indigenous peoples as traditions were stripped away and families torn apart. Addressing this huge health disparity, requires Indigenous peoples, experts in the field and healthcare providers to examine the evidence and create dialogue to improve the understanding of healthcare need. A recent grant awarded to Dr. Vikesh Maraj is studying how to achieve long-term effectiveness of nutrition counselling for Indigenous older adults with type 2 Diabetes in remote Southwestern Ontario with a culturally safe nutrition plan.
- 4. Curriculum Review and Development: Regularly assess and update the curriculum to ensure it remains relevant and inclusive of Indigenous perspectives. Jaimie Kechego has provided us with important insight into our curriculum changes (e.g. our Biomedical Sciences (Interdisciplinary Health Sciences program)) which has an area of concentration centered on Indigenous health as part of the curriculum. We anticipate future collaborations to expand these types of offerings and integration of new ideas.
- 5. Interdisciplinary Approaches: Collaborate with other Faculties such as Nursing, Human Kinetics and FASSH, to provide a broader understanding of Indigenous health and wellness.
- 6. Support for Indigenous Students: Create a supportive environment for Indigenous students, including mentorship programs and resources tailored to their needs.
- 7. Evaluation and Feedback: Implement mechanisms for continuous feedback from Indigenous communities and students to improve the curriculum and teaching practices.

With these strategies in mind, our Biomedical Sciences department can create a more inclusive and holistic educational experience that respects and values Indigenous knowledge and perspectives. The Faculty of Science has recently welcomed Professor Clint Jacobs, a recognized Indigenous Knowledge Holder as an expert in Indigenous-centered relationships to develop community-based initiatives in research, teaching and capacity development. As for faculty participation in this process, Dr. Anna Kozarova has taken the 'Pulling Together-Foundations series' taught by Jaimie Kechego which educated in part, the role of colonization and how it continues to affect the Indigenous Peoples of Canada and defines the relationship between indigenous and non-indigenous people today. Another of our faculty members (Dr. Dora Cavallo-Medved) along with Dr. Isabelle Barrette-Ng and Clint Jacobs (Integrative Biology) and Dr. Phil Dutton (Associate Dean of Science) is a co-PI on a grant that is focused on studying the Indigenization of curriculum across the Faculty of Science. We strongly encourage our faculty to engage in these types of initiatives/courses/workshops to better incorporate indigenous ways of knowing into their courses.

Although we are proud of the work currently in progress, we realize that there is much more to do, and we are committed to learning, unlearning and re-learning. This specific course with its focus on cellular and molecular mechanisms of neuronal function in normal and diseased conditions does not have specific Indigenous content in the learning outcomes. Rather than implementing Indigenous learning outcomes immediately into all our courses, we are committing to increasing our knowledge and understanding of the importance of Indigenizing all Biomedical Sciences curriculum, not just one course. Through this journey, we will identify Indigenous material and perspectives that are particularly relevant to our students and will expand on this question in future forms with our intents and actions.

#### References:

- Truth and Reconciliation Commission of Canada. "Truth and Reconciliation Commission of Canada: Calls to Action." 2015. <a href="https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls">https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls</a> to Action English2.pdf
- Universities Canada. "Universities Canada principles on Indigenous education." June 29, 2015. <a href="https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/">https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/</a>

#### **B.3 LEARNING OUTCOMES (QAF section 2)**

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

Course Learning Outcomes	Characteristics of a University of Windsor
This is a sentence completion exercise.	Graduate
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
A. Explain and describe the electrical properties of neurons and how electrical signals are used for neuronal communication. Identify and describe a wide range of cellular and molecular neuroscience concepts related to processes such as synaptic transmission, synaptic vesicle endocytosis, and synaptic plasticity.	A. the acquisition, application and integration of knowledge
B. Critically evaluate how cellular and molecular neuroscience approaches are used in neuroscience research. Approaches include CRISPR Cas9 gene editing, RNA-seq, optogenetics, electrophysiology and calcium imaging.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Explain how dysregulation of neuronal function can result in diseases of the nervous system. (Also applies to D).	C. critical thinking and problem-solving skills
D.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills

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Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
H.	H. creativity and aesthetic appreciation
I. Identify and describe how various diseases of the nervous system are caused by cellular and molecular changes in neurons.	I. the ability and desire for continuous learning

#### **B.4** Demand for Course

Please provide as much information on projected enrolment as possible.

Projected enrolment levels for the first 5 years of the	Year 1	Year 2	Year 3	Year 4	Year 5
new course.	120	120	120	120	120

#### **B.4.1 Impact of New Course on Enrolment in Existing Courses**

What will be the impact of offering the new course on enrolments in existing courses in the program or Department?

The creation of the new course will relieve the high enrolment of BIOL 2480. Enrolment in this course has increased from approximately 60-100 students (2015-2018) to 180-240 students (2019-2024).

#### C. RESOURCES

### C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do <u>not</u> name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from <u>other</u> campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

The Department of Biomedical Sciences has four faculty members with expertise in cellular and molecular neuroscience and all these faculty members are qualified to teach this course. Current administrative support will be adequate for this course.

### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

Four current faculty members in the Department of Biomedical Sciences are capable of teaching this course, so no Adjunct, Limited-term, and Sessional Faculty are required.

### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

#### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	None
Staff:	None
GA/TAs:	2 GAs for marking of exams

### <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

### University of Windsor Program Development Committee

\*5.5: Political Science – New Course Proposals (Form D)

Item for: Approval

Forwarded by: Faculty of Arts, Humanities, and Social Science

MOTION: That the following course be approved:^

POLS-2340. The Making of the Global World POLS-4450. Todays Totalitarian Trends

^Subject to approval of the expenditures required.

### Rationale/Approvals

- The new courses haves been approved by the Department of Political Science Council and the Faculty of Arts, Humanities, and Social Sciences Council.
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	BA(G) Political Science; BA(H) Political Science; BA(H) International Relations and Development Studies; BA(H) Law and Politics; BA(H) Political Science with French Specialization
DEPARTMENT(S)/SCHOOL(S):	Political Science
FACULTY(IES):	FAHSS

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]:	Winter 2026
*(subject to timely and clear submission)	

#### A. NEW COURSE PROFILE

Course # and Title: POLS-2340. The Making of the Global World

### A.1 Calendar Description

Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.

This course examines some of the basic historical processes that have constituted the contemporary global world. Among others, these include the rise of colonialism, capitalism, and the nation-state along with science as the dominant epistemology (i.e. way of knowing). The course explores particular issues that have emerged through this history including racism and nationalism, neoliberalism and precarity, migration and border control.

#### A.2 Other Course Information

Please complete the following tables.

Credit	Total		Delivery format			Break	down of co	ntact ho	urs/week
weight	contact hours	In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture	Lab/ Tutorial		Co-op/ practicum/ experientia I learning
3.0	36	Х				х			

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:		Replacing old course*** [provide old course number]
None				no	

<sup>\*\*\*</sup>Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.

Will students be able to obtain credit for the new course and the course(s) that it is replacing? N/A

#### **B. RATIONALE**

### **B.1** Course Goal(s)

Please provide a statement about the purpose of the course within the program of study or as an option.

The central goal of this course is to give students (Political Science majors and FAHSS students in general) a basic knowledge of how some key historical developments -- state-based politics; colonial expansion, racism, and Indigenous displacement; the rise of scientific classifications; capitalism and industrialization — have conditioned

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contemporary global political issues. These issues include racialized disparity; global wealth inequality; migration and refugee movements; struggles over expert knowledge and public policy; and populist movements on both the left and the right. This course will provide a strong foundation to upper-level courses in the department's subfields of International Relations and Development, Political Theory, Culture, and Religion, Canadian Politics, and Comparative Politics. More broadly, it will provide any FAHSS student with a basic awareness of historical events that have constituted today's world. It will therefore help students think about how to responsibly engage complex political and ethical dilemmas.

#### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building stronger, more meaningful partnerships with Indigenous students, scholars and communities. In developing this course, how has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

The course places Indigenous peoples in the centre of the global historical events that it describes. Students will learn how Indigenous contact with European expansion both led to their marginalization, but also how that contact influenced and resisted that expansion. Comparisons of Indigenous ways of life with European politics and economics will show students that the so-called "modern" world is but one historically particularly way of organizing daily life.

### B.3 LEARNING OUTCOMES (QAF section 2.1.1, 2.1.3, and 2.1.6)

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
A. Describe how key historical processes have created some of the particular political dilemmas now facing the world.	A. the acquisition, application and integration of knowledge
B. Critically and independently identify and evaluate key arguments about global issues.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Critically assess the applicability of major themes and theories about how the contemporary world has come to be understood by the mainstream society and to imagine more equitable alternatives.	C. critical thinking and problem-solving skills
D. Read and critically analyze texts that offer counterintuitive perspectives on key global political issues, how quantitative scientific methods are used in population management vis-àvis state policy and capital accumulation.	
E. Articulate the logic of diverse perspectives on political issues, including the logic of your perspective.	E. responsible behaviour to self, others and society
F. Discuss important, and often delicate, topics with peers.	F. interpersonal and communications skills

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Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
G. Lead group discussions on contemporary political issues that have global implications with a special focus on their ethical dimension.	
H. Analyze and synthesize various influences on contemporary global politics and develop written and oral presentations to share findings.	
I. Identify conditions that enable political and ethical engagement in contemporary global life.	I. the ability and desire for continuous learning

#### **B.4 Demand for Course**

Please provide as much information on projected enrolment as possible.

Projected enrolment levels for the first 5 years of the	Year 1	Year 2	Year 3	Year 4	Year 5
new course.	100	100	100	100	100

#### **B.4.1 Impact of New Course on Enrolment in Existing Courses**

What will be the impact of offering the new course on enrolments in existing courses in the program or Department?

Currently the Department of Political Science does not offer a synthetic and integrated course on contemporary global issues and the historically particular processes that shaped them. Given that students can use this course to prepare them for several of the department's subfields, I expect student enrolment to remain strong. I don't expect this course to have an impact on enrolments in other courses in the department.

#### **B.5 Student Workload**

Provide information on the expected workload per week of a student enrolled in this course. NOTE: Student workload should be consistent with the credit weight assigned to the course.

Ave	Average number of hours per week that the student will be expected to devote to:				
3	Lectures				
	Tutorials				
	Labs				
	Practical experience				
1	Independent Study				
	Reading for the course				
1	Work for assessment (essays, papers, projects, laboratory work)				
	Meeting with others for group work/project assignments				
	Studying for tests/examinations				
	Other: [specify]				
How	does the student workload for this course compare	The overall workload for this class will be similar			
with	other similar courses in the department/program area?	to other courses at the second-year level.			

#### C. RESOURCES

#### C.1 Available Faculty Expertise and Staff Resources (QAF sections 2.1.7, 2.1.8, 2.1.9 and 2.1.10)

Describe all faculty expertise and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the new course. Please <u>do not</u> name specific individuals.

This course will be facilitated by a faculty member within the Department of Political Science. The department has a qualified instructor who possesses the professional background and has the experience of teaching a similar course for the past ten years at three Canadian universities. The instructor's research expertise is signified by the publication of two books on prestigious academic premises that examine global issues from the historical and synthetic perspectives that this course adopts. This instructor is fully committed to developing the course outline and offering this course to students on a regular basis.

#### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the new course.

None. This course will be delivered primarily using existing resources in the Department of Political Science.

#### C.2 Resource Implications for Other Campus Units (Ministry sections 3 and 4)

Describe the reliance of the proposed new course on existing resources from <u>other</u> campus units, including for example: faculty teaching, equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, Provide relevant details.

The course does not rely on existing resources from other campus units.

### C.3 Anticipated New Resources (QAF sections 2.1.7, 2.1.8 and 2.1.9; Ministry section 4)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the new course.

N/A

### C.4 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the new course. (e.g., streamlining existing programs and courses, deleting courses, etc.).

N/A

#### C.5 Additional Resources Required – Resources Requested (QAF section 2.1.7 and 2.1.9)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to offer the new course.If not applicable, write n/a.

Faculty:	None
Staff:	None
GA/TAs:	GA/TAs will be assigned from within the department to this class using the current formula for allotting
	these resources: one per 50 students in the class.

#### C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to offer the new course, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	None
Teaching and Learning Support:	None
Student Support Services:	None
Space and Facilities:	None
Equipment (and Maintenance):	None

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TITLE OF PROGRAM(S)/CERTIFICATE(S):	BA(G) Political Science; BA(H) Political Science; BA(H) International Relations and Development Studies; BA(H) Law and Politics; BA(H) Political Science with French Specialization
DEPARTMENT(S)/SCHOOL(S):	Political Science
FACULTY(IES):	FAHSS

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Winter 2026
*(subject to timely and clear submission)	

#### A. <u>NEW COURSE PROFILE</u>

Course # and Title: POLS-4450. Today's Totalitarian Trends

### A.1 Calendar Description

Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.

This course examines political trends around the world that have been variously described as fascist, authoritarian, majoritarian, autocratic, etc. These appear in countries in both the so-called Global South and Global North. The course seeks to understand these trends, on the one hand, as case studies unique to a particular country or world region, and, on the other hand, as an effect of the globalization of such modernist phenomena as colonialism, nationalism, racism, class distinction, "progress", and "freedom". It will compare these cases in the light of twentieth century totalitarianism to better understand similarities and differences over the last one hundred years.

#### A.2 Other Course Information

Please complete the following tables.

Credit	Total			Breakdown of contact hours/week					
weight	contact hours	In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture/ seminar	Lab/ Tutorial		Co-op/ practicum/ experientia I learning
3.0	36	Х				х			

Pre-requisites	Co-requisites	Anti-requisites	 	Replacing old course*** [provide old course number]
None			no	

\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.

Will students be able to obtain credit for the new course and the course(s) that it is replacing?	N/A
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#### **B. RATIONALE**

### **B.1** Course Goal(s)

Please provide a statement about the purpose of the course within the program of study or as an option.

The central goal of this course is to give students (Political Science majors and FAHSS students in general) an in-depth view of how pluralist mass societies transform into homogenized spaces premised upon singular definitions of gender, race, and nation. This course will serve as a capstone seminar in the department's areas of International Relations and Development, Political Theory, Culture, and Religion, and Comparative Politics. More broadly, it will provide any FAHSS student with an in-depth awareness of how today's global politics so easily become divisive, terrifying, and violent. It will therefore help students think about how to responsibly engage today's complex and sensitive political issues.

#### B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building stronger, more meaningful partnerships with Indigenous students, scholars and communities. In developing this course, how has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

It is a historical fact that the processes associating with totalitarianism were first developed in colonized areas of the world, then transferred back to Europe. Similarly, these processes were also deployed in settler countries like Canada, the US, and Australia against Indigenous and enslaved peoples. Understanding modernity's draw to totalitarianism requires an understanding of both colonization and Indigenous and Black resistance to it.

#### B.3 LEARNING OUTCOMES (QAF section 2.1.1, 2.1.3, and 2.1.6)

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

Course Learning Outcome	Characteristics of a University of Windsor
This is a sentence completion exercise.	Graduate
At the end of this course, the successful student will know and be	1
able to:	to demonstrate:
A. Describe how key historical processes have created some of	A. the acquisition, application and
the particular political dilemmas now facing the world, such as	integration of knowledge
colonialism, etc.	
B. Read key texts about global issues, draw out the key	B. research skills, including the ability to
arguments, and critically and independently evaluate those	define problems and access, retrieve and
arguments.	evaluate information (information literacy)
C.	C. critical thinking and problem-solving skills
Critically assess the applicability of major themes and theories	
about how the contemporary world has come to be understood	
by the mainstream society and to imagine more equitable	
alternatives.	
D. Read and evaluate texts to identify diverse and counterintuitive	D. literacy and numeracy skills
perspectives on key global political issues.	

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Course Learning Outcome This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
E. Identify the logic behind various perspectives on a given political issue and explain how they make sense from their standpoint.	l · · ·
F. Articulate the logic of diverse perspectives on political issues, including the logic of your perspective.	F. interpersonal and communications skills
G. Lead peers in ethical discussion about contemporary political issues that have global implications.	G. teamwork, and personal and group leadership skills
H. Analyze and synthesize various influences on contemporary global politics and develop written and oral presentations to share findings.	H. creativity and aesthetic appreciation
I. Identify conditions that enable political and ethical engagement in contemporary global life.	I. the ability and desire for continuous learning

#### **B.4 Demand for Course**

Please provide as much information on projected enrolment as possible.

Projected enrolment levels for the first 5 years of the	Year 1	Year 2	Year 3	Year 4	Year 5
new course.	25	25	25	25	25

#### **B.4.1 Impact of New Course on Enrolment in Existing Courses**

What will be the impact of offering the new course on enrolments in existing courses in the program or Department?

Currently the Department of Political Science does not offer a course on totalitarianism, fascism, authoritarianism, or any political arrangement designed to undermine democracy and plurality. However, these forms of government, and trends toward, are a core feature of the modern world, thus making it imperative that students have the opportunity to learn about it.

### **B.5 Student Workload**

Provide information on the expected workload per week of a student enrolled in this course. NOTE: Student workload should be consistent with the credit weight assigned to the course.

Ave	Average number of hours per week that the student will be expected to devote to:			
3	Lectures/seminar			
	Tutorials			
	Labs			
	Practical experience			
1	Independent Study			
	Reading for the course			
1	Work for assessment (essays, papers, projects, laboratory work)			
	Meeting with others for group work/project assignments			
	Studying for tests/examinations			

Other: [specify]	
How does the student workload for this course compare	The overall workload for this class will be similar
with other similar courses in the department/program area?	to other courses at the fourth-year level.

#### C. RESOURCES

### C.1 Available Faculty Expertise and Staff Resources (QAF sections 2.1.7, 2.1.8, 2.1.9 and 2.1.10)

Describe all faculty expertise and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the new course. Please <u>do not</u> name specific individuals.

This course will be facilitated by a faculty member within the Department of Political Science. The department has a qualified instructor who possesses the appropriate professional background and has the experience of teaching a similar course for the past three years. The instructor's qualifications is signified by his editorship of the website Today's Totalitarianism that offers expert commentary on global trends toward cultural chauvinism, centralized executive authority, and suppression of opposition viewpoints. This instructor is fully committed to developing the course outline and offering this course to students on a regular basis.

#### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the new course.

None. This course will be delivered primarily using existing resources in the Department of Political Science.

#### C.2 Resource Implications for Other Campus Units (Ministry sections 3 and 4)

Describe the reliance of the proposed new course on existing resources from <u>other</u> campus units, including for example: faculty teaching, equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, Provide relevant details.

The course does not rely on existing resources from other campus units.

#### C.3 Anticipated New Resources (QAF sections 2.1.7, 2.1.8 and 2.1.9; Ministry section 4)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the new course.

N/A

#### C.4 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the new course. (e.g., streamlining existing programs and courses, deleting courses, etc.).

N/A

### C.5 Additional Resources Required – Resources Requested (QAF section 2.1.7 and 2.1.9)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to offer the new course. If not applicable, write n/a.

Faculty:	None
Staff:	None
GA/TAs:	No GA/TAs required as it is a fourth-year seminar with enrollment capped at 25.

### C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to offer the new course, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	None
Teaching and Learning Support:	None
Student Support Services:	None
Space and Facilities:	None
Equipment (and Maintenance):	None

### University of Windsor Program Development Committee

*5.6:	Computer Science	(Graduate) – Minor	Program (	Changes (	(Form C	)
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Item for: Approval

Forwarded by: Faculty of Science

MOTION: That the admission and degree requirements for the PhD in Computer Science (PhD) be changed in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

### **Rationale/Approvals:**

- This proposal as approved by the Department of Computer Science Council, the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council), and the Faculty of Graduate Studies Council.
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	PhD in Computer Science (PhD)
DEPARTMENT(S)/SCHOOL(S):	School of Computer Science
FACULTY(IES):	Faculty of Science

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

#### Does the minor program change include new courses?:

	Yes [All new course proposals must be submitted on PDC Form Ds and submitted for approval with the minor
	program change proposal (PDC Form C)]
Х	No

If yes, list all new courses: N/A

#### A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding and underlining">bolding and underlining</a>. Example: Degree requirements: WXYZ-1000, <a href="wxxyz-1010">wxxyz-1010</a>, WXYZ-1100, WXYZ-2100, WXYZ-3100, WXYZ-4100, plus three additional courses at the **3000-level or** 4000-level.

#### PhD in Computer Science (PhD)

The general regulations for the Degree of the Doctor of Philosophy (PhD.) at the University of Windsor, as set out in the section titled, The Degree of Doctor of Philosophy, will apply together with the more specific requirements for the degree of PhD. in Computer Science given in the following section. For admission, continuation in good standing, and graduation, students must satisfy both the general university regulations and the specific regulations for Computer Science.

#### **Admission Requirements**

Admission to the doctoral program is highly competitive and possession of the minimum requirements may not guarantee acceptance. In order to be considered for admission to the doctoral program in Computer Science, applicants must have completed a Master's degree in Computer Science or a closely related field. Applicants with a degree in other disciplines, such as Information Systems, Computer Engineering, Systems Engineering, Mathematics, Statistics or comparable programs, may be considered for admission at the discretion of the Admissions Committee based on academic background and qualifications. In addition, applicants must demonstrate to the Admissions Committee, the ability to conduct independent research in Computer Science for instance, through the completion of research-based thesis, research-oriented project, or appropriate research experience in industry or academia.

International applicants to graduate programs in Computer Science must demonstrate English proficiency by meeting or exceeding an IELTS overall score of 6.5 (or equivalent), with no more than one band scores of 6.0, and no band score below 6.0 (or TOEFL of 92 or equivalent).

#### **Program Requirements** Outline of Degree Requirements

All PhD students must fulfill the following graduate academic requirements:

- (a) A qualifying examination within four terms after entering the program.
- (b) No less than two and usually no more than four graduate courses. Four graduate courses in Computer Science.
- (c) Comprehensive examination within six terms after entering the program.
- (d) A research dissertation proposal within eight nine terms of entering the program.
- (e) Submission of annual progress reports.

- (f) Presentation of two seminars, (in additional to the other presentations required herein).
- (g) A final examination consisting of a PhD public oral dissertation defence (COMP-9980).

#### **Qualifying Examination**

The qualifying examinations must be taken by all students entering the doctoral program. The qualifying examination is intended to ensure that the student has a mastery of the fundamentals in Computer Science in order to undertake research. This is a breadth requirement in that it does not require the student to be able to undertake research in each of the fundamental areas. Rather, the student must demonstrate knowledge, in each of the fundamental areas, at a level that would be expected of a graduate from a four year Honours Computer Science university degree program. The student must obtain an average of at least 70% in each test and/or course works done for the qualifying examination.

#### **Graduate Courses**

Each student must complete no less than two and usually no more than four graduate Computer Science courses, not including those taken for credit in a Master's degree, and not including seminar or thesis courses.

Each student must complete four graduate Computer Science courses as follows:

- At the theory/foundational level, at least two courses from the following list: COMP-8400, COMP-8540, COMP-8570, COMP-8590, COMP-8610, COMP-8700, COMP-8720, COMP-8740.
- At the application or topic-specific level, at least two COMP-8xx0 courses excluding COMP-8010, COMP-8970,
   COMP-9980.

In exceptional cases, and upon approval of the program coordinator, the student may take more than four graduate courses or courses from other programs.

Graduate course selection will be determined by the student's Doctoral Committee. Graduate credit will be given for a grade of 70% or higher in a graduate course.

#### Comprehensive Examination

The comprehensive examination is one in which the student is asked to demonstrate a reasonable mastery of the field of specialization; it is designed to test the student's command of knowledge and ability to integrate that knowledge, after completion of all or most of the graduate course work. Normally, this examination is completed during the sixth term of graduate study and is a prerequisite to admission to candidacy. The comprehensive examination will consist of a written exam set by the student's supervisor(s) in the relevant research area, and an oral exam conducted by the student's PhD Committee.

#### The comprehensive examination will consist of two parts:

(i) the written comprehensive exam in the form of a survey or literature review report as per the standards of ACM Computing Surveys or similar (e.g., Elsevier or IEEE journals), which will be reviewed by the doctoral committee; upon approval, the student will proceed to the oral presentation;

(ii) the oral comprehensive exam in the form of a public presentation evaluated by the doctoral committee.

#### Admission to Candidacy

A student is admitted to candidacy when they have completed all the required graduate courses and has passed the comprehensive examination.

#### **Seminars**

The student will complete two seminars: Seminars 1 and 2. Each seminar will consist of delivering a public presentation of research work equivalent to a scientific paper that could be published in a reputable journal or conference or as an impactful research-oriented project in industry. The presentation will take place within the School of Computer Science (as a seminar series, colloquium, or publicly-announced talk), which will require the presence of the supervisor (at least one, if co-supervised) and at least one member of the doctoral committee.

<u>Seminar 1 is normally completed by the eighth term of studies, while Seminar 2 is normally completed by the eleventh term of studies.</u>

#### **Dissertation Proposal**

By the ninth term of studies, the student will present, in the form of an oral presentation, an outline of their proposed dissertation research. This will be presented to the doctoral committee who will approve, with or without modifications, or reject the proposal. If the dissertation proposal is rejected, the student will be given a single opportunity to repeat it.

#### **Doctoral Dissertation**

The final oral examination of the dissertation requires both an adequate dissertation and a satisfactory defence of the dissertation. This examination will be conducted by the doctoral committee. Following successful completion of Seminar 2, the acceptance and provisional approval of the dissertation by the doctoral committee, and a satisfactory preliminary report from the external examiner, a date for the oral examination can be set. The oral examination will consist of a public presentation evaluated by the committee who will decide on approval, with or without modifications, or rejection. The oral defense is normally completed by the twelfth term of studies.

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

#### **B. RATIONALE**

Please provide a rationale for the proposed change(s).

In the current structure which includes a qualifying exam, as well as a comprehensive exam without a standardized protocol:

- Other comparison PhD programs in Ontario do not include a qualifying exam, and they include a comprehensive exam with a standardized protocol. These changes will bring us in line with comparison PhD programs in Ontario.
- Students and supervisors face difficulty in publishing in well-recognized conferences and journals in a timely fashion, because they have to focus on the qualifying exam during the first and second term.
- PhD students face the challenge of not passing the qualifying exam after the second attempt and finish with their "hands empty". Course work, by contrast, provides the opportunity for students to learn critical materials in a more effective manner.
- Supervisors have to provide funding during the qualifying exam period (which is sometimes 2 terms) while the student does not have an opportunity to make progress on their research project(s).
- There is no clear or standardized protocol for the written portion of the comprehensive examination. As such, it is up to the supervisor to decide whether or not the student is knowledgeable about the field(s) of research.

This new structure is aligned with the MSc program: Students who want to transfer from MSc to PhD can be given credit for the graduate courses taken and for the survey paper completed during their course work.

#### In the new structure:

- Students will start their research project sooner by avoiding the stress and time spent in the qualifying exams. In contrast, taking more graduate level courses will give them the possibility of embarking on new research sooner, and hence enhancing their research productivity/output in the form of stronger publications.
- With the new form of the comprehensive exam, students will have the opportunity to become knowledgeable about the field of research, while benefiting from writing a survey as part of the comprehensive exam. This survey could be used as literature review of their publication(s) and/or dissertation.
- Failure to complete the milestones by the corresponding deadlines will be tracked by the Graduate Secretary (or the Program Coordinator in exceptional cases).

No resources are needed for implementation of the new program structure:

- With the new structure, students will have to take just two more courses (four in total). Based on past trends, approximately five or fewer new students join the program each term, which can be easily accommodated in existing graduate courses. Moreover, some theory and foundational courses normally have low enrolment; new PhD students will help boost the enrolment level in those courses.
- In addition, one of the PhD students' four courses could be COMP-8900, which would be offered by the supervisor and will give the student and the supervisor the chance of focusing on a specific research project, yielding in most cases, the pathway toward understanding the field and a new publication. As such no additional resources are required.
- Currently the qualifying examination is a demand on resources, involving the workload of four faculty members
  who have to prepare and mark qualifying exams each term, as well as, in some cases, mentor the students to
  prepare for these exams.
- The new form of the comprehensive exam and the seminars require no additional resources.

#### Summary of the structural changes to the program:

- 1. The qualifying exam is removed, and the minimum number of required courses is increased from 2 to 4. The comprehensive exam is retained and guidelines for the comprehensive exam are added.
- 2. The required graduate courses will cover theory and/or foundational level as well as applications. The theory/foundational courses cover theory and foundations that are currently required in the qualifying exam.
- 3. The seminars require that the presentations correspond to scientific works comparable to those peer-reviewed and published in reputable conferences or journals, or a research-oriented project in industry.
- 4. The comprehensive exam requires a survey or literature review paper, which prepares the student to become knowledgeable about the state-of-the-art in the research topic(s).
- 5. All other changes are about the timelines or are minor changes, mostly regarding the protocols to follow in order to evaluate such requirements.

#### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources

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requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

N/A

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

N/A

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### C.4 Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### **C.5 Planned Reallocation of Resources and Cost-Savings**

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

## <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

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### University of Windsor Program Development Committee

\*5.7: Mathematics and Statistics – Minor Program Changes (Form C)

Item for: Approval

Forwarded by: Faculty of Science

MOTION: That the program regulations for Mathematics and Statistics be changed in accordance with the

program/course change forms.^

^Subject to approval of the expenditures required.

### **Rationale/Approvals:**

- This proposal as approved by the Mathematics and Statistics Council and the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- See attached.

TITLE OF PROGRAM(S)/ CERTIFICATE(S):	Mathematics and Statistics programs
DEPARTMENT(S)/SCHOOL(S):	Department of Mathematics and Statistics
FACULTY(IES):	Faculty of Sceince

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

#### Does the program change include new courses?:

Yes [All new course proposals must be submitted on PDC Form Ds and submitted for approval with the minor
program change proposal (PDC Form C)]
 ••

\_X\_\_\_ No

#### A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding and underlining">bolding and underlining</a>.

*Example:* Degree requirements: WXYZ-1000, WXYZ-1010, WXYZ-1100, WXYZ-2100, WXYZ-3100, WXYZ-4100, plus three additional courses at the <u>3000-level or</u> 4000-level.

#### PROGRAM REGULATIONS

All programs in Mathematics are subject to the general University and Faculty of Science regulations as outlined in the relevant sections of this Calendar.

Mathematics, statistics, and actuarial science students cannot take any of KINE-2690, GENG-2220, MSCI-2020, STAT-2910, SOSC-2500, or SWRK-2000 for credit after taking STAT-2920 or STAT-2950 for credit.

[a note will be added to the Policy on Introductory Statistics Courses]

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

#### **B. RATIONALE**

Please provide a rationale for the proposed change(s).

The Senate Policy on Introductory Statistics Courses currently applies to the following courses: KINE-2690, GENG-2220, MSCI-2020, STAT-2910, SOSC-2500, and SWRK-2000. Under this policy, students are not eligible to receive credit for STAT-2910 if they have already completed STAT-2920 or STAT-2950. The Department of Mathematics and Statistics would like to extend this rule to all of the introductory statistics.

#### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do <u>not</u> name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from <u>other</u> campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

N/A

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

N/A

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

None

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

### C.6 Additional Resources Required - Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

## <u>C.6.1</u> Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

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### University of Windsor Program Development Committee

\*5.8: Physics – Minor Program Changes (Form C)

Item for: Approval

Forwarded by: Faculty of Science

MOTION: That the degree requirements for Honours Physics (with/without Co-op), Honours Physics with

Thesis (with/without Co-op), Honours Physics (Medical Physics) (with/without Co-op), Honours Physics (Medical Physics with Thesis) (with/without Co-op) be changed in accordance with the

program/course change forms.^

*^Subject to approval of the expenditures required.* 

#### Rationale/Approvals:

- This proposal as approved by the Department of Physics Council and the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Honours Physics (with/without Co-op) Honours Physics with Thesis (with/without Co-op) Honours Physics (Medical Physics) (with/without Co-op) Honours Physics (Medical Physics with Thesis) (with/without Co-op)
DEPARTMENT(S)/SCHOOL(S):	Physics
FACULTY(IES):	Science

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

#### Does the minor program change include new courses?:

	_ Yes	s [All new course proposals must be submitted on PDC Form Ds and submitted for approval <u>with</u> the mino
		program change proposal (PDC Form C)]
X	_ No	

If yes, list all new courses:

#### A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding and underlining">bolding and underlining</a>.

*Example:* Degree requirements: WXYZ-1000, WXYZ-1010, WXYZ-1100, WXYZ-2100, WXYZ-3100, WXYZ-4100, plus three additional courses at the **3000-level or** 4000-level.

#### Honours Physics (with/without Co-op)

**Degree Requirements** 

Total courses: 40 (43 for Co-op option)

(a) PHYS-1400, PHYS-1410, PHYS-1500, PHYS-2200, PHYS-2210, PHYS-2500, PHYS-3100, PHYS-3200,

PHYS-3210, PHYS-3500, PHYS-3900 or PHYS-3910, PHYS-4130, PHYS-4100, and six courses in Physics at the 3XXX or 4XXX level.

(b) CHEM-1100, CHEM-1110, CHEM-2400, COMP-1400, COMP-1410, MATH-1250 (or MATH-1260),

MATH-1720 (or MATH-1760), MATH-1730, MATH-2780, MATH-2790, MATH-3550, ELEC-2170 or COMP-2650.

- (c) two of Arts, Humanities and Social Sciences
- (d) seven courses from any area.

For Co-op stream, in addition:

(e) three Co-op terms: PHYS-2980, PHYS-3980, PHYS-4980, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for Co-op placements

### Honours Physics with Thesis (with/without Co-op)

**Degree Requirements** 

Total courses: 40 (43 for Co-op option)

(a) PHYS-1400, PHYS-1410, PHYS-1500, PHYS-2200, PHYS-2210, PHYS-2500, PHYS-3100, PHYS-3200,

PHYS-3210, PHYS-3500, PHYS-3900 or PHYS-3910, PHYS-4900 (6.0 credits)\*\*, PHYS-4130, PHYS-4100, and six additional

courses in Physics at the 3XXX or 4XXX level.

- (b) CHEM-1100, CHEM-1110, CHEM-2400, COMP-1400, COMP-1410, MATH-1250 (or MATH-1260), MATH-1720 (or MATH-1760), MATH-1730, MATH-2780, MATH-2790, MATH-3550, ELEC-2170 or COMP-2650
- (c) two of Arts, Humanities and Social Sciences
- (d) five courses from any area.
- \*\*Only students who have maintained a major average of 70% and a cumulative average of 60% will be permitted to enrol in PHYS-4900

#### Honours Physics (Medical Physics) (with/without Co-op)

**Degree Requirements** 

Total courses: 40 (43 for Co-op option)

- (a) PHYS-1400, PHYS-1410, PHYS-1500, PHYS-2200, PHYS-2210, PHYS-2500, PHYS-3100, PHYS-3200, PHYS-3210, PHYS-3500, PHYS-3700, PHYS-3900 or PHYS-3910, PHYS-4130, PHYS-4100, PHYS-4700, PHYS-4710 and three more courses in Physics at the 3XXX or 4XXX level.
- (b) BIOL-1101, CHEM-1100, CHEM-1110, CHEM-2300, CHEM-2400, BIOC-2010 or BIOC-2015, COMP-1400, COMP-1410, MATH-1250 (or MATH-1260), MATH-1720 (or MATH-1760), MATH-1730, MATH-2780, MATH-2790, MATH-3550.
- (c) two of Arts, Humanities and Social Sciences.
- (d) five courses from any area.

For Co-op option, in addition:

(e) three Co-op terms: PHYS-2980, PHYS-3980, PHYS-4980, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for Co-op placements.

#### Honours Physics (Medical Physics with Thesis) (with/without Co-op)

**Degree Requirements** 

Total courses: 40 (43 for Co-op stream)

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(a) PHYS-1400, PHYS-1410, PHYS-1500, PHYS-2200, PHYS-2210, PHYS-2500, PHYS-3100, PHYS-3200, PHYS-3210, PHYS-3700, PHYS-3900 or PHYS-3910, PHYS-4900 (6.0 credits)\*\*, PHYS-4130, PHYS-4100,

PHYS-4700, PHYS-4710, plus three additional courses in Physics at the 3XXX or 4XXX level.

(b) BIOL-1101, CHEM-1100, CHEM-1110, CHEM-2300, CHEM-2400, BIOC-2010 or BIOC-2015, COMP-1400, COMP-1410, MATH-1250 (or MATH-1260), MATH-1720 (or MATH-1760), MATH-1730, MATH-2780,

MATH-2790, MATH-3550.

- (c) two of Arts, Humanities and Social Sciences.
- (d) three courses from any area.
- \*\*Only students who have maintained a major average of 70% and a cumulative average of 60% will be permitted to enrol in PHYS-4900.

For Co-op option, in addition:

(e) three Co-op terms: PHYS-2980, PHYS-3980, PHYS-4980, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for Co-op placements

### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by

cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

#### B. RATIONALE

Please provide a rationale for the proposed change(s).

PHYS-3910 "Techniques in Experimental Physics II" is an upper-year physics elective with a focus on modern experimental design and techniques. Currently it is pitched as a continuation of the required course PHYS-3900 "Techniques in Experimental Physics I" which it has as a pre-requisite. [These two courses were created to consolidate the lab components of several upper year physics courses into a pair of more comprehensive courses.]

However, the content of PHYS-3910 as developed is essentially independent from that in PHYS-3900 and it would be sensible for students to take them in either order. Both teach experimental techniques in a project-based setting, and both have similar learning outcomes but focus on different topics.

We would thus like to make two changes to allow for more flexibility in our course offerings: first, remove PHYS-3900 as a pre-requisite to PHYS-3910, instead have prerequisites mirroring those of PHYS-3900. Second, we would like students to be required to take *either* PHYS-3900 or PHYS-3910 to satisfy the requirements for a physics degree (and all relevant variations). This would allow these two courses to be offered on an alternating year schedule without affecting course sequencing, while allowing interested students an opportunity to take both courses (one to satisfy their requirements, one as an upper year physics option). This course is not required for any Physics combined honours degrees and so does not affect those programs.

#### B.1 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967).

In <u>revising this program</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and <u>additional Resources</u> including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- **How** have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the <u>TRC</u> and <u>University Principles</u> documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form such as learning outcomes and/or in the syllabus where appropriate?

The Department of Physics is committed to including Indigenous content, perspectives and/or material in its curriculum wherever possible and appropriate and sees the inclusion of this perspective at the programmatic level as an important mandate. This is a technical upper year experimental physics course. We have explored the available literature on Indigenous perspectives and content in Experimental Physics but have not found any resources specific to this topic or at the appropriate level for its learning objectives. Therefore, there is no inclusion of Indigenous knowledge specifically in the course content.

#### What process has your department/Faculty used to consider Indigenization?

The Physics Department has been thinking about how to Indigenize the curriculum since 2020. We started by engaging with the Indigenous Curriculum Coordinator, Jaimie Kechego, and examining the resources that she suggested to us. The Leddy librarians also provided us with resources that were available through the library. We have been looking at these resources to see how they may be integrated into the physics curriculum. We are also looking to examples from other Universities who have been along this path. As a first example, we developed PHYS-2040 History of Astronomy, in which we have incorporated Indigenous knowledge for 25% of the course. When the University develops a process for approaching Indigenous knowledge keepers or Elders from Nations in our geographical area, we plan to develop relationships that will help us to further deepen the Indigenization of the curriculum. We are also trying to support Indigenous students who are currently in the program. Drs. Xiao and Rangan are mentors in the Pathway to Graduate Studies program initiated by the Faculty of Science to support Indigenous students into graduate programs. Dr. Rangan has hired Indigenous students both to help with course development, as well as for undergraduate research.

#### How have you considered the importance or relevance to the course/program?

Physics being a natural science, Indigenous knowledge is of obvious relevance to the discipline/program. Our efforts and struggles are not with whether we should integrate Indigenous knowledge and ways of knowing, but how to do it in an authentic way. Our long-term goal is that all our students develop the capacity for "Two-Eyed Seeing" [see for example Peltier, Cindy. "An application of two-eyed seeing: Indigenous research methods with participatory action research." *International Journal of Qualitative Methods* 17.1 (2018)].

### How has your department or faculty approached raising awareness for Indigenous knowledges in your area?

Several members of our department have been attending seminars and workshops on Indigenization and sharing their knowledge. For example, we co-sponsored the visit and seminars of a very well-known Indigenous astronomer and advertised these talks widely within our Department to all of the students and the faculty. Along with the specific visits and talks we sponsored financially, the Department has widely advertised and encouraged the participation of its students and faculty in the Canterbury ElderCollege Indigenous speaker series. The former Principal of Canterbury is Dr. Gordon Drake who is a Physics professor and past Head of Physics. Therefore there is a very close relationship between Canterbury and Physics which facilitates this cooperation and communication. Dr. Rangan has taken the mini course "Pulling together: A Guide for Curriculum Developers" that was being offered by Jaimie Kachego.

At the national level, the Department continues to consult with the Outreach Committee of the Canadian Association of Physicists (CAP) that is tasked with increasing the content from under-represented communities in Canadian physics curricula. Every year, at least half of the faculty in the Department attends the CAP national congress and while there

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are always consulting and learning what the "best practices" are for inclusion of Indigenous knowledge in a Physics curriculum. Often times there are specific technical sessions at the annual Congress devoted to the discussion of this topic. As this is a national priority, these discussions can be fruitful and inform our practices within the Department. Several faculty have been and continue to be on the Board of Directors of the CAP where this is discussed at the national level. As well, all the Heads of the Physics Departments in Canada meet several times a year through the CAP Heads Committee, and the sharing of knowledge with regards to the inclusion of Indigenous knowledge is frequently on the agenda. Based on these national conversations, the Department is very aware of what similar programs have done in their approach to the inclusion of Indigenous knowledge in similar courses and aims to emulate those approaches when possible or practical.

#### What do the TRC and University Principles documents suggest relevant to your course?

The "University Principles" (UP) are a synthesis of the TRC recommendations in their call to action:

https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/

Some of the University principles are well-aligned to the practices in our department. We are committed to developing and offering opportunities for Indigenous students (UP1) both via the P2GS program, NSERC USRA terms, and undergraduate research assistantships. We are committed to offering a student-centered environment (UP2) by implementing strategies that support student success. We have just begun our journey on the other principles, and some of the best practices are we are developing are to include land acknowledgements in course syllabi to indicate the respect for Indigenous nations, and continuing to look at existing Indigenous resources that we can integrate into the curriculum.

#### What have other similar courses/programs done that might be relevant to your course/program?

Among physics departments in Canada, we are further ahead in the journey of Indigenizing the curriculum than most others. Most learning resources in Physics have been developed for elementary and high school. The First Nations University of Canada has started teaching introductory college-level physics courses with the inclusion of Indigenous content. The challenge is that the way that Physics is taught is reductionist and taught by abstraction (example, imagine there is no gravity, or imagine there is no friction), whereas Indigenous ways of knowing are holistic and integrated. Combining the two approaches will be very challenging and will be a long process.

### In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

We will have to approach Indigenous knowledge keepers and/or Elders to consult with them on this topic. In general, large enrollment first year/introductory physics technical courses are not the best environment for adapting or integrating Indigenous approaches or knowledge. Upper year classes, with much smaller numbers and significantly greater contact with the students, would be the more appropriate venue for this in the context of a Physics curriculum.

### What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?

Several faculty members in the department are active in the Canadian Association of Physicists, where there are discussions between physics department leaders on how to Indigenize the curriculum, as discussed above.

#### Which literatures, sources, or Indigenous Knowledge Holders have you consulted?

The resources that we have been studying as part of the process are:

- 1. https://www.2eyedseeing.ca/about-5
- 2. Peltier, C. (2018). An Application of Two-Eyed Seeing: Indigenous Research Methods With Participatory Action Research. International Journal of Qualitative Methods, 17(1).
- 3. https://journals.sagepub.com/doi/10.1177/1609406918812346
- 4. https://decolonizinglight.com/ and resources therein

A concrete specific example of such discussions was evidenced in the development of our newly-developed "History of Astronomy" course, and our very-large enrollment first year astronomy courses. Within both these course we are adding Indigenous content and perspectives in the relevant places in the curriculum. Specifically, the Department of Physics financially supported the 2022 visit to the campus by a renowned Indigenous astronomer who visited the campus for two days to discuss in detail the inclusion of Indigenous knowledge in the study and practice of astronomy. During this visit, this colleague also visited specifically with our History of Astronomy instructors and provided helpful insights and advice concerning the inclusion of Indigenous perspectives in the astronomy curriculum. At the local level, during the development of the History of Astronomy course, the course developer consulted with the Aboriginal Coordinator in the Center for Teaching and Learning to ensure that this content is included in a respectful manner. This course now contains an entire section of the curriculum, approximately one-fourth on the Indigenous knowledge of the night sky. As with everyone else in the Faculty of Science, we are awaiting the appointment of an Indigenous knowledge-keeper within the Faculty who will consult with the Department on other approaches for inclusion within the programs of the Department. This History of Astronomy course has already had approximately 300 students complete it, and has so far always been over-subscribed with an enrollment cap of around 100/semester. It has proven to be very popular and very successful. It is planned to be offered again in fall of 2024.

#### Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?

Being from a scientific discipline, we do not have the training to engage in this type of analysis.

## Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

At present, there is no other relevant information to be added to these other sections. The Learning Outcomes have passed through CTL consultation, however.

#### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do <u>not</u> name specific individuals in this section.

Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university.

Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

The resources required for PHYS-3910 are essentially identical to those required for PHYS-3900 and by alternating these two courses every other year no additional resources are required to make this change.

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### C.4 Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

#### <u>C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)</u>

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

## <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

### University of Windsor Program Development Committee

\*5.9 Political Science - Minor Program Changes (Form C)

Item for: Approval

MOTION 1: That the degree requirements for the General Bachelor of Arts in Political Science General, Honours Bachelor of Arts in Political Science, Honours Political Science with Thesis, Honours Political Science with Thesis, Bachelor of Arts (Honours) Political Science with French Specialization, Honours Political Science with French Specialization and Thesis, Honours Bachelor of Arts Law and Politics, Honours Bachelor of Arts Law and Politics (with Thesis), Honours Business Administration and Political Science (with or without thesis and with or without Specialization), Honours International Relations and Development Studies (with Thesis), Concurrent Bachelor of Arts in Political Science/Bachelor of Education, and Honours Bachelor of Arts in International Relations and Development Studies be changed in accordance with the program/course change forms.^

MOTION 2: That the Certificate in North American Studies and Certificate in Public Administration be discontinued.

^Subject to approval of the expenditures required.

#### Rationale/Approvals:

- This proposal has been approved by the Department Political Science Council and the Faculty of Arts, Humanites and Social Sciences Council.
- See attached.

TITLE OF PROGRAM(S)/	1. General Bachelor of Arts in Political Science General
CERTIFICATE(S):	2. Honours Bachelor of Arts in Political Science
	3. Honours Political Science with Thesis
	4. Honours Political Science with Co-op
	5. Combined Bachelor of Arts in Political Science
	6. Combined Honours Political Science with Thesis
	7. Bachelor of Arts (Honours) Political Science with French Specialization
	8. Honours Political Science with French Specialization and Thesis
	9. Honours Bachelor of Arts Law and Politics
	10. Honours Bachelor of Arts Law and Politics (with Thesis)
	11. Honours Business Administration and Political Science (with or without thesis
	and with or without Specialization)
	12. Honours International Relations and Development Studies (with Thesis)
	13. ConcurrentBachelor of Arts in Political Science/Bachelor of Education
	14. Honours Bachelor of Arts in International Relations and Development Studies
	15. Certificate in North American Studies
	16. Certificate in Public Administration
DEPARTMENT(S)/SCHOOL(S):	Department of Political Science
FACULTY(IES):	FAHSS

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

#### Does the program change include new courses?:

X	Yes [All new course proposals must be submitted on PDC Form Ds and submitted for approval with the minor
	program change proposal (PDC Form C)]
N	lo

If yes, list all new courses:

POLS-2340. The Making of the Global World

POLS-4450 Todays Totalitarian Trends

#### A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding and underlining">bolding and underlining</a>.

*Example:* Degree requirements: WXYZ-1000, WXYZ-1010, WXYZ-1100, WXYZ-2100, WXYZ-3100, WXYZ-4100, plus three additional courses at the **3000-level or** 4000-level.

#### 1. Bachelor of Arts General Political Science

Degree Requirements Total courses: thirty.

(a) POLS-1000, POLS-1300 and POLS-1600;

- (b) Nine additional Political Science courses including at least three at the 3000-level or above (Note: students interested in switching to Honours Political Science should take SOSC-2500, POLS-2750, and one of POLS-2510 or POLS-2520);
- (c) two courses from Arts;
- (d) two courses from Languages or Science;
- (e) two courses from any area of study, excluding Social Sciences;
- (f) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (g) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);
- (hg) five courses from any area of study, including Political Science;
- (<u>i</u>h) five courses from any area of study, excluding Political Science.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

Subfields (students are strongly encouraged to take at least one course from each subfield)

#### **Canadian Politics**

2000-level: POLS-2010, POLS-2110, POLS-2130, POLS-2640 3000-level: POLS-3090, POLS-3200, POLS-3230, POLS-3260

#### **Comparative Politics**

2000-level: <u>POLS-2065, POLS-2320</u>, POLS-2330, <u>POLS-2340, POLS-3350</u>, POLS-2410, POLS-2440

3000-level: POLS-3460, POLS-3650, POLS-3670

4000-level: POLS-4310, POLS-4340, POLS-4410, POLS-4420, POLS-4450

#### International Relations and Development Studies

1000-level: POLS-1709

2000-level: <u>POLS-2065, POLS-2340, POLS-2490, POLS-2670, POLS-2680</u> 3000-level: POLS-3540, POLS-3550, POLS-3560, POLS-3600, POLS-3630

4000-level: POLS-4410, POLS-4420, POLS-4450, POLS-4610, POLS-4620, POLS-4640, POLS-4650

#### Political Theory, Culture and Religion

2000-level: POLS-2510, POLS-2520, POLS-2600, POLS-2610 3000-level: POLS-3519, POLS-3720, POLS-3780, POLS-3790

#### Public Administration, Law and Policy

2000-level: POLS-2120, POLS-2140, POLS-2200, POLS-2210

3000-level: POLS-3140, POLS-3210, POLS-3240, POLS-3610, POLS-3920, POLS-3990 4000-level: POLS-4210, POLS-4220, POLS-3920 and POLS-4920 (taken concurrently)

#### 2. Honours Bachelor of Arts in Political Science

**Degree Requirements** 

Total courses: forty.

- (a) POLS-1000, POLS-1300, POLS-1600 and POLS-2750;
- (b) one of POLS-2510 or POLS-2520 [should be taken in Semester 3, 4 or 5];
- (c) fourteen additional Political Science courses, including at least two at the 3000-level and <u>two</u> three at the 4000-level;

- (d) two courses from Arts;
- (e) two courses from Languages or Science;
- (f) two courses from any area of study, excluding Social Sciences;
- (g) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (h) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);
- (<u>i</u>) SOSC-2500;
- (jh) six courses from any area of study, including Political Science;
- (ki) six courses from any area of study, excluding Political Science.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

Subfields (students are strongly encouraged to take at least one course from each subfield)

**Canadian Politics** 

POLS-2010, POLS-2110, POLS-2130, POLS-2640, POLS-3090, POLS-3200, POLS-3230, POLS-3260

**Comparative Politics** 

<u>POLS-2065</u>, POLS-2320, POLS-2330, <u>POLS-2340</u>, POLS-2410, POLS-2440, POLS-3350, POLS-3460, POLS-3650, POLS-3670, POLS-4310, POLS-4340, <u>POLS-4410</u>, <u>POLS-4420</u>, <u>POLS-4450</u>

International Relations and Development Studies

POLS-1709 POLS-2065, POLS-2340, POLS-2490, POLS-2670, POLS-2680, POLS-3540, POLS-3550, POLS-3560, POLS-3600, POLS-3630, POLS-4410, POLS-4420, POLS-4450, POLS-4610, POLS-4620, POLS-4640, POLS-4650

Political Theory, Culture and Religion

POLS-2510, POLS-2520, POLS-2600, POLS-2610, POLS-3519, POLS-3720, POLS-3780

Public Administration, Law and Policy

POLS-2120, POLS-2140, POLS-2200, POLS-2210, POLS-3140, POLS-3210, POLS-3240, POLS-3610, POLS-3990, POLS-4210, POLS-4220, POLS-4920 and POLS-3920 (taken concurrently)

#### 3. Honour Political Science with Thesis

**Degree Requirements** 

Total courses: forty courses.

- (a) POLS-1000, POLS-1300, POLS-1600, POLS-2750, POLS-4970 and POLS-4980;
- (b) one of POLS-2510 or POLS-2520 [should be taken in Semester 3, 4 or 5];
- (c) twelve additional Political Science courses, including at least two at the 3000-level; and one other at the 4000-level.;
- (d) two courses from Arts;
- (e) two courses from Languages or Science;
- (f) two courses from any area of study, excluding Social Sciences;
- (f) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (g) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);

- (ig) SOSC-2500;
- (ih) six courses from any area of study, including Political Science;
- (<u>ki</u>) six courses from any area of study, excluding Political Science.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

Students maintaining cumulative and major averages of 80% upon beginning semester 7 will complete an undergraduate thesis under the supervision of a faculty member in the department during semesters 7 and 8 of the program through successful completion of the courses POLS-4970 and POLS-4980.

### 4. Honours Bachelor of Arts in Political Science with Co-op

**Degree Requirements** 

Total courses: forty. (Plus three work terms).

- (a) POLS-1000, POLS-1300, POLS-1600, POLS-2015 and POLS-2750;
- (b) one of POLS-2510 or POLS-2520 [should be taken in Semester 3, 4 or 5]
- (c) thirteen additional Political Science courses, including at least two at the 3000-level and <u>two</u> three at the 4000-level.
- (d) two courses from Arts;
- (e) two courses from Languages or Science;
- (f) two courses from any area of study, excluding Social Sciences;
- (g) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (h) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);
- (ig) SOSC-2500;
- (ih) six courses from any area of study, including Political Science;
- (ki) six courses from any area of study, excluding Political Science.
- (Li) GART-2980 (Co-op Work Term I), GART-3980 (Co-op Work Term II) and GART-4980 (Co-op Work Term III)

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

#### 5. Combined Bachelor of Arts in Political Science

**Degree Requirements** 

Total courses: forty.

- (a) POLS-1000, POLS-1300, POLS-1600, and POLS-2750; one of POLS-2510 or POLS-2520 [should be taken in Semester 3, 4 or 5]; and ten additional courses, including at least **two** three at the 4000-level.
- (b) Course requirements Other Subject; courses used to calculate the major average in the other subject area, as prescribed by that area of study.
- (c) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (d) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);

(e) SOSC-2500;

- (fd) two courses from Arts;
- (ge) two courses from Languages or Science;
- (<u>h</u>f) two courses from any area of study, excluding Social Sciences.
- (ig) additional courses from any area of study to a total of forty courses.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

Subfields (students are strongly encouraged to take at least one course from each subfield)

#### **Canadian Politics**

POLS-2010, POLS-2110, POLS-2130, POLS-2640, POLS-3090, POLS-3200, POLS-3230, POLS-3260

#### **Comparative Politics**

<u>POLS-2065</u>, POLS-2320, POLS-2330, <u>POLS-2340</u>, POLS-2410, POLS-2440, POLS-3350, POLS-3460, POLS-3650, POLS-3670, POLS-4310, POLS-4340, <u>POLS-4410</u>, <u>POLS-4420</u>, <u>POLS-4450</u>

#### International Relations and Development Studies

POLS-1709 POLS-2065, POLS-2340, POLS-2490, POLS-2670, POLS-2680, POLS-3540, POLS-3550, POLS-3560, POLS-3600, POLS-3630, POLS-4410, POLS-4420, POLS-4450, POLS-4610, POLS-4620, POLS-4640, POLS-4650

#### Political Theory, Culture and Religion

POLS-2510, POLS-2520, POLS-2600, POLS-2610, POLS-3519, POLS-3720, POLS-3780

#### Public Administration, Law and Policy

POLS-2120, POLS-2140, POLS-2200, POLS-2210, POLS-3140, POLS-3210, POLS-3240, POLS-3610, POLS-3990, POLS-4210, POLS-4220, POLS-3920 and POLS-4920 (taken concurrently)

#### 6. Combined Honours Political Science with Thesis

Degree requirements

Total courses: forty.

- (a) POLS-1000, POLS-1300, POLS-1600, POLS-2750, POLS-4970 and POLS-4980; one of POLS-2510 or POLS-2520 [should be taken in Semester 3, 4 or 5]; and eight additional courses; , including at least one other at the 4000-level.
- (b) Course requirements Other Subject; courses used to calculate the major average in the other subject area, as prescribed by that area of study.
- (c) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (d) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);
- (e) SOSC-2500;
- (f) two courses from Arts;
- (g) two courses from Languages or Science;
- (h) two courses from any area of study, excluding Social Sciences.
- (i) additional courses from any area of study to a total of forty courses.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

Students maintaining cumulative and major averages of 80% upon beginning semester 7 will complete an undergraduate thesis under the supervision of a faculty member in the department during semesters 7 and 8 of the program through successful completion of the courses POLS-4970 and POLS-4980.

### 7. Bachelor of Arts (Honours) Political Science with French Specialization

**Degree Requirements** 

Total courses: forty.

- (a) University of Windsor [14 courses]:
- (i) POLS-1000, POLS-1300, POLS-1600 and POLS-2750;
- (ii) one of POLS-2035 or POLS-2055 [French];
- (iii) one of POLS-2510 or POLS-2520 [to be taken in Semester 3,4 or 5]
- (iv) <u>Eight</u> seven additional Political Science courses, including at least two at the 3000-level and <u>two</u> three at the 4000-level.
- (b) University of Ottawa [5 courses]:
- POL2507 Introduction à la pensée politique
- POL3514 Vie politique en Asie
- POL3525 Pouvoir municipal au Canada
- POL3526 Les femmes et la politique
- POL3533 Politique et medias
- POL3540 Vie politique aux États-Unis
- POL3542 Vie politique en Europe occidentale
- POL3544 Vie politique en Afrique

Or other approved course at the 2000-level or above OR Five Political Science Courses in French taken on exchange or a letter of permission at a French-speaking university with the advanced approval of the department.

- (c) two courses from Arts;
- (d) two courses from Languages or Science;
- (e) two courses from any area of study, excluding Social Sciences;
- (f) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (g) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);
- (h) SOSC-2500;
- (<u>ig</u>) FREN-1210, FREN-1220, FREN-2210, FREN-2220 and FREN-2700;
- (jh) one of FREN-2530, FREN-2600, FREN-2810 or FREN-2830;
- (ki) three courses from any area of study, including Political Science;
- (Li) three courses from any area of study, excluding Political Science.

Courses used to calculate the major average are: course listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

Suggested Program Sequencing

Year 1

[Semester 1]

GART-1500. Effective Writing I ENGL-1010 or one Indigenous content course (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380) FREN-1210 French Language Training I [French]

POLS-1000 Introduction to Canadian Government and Politics

POLS-1300 Comparative Politics or POLS-1600. World Politics Introduction to International Relations
One additional course

[Semester 2]

ENGL-1010 or one Indigenous content course (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-

## 2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380)

FREN-1220 French Language Training II [French]

POLS-1300 Comparative Politics or POLS-1600 World Politics Introduction to International Relations
Two additional courses

Year 2

[Semester 3]

SOSC-2500 Basic Quantitative Methods in the Social Sciences

FREN-2210 French Language Training III [French]

## <u>2 POLS-XXXX Political Science courses (Note: POLS-2510 or POLS-2520, POLS-2035 or POLS-2055 should be taken</u> in Sem. 3, 4 or 5)

One additional course

[Semester 4]

POLS-2750 Introduction to Research Methods

FREN-2220 French Language Training IV [French]

## 2 POLS-XXXX Political Science courses (Note: POLS-2510 or POLS-2520, POLS-2035 or POLS-2055 should be taken in Sem. 3, 4 or 5)

POLS XXXX. Political Science course (Note: POLS 2510 or POLS 2520 should be taken in Sem. 3, 4 or 5)

POLS-2055. Issues in Quebec Politics [French]

One additional course

Year 3

[Semester 5]

One of FREN-2530, FREN-2600 or FREN-2830 [French]

FREN-2700 Intro to Cultural Heritage of French Canada [French]

POLS-XXXX Political Science course (Note: POLS-2510 or POLS-2520, <u>POLS-2035 or POLS-2055</u> should be taken in Sem. 3, 4 or 5)

Two additional courses

[Semester 6 – University of Ottawa]

Five of:

POL2507 Introduction à la pensée politique [French]

POL3514 Vie politique en Asie [French]

POL3525 Pouvoir municipal au Canada [French]

POL3526 Les femmes et la politique [French]

POL3533 Politique et medias [French]

POL3540 Vie politique aux États-Unis [French]

POL3542 Vie politique en Europe occidentale [French]

POL3544 Vie politique en Afrique [French]

Or other approved course at the 2000-level or above [French]

[Semester 7]

POLS-XXXX Political Science course [3000-level]

POLS-XXXX Political Science course [3000-level]

Three additional courses

[Semester 8]

POLS-XXXX Political Science course [4000-level]

POLS-XXXX Political Science course [4000-level]

POLS-XXXX Political Science course

Two additional courses

## 8. Honours Political Science with French Specialization and Thesis

Degree requirements

Total courses: forty

- (a) University of Windsor [14 courses]:
- (i) POLS-1000, POLS-1300, POLS-1600 and POLS-2750;
- (ii) one of POLS-2035 or , POLS-2045 or POLS-2055 [French];
- (iii) one of POLS-2510 or POLS-2520 [to be taken in Semester 3,4 or 5];
- (iv) POLS-4970 and POLS-4980;
- (v) <u>six</u> five additional Political Science courses, including at least two at the 3000-level. <del>and one other at the 4000-level.</del>
- (b) University of Ottawa [5 courses]:
- POL2507. Introduction à la pensée politique
- POL3514. Vie politique en Asie
- POL3525. Pouvoir municipal au Canada
- POL3526. Les femmes et la politique
- POL3533. Politique et medias
- POL3540. Vie politique aux États-Unis
- POL3542. Vie politique en Europe occidentale
- POL3544. Vie politique en Afrique
- Or other approved course at the 2000-level or above
- Or Five Political Science Courses in French taken on exchange or a letter of permission at a French-speaking university with the advanced approval of the department.
- (c) two courses from Arts;
- (d) two courses from Languages or Science;
- (e) two courses from any area of study, excluding Social Sciences;
- f) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (g) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);
- (h) SOSC-2500;
- (ig) FREN-1210, FREN-1220, FREN-2210, FREN-2220 and FREN-270;
- (jh) one of FREN-2530, FREN-2600, FREN-2810 or FREN-2830;
- (ki) three courses from any area of study, including Political Science
- (Ij) three courses from any area of study, excluding Political Science.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

Students maintaining cumulative and major averages of 80% upon beginning semester 7 will complete an undergraduate thesis under the supervision of a faculty member in the department during semesters 7 and 8 of the program through successful completion of the courses POLS-4970 and POLS-4980.

### 9. Bachelor of Arts (Honours) - Law and Politics

**Degree Requirements** 

Total courses: forty (40)

- (a) POLS-1000, POLS-1300, POLS-1600 and POLS-2750;
- (b) one of POLS-2510 or POLS-2520 [should be taken in Semester 3, 4 or 5];
- (c) POLS-2140 and POLS-3140;
- (d) one of POLS-2680, POLS-3600, POLS-3620/PHIL-3230, or POLS-3630;
- (e) three of POLS-2010, POLS-2120, POLS-2200, POLS-2210, POLS-3090, POLS-3210, POLS-3230, POLS-3240, and POLS-3260;
- (f) nine additional Political Science courses, including at least two three at the 4000-level;
- (g) two courses from Arts;
- (h) two courses from Languages or Science;
- (i) two courses from any area of study, excluding Social Sciences;
- (j) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (k) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);

(I) SOSC-2500, PHIL-1600, and PHIL-2610;

(mk) one of GART-2090 or PHIL-2210;

- (n+) two of PHIL-2260, HIST-2870, SACR-2620, WGST-3100, and WORK-2000;
- (om) three courses from any area of study, including Political Science;
- (pn) three courses from any area of study, excluding Political Science.

Courses used to calculate the major average are: course listed under requirements (a) to (f), and any courses taken in the major area(s) of study.

**Recommended Course Sequencing** 

Year 1 [Semester 1]

GART-1500. Effective Writing I - ENGL-1010 or one Indigenous content course

POLS-1000 Introduction to Canadian Government and Politics

POLS-1300 Comparative Politics or POLS-1600 World Politics Introduction to International Relations
Two additional courses

i wo additional course

Year 1 [Semester 2]

GART-1510. Effective Writing II ENGL-1010 or one Indigenous content course

POLS-1300 Comparative Politics or POLS-1600 World Politics Introduction to International Relations

POLS-XXXX Political Science course

Two additional courses

Year 2 [Semester 3]

SOSC-2500 Basic Quantitative Methods in the Social Sciences

POLS-XXXX Political Science course [Note: POLS-2510 or POLS-2520 should be taken in Sem. 3, 4 or 5]

POLS-XXXX Political Science course PHIL-1600 Reasoning Skills One additional course

Year 2 [Semester 4]

POLS-2750 Introduction to Research Methods

POLS-XXXX Political Science course [Note: POLS-2510 or POLS-2520 should be taken in Sem. 3, 4 or 5]

POLS-XXXX Political Science course

PHIL-2610 Informal Logic: Argumentation [prerequisite: PHIL-1600]

One additional course

Year 3 [Semester 5]

POLS-XXXX Political Science course [Note: POLS-2510 or POLS-2520 should be taken in Sem. 3, 4 or 5]

POLS-XXXX Political Science course POLS-XXXX Political Science course

Two additional courses

Year 3 [Semester 6]

POLS-XXXX Political Science course

POLS-XXXX Political Science course

Three additional courses

Year 4 [Semester 7]

POLS-XXXX Political Science course

POLS-XXXX Political Science course

Three additional courses

Year 4 [Semester 8]

POLS-4XXX XXXX Political Science course

POLS-4XXX Political Science course

POLS-4XXX Political Science course

Two additional courses

### 10. Honours Bachelor of Arts Law and Politics (with Thesis)

Degree requirements

Total courses: forty courses.

- (a) POLS-1000, POLS-1300, POLS-1600 and POLS-2750;
- (b) one of POLS-2510 or POLS-2520 [should be taken in Semester 3, 4 or 5];
- (c) POLS-2140 and POLS-3140;
- (d) one of POLS-2680, POLS-3600, POLS-3620/PHIL-3230, or POLS-3630
- (e) three of POLS-2010, POLS-2120, POLS-2200, POLS-2210, POLS-3090, POLS-3210, POLS-3230, POLS-3240, and POLS-3260;
- (f) nine additional Political Science courses, including POLS-4970 and POLS-4980 and one other at the 4000-level;
- (g) two courses from Arts;
- (h) two courses from Languages or Science;
- (i) two courses from any area of study, excluding Social Sciences;
- (j) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);

(k) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);

(I) SOSC-2500, PHIL-1600, and PHIL-2610;

(mk) one of GART-2090 or PHIL-2210;

(nl) two of PHIL-2260, HIST-2870, SACR-2620, WGST-3100, and WORK-2000;

(om) three courses from any area of study, including Political Science;

(<u>pn</u>) three courses from any area of study, excluding Political Science.

Courses used to calculate the major average are: courses listed under requirements (a) to (f), and any courses taken in the major area(s) of study.

Description of thesis option (if applicable): Students maintaining cumulative and major averages of 80% upon beginning semester 7 will complete an undergraduate thesis under the supervision of a faculty member in the department during semesters 7 and 8 of the program through successful completion of the courses POLS-4970 and POLS-4980.

## 11. Honours Business Administration and Political Science (with or without thesis and with or without Specialization)

Total courses: minimum 40 courses\* (120 credits)

a. Business - 16 courses: ACCT-1510, ACCT-2550, MGMT-1000, MGMT-2400, MGMT-2430, MGMT-3000, FINA-2700, FINA-2710, MSCI-1000, MSCI-2130, MSCI-2200, MSCI-3310 or MSCI-3410, MKTG-1310, STEN-1000, STEN-3970, STEN-4980.

b. Business Non-Thesis stream: 7 additional Business courses.

OR

Business Thesis stream: BUSR-4950 (3 credits) and BUSR-4990 (6 credits) and 4 additional Business courses.

- c. Political Science 5 courses: POLS-1000, POLS-1300, POLS-1600, POLS-2510 or POLS-2520, and POLS-2750.
- d. Six Five Political Science courses, 2000-level or above.
- e. Political Science Non-Thesis stream: <u>Two</u> Three Political Science course at the 4000-level OR

Political Science Thesis Stream\*: POLS-4970, POLS-4980, and one Political Science course, 4000-level or above.

- f. Economics 2 courses: ECON-1100, ECON-1110
- g. Mathematics 1 course: MATH-1980/1250/1720/1760 (or equivalents)
- h. Statistics 1 course: SOSC-2500 or MSCI-2020 or equivalent
- \*Students maintaining a minimum cumulative 80% average and a minimum 80% average in Political Science courses upon beginning semester 7 may complete a Political Science undergraduate thesis under the supervision of a faculty member in the department. The thesis requires successful completion of the courses POLS-4970 and POLS-4980 during semesters 7 and 8 of the program.
- \*\*Students in this program may pursue any specialization offered by the Odette School of Business. This may require more than 40 courses to be completed in order to meet all program and specialization requirements. Students are encouraged to seek academic advising from the Odette School of Business before pursuing this option.
- \*\*Students pursuing both a specialization and Thesis option may require more than 40 courses to be completed in order to meet all program, specialization and thesis requirements. Students are encouraged to seek academic advising from the Odette School of Business before pursuing this option.

Courses used to calculate the major average are: The courses listed in sections (a)-(e) and any courses taken in the major areas of study will be used to calculate the major average.

**Suggested Course Sequencing** 

YEAR 1

First Term

ECON-1100

MATH-1980/1250/1720/1760 (or equivalents)

POLS-1000

MGMT-1000

STEN-1000

Second Term

ECON-1110

POLS-1600

ACCT-1510

MKTG-1310

MSCI-1000

YEAR 2

First Term

SOSC-2500 or MSCI-2020 or equivalent

ACCT-2550

MGMT-2400

FINA-2700

POLS-1300

Second Term

POLS-2750 or one of: **POLS-2510** or POLS-2520

MGMT-2430

FINA-2710

MSCI-2130

MSCI-2200

YEAR 3

First Term

POLS-2750 or one of: <u>POLS-2510</u> or POLS-2520 Two Political Science courses, 2000-level or above.

MGMT-3000

STEN-3970

Second Term

MSCI-3310 or MSCI-3410

One Business course

Three Political Science courses, 2000-level or above.

YEAR 4

First Term

POLS-4970 (if accepted into thesis stream) and one Political Science course, 4000 2000-level or above,

Two Political Science courses, 4000 level or above one must be at the 4000-level (if in non-thesis stream) Three Business courses

Second Term

STEN-4980

POLS-4980 (if accepted into thesis stream)

One Political Science course at the 4000-level or above (if in non-thesis stream)

Three Business courses

## 13. Honours International Relations and Development Studies (with Thesis)

Degree requirements Total courses: forty.

(a) POLS-1000, POLS-1300, POLS-1600, POLS-2640 or POLS-2670, POLS-2750, POLS-3540 or POLS-3550, POLS-3600, POLS-4610, POLS-4620, POLS-4970, POLS-4980;

- (b) HIST-1230, HIST-1240;
- (c) One of: POLS-2510, or POLS-2520;
- (d) Three of <u>POLS-2065</u>, POLS-2300, POLS-2320, POLS-2330, <u>POLS-2340</u>, POLS-2350, POLS-2410, POLS-2440, <del>POLS-2450</del>, POLS-2490, POLS-2600, POLS-2610, POLS-2640 or POLS-2670 (if not taken under requirements for (a)), POLS-2680;
- (e) Two <u>of</u> POLS-3350, POLS-3460, POLS-3540 or POLS-3550 (if not taken under requirements for (a)), POLS-3560, POLS-3610, POLS-3620/PHIL-3230, POLS-3630, POLS-3650, POLS-3670, POLS-3720, POLS-4310, POLS-4340, POLS-4410, POLS-4420, POLS-4430, POLS-4450, POLS-4640, POLS-4650, POLS-4950, POLS-4960;
- (f) ECON-1100 or ECON-2000, ECON-1110 or ECON-2010 (students pursuing an Economics Minor for requirement (h) may take two additional elective courses under requirement (i) below);
- (g) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (h) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);

(i) SOSC-2500;

(jh) Minor in one of: Arabic Studies; Business Administration; Communication, Media, and Film; Economics; Entrepreneurship; French Studies; Geography; History; Jewish Studies; Latin American Studies; Modern Languages; Philosophy; Sociology; Women's and Gender Studies; Indigenous Studies; Race and Ethnicity Studies. (Minors consist of 6 courses, but note that some courses may require prerequisites that are not part of the Minor; students are strongly encouraged to seek academic guidance from the academic advisor in the appropriate department); (ki) Eleven Ten courses from any area of study, at least five of which must be outside Political Science

Courses used to calculate the major average are: courses listed under requirements (a) to (e), and any courses taken in the major area(s) of study.

Students maintaining cumulative and major averages of 80% upon beginning semester 7 will complete an undergraduate thesis under the supervision of a faculty member in the department during semesters 7 and 8 of the program through successful completion of the courses POLS-4970 and POLS-4980.

#### 14. Concurrent Bachelor of Arts in Political Science/Bachelor of Education

Degree Requirements General Bachelor of Arts in Political Science Total course equivalents: Thirty

(a) POLS-1000, POLS-1300 and POLS-1600;

- (b) nine additional courses Political Science including at least three at the 3000-level or above (Note: students interested in switching to Honours Political Science should take SOSC-2500, POLS-2750, and one of POLS-2510 or POLS-2520);
- (c) two courses from Arts;
- (d) two courses from Languages or Science;
- (e) two courses from any area of study, excluding Social Sciences;
- (f) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study);
- (g) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.) (one of: GART-1210/SOSC-1210, ENGL-2320, HIST-2460, HIST-2470, PHIL-1350, PHIL-2300, POLS-2000, POLS-3000, POLS-4000, WGST-2380);
- (hg) five courses from any area of study, including Political Science
- (ih) five courses from any area of study, excluding Political Science

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

As indicated on the Political Science and Faculty of Education websites, Law and the Global Studies teachable subjects include the following courses:

Law: two of: POLS-2140, POLS-3140, POLS-3630

Global Studies: two of: <u>POLS-2065</u>, POLS-2320, POLS-2330, <u>POLS-2340</u>, POLS-2350, POLS-2410, POLS-2440, <del>POLS-2450</del>, POLS-2490, POLS-2600, POLS-2610, POLS-2640, POLS-2680; two of: POLS-3460, POLS-3540, POLS-3550, POLS-3560, POLS-3650, POLS-3650, POLS-3670, POLS-3720, POLS-4310, POLS-4340, <u>POLS-4410</u>, <u>POLS-4420</u>, POLS-4640, POLS-4650, POLS-4960.

#### 15. Certificate in North American Studies

**Admission Requirements** 

For domestic students: Minimum admission requirements for undergraduate degrees.

For International/Exchange students: Successful completion of at least one year of undergraduate study at an accredited degree-granting institution and clear competence in English for academic purposes. Positive recommendation for international students from the home university (if currently enrolled elsewhere).

### Requirements

Total courses: ten

(a) POLS-1000, POLS-2320, POLS-3350, , POLS-3550;

(b) Two of POLS-2640; POLS-2010; POLS-3610; POLS-4340; POLS-4650;

(c) Two of HIST 2430; HIST 2440; HIST 2470; HIST 2620; HIST 3490; HIST 3620; HIST 3630

(d) One of SACR-2280; SACR-3330; SACR-3390

#### 16 Certificate in Public Administration

**Admission Requirements** 

Admission requirements are the same as those for the Honours Political Science program.

Requirements

Total courses: eight

(a) POLS-1000, POLS-2200, POLS-2210:

(b) ECON-1100 and ECON-1110;

(c) Three of POLS 2000; POLS 2120; POLS 2130; POLS 2140; POLS 2320; POLS 2750; POLS 3000; POLS 3090; POLS 3140; POLS 3200; POLS 3210; POLS 3230; POLS 3260; POLS 3920, POLS 4000; POLS 4110; POLS 4210; POLS 4220; POLS 4310, POLS 4920.

## A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

#### **B. RATIONALE**

Please provide a rationale for the proposed change(s).

### **Political Science Programs**

To balance the academic mission with financial realities, the Department of Political Science has introduced proposed changes to its Political Science programs. Given the financial challenges currently facing the University of Windsor, the department is committed to maintaining its ability to deliver high-quality education while navigating these difficulties. With this in mind, the department has implemented a number of strategic measures aimed at reducing redundant courses and streamlining undergraduate programs. This will allow the department to maximize resources and optimize faculty time, ensuring that the most impactful courses and programs continue to be offered without overextension. The proposed changes will help keep the programs competitive in the evolving higher education landscape.

The changes will not affect student access to essential courses or programs, particularly those required for graduation or key career paths. We remain dedicated to providing high-quality, accessible education. By making these strategic decisions now, we aim to ensure that our programs stay strong, relevant, and capable of meeting the needs of students, faculty, and the wider community for years to come.

### Certificate in North American Studies and Certificate in Public Administration (Discontinue)

One of the proposed changes is the decision to discontinue the Certificate in North American Studies and Certificate in Public Adminstration. Over the past several years, there has been very little enrollment in these certificates, indicating low demand and a lack of student interest. To prioritize programs that better align with current student interests and departmental needs, the Department of Political Science has decided to discontinue offering the both certificates.

### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or

upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

In light of the university's ongoing efforts to adapt to financial constraints while maintaining academic excellence, we are proposing a series of program changes designed to streamline and optimize our academic offerings. These adjustments are carefully considered to enhance our focus on high-demand programs and courses and align well with both student and faculty needs as well as evolving financial pressures.

The proposed program changes will not require any additional resources. Rather, these changes are intended to make more efficient use of the existing faculty, staff, and infrastructure by consolidating under-enrolled courses and eliminating course redundancies. Political Science is committed to minimizing disruption for students and faculty, ensuring that essential services and support remain intact.

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

The courses will be taught by experienced full-time faculty members on a regular basis. The reliance on limited-term or sessional faculty will be minimal and not exceed current practices.

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

## **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

None

## C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

## C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

## <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

**D.1 Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification

## University of Windsor Program Development Committee

\*5.10: Psychology (Graduate) – Minor Program Changes (Form C)

Item for: Approval

Forwarded by: Faculty of Arts, Humanities, and Social Sciences

MOTION: That the degree requirements for the Master's and Doctoral Degree, Clinical Psychology Master's and Doctoral Degree, Applied Social Psychology be changed in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

## Rationale/Approvals:

- This proposal as approved by the Department of Psychology Council, the Faculty of Arts, Humanities and Social Sciences Council, and the Faculty of Graduate Studies Council.
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Master's and Doctoral Degree, Clinical Psychology	
	Master's and Doctoral Degree, Applied Social Psychology	
DEPARTMENT(S)/SCHOOL(S):	Psychology	
FACULTY(IES):	FAHSS	

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Spring 2025
*(subject to timely and clear submission)	

#### A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding">bolding</a> and <a href="mailto:underlining">underlining</a>. Example: Degree requirements: WXYZ-1000, <a href="wwxyz-1010">wxyz-1010</a>, WXYZ-1100, WXYZ-2100, WXYZ-3100, plus three additional courses at the <a href="mailto:3000-level">3000-level</a> or 4000-level.

### **Clinical Psychology**

#### **Program Requirements**

1) Master's degree: The first phase of the doctoral program involves the completion of the Master's degree in the first two years of the program, the requirements for which include a thesis. Further advancement in the doctoral program depends on the quality of performance in fulfilling the requirements for the Master's degree. This would not apply to students entering the Applied Social Psychology PhD program with a prior Master's degree.

### MA/PHD IN CLINICAL PSYCHOLOGY

Students in Clinical Psychology are admitted to one of three tracks (i.e., Adult Clinical, Child Clinical, or Clinical Neuropsychology).

Master of Arts – Clinical Psychology (Adult)/Clinical Psychology (Child)/Clinical Neuropsychology

To complete a Master of Arts degree in Clinical Psychology (Adult)/Clinical Psychology (Child)/Clinical Neuropsychology, all students must successfully pass (receive a 70% or higher or a Pass for Pass/Fail courses) the following courses:

- a. MA Thesis Research (PSYC 8970) until successfully defended and receive a Pass (P)
- b. Statistics for Graduate Study in Psychology I (PSYC 8511) and II (PSYC 8512)
- c. Research Methods in Clinical Psychology (PSYC 8514)
- d. Ethical and Professional Issues in Clinical Psychology (PSYC 8581)
- e. Personality and individual differences courses (all are required):
  - Psychopathology (PSYC 8580), and
  - Clinical Assessment I & II (PSYC 8582 & PSYC 8583), and
  - Introduction to Psychotherapy (PSYC 8674)
- f. At least one, two-semester Therapy Course sequence from:
  - Child/Adolescent Clinical Interventions I and II (PSYC 8675/ PSYC 8676)
  - Brief Psychodynamic Psychotherapy I and II (PSYC 8685/PSYC 8686)
  - Family Therapy I and II (PSYC 8690/PSYC 8691)

- o Cognitive Behavioural Therapy I and II (PSYC 8692/PSYC 8693)
- Integrative Psychotherapy I and II (PSYC 8694/PSYC 8695)
- Emotion Focused Therapy I and II (PSYC 8696/PSYC 8697)
- g. Students should take one (1) additional course within each of the four (4) categories below during the MA degree (any remaining courses must be completed during the PhD degree):
  - I. History of psychology (must be completed if student has not already taken an equivalent course as part of a previously earned degree):
    - History and Systems of Psychology (PSYC 4150), or
    - Historical and Philosophical Foundations of Psychology (PSYC 8501)
  - II. Biological bases of behaviour:
    - Human Neuropsychology and Biological Bases of Behaviour (PSYC 8503)
  - III. Cognitive bases of behavior (pick one):
    - Cognitive Bases of Behaviour (PSYC 8505), or
    - Cognitive Development (PSYC 8541), or
    - Emotional Development (PSYC 8542).
  - IV. Social bases of behaviour (pick one):
    - o Issues in Cultural Diversity (PSYC 8657), or
    - o Applied Social Psychology (PSYC 8550), or
    - o Multicultural Issues in Clinical Practice (PSYC 8588).
- h. Complete at least 300 hours of clinical practicum experience, which can be obtained through the clinical hours accumulated within the following courses:
  - At least one of the two-semester Therapy Course sequences
  - Specialized assessment courses offered within each track
  - Clinical Practicum: MA-Level (PSYC 8701) as part of a practicum placement and receive a Pass (P) in their final semester of PSYC 8701
- i. Specialized Courses offered within each track as follows:
  - I. Students in the Adult Clinical track must take:
    - Advanced Adult Assessment (PSYC 8589)
    - Adult Assessment Practicum (PSYC 8590)
  - II. Students in the Child Clinical track must take:
    - Child Clinical Assessment I (PSYC 8652)
    - Child and Adolescent Assessment Practicum (PSYC 8653)
  - III. Students in the Child Clinical track may take:
    - Developmental Psychopathology (PSYC 8540) MA-level, if offered, otherwise PhD-level
    - o Survey of Child Psychotherapies (PSYC 8651) MA-level, if offered, otherwise PhD-level
    - Cognitive Behavioural Therapy I and II (PSYC 8692/PSYC 8693) MA or PhD-level
    - Child and Adolescent Clinical Interventions I and II (PSYC 8675/PSYC 8676) MA or PhD-level
  - IV. Students in the Clinical Neuropsychology track must take:
    - Human Neuropsychology and Biological Bases of Behaviour (PSYC 8503)
    - o Cognitive Behavioural Therapy I and II (PSYC 8692/PSYC 8693)
    - Introductory Practicum in Clinical Neuropsychology (PSYC 8702; 3 semesters)
  - V. Students in the Clinical Neuropsychology track may take:
    - Structure and Function of the Brain (PSYC 8529) MA-level, if offered, otherwise PhD-level

- Adult Clinical Neuropsychology: Theory Methods and Research (PSYC 8642) MA-level, if offered, otherwise PhD-level
- O Choice of 1 of the following courses MA or PhD-level:
  - Neurodevelopmental Disorders (PSYC 8644), or
  - Neuropsychological Aspects of Rehabilitation (PSYC 8645), or
  - Neuropsychology of Older Adults (PSYC 8648).

[Students in Clinical Psychology (Adult)/Clinical Psychology (Child)/Clinical Neuropsychology are to complete these MA-level requirements with a minimum cumulative average of 75% within two years.]

Doctor of Philosophy - Clinical Psychology (Adult)/Clinical Psychology (Child)/Clinical Neuropsychology

After meeting the requirements above, all Clinical Psychology students who are pursuing a PhD in Clinical Psychology (Adult)/Clinical Psychology (Child)/Clinical Neuropsychology must successfully maintain a minimum cumulative average of 75% or higher and successfully pass (receive a 70% or higher or a Pass for Pass/Fail courses) the courses listed below:

- a. Doctoral Dissertation Research (PSYC 9980 Section 01) until successfully defended and receive a Pass (P)
- b. Comprehensive Examination (PSYC 9410, sect 02); must receive a Pass (P) within the first 4 semesters after registration as a PhD student (unless a delay has been approved by the department).
- c. Complete at least 700 hours of clinical practicum experience, which can be obtained through clinical hours accumulated within the following courses:
  - Two-semester Therapy Course(s) sequence(s)
  - Specialized assessment courses offered within each track
  - Clinical Practicum: PhD-Level (PSYC 9020, section 01 or 02) as part of a practicum placement and receive a Pass (P) in the final semester of both PSYC 9020-01 and 9020-02
- d. Preparing for Clinical Internship (PSYC 9050); register in the fall term during the year of internship application and receive a Pass (P)
- e. Pre-Doctoral Clinical Internship (PSYC 9060) continuously enrolled while completing their pre-doctoral clinical internship until receive a Pass (P) in their final semester
- f. Specialized Courses offered within each track as follows:
  - I. Students in the Adult Clinical must take:
    - Integrative Psychotherapy I & II (PSYC 8694/PSYC 8695)
    - Psychological Services and Research Center (PSRC) Advanced Psychotherapy Practicum (PSYC 8715, 2 semesters)
  - II. Students in the Child Clinical must take:
    - Developmental Psychopathology (PSYC 8540) if not taken at the MA-level
    - Survey of Child Psychotherapies (PSYC 8651) if not taken at the MA-level
    - Cognitive Behavioural Therapy I and II (PSYC 8692/PSYC 8693) if not taken at the MA-level
    - Child and Adolescent Clinical Interventions I and II (PSYC 8675/PSYC 8676) if not taken at the MAlevel
  - III. Students in the Clinical Neuropsychology must take:
    - o Structure and Function of the Brain (PSYC 8529) -- if not taken at the MA-level
    - Adult Clinical Neuropsychology: Theory Methods and Research (PSYC 8642) -- if not taken at the MAlevel
    - Advanced Practicum in Neuropsychology (PSYC 8703; 2 semesters)
    - Choice of 1 of the following courses if not taken at the MA-level:

- Neurodevelopmental Disorders (PSYC 8644), or
- Neuropsychological Aspects of Rehabilitation (PSYC 8645), or
- Neuropsychology of Older Adults (PSYC 8648).

### MA/PHD IN APPLIED SOCIAL PSYCHOLOGY

Master of Arts - Applied Social Psychology

To complete a Master of Arts degree in Applied Social Psychology, students must successfully pass (receive a 70% or higher or a Pass for Pass/Fail courses) the following courses:

- a. MA Thesis Research (PSYC 8970) until successfully defended and receive a Pass (P)
- b. Statistics for Graduate Study in Psychology I (PSYC 8511) and II (PSYC 8512)
- c. Theory and Research in Social Psychology (PSYC 8560)
- d. Ethical Issues in Applied Psychology (PSYC 8577)
- e. Applied Social Psychology (PSYC 8550)
- f. Program Evaluation and Organizational Development (PSYC 8566)
- g. One elective at the PSYC 8000 level (from Breadth Courses below)
- h. Applied Social Psychology Practicum (PSYC 8721, including 100 hours of practicum experience)

[Students are to complete these MA-level requirements with a minimum cumulative average of 75% within two years.]

Doctor of Philosophy - Applied Social Psychology

After meeting the MA requirements above, Applied Social Psychology students pursuing a PhD in Applied Social Psychology must successfully maintain a minimum cumulative average of 75% or higher and pass (receive a 70% or higher) nine (9) additional courses (two research courses, two practice courses, and five classroom courses), including:

- a. Two Research Courses:
  - Comprehensive Examination [PSYC 9410, section 01 for applied social students; must receive a Pass (P)
    within the first 5 semesters after registration as a PhD student (unless a delay has been approved by the
    department), and
  - o Doctoral Dissertation Research (PSYC 9980 Section 02) until successfully defended and receive a Pass (P)
- b. Two Practice Courses (1000 hours total):
  - Applied Social Doctoral Internship I & II (PSYC 9310, PSYC 9320)
- c. Four Content Courses:
  - Historical and Philosophical Foundations of Psychology (PSYC 8501); and
  - o Issues in Cultural Diversity (PSYC 8657), and
  - Applied Psychological Measurement (PSYC 8516); and
  - Additional methodology course [one of: Advanced Multivariate Analysis (PSYC 8513) or Qualitative Methods (PSYC 8517)
- d. One Additional Applied Social Psychology Breadth Course from:
  - Feminist Psychology and the Psychology of Women and Gender (PSYC 8575), or
  - Foundations of Positive Psychology: Flourishing in Interpersonal Contexts (PSYC 8578)
  - Special Topics in Applied Social Psychology (PSYC 8610)
  - Community Psychology (PSYC 8660), or
  - Health Psychology (PSYC 8662), or
  - Industrial/Organizational Psychology (PSYC 8665), or approved alternatives

### All Clinical Psychology and Applied Social Psychology MA/PhD Students

All graduate students in Psychology are required to comply with the most recent ethical principles, values, and standards of the Canadian Psychological Association and the American Psychological Association, and with the current standards for research with human participants adopted by the University of Windsor. Failure of a student to adhere to the principles, values, and standards defined above will constitute sufficient cause to warrant dismissal from the graduate program in Psychology.

Progress reports: All graduate students are required to demonstrate advancement in the program by completing an annual report to be submitted to the student's track/program coordinator. This report will describe the progress that the graduate student made over the previous year and outline the goals for the upcoming year. An Annual Evaluation of Student Progress will then be generated by the track/program coordinator to provide a review and evaluation of the status of the graduate student's progress in the program and recommendations for completion of the program in a timely manner. Failure of a student to complete this report annually may constitute sufficient cause to warrant dismissal from the graduate program in Psychology.

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

### **B. RATIONALE**

Please provide a rationale for the proposed change(s).

Successful completion of these courses has always been departmentally recognized criteria to earn a Master's or Doctoral Psychology degree in our program. Although recognized internally, these expectations were not officially in the calendar, and they should be.

### B.1 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <a href="Truth and Reconciliation Report">Truth and Reconciliation Report</a> (2015) (page 1), the unique legal requirements of the <a href="Constitution Act 1982">Constitution Act 1982</a> (Sections 25, 35), the provincial legal requirements of the <a href="Ontario Human Rights Code">Ontario Human Rights Code</a>, 1990, and provincial legislation <a href="Bill Pr36">Bill Pr36</a> (1967). In <a href="revising this program">revising this program</a>, <a href="how has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit)">Inuit</a>) content, perspectives, or material into the curriculum?

Please consider these prompt questions and <u>additional Resources</u> including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- How have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the <u>TRC</u> and <u>University Principles</u> documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?

- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?
- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form such as learning outcomes and/or in the syllabus where appropriate?

### What process has your department/Faculty used to consider Indigenization?

Faculty in the Psychology department are engaged in ongoing efforts to better understand our role in the Indigenization of our programs. Thus far, faculty have pursued this understanding in the ways that best fit their teaching and research needs. These strategies have included top-down and bottom-up work, including:

- Psychology has begun considering Indigenization by attending the Pulling Together Workshops facilitated by Indigenous Learning Specialist Jaimie Kechego in order to do some self-reflective education and gauge how the department may respectfully incorporate Indigenous knowledges. Several Psychology faculty members also attended the Indigenous Research and Scholarship Forum.
- 2. The Department Head (Dr. Patti Fritz) has surveyed faculty about their efforts and has compiled that information in a document for circulation. The activities outlined here are from that survey.
- 3. A faculty member in Psychology (Dr. Catherine Kwantes) holds SSHRC (Social Sciences and Humanities Research Council) and ORF-RE grant funding for the Indigenous Workways project aimed at providing information for organizations to help be more inclusive for Indigenous employees. As a part of that, she has taken courses including the Indigenous Canada MOOC from the University of Alberta she also consults regularly with Indigenous colleagues and elders.
- 4. One of our newer faculty members (Dr. Onawa Labelle) was hired through the President's Indigenous Peoples Scholars Program. Dr. Labelle has been a leader in the department since her hire.
- 5. Multiple clinical faculty members have attended workshops on working with Indigenous clients. These workshops have generally been at professional conferences and have led to continuing education credits.
- 6. Multiple faculty members have engaged in self-directed study following the advice of Indigenous leaders in our community and academic circles. In this effort, faculty members have read books such as *Research Is Ceremony:* Indigenous Research Methods, Seven Fallen Feathers, Firekeeper's Daughter, Braiding Sweetgrass, Indigenous Continent, Covered with Night, Moon of the Crusted Snow, and As Long as Grass Grows.
- 7. In February 2023, our departmental colloquium speaker (Dr. Lindsey Morcom from Queen's University) presented her work on the impact of Indigenous language revitalization on community relations.
- 8. Two faculty members (Dr. Kris Romero and Dr. Patti Timmons Fritz) held a grant from the Diversity, Indigeneity, and Anti-racism Professional Development Fund to work on culturally sensitive clinical assessments. It is their intention to include Indigenous perspectives in this work.
- 9. Dr. Kwantes recently discovered a text entitled, A New Psychology Based on Community, Equality, and Care of the Earth: An Indigenous American Perspective. She has recommended this to the department for independent study by faculty.

#### How have you considered the importance or relevance to the course/program?

The TRC and Universities Principals on Indigenous education stress the importance of Indigenization of courses or programs to increase Indigenous learners (so that they see themselves reflected back in the course) in the area of psychology, by reading and understanding what these documents mean, Psychology is able to respectfully begin building their own capacity for understanding what it means to Indigenize a course or program. This will be an ongoing process over the coming decades.

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Faculty in our department are actively engaged in research. As part of that work, all researchers are reviewing TCPS2 Chapter 9: Research Involving the First Nations, Inuit, and Métis Peoples of Canada and OCAP principles.

## How has your department or faculty approached raising awareness for Indigenous knowledges in your area?

Dr. Fritz frequently shares documents and information with the department related to Indigenous knowledge and traditions. The department has begun raising awareness by attending events or sessions that share Indigenous knowledges. For example, the annual Pow Wows have been an opportunity to see Indigenous knowledges and traditions in action. These were attended by multiple faculty members.

Drs. Labelle and Kwantes have developed an Indigenous Research Methodology module for online learning. This has been shared with our AAU to promote awareness and added to our faculty Teams channel as a resource for all courses in the department.

As mentioned above, the department has also invited Indigenous scholars to present Indigenous research to the department.

### What do the TRC and University Principles documents suggest relevant to your course?

To date these specific suggestions from TRC and University principals can apply to Psychology, but we have not instituted wide-ranging changes yet because we still need to do some self-reflective work and see if there is a respectful fit with the course and Indigenous knowledges.

Thus far, faculty have begun to make specific changes to their courses as we decolonize our curriculum. Three specific examples from the clinical program are in the Multicultural Issues in Clinical Practice (PSYC 8588), Clinical Assessment II (PSYC 8583), and Child Clinical Assessment (PSYC 8652) courses. The multicultural course is a mandated part of our curriculum from our accreditation body and is taught by Dr. Ben Kuo. Dr. Kuo has specific assignments and content that reflect indigenous perspectives and clinical needs. The Clinical Assessment II course is taught by Dr. Carlin Miller. For that course, Dr. Miller has consulted with Jaimie Kechego to identify content that reflects trauma-informed assessment needs of FNIM people. She has added several readings to the course content to offer an indigenous perspective on how to provide culturally sensitive clinical services to FNIM people. For the Child Clinical Assessment course, Dr. Fritz includes readings on culturally-responsive assessment of Indigenous students and shares information she has learned from workshops she has attended on this topic.

For the Applied Social program, Indigenous knowledge and worldviews are brought into a number of courses. For example, students are required to take a course in Cultural Diversity. This course, taught by Dr. Kathryn Lafreniere, includes a unit with readings that focus on Indigenous perspectives and the experiences of Indigenous students as well as how the discipline of Applied Social Psychology should be incorporating Indigenous worldviews. Additionally, Dr. Lafreniere teaches Community Psychology, and that course has a unit with readings that have a focus on methods and initiatives with Indigenous communities.

#### What have other similar courses/programs done that might be relevant to your course/program?

Psychology has contacted other postsecondary institutions to inquire about what has been done respectfully at their institutions. At this point, we still have significant work to do in this area as we do not want to do more harm than good.

Notably, the new accreditation standards that govern our clinical psychology program require additional learning engagement points with Indigenous culture. As a result, our department will need to do some of this work in order to receive re-accreditation in 2026 after our 2025 self-study is submitted.

## In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

Psychology has begun to think about the medicine wheel and how those holistic teachings can be respectfully included by inviting a knowledge holder for example. Psychology is also beginning to consider Indigenous research methodologies and how such approaches may be applied and bring about new understandings. As many of our clinical and applied courses include contact with clients from the community, any time a client identifies as FNIM, faculty ensure students are prepared to engage with the client respectfully and effectively. Likewise, some courses in our Applied Social Psychology and Clinical Psychology graduate programs include Indigenous content. These efforts are unaffected by the changes proposed in the current application, which entails officially documenting required coursework to achieve the MA and PhD.

## What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?

The early foundational work we have done on Indigenizing the curriculum has made it clear to departmental leaders that we have significant work to do before you can be educational allies to FNIM peoples.

Which literatures, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name).

Dr. Miller consulted with Jaimie Kechego on the initial draft of these responses. However, the responses have been revised and edited across time to reflect recent developments.

Multiple faculty members have engaged in self-directed study following the advice of Indigenous leaders in our community and academic circles. In this effort, faculty members have read books such as Research Is Ceremony: Indigenous Research Methods, Seven Fallen Feathers, Firekeeper's Daughter, Braiding Sweetgrass, Indigenous Continent, Covered with Night, Moon of the Crusted Snow, and As Long as Grass Grows.

As part of her research and consultation project, Dr. Kwantes has also been in regular contact with Russell Nahdee, Jean Becker (ACP, Indigenous Relations at UWaterloo) (names provided with permission), and several Indigenous students. She has also attended and presented at cando (Council for the Advancement of Native Development Officers). She and her grant funded team recently held a pre-conference workshop at the Canadian Psychological Association annual conference on ways organizations can work towards creating psychological and culturally safe workplaces for Indigenous employees.

#### Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?

In terms of direct engagement on Indigenous issues, we are at the preliminary stages of this analysis. We recognize that there are systemic problems with Psychology that is largely founded in the work products of white (largely European) male researchers and theorists. It is our goal to respectfully add Indigenous perspectives. Although we include some Indigenous content in some of our courses, our work to date on Settler Colonialism and Decolonization is limited. At this point, we are still learning protocols for interacting with Indigenous knowledge holders and our ability to develop timelines for this decolonization is limited.

### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human,

physical and financial resources (within and outside the unit) on other existing programs in the department or at the university.

Provide an assessment of the reliance of the revised program on existing resources from <u>other</u> campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

No change in resources is necessitated.

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

N/A

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

## **C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

## C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A

GA/TAs: N/A
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## <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

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## University of Windsor Program Development Committee

\*5.11 Bachelor of Science – Minor Program Changes (Form C)

MOTION: That the degree requirements for the Bachelor of Science be changed in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

## **Rationale/Approvals:**

- This new course proposal has been approved by the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Bachelor of Science
DEPARTMENT(S)/SCHOOL(S):	Faculty of Science
FACULTY(IES):	Faculty of Science

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025 Undergraduate Calendar
*(subject to timely and clear submission)	

#### A.1 PROGRAM REQUIREMENT CHANGES

### **Bachelor of Science (General Science)**

Degree Requirements Total courses: thirty.

- (a) two sets of six courses from two different Departments or School as listed:
  - Biological Sciences: BIOL-1101 and BIOL-1111; and \*four BIOL-XXXX or BIOM-XXXX courses at the 2000 level or above
  - Chemistry and Biochemistry: CHEM-1100 and CHEM-1110; and \*four CHEM-XXXX or BIOC-XXXX courses at the 2000 level or above
  - Computer Science: COMP-1400 and COMP-1410; and \*four COMP-XXXX courses at the 2000 level or above
  - School of the Environment: ESCI-1100 and ESCI-1111; and \*four ESCI-XXXX courses at the 2000 level or above
  - Economics: ECON-1100 and ECON-1110; and \*four ECON-XXXX courses at the 2000 level or above
  - Mathematics and Statistics: MATH-1720 (or MATH-1760) and MATH-1730; and \*four MATH-XXXX or STAT-XXXX courses at the 2000 level or above
  - Physics: PHYS-1400 and PHYS-1410; and \*four PHYS-XXXX courses at the 2000 level or above

\*NOTE: These courses must be from among the courses listed to calculate the major average for a degree program in the Department or School.

- (b) one set of two courses from a third Department or School as listed:
  - Biological Sciences: BIOL-1101 and BIOL-1111
  - Chemistry and Biochemistry: CHEM-1100 and CHEM-1110
  - Computer Science: COMP-1400 and COMP-1410, or COMP-1047 and COMP-2057, or COMP-2067 and COMP-2057
     2057 2087
  - School of the Environment: ESCI-1100 and ESCI-1111
  - Economics: ECON-1100 and ECON-1110
  - Mathematics and Statistics: MATH-1760 and STAT-2910, or MATH-1720 and STAT-2910, or MATH-1760 and MATH-1730, or MATH-1720 and MATH-1730.
  - Physics: PHYS-1400 and PHYS-1410 or PHYS-1300 and PHYS-1310
- (c) four Science courses at the 3000 level or above which are from the courses listed to calculate the major average for a degree program of the Department or School in the Faculty of Science that offers the courses.
- (d) four courses from Arts/Languages and Social Sciences, with at least one from each
- (e) eight courses from any area of study excluding BIOM-1003, BIOL-1013, BIOC-1303, CHEM-2003, MATH-1280, MATH-1780, and MATH-1980. , ESCI-1000 and ESCI-1010

### **Calculation of Major Average**

The major average is calculated from the grades of all Science courses, excluding the grades obtained in the following courses: ECON-2000, ECON-2010, BIOM-1003, BIOL-1013, BIOM-2093, BIOC-1303, CHEM-2003, CHEM-2305, BIOC-2015, COMP-2077, COMP-2097, COMP-2707, COMP-3057, COMP-3077, ESCI-1000, ESCI-1010, ESCI-2300, ESCI-2010, ESCI-2630, MATH-1280, MATH-1780, MATH-1980, PHYS-1000, PHYS-1010, PHYS-2060 and ESCI-2000.

Note: COMP-1047 or COMP-2067 and COMP-2087 count as a 'science pair' (see requirement (b) above) and will be included in the calculation of the major average.

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining.

Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a **Form E.** 

The changes made do not require additional resources nor affect degree requirements.

#### **B. RATIONALE**

Please provide a rationale for the proposed change(s).

This request is to remove ESCI-1000 and ESCI-1010 as they can be used towards the any area of study electives, which has already been updated in the Calendar by the Faculty of Education under the General Science/ Concurrent Education program requirements. The other change is to the Computer Science second concentration options due to COMP-1047 and COMP-2057 not being suitable any longer and COMP-2087 (newer course) is now the appropriate pair to COMP-2067.

## C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

N/A

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

## C.4 Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

## C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

## C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

## C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

#### **D.1 Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification
•		

## University of Windsor Program Development Committee

\*5.12 Bachelor of Social Work (BSW) - Minor Program Changes (Form C)

Item for: Approval

MOTION: That the degree requirements for the Honours Bachelor of Social Work, Honours Bachelor of Social Work and Disability Studies, Honours Bachelor of Social Work and Women's Studies, Honours Bachelor of Social Work for University Graduates, Honours Bachelor of Social Work for Ontario Child and Youth Care Program Graduates be changed in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

## Rationale/Approvals:

- This proposal has been approved by the School of Social Work Council and the Faculty of Arts, Humanites and Social Sciences Council.
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Bachelor of Social Work (BSW)
DEPARTMENT(S)/SCHOOL(S):	School of Social Work – March 19, 2025
FACULTY(IES):	Faculty of Arts, Humanities and Social Sciences

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

### Does the minor program change include new courses?:

 <sub>.</sub> Yes [All new course proposals must be submitted on PDC Form Ds and submitted for approval <u>with</u> the minor
program change proposal (PDC Form C)]
 ••

\_\_X\_\_ No

If yes, list all new courses: N/A

### A.1 PROGRAM REQUIREMENT CHANGES

#### **Honours Bachelor of Social Work**

Degree Requirements

Total courses: 40

- (a) SWRK-1170, SWRK-1180, SWRK-2040, SWRK-2100, SWRK-3360, SWRK-3370, SWRK-3380, SWRK3390, SWRK-3440, SWRK-3710, SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), SWRK-4750 (12 credit hours).
- (b) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study.)
- (c) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.)
- (d) SOSC-2500 or SWRK-2000;
- (e) Two courses from Science;
- (f) A minimum of six courses from one of the disciplines or programs of study listed below: Communication Studies, Media, and Film, Labour Studies, Psychology, Sociology, Anthropology, History, Women's and Gender Studies, Political Science, Family and Social Relations, Diaspora Studies, and Disability Studies.
- (g) 9 courses from any area of study including Social Work courses.

Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study.

### **Program Sequencing**

Year 1: ENGL-1010, SWRK-1170, SWRK-1180, one Indigenous content course, two science courses, two introductory courses from a social science discipline, two introductory courses from any area of study

Year 2: SOSC-2500 or SWRK-2000, and SWRK-2040, SWRK-2100, and four courses at the 2000-4000 level from a social science discipline, plus three courses from any area of study.

Year 3: SWRK-3360, SWRK-3370, SWRK-3380, SWRK-3390, SWRK-3440, SWRK-3710, plus four courses from any area of study including Social Work.

Year 4: SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730, SWRK-4750.

Phasing out of previous curriculum: Program advisors will determine appropriate exceptions for students who are completing their program under the previous curriculum and who fall out of sequence.

## **Honours Bachelor of Social Work and Disability Studies**

This is a joint offering between Social Work and Psychology Interdisciplinary and Critical Studies.

Degree Requirements Total courses: 40

- (a) Social Work: SWRK-1170, SWRK-1180, SWRK-2040, SWRK-3360, SWRK-3370, SWRK-3380, SWRK3390, SWRK-3440, SWRK-3710, SWRK-4230, SWRK-4300, SWRK-4730 (9.0 credit hours), SWRK-4310, SWRK-4750 (12 credit hours).
- \* Every effort will be made to ensure that Field Education I and II will allow the Combined Social Work and Disability Studies student to utilize their knowledge from both areas of study in the experiential learning process.
- (b) Disability Studies:
  - (i) four discipline foundation courses: PSYC-1150, PSYC-1160, DISB/SJST-1000, SWRK-2100;
  - (ii) three Disability Studies or Disability Studies-Emphasis courses;
  - (iii) three human development courses: PSYC-2230, PSYC-2240, PSYC-2250
- (iv) three Disability Studies courses: DISB-2010, DISB-3020, DISB-4010.
- (c) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study.)
- (d) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.)
- (e) two Science courses;
- (f) SOSC-2500 or SWRK-2000;
- (f) three courses from any area of study, excluding social work and disability studies.

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study.

## **Recommended Course Sequencing:**

Year 1: ENGL-1010, SWRK-1170, SWRK-1180, PSYC-1150, PSYC-1160, IACS-1000, one Indigenous content course, one science course, and two courses from any area of study

Year 2: SWRK-2100, SWRK-2040, SOSC-2500 or SWRK-2000, PSYC-2230, PSYC-2240, one science course, 3 Disability Studies Emphasis courses and one course from any area of study.

Year 3: SWRK-3360, SWRK-3370, SWRK-3380, SWRK-3390, SWRK-3440, SWRK-3710, PSYC-2250, DISB2010, DISB-3020, DISB-4010.

Year 4: SWRK-4230, SWRK-4300, SWRK-4730 (9.0 credit hours), SWRK-4310, SWRK-4750 (12 credit hours).

## **Honours Bachelor of Social Work and Women's Studies**

This is a joint offering between Social Work and Women's and Gender Studies.

### **Degree Requirements**

Total courses: 40

- (a) Social Work: SWRK-1170, SWRK-1180, SWRK-2040, SWRK-3360, SWRK-3370, SWRK-3380, SWRK3390, SWRK-3440, SWRK-3710, SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), and SWRK-4750 (12 credit hours).
- (b) Women' and Gender Studies:
  - (i) WGST-1000, WGST-2500, WGST-3050 or WGST/PHIL-3590, WGST-3060;
  - (ii) five of WGST/SACR-2100, WGST-2200, WGST/SJST-2350, WGST/WORK-2600, WGST-2380, WGST-3000, or KINE-3501/PSYC/SACR/SJST/SOSC/SWRK/WGST-3500;
  - (iii) SWRK/WGST-3550; one of SWRK/WGST-3470 WGST-3300 OR WGST-3850\*;
  - (iv) three additional Women's and Gender Studies courses.
- (c) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study.)

- (d) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.)
- (e) SOSC-2500 or SWRK-2000;
- (f) One science course;
- (g) Three courses from any area of study, excluding Social Work and Women's and Gender Studies. (It is recommended that these courses be from related disciplines)

Courses used to calculate the major average are: courses listed under requirements (a) and (b), and any courses taken in the major area(s) of study. \*WGST-3850 may count as equivalent only when offered as a Walls to Bridges course under section code "75".

## **Program Sequencing**

Year 1: (Ten courses) ENGL-1010, one Indigenous content course, SWRK-1170, SWRK-1180, WGST-1000, WGST-2100 (or SACR-2100), WGST-XXXX (one Women's and Gender Studies course), one science course, two courses from any area of study, excluding Social Work and Women's and Gender Studies

Year 2: (Ten Courses) SOSC-2500 or SWRK-2000, SWRK-2040, WGST-2500; four of WGST/SACR-2100, WGST-2200, WGST/SJST-2350, WGST/WORK-2600, WGST-2380, WGST-3000, or KINE-3501/PSYC/SACR/SJST/SOSC/SWRK/WGST-3500; two Women's and Gender Studies courses, and one course from any area of study, excluding Social Work and Women's and Gender Studies.

Year 3: (Ten courses) SWRK-3360, SWRK-3370, SWRK-3380, SWRK-3390, SWRK-3440, SWRK-3710, WGST3590 (or PHIL-3590 or WGST-3050), WGST-3060, SWRK/WGST-3550; and one of SWRK/WGST-3470 or WGST-3850\*;

Year 4: SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), SWRK-4750 (12 credit hours).

### **Honours Bachelor of Social Work for University Graduates**

### **Degree Requirements**

Total courses: 20

- (a) SWRK-2040, SWRK-2100, SWRK-3360, SWRK-3370, SWRK-3380, SWRK-3390, SWRK-3440, SWRK3710, SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), SWRK-4750 (12 credit hours).
- (b) SOSC-2500, SWRK-2000, or equivalent;
- (c) One course from any area of study Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study. Students who have previously taken SOSC-2500 or equivalent may substitute a social science course at the 2000-4000 or a 3000-4000 level social work course.

Phasing out of previous curriculum: Program advisors will determine appropriate exceptions for students who are completing their program under the previous curriculum and who fall out of sequence.

### **Program Sequencing**

Year 1: SOSC-2500 or SWRK-2000, SWRK-2040, SWRK-2100, SWRK-3360, SWRK-3370, SWRK-3380, SWRK-3390, SWRK3440, SWRK-3710, one course from any area of study.

Year 2: SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9.0 credit hours), SWRK-4750 (12 credit hours).

## Honours Bachelor of Social Work for Ontario Child and Youth Care Program Graduates

Students are strongly advised to consult with a Social Work academic advisor before registering for courses in this program.

#### **Degree Requirements**

Total courses: 20, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Care diploma with the following stipulation: In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 20 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Social Work Undergraduate Program Coordinator (or designate) will identify a substitute course requirement.

- (a) SWRK-2040, SWRK-2100, SWRK-3360, SWRK-3370, SWRK-3380, SWRK-3390, SWRK-3440, SWRK3710, SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), SWRK-4750 (12 credit hours).
- (b) SOSC-2500, SWRK-2000, or equivalent;
- (c) One course from any area of study Courses used to calculate the major average are: courses listed under requirement (a), and any courses taken in the major area(s) of study. Students who have previously taken SOSC-2500 or equivalent may substitute a social science course at the 2000-4000 level or a 3000-4000 level social work course. Phasing out of previous curriculum: Program advisors will determine appropriate exceptions for students who are completing their program under the previous curriculum and who fall out of sequence.

## **Program Sequencing**

Year 1: SOSC-2500 or SWRK-2000, SWRK-2040, SWRK-2100, SWRK-3360, SWRK-3370, SWRK-3380, SWRK-3390, SWRK3440, SWRK-3710, one course from any area of study.

Year 2: SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), SWRK-4750 (12 credit hours).

## A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

### B. RATIONALE

Please provide a rationale for the proposed change(s).

Students frequently take either SOSC-2500 or SWRK-2000 to complete their statistical course requirement. These courses are anti-requisites of each other. Until now, we have been submitting course equivalency forms to allow SWRK-2000 to be taken in place of SOSC-2500 which places a burden on academic advisors, the associate dean of academic affairs, and the registrar's office. The recommended change would streamline the process and allow either course to count towards the students' degree requirements without the administrative burden of course equivalency forms.

#### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

None. SWRK-2000 is already offered to students and will not require any additional resources to run the course. The proposed change will free up time for the Undergraduate Program Coordinator, the Associate Dean of Academic Affairs, and the registrar's office to focus on other areas of academic advising and student support.

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

None. SWRK-2000 is taught by a full time faculty member from the school of social work and has been for several years.

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### C.4 Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

None.

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

See C.1 above.

## C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

## <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

### **D.1 Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification

## University of Windsor Program Development Committee

\*5.13 Master of Applied Economics and Policy (MEAP)- Minor Program Changes (Form C)

Item for: Approval

MOTION: That the degree requirements for the Master of Applied Economics and Policy (MEAP) be changed

in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

### Rationale/Approvals:

- This proposal as approved by the Department of Economics Council the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council, and the Faculty of Graduate Studies Council.
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Master of Applied Economics and Policy
DEPARTMENT(S)/SCHOOL(S):	Economics
FACULTY(IES):	Science

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

### Does the minor program change include new courses?:

 Yes [All new course proposals must be submitted on PDC Form Ds and submitted for approval with the minor
program change proposal (PDC Form C)]
 X_ No

If yes, list all new courses:

## A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding and underlining">bolding and underlining</a>. Example: Degree requirements: WXYZ-1000, <a href="wxxyz-1010">wxxyz-1010</a>, WXYZ-1100, WXYZ-2100, WXYZ-3100, WXYZ-4100, plus three additional courses at the <a href="mailto:3000-level or">3000-level or</a> 4000-level.

### Master of Applied Economics and Policy (MAEP)

Admission Requirements

In order to be admitted to the program, a student must hold a 4-year bachelor degree with a minimum major average of B- (70%) or an average of B+ (77%) or better in the last 2 years of study. Applicants must have at least one undergraduate course in statistics, and introductory-level courses in microeconomics and macroeconomics. In exceptional cases, students not meeting these requirements can be admitted at the discretion of the Program Coordinator after consultation with the Advisory Board. In addition, two semesters of calculus, and a semester of intermediate microeconomics and macroeconomics are highly recommended, but not required.

Applicants are strongly encouraged to have a demonstrated background in economics and mathematical and statistical foundations. Admission is highly competitive and preference will be given to applicants who exceed the minimum requirements and who have demonstrated work experience in the field. Candidates who lack the recommended background may be considered for admission on a case by case basis.

Candidates must demonstrate English proficiency by meeting or exceeding an IELTS score of 6.5 (or equivalent). If an applicant receives an English language proficiency score of less than 6.5 (or equivalent) they may be offered a conditional letter of acceptance pending successful completion of an approved English Language Training program, such as the University of Windsor's Centre for English Language Development's English Language Improvement Program (ELIP), or submitting a successful English language test score. Applicants must pass a successful interview with representative or agent acting on behalf of the University of Windsor.

**Degree Requirements** 

Total Courses: 39 credit hours (13 courses - 3 credit hours each)

(a) ECON-8210: Applied Microeconomics ECON-8220: Applied Macroeconomics

ECON-8230: Mathematics for Applied Economics

ECON-8240: Applied Econometrics 1 ECON-8250: Applied Econometrics 2 ECON-8260: Business Communication

ECON-8270: Research Project in Economic Policy and Seminar

#### (b) Two ECON-3000 or ECON-4000 level courses, except: of the following:

ECON-3060. Mathematical Economics I

ECON-4070. Senior Research Workshop

ECON-4950. Economics Internship

ECON-3730: International Economics: Trade

ECON-3740: International Economics: Finance

ECON-3350: Money and Banking

ECON-4160: Urban and Regional Economics

ECON-4300: Economics Analysis of Law

ECON-4600: Cost-Benefit Analysis

ECON-4860: Public Sector Economics: Finance

### (c) Two of the following: In addition to item (a), any two ECON-8000 level courses, except:

ECON-8010: Microeconomic Theory I ECON-8020: Macroeconomic Theory I ECON-8410: Econometric Theory

ECON-8960: Major Paper

ECON-8100: International Economics ECON-8500: Monetary Theory and Policy ECON-8800: Models of Strategic Behavior ECON-8940: Special Studies in Economics

ECON-8160: Labor Economics I ECON-8910: Urban Economics

#### (d) Two of the following (offered by the Masters of Management program):

BSMM-8110: Accounting Concepts and Techniques

BSMM-8120: Finance in a Global Perspective

BSMM-8310: International Business

BSMM-8360: International Financial Reporting BSMM-8370. International Financial Management

BSMM-8550: Domestic Transportation and International Shipping

Note the following: To improve communication skills, students will be required to complete a course in Business Communication with short modules spread throughout the program.

#### These modules are:

Term 1: Learning strategies in North American universities

Term 2: Norms of class participation, giving and receiving criticism graciously and productively Term 3: Working in a team, including dealing with personality differences.

Term 4: Training in using Linked-In

Students will be required to complete a policy project to fulfill the requirements of Research Project in Economic Policy. Topics would normally be of applied nature. Students would work on group projects involving statistical analysis and make group presentations

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

#### B. RATIONALE

Please provide a rationale for the proposed change(s).

The main rationale for the proposed changes is to allow more flexibility and choices among the ECON 3000, 4000, and 8000 level courses offered by the Department of Economics.

#### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do <u>not</u> name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from <u>other</u> campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

Changes will not require additional resources.

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

The majority of MAEP courses will be taught by faculty members, with sessional instructors covering up to 25% of the courses

## C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### C.4 Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

## <u>C.6.1</u> Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

#### **D.1 Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification	

### University of Windsor Program Development Committee

\*5.14: Graduate Faculty Regulations— Minor Program Change (Form C)

Item for: Approval

MOTION: That the Graduate Faculty Regulations be changed in accordance with the program/course change

forms.^

^Subject to approval of the expenditures required.

### Rationale/Approvals:

- The proposal has been approved by the Faculty of Graduate Studies Council.
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Faculty Regulations
DEPARTMENT(S)/SCHOOL(S):	N/A
FACULTY(IES):	Faculty of Graduate Studies

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

#### Does the minor program change include new courses?:

	Yes [All new course proposals must be submitted on PDC Form Ds and submitted for approval <u>with</u> the minor
	program change proposal (PDC Form C)]
_X	_ No
If yes	s, list all new courses: N/A

#### A.1 PROGRAM REQUIREMENT CHANGES

#### **FACULTY REGULATIONS FOR THE DOCTOR OF PHILOSOPHY**

[...] Course of Study (pg.11)

[...]

Declaration of Conflict of Interest (COI) in Supervision

A Conflict of Interest (COI) exists if a supervisor, co-supervisor, and/or committee member has a financial or close personal relationship (e.g., romantic, sexual, marital, or familial) with a student over whom they have a supervisory or evaluative role.

Should such a relationship between a supervisor and student develop, the supervisory relationship will be terminated, and the Graduate Program Chair may act as supervisor for the student until a new supervisor can be determined. The former supervisor, co-supervisor and/or the academic unit may remain responsible for the maintenance of any existing or promised financial support until appropriate supervision can be found in consultation with the Dean of Graduate Studies or their designate.

<u>Likewise</u>, a COI exists if supervisors, co-supervisors, and committee members have a financial or close personal relationship (e.g., romantic, sexual, marital or familial) with one another. Should such a relationship develop or be identified, the program may take one of the following options to mitigate the COI;

- 1. One or more of the individuals involved may resign from the committee so that only one person involved in the relationship remains a member of the committee, or
- 2. An additional committee member will be added.

In the case that a Graduate Program Chair is also a student's supervisor, another Graduate Committee Chair (e.g., Department Head) may be named for that student throughout the supervisor's tenure in that role.

FACULTY REGULATIONS FOR THE MASTER'S DEGREE

[...]

Course of Study (pg 17)

[...]

#### **Declaration of Conflict of Interest in Supervision**

A conflict of interest (COI) exists if a supervisor, co-supervisor, and/or committee member has a financial or close personal relationship (e.g., romantic, sexual, marital, or familial) with a student over whom they have a supervisory or evaluative role.

Should such a relationship between a supervisor and student develop, the supervisory relationship will be terminated, and the Graduate Program Chair may act as supervisor for the student until a new supervisor can be determined. The former supervisor, co-supervisor and/or the academic unit may remain responsible for the maintenance of any existing or promised financial support until appropriate supervision can be found in consultation with the Dean of Graduate Studies or their designate.

Likewise, a COI exists if supervisors, co-supervisors, and committee members have a financial or close personal relationship (e.g., romantic, sexual, marital or familial) with one another. Should such a relationship develop or be identified, the program may take one of the following options to mitigate the COI;

- 1. one or more of the individuals involved may resign from the committee so that only one person involved in the relationship remains a member of the committee, or
- 2. an additional committee member will be added.

In the case that a Graduate Program Chair is also a student's supervisor, another Graduate Committee Chair (e.g., Department Head) may be named for that student throughout the supervisor's tenure in that role.

#### **Committees**

Research undertaken as part of a Master's program is normally directed by a faculty supervisor and advised by a Master's committee. By the end of the first term of registration in the thesis, the program will recommend the appointment of members of the Master's committee, whose appointments must be approved by the Faculty of Graduate Studies. At the same time the candidate will be required to validate the Non-Exclusive License to the University of Windsor authorizing the University to archive, reproduce, and distribute the thesis.

The Master's thesis committee will include as a minimum a research supervisor or co supervisors from the program, who is(are) a member of graduate faculty, one other program reader, and one outside program reader from the University of Windsor. The outside program reader may not be cross appointed to the program in which the student is registered. Additional members may be added with the approval of the program and the Faculty of Graduate Studies.

The majority of the members of an advisory committee must have graduate faculty status and the supervisor must have full graduate faculty status. In the case of co-supervision one of the co-supervisors must have full graduate faculty status, see Senate Policy on Graduate Faculty Designation.

The master's thesis committee will include a research supervisor from the program who holds full graduate faculty status, and two other readers from the University of Windsor. If there are co-supervisors one of the two must be from the program and hold full graduate faculty status. The other must hold either affiliate or full graduate faculty status.

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Additional members may be added with the approval of the program and the Faculty of Graduate Studies.

The majority of the members of an advisory committee must have graduate faculty status. See Senate Policy on Graduate Faculty Designation.

[...]

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

N/A

#### B. RATIONALE

Please provide a rationale for the proposed change(s).

The University of Windsor did not have language on conflict of interest on graduate committees and would like there to be the ability for transparent conversation. This change will be accompanied by changes to the committee form(s) so that the student is aware of any potential conflict of interest among committee members. This was well received by council, where members articulated their own ad-hoc approach to this.

The change to the Master's committee formation is intended to provide an opportunity to create the committee that best meets the student's research needs. This is common at many other institutions at the Master's level.

\*The doctoral committee was not revised to remain aligned with the sector, where if such a committee exists there is a separate supervisory committee and examining committee. It was discussed that programs are not large enough to form two separate committees for each student.

#### C. RESOURCES

## C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

N/A

## C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

N/A

### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

## C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

### C.4 Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

#### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

### <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A

Student Support Services:	N/A
Space and Facilities:	N/A
Equipment (and Maintenance):	N/A

**D.1 Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification   Approval Body Modifying	Reason for Modification
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N/A

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### University of Windsor Program Development Committee

\*5.15: Computer Science - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Science

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification
Jan. 20, 2025		Redesigning based on new ACM/IEEE CS

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE**:

I. THERE ARE **NO OFFICIAL LEARNING OUTCOMES FOR THE COURSE** IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

OR

II. THERE ARE CHANGES TO THE COURSE LEARNING OUTCOMES

OR

III. IT HAS BEEN 5 YEARS SINCE LEARNING OUTCOMES FOR THE COURSE WERE LAST SUBMITTED TO PDC/SENATE (check the CuMA database for the date of last submission at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Supportive	
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar [Undergraduate or Graduate] the changes will be made.
Include the effective date\* [Fall, Winter, Spring, 20XX].

\*(subject to timely and clear submission) These changes require no new resources.

Undergraduate calendar (Fall 2025)

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with bolding and underlining.

For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining.

**Example:** CHEM-1001. University Senates — Role and Power-This course explores the history, role, and power of Senates in Canadian universities. (Also offered as BIOC 1001.) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

#### COMP-3057. Cyber-Ethics

A number of key concerns about social welfare in our cyber age will be explored. Law, This course will examine key challenges and topics related to ethics and societal change in the digital age, focusing on how law, morality, and public policy, and how these both influence and are influenced by the Internet will be examined. digital technologies.

This course Students will critically appraise assess issues surrounding, but not limited to, free speech, property rights (especially particularly intellectual property), privacy, security, and artificial intelligence. The students will be expected to demonstrate understanding of ethical digital stewardship, Indigenous digital sovereignty, and the importance of respecting cultural values in technology design. Students will analyze ethical theorists, policy makers, legal experts, Indigenous scholars, and computer scientists will be analyzed in this course to demonstrate a comprehensive understanding of cyber ethics in today's society. (Prerequisites: COMP-2057 or COMP 2540 completed Semester 4 of studies) (This course may not be taken to fulfill the major requirements of any major or joint major in Computer Science, except for the Bachelor of Information Technology (BIT) program.)(3 lecture hours a week)

#### [Clean Version]:

#### COMP-3057. Cyber-Ethics

This course will examine key challenges and topics related to ethics and societal change in the digital age, focusing on how law, morality, and public policy influence and are influenced by digital technologies. Students will be critically assessing issues surrounding, but not limited to, free speech, property rights (particularly intellectual property), privacy, security, and artificial intelligence. Students will be expected to demonstrate understanding of ethical digital stewardship, Indigenous digital sovereignty, and the importance of respecting cultural values in technology design. Students will analyze ethical issues raised by theorists, policy makers, legal experts, Indigenous scholars, and computer scientists to demonstrate a comprehensive understanding of cyber ethics in today's society. (Prerequisites: COMP-2057 or completed Semester 4 of studies) (3 lecture hours a week)]

### A.1 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In In revising this/these course(s), **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and additional Resources including disciplinary examples:

- What process has your department/Faculty used to consider Indigenization?
- **How** have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the TRC and University Principles documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?
- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

We recognize that many of our programs do not yet incorporate Indigenous knowledges or ways of knowing, and that we have much to learn successfully meet our commitment towards Indigenizing our teaching and research practices. Following are some strategies we are trying to implement for our Computer Science programs:

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- 1. **Required Learning:** This course specifically is updated to accommodate Indigenous digital sovereignty, and the importance of respecting cultural values in technology design and will be a mandatory component of the course. This course will become a core course for ALL undergraduate Computer Science students.
- 2. **Guest Lectures and Workshops**: Invite Indigenous scholars and practitioners to share their knowledge and experiences with students in our courses.
- 3. **Support for Indigenous Students**: Create a supportive environment for Indigenous students, including mentorship programs and resources tailored to their needs.
- 4. **Evaluation and Feedback**: Implement mechanisms for continuous feedback from Indigenous communities and students to improve the curriculum and teaching practices.
- Curriculum Review and Development: Regularly assess and update the curriculum to ensure it remains relevant
  and inclusive of Indigenous perspectives. We are in touch with Jaimie Kechego to get important insight into our
  curriculum.

### A.2 Experiential Learning Categories

	he proposed course revision include the addition or deletion of an experiential le ions go to: <a href="https://www.uwindsor.ca/cces/1423/experiential-learning-definitior">https://www.uwindsor.ca/cces/1423/experiential-learning-definitior</a>	•	ponent? Foi	
_	the revision(s) does (do) not include the addition or deletion of experiential lea		onent(s).	
	- the revision(s) include(s) the addition or deletion of experiential learning comp	onent(s).(	Check all tha	
apply:	Experiential Learning Categories Addition			
	applied research			
	Capstone			
	Clinic			
	со-ор			
	community service learning			
	creative performance or exhibit (for visual and performing arts)			
	entrepreneurship			
	field experience or site visit			
	field work			
	industry/community consulting project			
	interactive simulations			
	internship – full-time			
	internship – part-time			
	professional practicum			
	research project			
	study abroad			
	Labs			

#### B. Learning Outcomes for the Courses Listed Above

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics

of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes. Where there are changes to the learning outcomes, please clearly mark deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. COPY AND PASTE THE FOLLOWING ROW and TABLE, AND COMPLETE THEM FOR EACH COURSE LISTED ABOVE.

	COMPLETE THIS TABLE FOR EACH COURSE LISTED IN SECTION "A" ABOVE.				
СС	OURSE NUMBER AND TITLE:	COMP-3057. Cyber-Et	thics		
L		(Learning outcomes w	were last updated May 26, 2017)		
SE	LECT ONE OF THE FOLLOWING:				
I.	There are no official learning of course in the PDC/Senate recordatabase at <a href="https://ctl2.uwing.nc">https://ctl2.uwing.nc</a>	rd. (check the CuMA	Provide learning outcomes for the course by completing the Learning Outcomes Table below.		
II.	There are changes to the cour	se learning outcomes	_X Provide learning outcomes for the course by completing the Learning Outcomes Table below.		
III.	It has been 5 years since learn course were last submitted to the CuMA database for the da at <a href="https://ctl2.uwindsor.ca/cu">https://ctl2.uwindsor.ca/cu</a>	PDC/Senate. (check te of last submission	Provide learning outcomes for the course by completing the Learning Outcomes Table below.		
IV.	Learning Outcomes have been years and no revisions are bein	•	Learning outcomes need not be submitted. PROVIDE DATE LAST REVIEWED BY PDC/SENATE then go to the next course:(check CUMA database at: https://ctl2.uwindsor.ca/cuma/public/)		

Course Learning Outcomes	Characteristics of a University of
This is a sentence completion exercise.	Windsor Graduate
At the end of the course, the successful student will know and be able	A U of Windsor graduate will have the
to:	ability to demonstrate:
Define cyber-ethics and recognize elements of cyber-ethics that distinguish it from general ethics.  Describe the key differences between intellectual property and tangible property.  Discuss global privacy threats posed by cyber technology.  Relate a variety of ethical frameworks to arising ethical issues in cyberspace.  Define security issues and their impact on individuals, organizations, and society.	A. the acquisition, application and integration of knowledge
Demonstrate an understanding of fundamental cyber ethics	
concepts, including data protection, ethical digital stewardship, and Indigenous digital sovereignty	

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Course Learning Outcomes	Characteristics of a University of
This is a sentence completion exercise.	Windsor Graduate
, and the second	
At the end of the course, the successful student will know and be able	A U of Windsor graduate will have the
<u>to:</u>	ability to demonstrate:
Locate, analyze and evaluate ethical use of information from a	B. research skills, including the ability to
variety of sources and media.	define problems and access, retrieve
Appraise issues surrounding, but not limited to, free speech and	and evaluate information (information
property rights (especially intellectual property).	literacy)
Recognize and evaluate system security issues and their impact	C. critical thinking and problem-solving
on individuals, organizations, and society.	skills
Discuss role of ethics in role of legal and social discussions and	
debates regarding role of computers and their use.	
Recognize and discuss importance of respecting cultural values in	
technology design.	
	D. literacy and numeracy skills
Appraise the influences of various cyber-ethics concerns from	E. responsible behaviour to self, others
different perspectives on both individual and society.	and society
Evaluate the impact of various cyber-ethics issues, including data	
protection, artificial intelligence, and Indigenous digital sovereignty,	
from multiple perspectives on individuals, communities, and society.	
Defend a position on the regulation of cyberspace and discuss the	F. interpersonal and communications
impacts of the global digital divide.	skills
	G. teamwork, and personal and group
	leadership skills
	H. creativity and aesthetic appreciation
	I. the ability and desire for continuous
	learning

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### University of Windsor Program Development Committee

\*5.16: Economics - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Science

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification
February 27 2025	Dept. of Economics	Updated prerequisites for the course.

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE** THERE ARE <u>NO OFFICIAL LEARNING OUTCOMES</u> FOR THE COURSE IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Supportive	
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar [Undergraduate or Graduate] the changes will be made	e. Undergraduate
Include the effective date* [Fall, Winter, Spring, 20XX].	Calendar, Fall 2025
*(subject to timely and clear submission) These changes require no new resources.	

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<u>www.uwindsor.ca/secretariat/calendars</u>) and clearly marking deletions with strikethrough (<u>strikethrough</u>) and additions/new information with <u>bolding and underlining</u>.

For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining.

**Example:** CHEM-1001. University Senates — Role and Power—This course explores the history, role, and power of Senates in Canadian universities. (Also offered as BIOC-1001.) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

### ECON-3350. Money and Banking

The banking system and other financial institutions; money demand and money supply; money and the level of economic activity; money and inflation; issues in monetary policy. (Prerequisite: ECON-2310 ECON-1110.)

### **A.1 Experiential Learning Categories**

Yes	- the revision(s) include(s) the addition or deletion of experiential learning of	omponent(s). (	Check all that
. ,	Experiential Learning Categories	Addition	Deletion
	applied research		
	Capstone		
	Clinic		
	со-ор		
	community service learning		
	creative performance or exhibit (for visual and performing arts)		
	Entrepreneurship		
	field experience or site visit		
	field work		
	industry/community consulting project		
	interactive simulations		
	internship – full-time		
	internship – part-time		
	professional practicum		
	research project		
	study abroad		
	Labs		
C	Are any of the courses being deleted currently required in one or more problem.  deleted, check "No".)  es [A minor program change proposal (PDC Form C) or major program change submitted with the summary of minor course and calendar changes (PDC form C).	ge proposal (PD	

#### B. Learning Outcomes for the Courses Listed above where there are no official learning outcomes for the course.

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

N/A

### University of Windsor Program Development Committee

\*5.17: English - Summary of Minor Course and Calendar Changes (Form E)

Item for: **Information** 

Forwarded by: Faculty of Arts, Humanities and Social Sciences

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

	Date of Modification	Approval Body Modifying	Reason for Modification
ĺ			

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE** THERE ARE **NO OFFICIAL LEARNING OUTCOMES FOR THE COURSE** IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Supportive	
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar [Undergraduate or Graduate] the changes will be made.	Fall 2025
<b>Include the effective date*</b> [Fall, Winter, Spring, 20XX]. *(subject to timely and clear	
submission) These changes require no new resources.	

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding and underlining">bolding and underlining</a>. For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding and underlining">bolding and underlining</a>. Example: CHEM-1001. University Senates — Role and Power-This course explores the history, role, and power of Senates in Canadian universities. (<a href="Also offered as BIOC 1001.">Also offered as BIOC 1001.</a>) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

#### **ENGL-1001. Composition**

An introduction to the fundamentals of effective writing, including attention to rhetorical concepts of audience, purpose, context, planning, logical development, organization, format, and style. (Arts elective only; does not count for credit in English.)

#### A.1 Experiential Learning Categories

Does the proposed course revision include the addition or deletion of an experiential learning component? For
definitions go to: <a href="https://www.uwindsor.ca/cces/1423/experiential-learning-definitions">https://www.uwindsor.ca/cces/1423/experiential-learning-definitions</a>

$igigigigigigigar{igigeta}$ No - the revision(s) does (do) not include the addition or deletion of experiential learning com	ponent(s)
--	-----------

	$\square$ <b>Yes</b> - the revision(s) include(s) the addition or deletion of experiential learning component(s).	Check all that
aį	pply:	

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Experiential Learning Categories

applied recearch	
applied research	
Capstone	
Clinic	
со-ор	
community service learning	
creative performance or exhibit (for visual and performing arts)	
Entrepreneurship	
field experience or site visit	
field work	
industry/community consulting project	
interactive simulations	
internship – full-time	
internship – part-time	
professional practicum	
research project	
study abroad	
Labs	

Note: A Form C has already been submitted for many programs in FAHSS, as well as the programs in Science and

B. Learning Outcomes for the Courses Listed above where there are no official learning outcomes for the course.

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Engineering as relates to the replacement of ENGL-1001 with ENGL-1010.

N/A

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Addition Deletion

### University of Windsor Program Development Committee

\*5.18: Engineering - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Engineering

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE** THERE ARE <u>NO OFFICIAL LEARNING OUTCOMES</u> FOR THE COURSE IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Suppo	rtive
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No
N/A				

Please specify to which calendar [Undergraduate or Graduate] the changes will be made.	Fall 2025
Include the effective date* [Fall, Winter, Spring, 20XX]. *(subject to timely and clear	
submission) These changes require no new resources.	

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding">bolding</a> and underlining. For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding">bolding</a> and underlining. Example: CHEM-1001. University Senates — Role and Power-This course explores the history, role, and power of Senates in Canadian universities. (<a href="Also offered as BIOC 1001.">(Also offered as BIOC 1001.)</a>) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

#### MECH-3233. Fluid Mechanics I

Fluid properties and basic concepts, fluid statics, equations of motion, one dimensional flows, flows in pipes in series, parallel and networks, dimensional analysis and similitude. (3 lecture hours, 1 tutorial hour a 1.5 tutorial hours per week.) (Prerequisite: PHYS-2100)

### **A.1 Experiential Learning Categories**

Experiential Learning Categories	Addition	Deletion	
applied research			
Capstone			
Clinic			
со-ор			
community service learning			
creative performance or exhibit (for visual and performing arts)			
Entrepreneurship			
field experience or site visit			
field work			
industry/community consulting project			
interactive simulations			
internship – full-time			
internship – part-time			
professional practicum			
research project			
study abroad			
Labs			

B. Learning Outcomes for the Courses Listed above where there are no official learning outcomes for the course.

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### **LEARNING OUTCOMES TABLE**

COMPLETE THIS TABLE FOR EACH COURSE THAT DOES I (check the CuMA database at https://ctl2.uwindsor.ca/cuma/pu	
COURSE NUMBER AND TITLE: MECH-3233. Fluid Mechanics I	
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A U of Windsor graduate will have the ability to demonstrate:
A. Utilize dimensional analysis and pi theorem. Analyze pressure variation in static fluids.	A. the acquisition, application and integration of knowledge
B. Interpret velocity and pressure measurements.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Analyze pipe flow and losses. Apply forces on Submerged surfaces. Apply continuity and linear momentum equations.	C. critical thinking and problem-solving skills
D.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
Н.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

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### University of Windsor Program Development Committee

\*5.19: Mathematics and Statistics - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Science

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date Modification	of	Approval Body Modifying	Reason for Modification

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE**THERE ARE <u>NO OFFICIAL LEARNING OUTCOMES</u> FOR THE COURSE IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Suppo	rtive
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar changes will be made. Include the effective date*	Undergraduate
[Fall, Winter, Spring, 20XX]. *(subject to timely and clear submission)	Calendar, Fall 2025
These changes require no new resources.	

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding">bolding</a> and underlining.

For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining.

#### STAT-4550. Regression Analysis

This course covers simple and multiple linear regression, inference on regression parameters, residual analysis, stepwise regression, polynomial regression, diagnostics and remedial measures for multicollinearity and influential observations, weighted least squares, logistic regression, nonlinear regression. (Prerequisite: (STAT 2910 or STAT-2950) STAT-2950 and MATH-1250.) (3 lecture hours per week.)

#### A.1 Experiential Learning Categories

y: Experiential Learning Categories Addition					
•		Addition	Deletion		
applied					
Capston					
Clinic					
co-op					
commur	ity service learning				
creative	performance or exhibit (for visual and performing arts)				
Entrepre	neurship				
field exp	erience or site visit				
field wo	k				
industry	community consulting project				
interacti	ve simulations				
internsh	p – full-time				
internsh	p – part-time				
professi	onal practicum				
research	project				
study ab	road				
Labs					
deleted, c _ Yes [A min submit No	f the courses being deleted currently required in one or more pack "No".) or program change proposal (PDC Form C) or major program change ted with the summary of minor course and calendar changes (PDC reses that are being deleted and the programs in which they are cur	ge proposal (PI Form E)]	OC Form B)		

### B. Learning Outcomes for the Courses Listed above where there are no official learning outcomes for the course.

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

**COMPLETE THIS TABLE FOR EACH COURSE THAT DOES NOT HAVE OFFICIAL LEARNING OUTCOMES.** (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>) (Copy and Paste Table for additional courses)

COURSE NUMBER AND TITLE: STAT-4550. Regression Analysis Course Learning Outcomes	Characteristics of a University of
This is a sentence completion exercise.	Windsor Graduate
At the end of the course, the successful student will know and be able	A U of Windsor graduate will have the
	ability to demonstrate:
A.Define the standard simple linear regression model, with proper assumptions.  Set up normal equations and solve for estimated parameters.  Generalize simple linear regression to multiple linear regression and use the matrix formulation.  Perform hypothesis tests to check for significance of the coefficients of the model, including testing for single coefficients.  Use polynomial regression and perform related hypothesis tests.  Examine diagnostic measures to check if assumptions are satisfied (linearity, independence, homoscedasticity, normality).  Examine collinearity and its characteristics.  Use transformations to transform nonlinear models to linear models.  Use indicator variables and examine interaction effects.  Apply regression techniques to actual data sets  Use software such as R to perform regression analysis.  Interpret software output and generate reproducible analysis reports.  Interpret and discuss implications of findings in the context of a real-world problem. (Also applies to C and D)	ability to demonstrate:  A. the acquisition, application and integration of knowledge
B. Extend given definitions, techniques, and theorems to prove complex results in regression analysis without being given a prescribed method. Recognize relevant examples, formulate conjectures based on these examples, prove/disprove/discard as intractable these conjectures. (Also applies to C, G,H, I.) Find, read, and integrate knowledge from academic literature on topics related to Regression Analysis.	B. research skills, including the abilit to define problems and access retrieve and evaluate informatio (information literacy)
C. Discuss and solve regression analysis problems using the relevant terminology and structural framework.  Compose organized and logical solutions to regression analysis problems. (Also applies to F, H.)	C. critical thinking and problem solving skills
D.	D. literacy and numeracy skills
E. Recognize, evaluate and construct logically sound arguments and	E. responsible behaviour to self
deductions in regression analysis.	others and society
F.	F. interpersonal and communication skills
G.	G. teamwork, and personal an group leadership skills
H. Use regression methods can be used in nonconventional ways.  Create counterexamples to show regression model assumptions must be examined very carefully.	H. creativity and aestheti appreciation
I.	I. the ability and desire for continuous learning

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### University of Windsor Program Development Committee

\*5.20 Mechanical, Automotive and Materials Engineering - Summary of Minor Course and Calendar

Changes (Form E)

Item for: Information

Forwarded by: Faculty of Engineering

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE**:

I. THERE ARE **NO OFFICIAL LEARNING OUTCOMES FOR THE COURSE** IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

OR

II. THERE ARE CHANGES TO THE COURSE LEARNING OUTCOMES

OR

III. IT HAS BEEN 5 YEARS SINCE LEARNING OUTCOMES FOR THE COURSE WERE LAST SUBMITTED TO PDC/SENATE (check the CuMA database for the date of last submission at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Suppo	rtive
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar [Undergraduate or Graduate] the changes will be made. Include the effective date\* [Fall, Winter, Spring, 20XX]. \*(subject to timely and clear submission) These changes require no new resources.

### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="mailto:bolding">bolding</a> and underlining. For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with bolding and underlining.

**Example:** CHEM-1001. University Senates — Role and Power. This course explores the history, role, and power of Senates in Canadian universities. (Also offered as BIOC-1001.) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

#### INDE-2010. Engineering Management and Globalization

As globalization leads to an internationally integrated production and consumption of goods, cultural products, and services, local and national identities are challenged. Globalization creates both challenges and opportunities for companies providing goods or services. This course discusses the impact of globalization on the industrial and systems engineering discipline, in a multidisciplinary and multi national context. For engineers to competently operate in a globalized environment, they must understand the context, methodologies content and outcomes. Critical thinking, systems thinking, integration of technical and, professional and business acumen is necessary. Stability requires knowledge about understanding the complexity involved and learning to manage it. The course will also deal with: impact on industrial, production, and national systems. It should help prepare students and giving them skills for solving complex systems, and life-long learning and continuous improvement. (Prerequisites: GENG-1190 and GENG-1330) (3 lecture, 2 laboratory hours a week.)

#### MECH-2230. Advanced Engineering and Design

Computer aided design applications for engineering graphic communication. Solid modeling; orthographic projection and isometric drawing; sections and conventions; dimensioning and tolerancing. Design portfolio and project. (Prerequisite: GENG-1330) (Prerequisite: GENG-1102) (4 lecture/laboratory hours a week.)

#### MECH-3212. Thermodynamics

An introductory thermodynamics course in which fundamental principles are developed. Included are ideal gas relations, properties of pure substances, First Law for closed and steady flow systems, the Second Law with entropy relations, and an introduction to cycles. (3 lecture, 1.5 tutorial hours a week.) (Prerequisite: GENG-1200) (Prerequisite: PHYS-2100)

#### **MECH-3224. Engineering Measurements**

Basic concepts in instrumentation; error analysis; instrumentation and measurement systems including sensors, transducer, signal conditioning and display; microcomputer-based data acquisition and analysis. (Prerequisite: GENG-2220 GENG-2102 or STAT-2910.) (3 lecture, 1.5 laboratory/tutorial hours a week.)

#### MECH-3233. Fluid Mechanics I

Fluid properties and basic concepts, fluid statics, equations of motion, one dimensional flows, flows in pipes in series, parallel and networks, dimensional analysis and similitude. (3 lecture hours, 1 tutorial hour a week.) (Prerequisite: GENG-1200) (Prerequisite: PHYS-2100)

#### MECH-4211. Design for Failure Prevention Deformation, Fracture, and Failure Prevention

Philosophy of machine design. Design factor/reliability relationships. Contemporary fatigue analysis, including low-and high cycle, triaxial state of non-reversed stress and fatigue damage, with applications of selected mechanical elements. (Prerequisites: MECH-3211, MECH-3223, and Semester 7 or higher standing.) (3 lecture, 3 laboratory hours a week.) Mechanics of deformation, fracture, and failure in engineering materials, structures, and components. Principles of stress and strain analysis, including stress concentrations and strain energy. Mechanisms of material failure, including brittle and ductile fracture, fatigue, and creep. Practical aspects of failure prevention, including design principles, failure analysis, and material characterization and selection. (Prerequisites: MECH-3211, MECH-3223, and Semester 7 or higher standing) (3 lecture hours, 1.5 tutorial hours, 1.5 laboratory hours weekly)

#### MECH-4228. Sustainability in Engineering

Environmental impact assessment. Biophysical and socioeconomic impacts from engineering activities, processes, and projects. Human health and environmental risk concepts. Introduction to life cycle analysis, corporate/industrial environmental management, and environmental management systems. Waste reduction, reuse, and recycling, and reclamation. Students will undertake various project related and problem-based assignments. (Cross-listed with

ENVE4810.) (Prerequisite: GENG-2500 GENG 2101 and Semester 6 or higher standing.) (3 lecture, 2 tutorial hours a week.)

#### **MECH-4821. Deformation and Fracture**

Introduction to basic plasticity theory and its application to common metal forming and metal cutting processes.

Fracture mechanics and its applications in brittle and ductile fracture, creep and fatigue, for purposes of design and of analysis. (Prerequisite: MECH-3211 and Semester 7 or higher standing.) (3 lecture, 2 laboratory hours a week.)

#### A.1 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). In In revising this/these course(s), **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Please consider these prompt questions and additional Resources including disciplinary examples:

- What process has your department/Faculty used to consider Indigenization?
- How have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the <u>TRC</u> and <u>University Principles</u> documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?
- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

The following information describes how the undergraduate mechanical engineering programs incorporate Indigenous content, perspectives, and material and what the Faculty of Engineering is doing to learn and grow in this area.

#### What process has your department/Faculty used to consider Indigenization?

The process the Faculty of Engineering has taken has been to create presentations that are provided to students in courses that are common to all B.A.Sc. programs in each year of study. These presentations discuss residential schools, Truth and Reconciliation, and colonialism. Following these presentations, students are assigned a writing assignment to reflect upon the information and discuss its relevance to them and/or the engineering profession. This approach has been taken to reinforce the fact that these issues are important to the engineering profession, regardless of discipline, as discussed below. This process was undertaken by the Associate Dean, Academic, in communication with the Indigenization Learning Specialist within the Centre for Teaching and Learning. GENG-1101 Engineering 1 is the first-year course that provides a presentation about residential schools, Truth and Reconciliation, and colonialism and assigns a reflection assignment for the first-year program, which is common to all engineering students. GENG-2101 Engineering 2 is the second-year course that provides a project in which students consider an engineering-focused issue facing an Indigenous community. GENG-3130 Engineering Economics is the third-year course that provides a

presentation about Indigenous issues and students complete an assignment. MECH-4200 Capstone Design is the fourth-year course that incorporates the Seventh Generation Principle into the decision-making process for design teams to consider the impacts of their design choices and materials on the next seven generations. This is a concept that is introduced in the first-year course GENG-1201 Cornerstone Design, then reinforced in the 2<sup>nd</sup> and 3<sup>rd</sup>-year design courses GENG-2201 Engineering Design 2 and GENG-3201 Engineering Design 3, respectively.

#### 2. How have you considered the importance or relevance to the course/program?

Engineering design is a topic that is part of the curricula throughout students' four years of study. A much-overlooked aspect of engineering design has historically been considering the environmental and social impacts of designs. This has led to the most pressing global issue – climate change. The engineering profession can learn from Indigenous ways of knowing, especially the appreciation that our current activities will impact the next seven generations.

As well, Indigenization is relevant when we discuss ethics and equity issues within the profession and Canadian society. "Ethics and Equity" is one of twelve Graduate Attributes to be demonstrated by students graduating from an accredited engineering program. Within this context, students are made aware of their responsibility to act equitably and ethically in their actions with their community, colleagues, clients, and society. The most important requirement within the Professional Engineers Ontario (PEO) Code of Ethics is to "regard the practitioner's duty to public welfare as paramount" [1]. This duty lends itself to discussing respect for and collaboration with Indigenous communities when developing infrastructure and processes.

3. How has your department or faculty approached raising awareness for Indigenous knowledges in your area? This is an area of weakness within the Faculty of Engineering. The initial process was created by the Associate Dean, Academic, without much involvement by faculty members. However, changes are being made to raise awareness. Through the Faculty's Equity, Diversity and Inclusion Advisor, faculty members have been made aware of relevant presentations and workshops, e.g., events that were held on and around Orange Shirt Day as well as slides for instructors to use in their classes to provide information about Orange Shirt Day. The Faculty of Engineering Curriculum Committee has identified Indigenous knowledge as a topic that should be more thoroughly covered within all B.A.Sc. curricula. The Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in the short course "Pulling Together: A Guide for Curriculum Developers." All the instructors in the Faculty were also encouraged to attend the workshops to raise awareness (an email was sent on Feb 10, 2023). As part of each

program's continuous improvement process, an email was sent to instructors on January 27, 2023, asking, among

#### 4. What do the TRC and University Principles documents suggest relevant to your course?

other items, instructors to consider if, and how, their courses can include Indigenous content.

The process that the Faculty of Engineering is taking (described in answer to question 1) affirms the spirit of the TRC Call to Action item 62(i), to create a "curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada" [2]. As well the University Principles document states that focus should be placed on learning outcomes. This is an activity that the Faculty has been working to implement for over a decade. Furthermore, the Faculty's current process of presenting information on residential schools, Truth and Reconciliation, and colonialism aligns with the principle "Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous people in Canada" [3]. Finally, the ELEVATE program provides funding and collaborative opportunities for Indigenous students in Engineering, which aligns with the principle of committing to "develop opportunities for Indigenous students" [3].

### 5. What have other similar courses/programs done that might be relevant to your course/program?

The Faculty of Engineering began by developing and implementing our own approach. Now, we are beginning to explore what other engineering programs are doing across Canada. A grant was received on February 7, 2023, to fund research into the current practices within engineering programs across Canada.

6. In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

The answers to questions 1 and 2 have identified specific areas of the programs that are most relevant for the inclusion of Indigenous approaches or knowledge, i.e., in considering the environmental and social impacts of product and process designs, and when we discuss "ethics and equity" and respect for others, our community, and "regard the practitioner's duty to public welfare as paramount" [1].

7. What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?

As a whole, the Faculty's awareness is limited. Some faculty members are better informed than others, but this is another area of weakness. The Equity, Diversity and Inclusion Officer in Engineering, who has been hired recently, has begun providing relevant resources and workshops to Faculty members. Indigenous issues are part of these materials. For example, slides were prepared and provided to all instructors to include in our classes to make students aware of Orange Shirt Day, what it is and why it is important, and to advertise events that occurred on Orange Shirt Day.

8. Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)

We have met with the Indigenization Learning Specialist, Jaimie Kechego, to review our process and the presentations that are provided to students. This is an iterative process; we have been learning and improving as the process develops, and we will continue to make changes as we learn. We have also reached out to Professional Engineers Ontario (PEO) on January 26, 2023, and First Nations Engineering Services Ltd. on February 3, 2023, to connect with local professional engineers who identify as Indigenous. Building relationships with Indigenous professional engineers would be invaluable for the Faculty of Engineering.

PEO has recently published an issue of its official publication, Engineering Dimensions, about Indigenous engineering firms, Indigenizing engineering, and Indigenous pathways to engineering. This literature provides an Ontario-based foundation for our research into the current state of the profession and approaches taken by other institutions.

9. Are you engaging in critical analysis of Settler Colonialism and/or Decolonization? Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

No, we have not performed this critical analysis. Much more learning needs to occur for those within the Faculty who are developing the curricula to better understand what decolonization looks like within engineering. This is a project that will begin with educating ourselves; the Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in a six-week course "Pulling Together: A Guide for Curriculum Developers" offered by the University of Windsor and taught by Jaimie Kechego.

#### References

- 1. Government of Ontario. "R.R.O. 1990, Regulation 941: GENERAL under Professional Engineers Act, R.S.O. 1990, c. P28." January 1, 2023. https://www.ontario.ca/laws/regulation/900941
- Truth and Reconciliation Commission of Canada. "Truth and Reconciliation Commission of Canada: Calls to
   Action." 2015. <a href="https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls to Action English2.pdf">https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls to Action English2.pdf</a>
   Universities Canada. "Universities Canada principles on Indigenous education." June 29, 2015.
   <a href="https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/">https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/</a>

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A.2 Exp	eriential Learning Categorie	S				
	he proposed course revision			_	ponent? For	r
definitions go to: https://www.uwindsor.ca/cces/1423/experiential-learning-definitions						
_	the revision(s) does (do) not		•			
<b>Yes</b> · apply:	- the revision(s) include(s) th	e addition or deletion of	experiential learning com	oonent(s). (	Check all tha	at
арріу.	Experiential Learning Cate	gories		Addition	Deletion	
	applied research	_				
	capstone					
	Clinic					
	со-ор					
	community service learning					
	creative performance or ex		formina arts)			
	entrepreneurship		- <b>3</b> ,			
	field experience or site visit	<u> </u>				
	field work	-				
	industry/community consu	Iting project				
	interactive simulations	- 0 p - 1,1-1-1				
	internship – full-time					
	internship – part-time					
	professional practicum					
	research project					
	study abroad					
	Labs					
	2003					
B. Lea	arning Outcomes for the Cou	rses Listed Above				
	e complete the following to		parning outcomes that mak	ke un the ac	nal of the co	ourse
	t will students know and be					
Char	acteristics of a University of	f Windsor Graduate ou	tlined in "To Greater Heig	ghts" by list	ing them in	n the
appro	opriate rows. Please note tha	nt a learning outcome m	ay link to more than one of	the specifie	d Character	ristics
of a l	<b>Iniversity of Windsor Graduo</b>	ate, and that a single cou	urse might not touch on each	ch of the Ch	aracteristics	s. <b>If a</b>
speci	specific learning outcome is not applicable for the course, please enter N/A or not applicable. Proposers are					
	strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of					
	learning outcomes. Where there are changes to the learning outcomes, please clearly mark deletions with					
strikethrough ( <del>strikethrough</del> ) and additions/new information with <u>bolding and underlining</u> . COPY AND PASTE						
THE FOLLOWING ROW and TABLE, AND COMPLETE THEM FOR EACH COURSE LISTED ABOVE.						
	COMPLETE TH	IS TABLE FOR EACH COL	IRSE LISTED IN SECTION "A	" ABOVE.		
COU	RSE NUMBER AND TITLE:	MECH-2230. Advance	d Engineering and Design			
SELEC	CT ONE OF THE FOLLOWING					
l. T	here are no official learning of	outcomes for the	X Provide learning or	utcomes for	the course	by

completing the Learning Outcomes Table

below.

course in the PDC/Senate record. (check the CuMA

database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

II.	There are changes to the course learning outcomes	Provide learning outcomes for the course by completing the Learning Outcomes Table below.
III.	It has been 5 years since learning outcomes for the course were last submitted to PDC/Senate. (check the CuMA database for the date of last submission at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )	Provide learning outcomes for the course by completing the Learning Outcomes Table below.
IV.	Learning Outcomes have been reviewed in the past 5 years and no revisions are being proposed.	Learning outcomes need not be submitted.  PROVIDE DATE LAST REVIEWED BY PDC/SENATE then go to the next course:(check CUMA database at: https://ctl2.uwindsor.ca/cuma/public/)

### MECH-2230. Advanced Engineering and Design

Course Louisian Outronies	Characteristics of a Hairmanita of Mindon
Course Learning Outcomes	Characteristics of a University of Windsor
This is a sentence completion exercise.	Graduate
At the end of the course, the successful student will know and	A U of Windsor graduate will have the ability to
<u>be able to:</u>	demonstrate:
A.	A. the acquisition, application and integration of
Use CAD tools to create engineering drawings.	knowledge
B. Acquire information via library methods, relevant codes /	B. research skills, including the ability to define
standards / regulations, and digital methods	problems and access, retrieve and evaluate
, , , ,	information (information literacy)
C. Use discipline-specific techniques and resources to refine	C. critical thinking and problem-solving skills
and advance a design to its final state.	6. 6. 10.00. 0 min b. 0.00. 0 min b.
D.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and
	society
F. Deliver engineering-based written communications	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership
	skills
н.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COMPLETE THIS TABLE FOR EACH COURSE LISTED IN SECTION "A" ABOVE.				
COURSE NUMBER AND TITLE:	MECH-3212. Thermodynamics			
SELECT ONE OF THE FOLLOWING:	SELECT ONE OF THE FOLLOWING:			
I. There are no official learning outcomes for the course in the PDC/Senate record. (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )		X Provide learning outcomes for the course by completing the Learning Outcomes Table below.		
II. There are changes to the cour	se learning outcomes	Provide learning outcomes for the course by completing the Learning Outcomes Table below.		

III.	It has been 5 years since learning outcomes for the course were last submitted to PDC/Senate. (check the CuMA database for the date of last submission at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )	Provide learning outcomes for the course by completing the Learning Outcomes Table below.
IV.	Learning Outcomes have been reviewed in the past 5 years and no revisions are being proposed.	Learning outcomes need not be submitted. PROVIDE DATE LAST REVIEWED BY PDC/SENATE then go to the next course: (check CUMA
		database at: <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )

### MECH-3212. Thermodynamics

Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of the course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
A. Characterize fluid properties using physics and chemistry concepts, e.g., ideal gas law, liquid-vapour diagrams	A. the acquisition, application and integration of knowledge
Identify and explain work and heat sign conventions and the work involved with moving boundary systems (graphical and analytical).	
B. Identify and use data acquisition systems and methods, including sampling rates, filtering, and real-time data processing.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Map the function for common steady flow devices onto the energy balance to develop a standard method for their analysis.	C. critical thinking and problem-solving skills
Apply the general energy and entropy balance relations to problems in control volumes and closed systems.	
Examine isentropic processes and the property relations under constant/variable specific heat, and ideal gas assumptions.	
Calculate the efficiency of cycles and thermodynamics devices.	
D.	D. literacy and numeracy skills
E. Identify economic, environmental, and social effects of such thermodynamic activities as refrigeration.	E. responsible behaviour to self, others and society
F.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills

Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of the course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

	COMPLETE THIS TABLE FOR EACH COURSE LISTED IN SECTION "A" ABOVE.			
СО	URSE NUMBER AND TITLE:	MECH-3224. Engineering Measurements		
SFI	LECT ONE OF THE FOLLOWING:			
I.	There are no official learning course in the PDC/Senate recodatabase at <a href="https://ctl2.uwind">https://ctl2.uwind</a>	outcomes for the ord. (check the CuMA		outcomes for the course by arning Outcomes Table
II.	There are changes to the cours	se learning outcomes		utcomes for the course by arning Outcomes Table
III.	It has been 5 years since learn course were last submitted to the CuMA database for the da at <a href="https://ctl2.uwindsor.ca/cu">https://ctl2.uwindsor.ca/cu</a>	PDC/Senate. (check te of last submission		utcomes for the course by arning Outcomes Table
IV.	Learning Outcomes have been years and no revisions are bein	·		

### MECH-3224. Engineering Measurements

Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of the course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
A. Select and use the limitations of measuring instruments and testing equipment to collect data for analysis	A. the acquisition, application and integration of knowledge
B. Identify and use data acquisition systems and methods, including sampling rates, filtering, and real-time data processing.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.	C. critical thinking and problem-solving skills
D.	D. literacy and numeracy skills

Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of the course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
Justify the use of data acquisition systems and methods, including sampling rates, filtering, and real-time data processing.	
E.	E. responsible behaviour to self, others and society
F. Deliver engineering-based oral communications both from and for a variety of audiences.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

	COMPLETE THIS TABLE FOR EACH COURSE LISTED IN SECTION "A" ABOVE.		
CC	COURSE NUMBER AND TITLE: MECH-3233. Fluid Mechanics I		
SE	LECT ONE OF THE FOLLOWING:		
I.	There are no official learning of in the PDC/Senate record. (che at		

### MECH-3233. Fluid Mechanics I

Course Learning Outcomes	Characteristics of a University of Windsor Graduate
This is a sentence completion exercise.	
	A U of Windsor graduate will have the ability to
At the end of the course, the successful student will know	demonstrate:
and be able to:	
A.	A. the acquisition, application and integration of
	knowledge

Course Learning Outcomes	Characteristics of a University of Windsor Graduate
This is a sentence completion exercise.	
	A U of Windsor graduate will have the ability to
At the end of the course, the successful student will know	demonstrate:
and be able to:	
Explain the foundational principles of fluid mechanics,	
including key concepts related to fluid properties, pressure,	
and forces acting on submerged surfaces.	
В.	B. research skills, including the ability to define
Select and use limitations of measuring instruments and	problems and access, retrieve and evaluate
test equipment to collect data.	information (information literacy)
C.	C. critical thinking and problem-solving skills
Conduct an experiment related to fluid mechanics.	
D.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F.	F. interpersonal and communications skills
G	G. teamwork, and personal and group leadership
	skills
Н.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

	COMPLETE THIS TABLE FOR EACH COURSE LISTED IN SECTION "A" ABOVE.			
СО	COURSE NUMBER AND TITLE: MECH-4211 Deformation, Fracture, and Failure Prevention		ture, and Failure Prevention	
SELECT ONE OF THE FOLLOWING:				
l.	There are no official learning of course in the PDC/Senate recordatabase at <a ctl2.uwindsor.ca="" cu"="" href="https://ctl2.uwing.com/https:&lt;/td&gt;&lt;td&gt;ord. (check the CuMA&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Provide learning outcomes for the course by completing the Learning Outcomes Table below.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;II.&lt;/td&gt;&lt;td&gt;There are changes to the cour&lt;/td&gt;&lt;td&gt;se learning outcomes&lt;/td&gt;&lt;td&gt; c&lt;/td&gt;&lt;td&gt;Provide learning outcomes for the course by completing the Learning Outcomes Table below.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;III.&lt;/td&gt;&lt;td&gt;It has been 5 years since learn course were last submitted to the CuMA database for the da at &lt;a href=" https:="">https://ctl2.uwindsor.ca/cu</a>	PDC/Senate. (check te of last submission	(	Provide learning outcomes for the course by completing the Learning Outcomes Table pelow.
IV.	Learning Outcomes have been years and no revisions are bein	·	PROVID go to th (check	Learning outcomes need not be submitted. DE DATE LAST REVIEWED BY PDC/SENATE then need next course:  CUMA database at:  (ctl2.uwindsor.ca/cuma/public/)

MECH-4211 Deformation, Fracture, and Failure Prevention

Course Learning Outcomes	Characteristics of a University of
This is a sentence completion exercise.	Windsor Graduate
· '	
At the end of the course, the successful student will know and be able	A U of Windsor graduate will have the
<u>to:</u>	ability to demonstrate:
A.	A. the acquisition, application and
Outline and explain the mechanisms of material failure and the factors	integration of knowledge
that influence fracture and fatigue behaviour.	
B.	B. research skills, including the ability to
Evaluate material properties and select materials for specific	define problems and access, retrieve
applications.	and evaluate information (information
Use advanced analysis techniques to investigate failures in real-world	literacy)
applications.	
C.	C. critical thinking and problem-solving
Analyze stress and strain in simple and complex engineering systems.	skills
Apply design principles and methodologies to prevent failure in	
engineering structures and components.	
D.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others
Engage in respectful, timely, and collaborative communications with	and society
students and staff.	<u> </u>
F.	F. interpersonal and communications
	skills
G.	G. teamwork, and personal and group
	leadership skills
Н.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous
	learning

	COMPLETE THIS TABLE FOR EACH COURSE LISTED IN SECTION "A" ABOVE.		
CC	COURSE NUMBER AND TITLE: MECH-4228. Sustainability in Engineering		
		(These are new learning outcomes.)	
SE	SELECT ONE OF THE FOLLOWING:		
I.	There are no official learning of course in the PDC/Senate recordatabase at <a href="https://ctl2.uwing.nc">https://ctl2.uwing.nc</a>	ord. (check the CuMA	X Provide learning outcomes for the course by completing the Learning Outcomes Table below.
II.	There are changes to the cour	se learning outcomes	Provide learning outcomes for the course by completing the Learning Outcomes Table below.
III.	It has been 5 years since learn course were last submitted to the CuMA database for the da at https://ctl2.uwindsor.ca/cu	PDC/Senate. (check te of last submission	Provide learning outcomes for the course by completing the Learning Outcomes Table below.

IV.	Learning Outcomes have been reviewed in the past 5	Learning outcomes need not be submitted.
	years and no revisions are being proposed.	PROVIDE DATE LAST REVIEWED BY PDC/SENATE then
		go to the next course:(check CUMA
		database at: <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )

#### MECH-4228. Sustainability in Engineering

Course Learning Outcomes This is a sentence completion exercise.	Characteristics of a University of Windsor Graduate
At the end of the course, the successful student will know and be	A U of Windsor graduate will have the
able to:	ability to demonstrate:
A.  Describe need for and principles of processing of Municipal Solid  Waste (MSW) and benefits of shredding (size reduction) for  materials recovery.	A. the acquisition, application and integration of knowledge
B. Classify environmental and sustainability related problems for engineering activities using commonly used environmental assessment and related process approaches.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Evaluate the environmental implications of engineering activities through the identification of given and missing information and assumptions.	
Effectively use environmental assessment and related process approaches	
Apply material recovery factors and materials balance to determine loading rates for sizing equipment for and Materials Recovery Facilities	
C. Identify the impacts of engineering activity on society and the environment. Identify ways to mitigate the potential negative impact of engineering activities on society and the environment.	C. critical thinking and problem-solving skills
D.	D. literacy and numeracy skills
E. Engage in respectful, timely, and collaborative communications with students and staff.	E. responsible behaviour to self, others and society
F. Compose communications for diverse audiences that describe and assess environmental issues related to engineering activities.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
Н.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

#### University of Windsor Program Development Committee

\*5.21 Physics - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Science

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification
January 2025	Dept. of Physics	Description and prerequisites

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE** THERE ARE **NO OFFICIAL LEARNING OUTCOMES FOR THE COURSE** IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Suppo	rtive
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar [Undergraduate or Graduate] the changes will be made.	Undergraduate
Include the effective date* [Fall, Winter, Spring, 20XX].	Calendar, Fall 2025
*(subject to timely and clear submission) These changes require no new resources.	

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<u>www.uwindsor.ca/secretariat/calendars</u>) and clearly marking deletions with strikethrough (<u>strikethrough</u>) and additions/new information with <u>bolding and underlining</u>.

For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Example: CHEM-1001. University Senates — Role and Power-This course explores the history, role, and power of Senates in Canadian universities. (Also offered as BIOC 1001.) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

#### PHYS-3910. Techniques in Experimental Physics II

All physics hypotheses, models, and theories need to be tested and verified through experiments to ensure their validity in representing the observable universe. This course will emphasize the concepts of experimental design and techniques needed for making these observations. The student will design and construct experiments that test theories presented in upper-year physics courses, with an emphasis on electromagnetism and quantum mechanics. This course is a continuation of PHYS 3900, with an emphasis on experimental design, modelling, simulation, and construction. Topics may include design and fabrication of apparatus, microprocessor programming, sources of noise, and noise reduction in measurements. (Prerequisites: PHYS 3900 or consent of instructor.) (Prerequisites: PHYS-2210 and one of MATH-3550 or PHYS-3610.) (1.5 hours of laboratory and 1.5 hours of tutorial per week.)

#### A.1 Experiential Learning Categories

Franciscotic I I compile Cota comice	A -1-11:4:	Dalatian
Experiential Learning Categories	Addition	Deletion
applied research		
Capstone		
Clinic		
со-ор		
community service learning		
creative performance or exhibit (for visual and performing arts)		
Entrepreneurship		
field experience or site visit		
field work		
industry/community consulting project		
interactive simulations		
internship – full-time		
internship – part-time		
professional practicum		
research project		
study abroad		
Labs		

#### B. Learning Outcomes for the Courses Listed above where there are no official learning outcomes for the course.

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

N/A (Learning outcomes were last updated February 12, 2021).

#### University of Windsor Program Development Committee

\*5.22: Political Science - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Arts Humanities and Social Sciences

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Modification	Approval Body Modifying	Reason for Modification	

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE** THERE ARE <u>NO OFFICIAL LEARNING OUTCOMES</u> FOR THE COURSE IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Supportive	
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar [Undergraduate or Graduate] the changes will be made.	Fall 2025
Include the effective date* [Fall, Winter, Spring, 20XX].	
*(subject to timely and clear submission) These changes require no new resources.	

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding and underlining">bolding and underlining</a>. For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding and underlining">bolding and underlining</a>. Example: CHEM-1001. University Senates — Role and Power This course explores the history, role, and power of Senates in Canadian universities. (<a href="Also offered as BIOC 1001.">Also offered as BIOC 1001.</a>) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

#### **POLS 2750 - Introduction to Research Methods**

Introduces students to quantitative and qualitative social research. Looks at how surveys and focus groups are used and abused for political and commercial purposes. Examines what field and archival research can teach us about human behaviour and social, political, and economic trends. (Prerequisite: SOSC 2500.)

#### **POLS 4210 - Seminar in Canadian Public Policy**

A detailed analysis of the Canadian public policy process. Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. A detailed analysis of the Canadian public policy process. Restricted to Political Science and International Relations majors in semesters 5 to 8.

**POLS 4310 - Seminar in Comparative Politics** 

A comparative examination of national political systems emphasizing areas such as political culture, political parties, elites, and interest groups. In given terms, the focus may be on industrialized or developing countries. Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. Restricted to Political Science and International Relations majors in semesters 5 to 8.

#### POLS 4340 - Seminar in Politics of the United States

An analysis of selected topics in United States politics and government. May include an examination of foreign perspectives on U.S. politics, Canadian-U.S. relations, parties and elections, civil liberties and civil rights, or other important topics in United States politics. Restricted to Semester 7 and 8 Political Science majors. Restricted to Political Science majors in semesters 5 to 8.

#### POLS 4410 - The New Scramble for African Resources

This course examines the evolving political and economic relationships between countries in Sub-Saharan Africa and the rest of the world. As Africa moves from a "forgotten" continent to a "rising" one in the eyes of foreign policy analysts and the global business community, this course re-examines Africa's role in international relations and international security. Through the lens of the "new scramble for Africa", the course will examine contemporary issues such as land, oil and minerals before focusing specifically on case studies of Africa's changing relations with the world. (Prerequisites: POLS-1600, POLS-2410 or consent of instructor. Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. Restricted to Political Science and International Relations majors in semesters 5 to 8.)

#### POLS 4420 - Politics and Security in Russia and Eruasia Eurasia

This course examines the politics of and security issues facing the Russian Federation, the five Central Asian Republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, and the Caucasian Republics of Georgia, Armenia and Azerbaijan. For the purposes of this course, the role and influence of Turkey, Iran, China and the United States on the politics and security of these Eurasian states will also be considered. The approach taken in this course is interdisciplinary, drawing heavily from the fields of political science, history, and economics. The students will be introduced to political, economic and social issues affecting the region and taught how to research these issues through the lens of historical analysis and political economy. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. Restricted to Political Science and International Relations majors in semesters 5 to 8.) Enrolment Requirement: SM7/SM8 POLS and INTL REL Semester 5 to 8 Political Science and International Relations majors.

POLS 4610 - Seminar in Theories of International Relations International Relations Seminar: Theory and Practice

A survey of competing perspectives and approaches employed in the contemporary study of international relations,
with applications to global case studies. Restricted to Semester 7 and 8 International Relations majors. Restricted to
International Relations majors in semesters 5 to 8.)

#### **POLS 4640 - International Political Economy**

An overview of the major theoretical perspectives and issues in international political economy. Issues addressed may include: international trade, foreign investment and multinational corporations, international monetary institutions, and crisis and change in the international system. Restricted to Semester 7 and 8 International Relations majors. Restricted to International Relations majors in semesters 5 to 8.

#### **POLS 4650 Seminar in Globalization**

A critical overview of major theories, debates and case studies related to the politics of globalization. Specific topics addressed may include changes in the nature of state sovereignty, the creation and regulation of a global economy, and cultural change and resistance. Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. Restricted to Political Science and International Relations majors in semesters 5 to 8. Students are recommended to take 45-120 before taking this course.

#### **POLS 4880 - Selected Topics in Political Science**

Topics of current interest which may vary from year to year. (May be repeated for credit with permission of a program advisor in Political Science.) Restricted to Semester 7 and 8 Political science majors and Semester 7 and 8 International Relations majors. Restricted to Political Science and International Relations majors in semesters 5 to 8.

#### POLS 4950 - Advanced Topics in Canadian Foreign Policy

This seminar will focus on issues that are driving the contemporary Canadian foreign policy agenda. Members of the seminar will read and discuss recent research on topics including Canada's defence and security policy, trade and aid policies, environmental record, as well as more recent foreign policy initiatives. Students are expected to learn through active participation in the class. Students are also expected to have some background knowledge of both Canadian history and Canadian government and politics. The course is restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. restricted to Political Science and International Relations majors in semesters 5 to 8. Students must have taken 45-160 POLS 1600 (Introduction to International Relations) before taking this course. While not a pre-requisite, it is also recommended that students take 45-264 POLS 2640 (Introduction to Canadian Foreign Policy) before this class, although the instructor will permit students into the course without it.

#### **POLS 4960 - Advanced Topics in International Security**

This seminar will focus on issues that are driving the contemporary fields of strategic and security studies. Members of the seminar will read and discuss recent research on topics including Canadian and American defence and security policy, proliferation, the arms trade, energy security, and changes in military strategy. Students are expected to learn through active participation in the class. Students are also expected to have some background knowledge of global politics and some understanding of recent conflict. The course is restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors restricted to Political Science and International Relations majors in semesters 5 to 8. [Students must have taken POLS-1600 (Introduction to International Relations) before taking this class. While not a pre-requisite, it is also recommended that students take POLS-2670 (Strategic Studies) before this class, although the instructor will permit students into the course without it.]

#### POLS-4990 - Directed Reading in an Approved Special Field

Intended for students with special interest in areas not covered in sufficient depth by other courses. (To be taken only with permission of instructor and a program advisor in Political Science.) (May be repeated for credit if content changes.) This course is designed for students with a special interest in specific areas of political science that are not fully explored in the regular curriculum. It offers a unique opportunity for independent research under the supervision of a faculty member, tailored to the student's academic interests and the faculty member's expertise. The course is available to students who have exceptional circumstances and have obtained approval from both the instructor and a program advisor in Political Science. Content may vary with each enrollment, allowing the course to be repeated for credit if the subject matter changes. This course fosters in-depth exploration and personalized learning in political science. Prerequisites: Permission of instructor and program advisor required.

#### The following courses are being deleted:

POLS 1709 Introduction to Diaspora Studies: There's No Place Like Home

POLS 2045 Issues in Quebec Politics (French)

POLS 2450 Contemporary Issues in International Relations

POLS 2480 The Political Economy of Mass Media

POLS 2550 The Politics of Music

POLS 2700 Information Searching and Analysis

POLS 3210 The Legislative Process

POLS 3240 Public Infrastructure

POLS 3780 Promotional Culture and Democracy
POLS 4220 Seminar in Public Policy Analysis
POLS 4620 Interdisciplinary Approaches to Research in International Relations

#### A.1 Experiential Learning Categories

Does the proposed course revision include the addition or deletion of an experiential learning component? For				
definitions go to: <a href="https://www.uwindsor.ca/cces/1423/experiential-learning-definitions">https://www.uwindsor.ca/cces/1423/experiential-learning-definitions</a>				
No - the revision(s) does (do) not include the addition or deletion of experiential learning component(s).				
Yes - the revision(s) include(s) the addition or deletion of experiential learning component(s). Check all that				
apply:				
A.2 Are any of the courses being deleted currently required in one or more programs? (if no courses are being				
A.2 Are any of the courses being deleted currently required in one or more programs? (if no courses are being deleted, check "No".)				
deleted, check "No".)				
deleted, check "No".)				
deleted, check "No".)  Yes [A minor program change proposal (PDC Form C) or major program change proposal (PDC Form B) must be				

#### B. Learning Outcomes for the Courses Listed above where there are no official learning outcomes for the course.

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. If a specific learning outcome is not applicable for the course, please enter N/A or not applicable. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

N/A

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#### University of Windsor Program Development Committee

\*5.23 General Science - Program Learning Outcomes

Item for: Information

Forwarded by: Faculty of Science

General Science Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute. At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to demonstrate:	COU-approved Undergraduate Degree Level Expectations
A.  Describe and explain a range of core scientific concepts in two areas of science.  Explain the scientific method <u>using</u> <u>examples from</u> in the context of two <u>or</u> <u>more</u> areas of science.  Describe the relationship between fundamental early discoveries in science and modern understanding and ramifications of such discoveries.	A. the acquisition, application and integration of knowledge	1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge
B. Locate and access resources in the scientific literature to address a specific subject area. Review information on a scientific topic, assess the quality of the documentation or research and justify their analysis.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	<ol> <li>Depth and Breadth of Knowledge</li> <li>Knowledge of Methodologies</li> <li>Application of Knowledge</li> <li>Awareness of Limits Knowledge</li> </ol>
C. Formulate and test <u>hypotheses</u> hypotheseis using logical, mathematical, or statistical methods.	C. critical thinking and problem-solving skills	<ol> <li>Depth and Breadth of Knowledge</li> <li>Knowledge of Methodologies</li> <li>Application of Knowledge</li> <li>Awareness of Limits of Knowledge</li> </ol>
D. Write a formal paper with the correct structure (e.g. include proper citations, references, etc.) Express complex scientific concepts in written form. Analyze data and interpret results. Solve quantitative problems. Qualitatively summarize and objectively present data.	D. literacy and numeracy skills	4.Communication Skills 5. Awareness of Limits of Knowledge
E. Perform technical skills and safe practice in a laboratory of <u>or</u> field situation.	E. responsible behaviour to self, others and society	<ul><li>5. Awareness of Limits of</li><li>Knowledge</li><li>6. Autonomy and Professional</li><li>Capacity</li></ul>

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General Science Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute. At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to demonstrate:	COU-approved Undergraduate Degree Level Expectations
Recognize and practice the rules of academic honesty.		
F.  Communicate complex scientific and technical information clearly and concisely.  Produce reports on work carried out in a laboratory.	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity
G. Participate constructively and cooperatively in small group activities.	G. teamwork, and personal and group leadership skills	Communication Skills     Autonomy and Professional     Capacity
H. Explain the functionality and diversity of scientific systems in a manner appropriate to the intended audience.	H. creativity and aesthetic appreciation	Knowledge of Methodologies     Application of Knowledge     Autonomy and Professional     Capacity
I.  Incorporate new ideas into their comprehension of the developing nature of science.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity
Apply previous knowledge and skills to present issues in science and the community.		

#### University of Windsor Program Development Committee

\*5.24: Visual Arts - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Arts Humanities and Social Science

**Form History** (Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)

Date of Mo	dification	Approval Body Modifying	Reason for Modification	

#### INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.

ALL SECTIONS OF THIS FORM <u>MUST</u> BE COMPLETED. **LEARNING OUTCOMES MUST BE PROVIDED FOR LISTED COURSES WHERE** THERE ARE <u>NO OFFICIAL LEARNING OUTCOMES</u> FOR THE COURSE IN THE PDC/SENATE RECORD (check the CuMA database at <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a>)

#### Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes

			Supportive	
AAU Consulted	AAU Head/Directors	Date Consulted	Yes	No

Please specify to which calendar [Undergraduate or Graduate] the changes will be made. Include		
the effective date* [Fall, Winter, Spring, 20XX]. *(subject to timely and clear submission)		
These changes require no new resources.		

#### A. Proposed Course Calendar Revisions

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate online calendar (<a href="www.uwindsor.ca/secretariat/calendars">www.uwindsor.ca/secretariat/calendars</a>) and clearly marking deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding and underlining">bolding and underlining</a>. For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (<a href="strikethrough">strikethrough</a>) and additions/new information with <a href="bolding and underlining">bolding and underlining</a>. Example: CHEM-1001. University Senates — Role and Power This course explores the history, role, and power of Senates in Canadian universities. (<a href="Also offered as BIOC 1001.">Also offered as BIOC 1001.</a>) (Prerequisite: CHEM-1000.) 2 lecture hours and 1 tutorial hour per week 3 lecture hours/week

#### **VISUAL ARTS COURSES**

Not all courses listed will necessarily be offered each year. Studio courses are either three hours a week. or six hours a week, depending on the medium and level of study. See below for details. Art History courses are three hours a week unless otherwise indicated. Prerequisites for all Art History courses are waived for non-Visual Arts major.

**Studio Courses:** VSAR-1050, VSAR-1060, VSAR-1070, VSAR-1080, VSAR-2030, VSAR-2130, <del>VSAR-2230, VSAR-2230, VSAR-2230, VSAR-2430, VSAR-2450, VSAR-2550, VSAR-2630, VSAR-2850, VSAR-2900, VSAR-3030, VSAR-3130, VSAR-3260, VSAR-3330, VSAR-3430, VSAR-3450, VSAR-3460, VSAR-3470, VSAR-3480, VSAR-3830, VSAR-3840, VSAR-3850, and VSAR-3860, <u>VSAR-4800 and VSAR-4810</u>.</del>

#### VSAR-1060. Studio Practice and Ideas/Image Introduction to the Elements of Art and Principles of Design

An introduction to the fundamental skills and critical concepts of visual perception and production common to all areas of 2-dimensional image making 2D, 3D, and time-based creation. Basic principles of composition and, design, light and pigment-based and colour theory, as these apply to painting, photo-based processes, and print production will be explored within an interdisciplinary context. Their use and application will be explored within the contemporary art context. Class projects may involve inter-disciplinarity between these media. Studio assignments are combined with related critical theory, historical practice and current strategies. (Lab fees may apply.)

#### VSAR-1070. Studio Practice and Ideas/Drawing Introduction to Drawing and Painting

An investigation of a variety of drawing **and painting** processes, materials, and concepts in a studio environment that fosters exploration. (Lab fees may apply.)

#### VSAR-2030. Introductory Drawing

Media, techniques, vocabulary, and concepts of drawing, including the human figure and other subject matter. Development of drawing skills with exposure to more complex drawing situations, approaches, and points of view. Emphasis on a variety of materials (traditional and non-traditional). (Prerequisites: VSAR-1070) (Lab fees may apply.)

#### VSAR-2130. Introductory Painting

Introduction to traditional and contemporary painting concerns, problems in rendering three-dimensional form in space and organization of the two-dimensional surface. (VSAR-1060 and or VSAR-1070)

#### **VSAR-2330.** Introductory Sculpture

An introduction to the various concepts and processes of contemporary sculpture practice. Issues will be addressed through group discussion and practical application. (Prerequisites: \(\forall \) \(\f

#### VSAR-2430. Introductory Time-Based Art

An investigation of the principles, vocabulary and concepts of time-based art. Emphasis is on exploring the potential of video for art projects as well as for community action in an experimental and critical environment. Assignments and screenings will stimulate students to explore issues inherent to time-based strategies in contemporary art as well as give a background to its brief history. (Prerequisites: VSAR-1080 VSAR-1060 or VSAR-1070 or permission of the instructor or semester three or above.) (Lab fees may apply.)

#### VSAR-2550. From 2D to 3D - Playing with Space Installation Art

How do we experience space? What are the elements that animate and activate a space? How have artists used space to communicate and investigate current issues within culture and society? From subtle cues such as temperature and smell, to the more obvious such as colour, texture, sound and construction, students will investigate the sensory, narrative and critical aspects of installation where space itself becomes our medium. In this studio-based course, students will bridge the gap between 2D image and 3D structure as an introduction to the processes used by artists to explore and manipulate space. Students will also look at current debates surrounding installation art and the gallery as "white cube." This course allows students to work in any medium available at the School of Creative Arts. (Prerequisite: MACS-1500 or one VSAR course at the 1000 level. VSAR-1060 or VSAR-1070.) (Lab fees may apply.)

#### VSAR-2900. Introductory Digital Photography: Digital

An applied photography course concentrating on digital imaging processes, including camera operation for high quality digital image capture, colour use, image processing, and printing. The course offers an introduction to the elements of digital photography, concentrating on digital image capture, image processing using Adobe Photoshop and Bridge, colour management, and an introduction to scanning and printing. Various types of digital cameras are discussed. Critiques, presentations and readings assist students to expand their analytical and creative skills. (Pre-

requisites: Macs-1500 or on VSAR course at the 1000 level MACS-2150, VSAR-1060 or VSAR-1070 or permission of instructor.) (Lab fees may apply.)

#### VSAR-3030. Advanced Drawing

Advanced problems in drawing, emphasizing individual directions, concepts, and various media. (Prerequisite: VSAR-2030.) (May be repeated for credit.) (Lab fees may apply.)

#### VSAR-3130. Advanced Painting

Development of the concepts and painting skills encountered in VSAR-2130. Exploration of the creative potential, range, and flexibility of non-traditional techniques, forms and media. (Prerequisites: VSAR-2130.) (May be repeated for credit.) (Lab fees may apply.)

#### VSAR-3330. Advanced Sculpture and Installation

An in-depth study of concepts and processes as they pertain to contemporary sculpture <u>and installation</u> practices. Issues will be addressed through group discussion and practical application. (Prerequisites: VSAR-2330 <u>or VSAR-2550</u>.) (May be repeated for credit.) (Lab fees may apply.)

#### VSAR-3430. Advanced Time-Based Art

This course explores time-based media in more complex and demanding projects than VSAR-2430.Projects may include experimental video, animation, video installation, audio projects, documentary and performance art. This studio course encourages the thoughtful engagement of complex ideas through visual and/or audio means within issues in visual culture and contemporary art practices. (Prerequisite: VSAR-2430 or VSAR-2630 or VSAR-2450) (May be repeated for credit.) (Lab fees may apply.)

#### VSAR-3830. Inter-Media Practices - Processes

A studio/seminar course providing the basis for <u>intermedia art practices</u> in an interdisciplinary context is developed through a critical approach to materials, issues, and artmaking. Required readings/research pertinent to current issues are discussed in relation to studio production. Studio production integrating two or more Visual Arts' disciplines is expected. (Prerequisites: <del>VSAR 2030, two 2000 level studios, and Three 2000 or 3000 studios.) (Lab fees may apply.)</del>

#### VSAR-3840. Inter-Media Practices - Topics

A practice-oriented seminar focusing on topics central to the interdisciplinary art practice in contemporary social and cultural contexts. Issues within areas such as history, gender, race and technology are considered within the context of varying perspectives. Students' studio production is challenged within a contemporary interdisciplinary environment. The students' individual production will be expected to be situated within the larger art and social context. (Prerequisites: VSAR 2030, two 2000 level studios, and Three 2000 or 3000 studios.) (Lab fees may apply.)

#### VSAR-4800. Studio Practice I

The advanced student is given wide range to work in a chosen medium to synthesize produce a body of artwork and engage in professional development activities utilizing accumulated knowledge and experience with individual critique support provided by the instructor. (Prerequisites: 14 studio courses which must include VSAR-3830 or VSAR-3840 plus three VSAR-3000-level courses in the same or related area.) (double credit weight) (Lab fees may apply.)

#### VSAR-4810. Studio Practice II

The advanced student is given wide range to work in a chosen medium to synthesize to produce a body of artwork and plan, organize, and execute a professional-level group exhibition utilizing accumulated knowledge and experience with individual—critique support provided by the instructor. (Prerequisite: VSAR-4800.)(double credit weight) (Lab fees may apply.)

#### **A.1 Experiential Learning Categories**

No -	the revision(s) does (do) not include the addition or deletion of experiential lea	arning comp	onent(s).	
	- the revision(s) include(s) the addition or deletion of experiential learning com	ponent(s). (	Check all the	at
apply:	Experiential Learning Categories	Addition	Deletion	
	applied research			
	Capstone			
	Clinic			
	со-ор			
	community service learning			
	creative performance or exhibit (for visual and performing arts)			
	Entrepreneurship			
	field experience or site visit			
	field work			
	industry/community consulting project			
	interactive simulations			
	internship – full-time			
	internship – part-time			
	professional practicum			
	research project			
	study abroad			
	Labs			
<i>d</i> Y€ X_ No	re any of the courses being deleted currently required in one or more progreleted, check "No".)  Is [A minor program change proposal (PDC Form C) or major program change possibilities submitted with the summary of minor course and calendar changes (PDC Form St. all courses that are being deleted and the programs in which they are currently the summary of minor course and calendar changes (PDC Form St. all courses that are being deleted and the programs in which they are currently required in one or more programs.	roposal (PD m E)]	C Form B) n	
B. Lear	ning Outcomes for the Courses Listed above where there are no official learni	ng outcome	es for the co	ourse.
will stu of a Ui note ti	complete the following table. State the specific learning outcomes that make upudents know and be able to do at the end of this course?) and link the learning ouniversity of Windsor Graduate outlined in "To Greater Heights" by listing them in that a learning outcome may link to more than one of the specified Characteristiate, and that a single course might not touch on each of the Characteristics.	tcomes to th the appropi	ne Characte riate rows. F	ristics Please
If a sp	ecific learning outcome is not applicable for the course, please enter N/A or n	ot applicab	le.	
	sers are strongly encouraged to contact the Centre for Teaching and Learn	ing for ass	istance wit	h the

COURSE NUMBER AND TITLE: VSAR-3030 Advanced Drawing	
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:  A. Apply advanced drawing skills to engage with conceptual ideas in a	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:  A. the acquisition, application and
range of traditional, non-traditional, and experimental media.	integration of knowledge
B. Access information from a variety of sources to inform their drawing practice, including thematic research, material research, and technical information.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Identify and define artistic problems encountered in drawing practices and develop creative solutions through experimentation, iteration, and material exploration.	C. critical thinking and problem-solving skills
D Produce effective written communication skills in artist statements, project proposals, and reflections on their drawing practice.	D. literacy and numeracy skills
E. Adhere to studio safety protocols and demonstrate responsible use of equipment and materials, prioritizing a safe studio environment.	E. responsible behaviour to self, others and society
F. Articulate the concepts and motivations underlying drawing production in individual consultations and group discussions.	F. interpersonal and communications skills
G. Engage in peer-to-peer dialogue about works in development and provide constructive feedback on finished pieces.	G. teamwork, and personal and group leadership skills
H. Express personal creative concepts through contemporary drawing practices and techniques.	H. creativity and aesthetic appreciation
Reflect on their artistic process and identify areas for continued growth and development within their drawing practice.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: VSAR-3130 Advanced Painting			
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:		
A. Apply advanced painting skills to engage with current conceptual ideas in a range of traditional, non-traditional, and experimental media.	A.the acquisition, application and integration of knowledge		
B. Access information from a variety of sources to inform their painting practice, including thematic research, material research, and technical information.	B.research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)		
C. Identify and define artistic problems encountered in painting practices and develop creative solutions through experimentation, iteration, and material exploration.	C.critical thinking and problem-solving skills		

D. Demonstrate effective written communication skills in artist statements, project proposals, and reflections on their painting practice.	D.literacy and numeracy skills
E. Adhere to studio safety protocols and demonstrate responsible use of equipment and materials, prioritizing a safe studio environment.	E.responsible behaviour to self, others and society
F. Articulate the concepts and motivations underlying painting production in individual consultations and group discussions.	F.interpersonal and communications skills
G. Engage in peer-to-peer dialogue about works in development and provide constructive feedback on finished pieces.	G.teamwork, and personal and group leadership skills
H. Express personal creative concepts through contemporary painting practices and techniques.	H.creativity and aesthetic appreciation
Reflect on their artistic process and identify areas for continued growth and development within their painting practice.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: VSAR-3330 Advanced Sculpture and Installation		
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:	
A. Apply advanced skills to create sculptures and installations in a range of traditional, non-traditional and experimental media and techniques with attention to sound craftsmanship.	A. the acquisition, application and integration of knowledge	
B. Access information from a variety of sources to inform their sculpture and installation practice, including thematic research, material research, and technical information.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	
C. Identify and define artistic problems encountered in sculpture and installation and develop creative solutions through experimentation, iteration, and material exploration.	C. critical thinking and problem-solving skills	
D. Produce effective written communication skills in artist statements, project proposals, and reflections on their sculpture and installation practice.	D. literacy and numeracy skills	
E. Adhere to studio safety protocols and demonstrate responsible use of equipment and materials, prioritizing a safe studio environment.	E. responsible behaviour to self, others and society	
F. Explain the concepts and motivations underlying sculpture and installation works in individual consultations and group discussions.	F. interpersonal and communications skills	
G. Engage in peer-to-peer dialogue about sculpture and installation works in development and provide constructive feedback on finished pieces.	G. teamwork, and personal and group leadership skills	
H. Express personal creative concepts through sculpture and installation.	H. creativity and aesthetic appreciation	
I. Reflect on their artistic process and identify areas for continued growth and development within their sculpture and installation practice.	I. the ability and desire for continuous learning	

COURSE NUMBER AND TITLE: VSAR-3430. Advanced Time-Based Art	
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:
A. Analyze and synthesize advanced concepts and techniques of time-based media, including experimental video, animation, installation, audio, documentary, and performance art within contemporary art and visual culture contexts.	B. the acquisition, application and integration of knowledge
B. Develop project proposals by identifying pertinent issues in visual culture and contemporary art, and by locating, evaluating, and synthesizing relevant research materials to inform creative development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Solve technical and conceptual challenges in the production of advanced projects.	C. critical thinking and problem-solving skills
D. Articulate conceptual frameworks and technical processes related to advanced time-based art practices through written documentation, presentations, and effective use of relevant software and technologies.	D. literacy and numeracy skills
E. Engage in an ethical studio practice, respecting diverse artistic approaches, and considering the broader social and cultural implications of their creative work.	E. responsible behaviour to self, others and society
F. Communicate complex ideas, intentions, and processes related to advanced time-based art projects in individual and group critiques.	F. interpersonal and communications skills
G. Collaborate effectively on group projects when applicable, taking initiative and contributing constructively to shared creative goals, while also demonstrating self-direction in the development and execution of individual projects.	G. teamwork, and personal and group leadership skills
H. Develop innovative and conceptually advanced time-based artworks that demonstrate their critical engagement with contemporary artistic practices.	H. creativity and aesthetic appreciation
I. Reflect on their artistic process and identify areas for continued growth and development within their time-based art practice.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: VSAR-3830. Inter-Media Practices - Processes		
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:	
A. Integrate knowledge from various visual arts disciplines (drawing, painting, sculpture, digital media, etc.) into cohesive intermedia projects.	A. the acquisition, application and integration of knowledge	
B. Define research questions relevant to their intermedia practice.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	
C. Develop problem-solving strategies for integrating diverse media and artistic approaches.	C. critical thinking and problem-solving skills	
D. Write about their artistic production using terminology and concepts relevant to inter-media.	D. literacy and numeracy skills	
E. Adhere to studio safety protocols and demonstrate responsible use of equipment and materials.	E.responsible behaviour to self, others and society	
F. Provide constructive feedback on works-in-progress and completed artworks.	F.interpersonal and communications skills	
G. Articulate their individual artistic vision while engaging in collaborative learning environments.	G.teamwork, and personal and group leadership skills	
H. Develop personal artworks within the context of intermedia practice.	H.creativity and aesthetic appreciation	
Evaluate their creative production, identifying areas for development.	I.the ability and desire for continuous learning	

COURSE NUMBER AND TITLE: VSAR-3840. Inter-Media Practices - Topics			
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:		
A. Apply knowledge of contemporary issues relevant to inter-media art practice to the creation of inter-media artworks.	A.the acquisition, application and integration of knowledge		
B. Incorporate research findings related to specific topics to their studio practice.	B.research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)		
C. Analyse their own work and the work of others in relation to contemporary social and cultural issues.	C.critical thinking and problem-solving skills		
D. Contextualize their artistic practice within contemporary art discourse and social and cultural theory, applying relevant terminology and concepts.	D.literacy and numeracy skills		
E. Adhere to ethical guidelines for research and artistic practice.	E.responsible behaviour to self, others and society		

F. Describe their artistic intentions and the social and cultural	F.interpersonal and communications	
significance of their work in class discussions and presentations.	skills	
G. Articulate their individual artistic vision while engaging in	G.teamwork, and personal and group	
collaborative learning environments.	leadership skills	
H. Explore diverse media and artistic approaches to develop inter-	H.creativity and aesthetic appreciation	
media artworks within a socially and culturally informed context.		
Evaluate their creative production, identifying areas for	I.the ability and desire for continuous	
development.	learning	

COURSE NUMBER AND TITLE: VSAR-4800 Studio Practice I	
Course Learning Outcomes  This is a sentence completion exercise.  At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:
A. Apply accumulated knowledge and experience to produce a cohesive body of work.	A. the acquisition, application and integration of knowledge
B. Conduct independent research to inform and expand their artistic practice and professional development skills, utilizing diverse sources and methodologies.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Solve technical and conceptual problems within their chosen medium.	C. critical thinking and problem-solving skills
D. Communicate their artistic intentions and processes through written and verbal presentations.	D. literacy and numeracy skills
E. Maintain a safe and responsible studio practice, adhering to ethical and environmental considerations.	E. responsible behaviour to self, others and society
F. Contribute to a supportive learning environment by through constructive peer discussions, developmental feedback on works-in-progress, and critiques.	F. interpersonal and communications skills
G. Produce self-directed learning and take initiative in the development of their artistic practice.	G. teamwork, and personal and group leadership skills
H. Articulate their personal aesthetic vision through the creation of a body of artwork.	H. creativity and aesthetic appreciation
I. Create a personalized two-year learning plan that reflects their professional and personal development goals.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: VSAR-4810 Studio Practice II						
Course Learning Outcomes Characteristics of a University of						
This is a sentence completion exercise.	Windsor Graduate					
At the end of the course, the successful student will know and be	A U of Windsor graduate will have the					
able to:	ability to demonstrate:					
A. Apply accumulated knowledge and experience to produce and refine a cohesive body of work.	A. the acquisition, application and integration of knowledge					

#### University of Windsor Program Development Committee

\*5.25 Visual Arts - Minor Program Changes (Form C)

Item for: Approval

MOTION: That the degree requirements for the BFA Visual Arts, General BA Visual Arts and Combined BA Visual Arts be changed in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

#### **Rationale/Approvals:**

- This proposal has been approved by the School of Creative Arts Council and the Faculty of Arts, Humanites and Social Sciences Council.
- See attached.

TITLE OF PROGRAM(S)/CERTIFICATE(S): BFA Visual Arts, General BA Visual Arts, Combined BA Visual				
DEPARTMENT(S)/SCHOOL(S):	School of Creative Arts			
FACULTY(IES):	FAHSS			

Proposed change(s) effective as of* [Fall, Winter, Spring]:	Fall 2025
*(subject to timely and clear submission)	

#### Does the minor program change include new courses?:

	Yes [All new course proposals must be submitted on PDC Form Ds and submitted for approval with the	he minor
	program change proposal (PDC Form C)]	
X_	<u>No</u>	

If yes, list all new courses: n/a

#### A.1 PROGRAM REQUIREMENT CHANGES

#### **General BA Visual Arts**

Note: As of Fall 2013 there are no direct admissions from High School, with the exception of students enrolled in the Concurrent Bachelor of Arts (Visual Arts General)/Bachelor of Education program. All other students will be applying directly to the Honours program.

Total courses: thirty.

- (a) Visual Arts sixteen courses: <del>VSAR-1050,</del> VSAR-1060, VSAR-1070, <u>VSAR-2330, VSAR-2430, and VSAR-3830 or VSAR-3840</u> and <del>VSAR-1080, and eight seven</del> other studio courses numbered VSAR-2030 through VSAR-3900 plus MACS-2050, MACS-2150, <u>one additional MACS course at the 2000 level,</u> and two <u>one</u> additional MACS courses at the 2000, 3000 or 4000 level.
- (b) two courses from Social Sciences;
- (c) two courses from Languages or Science;
- (d) two courses from any area of study, including Arts.
- (e )ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study.);
- (f) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.);
- (g) INCS-2020, INCS-2030;
- (h) four more courses from any area of study, **including** Visual Arts.

Courses used to calculate the major average are: courses listed under requirement (a) and any courses taken in the major area(s) of study.

#### **BFA Visual Arts**

(a) VSAR: twenty eighteen courses (66 60 course credits) as follows: VSAR-1050, VSAR-1060, VSAR-1070, VSAR-1080; VSAR-2330, VSAR-2430; one of VSAR-3830 or VSAR-3840; VSAR-4800 (6.0 credits), VSAR-4810 (6.0 credits), VSAR-4900 and VSAR-4910; plus at least three 2000-level courses in three other separate areas; five four additional 3000-level courses in at least three separate areas; and three four additional courses at the 2000 or 3000 level (courses beginning either with a VSAR- or a MACS). Media Art Histories/Visual Culture: six courses (18 course credits) as follows:

MACS-2050, MACS-2150, plus four one of MACS 2200, MACS 2500 or MACS 2600, and three additional MACS, one of which has to be at the 4000-level.

- (b) three courses from Social Sciences, Humanities or Arts (excluding Visual Arts);
- (c) two courses from Languages or Science;
- (d) five seven courses from any area of study, including Visual Arts.
- (e) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study.);
- (f) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.).

Courses used to calculate the major average are: courses listed under requirement (a) and any courses taken in the major area(s) of study. Students must maintain a 76% major average to enroll in advanced courses: VSAR-4800; VSAR-4810; VSAR-4900; VSAR-4900; VSAR-4910 in year 4.

Students whose average drops below this average can:

- (a) be allowed to continue in the BFA program on a conditional basis, subject to re-evaluation;
- (b) be allowed to transfer to the general Bachelor of Arts-Visual Arts program.

Consult a program advisor in Visual Arts for details regarding portfolio requirements and procedures.

#### **VISUAL ARTS - PROGRAM REGULATIONS**

**Visual Arts General Information** 

Transfer Students: Students who have taken art courses at other post-secondary institutions and desire credit for basic courses in Visual Arts may be required to submit a portfolio of their own work for evaluation by Visual Arts, together with an official transcript of their record and catalogues describing the courses taken, all of which must be submitted no later than two weeks before the first day of classes.

Visual Arts Program Requirements

- 1) It is strongly recommended that MACS 2050 AND OR MACS 2150 two MACS 2XXX be taken by students in Year 1 of the BFA in Visual Arts.
- 2) It is strongly recommended that Visual Arts students take <del>VSAR-1050,</del> VSAR-1060 <u>AND</u> VSAR-1070<del>, and VSAR-1080</del> in Year 1.
- 3) Fourth-year BFA students will be required to participate in the **B.F.A. Candidates' Exhibit Soca Graduating Exhibition as part of VSAR-4810**. The selection of work to be exhibited is to be made with the approval of the student's instructor in VSAR-4810. **Studio Practice II.**

#### Visual Arts and the Built Environment

Note: Students admitted to the BFA in Visual Arts and the Built Environment (VABE) program are also required to apply for a US study visa in consultation with the University of Detroit Mercy (UDM), in order to attend and complete courses at the UDM School of Architecture. Admission to the VABE program does not guarantee the granting of a study visa by the US government. Continuation in the VABE program requires that a study visa is granted by the US government.

Areas of Study

Requirements for degree programs in Visual Arts make reference to the following groups of courses:

Basic Foundation Courses: VSAR-1050, VSAR-1060, VSAR-1070, VSAR-1080, and Media Art Histories/Visual Culture MACS-2150, MACS-2050.

Drawing #Printmaking and Painting: VSAR-2130, VSAR-2230, VSAR-3130, VSAR-3650, VSAR-3900; VSAR-2030, VSAR-3030, VSAR-3260, VSAR-3650, VSAR-3860, VSAR-3900.

Inter-media <del>Practices:</del> VSAR-3830, VSAR-3840, VSAR-3710, VSAR-3850, VSAR-3860, VSAR-3650, VSAR-3900 Internship: VSAR-3800

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Photography: Photo-Based Image Processes: VSAR-2530, VSAR-2900, VSAR-3460, VSAR-3470, VSAR-3480, VSAR-3650, VSAR-3900

Sculpture/<u>Installation/</u>Built Environment: VSAR-2330, VSAR-2550, VSAR-3330, VSAR-3710, VSAR-3850, VSAR-3650, VSAR-3850, VSAR-3900.

<u>Time-Based/Sequential Image Processes</u>: VSAR-2430, VSAR-2450, VSAR-2630, VSAR-3430, VSAR-3450, VSAR-3630, VSAR-3650, VSAR-3900

Media Arts and Culture: MACS-2200, MACS-2500, MACS-2600, MACS-2850, MACS-3450, MACS-3620, MACS-3700, MACS-3910, MACS-4500, MACS-4520, MACS-4560.

#### **Combined BA Visual Arts**

#### **Program Regulation**

Students in combined programs must complete all courses used to calculate the major average for both subject areas and GART 1500 and GART 1510. They must also complete the degree requirements, in the order presented to a total of forty courses. Example: If the total course requirements add up to 43 once the requirements for the second subject area are included, the degree requirements are to be completed in the order presented, until the student reaches a total of 40 courses.

#### **Degree Requirements**

Total courses: forty.

- (a) Seventeen courses consisting <u>of:</u> Studio Fundamentals <del>VSAR 1050,</del> VSAR-1060, VSAR-1070, and <del>VSAR 1080,</del> <u>VSAR-2330 and VSAR-3830 or VSAR-3840</u> plus <u>nine seven</u> other studio courses numbered VSAR-2030 through <u>VSAR-3900 and/or Cinema Arts and/or Film courses numbered CNMA-2XXX through CNMA-4XXX or FILM-2XXX through FILM-4XXX</u>. At least four <u>VSAR</u> courses must be at the 3000-level; <u>plus</u>, the following Media Art Histories/Visual Culture courses: MACS-2050, MACS 2150, **plus one** additional MACS course at the 2000 level, plus **two** MACS courses at the 3000 **or 4000 level**.
- (b) Course requirements Other Subject: courses used to calculate the major average in the other subject area, as prescribed by that area of study.
- (c) ENGL-1010 (students with 80% or higher in Grade 12 ENG4U (or equivalent) are exempt from this course requirement and will substitute it with an additional course from any area of study.);
- (d) one course with Indigenous content, perspectives, or materials (see Office of the Dean of the Faculty of Arts, Humanities, and Social Sciences for complete list.);
- (e) two courses from Social Sciences;
- (f) two courses from Languages or Science;
- (g) two courses from any area of study, including Arts.
- (h) additional courses from any area of study to a total of forty courses.

Courses used to calculate the major average are: courses listed under requirements (a) to (b), and any courses taken in the major area(s) of study.

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (strikethrough) and additions/new information with bolding and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a Form E.

No additional resources are required for these changes.

#### B. RATIONALE

Please provide a rationale for the proposed change(s).

Students have long been required to take four introductory level Visual Arts classes (VSAR-1050, VSAR-1060, VSAR-1070, and VSAR-1080), and we are reducing this overly stringent requirement to two courses (VSAR-1060 and VSAR-1070). Currently Visual Arts has too many 1000-level Visual Art courses, which has proved challenging for students at the end of their degree program who do not have enough upper-level credits. Additionally, having four required courses at the first-year level has created a bottleneck for students moving from 1st- to 2nd-year. We are integrating the introductory content from VSAR-1050 and VSAR-1080 into VSAR-1060 and VSAR-1070. The more advanced content from VSAR-1050 will be moved into VSAR-2330, and from VSAR-1080 into VSAR-2430, which will become required courses.

Deletion of VSAR-4900 and VSAR-4910 will further streamline the program. Content from these courses will be integrated into VSAR-3830, VSAR-3840, VSAR-4800, VSAR-4810 and MACS courses.

There are currently six faculty members teaching VSAR courses at both the undergraduate level, and with the change to a 2+2 teaching load, streamlining will enable us to deliver the program.

#### C. RESOURCES

### C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

SoCA has six full-time faculty covering the VSAR and MACS courses. These changes on the VSAR courses complement the streamlining of the MACS courses completed in 2024 so we can continue to deliver our programs with our current faculty complement. The overall reduction of required VSAR courses from 20 to 18 will streamline the program and make it more accessible to students. These changes do not require additional resources from inside the unit. Students will take 2 additional courses that can be from any AAU.

### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

Since 2018, VSAR-1050 has been offered three times per year with all three sections being taught by a sessional, after two retirements of full-time faculty in the area in the last decade. The deletion VSAR-1050 from the program requirements will therefore reduce sessional requirements at the 1<sup>st</sup>-year level by three. Since 2018, VSAR-1080 has been offered three times per year with one to two sections being taught by a sessional. The deletion VSAR-1080 from the program requirements will therefore reduce sessional requirements at the 1<sup>st</sup>-year level by up to two. Reducing the number of 4<sup>th</sup> year courses by eliminating VSAR-4900 and VSAR-4910 will free-up full-time faculty to teach other required courses.

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### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### C.4 Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

No new resources are required.

#### C.5 Planned Reallocation of Resources and Cost-Savings

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

Deleting VSAR-1050, VSAR-1080, VSAR-4900, and VSAR-4910 and reducing the additional VSAR requirements by two courses will streamline the program, ensuring students are able to get the courses they need in order to graduate.

#### C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	No additional requirements.
Staff:	No additional requirements.
GA/TAs:	No additional requirements.

### <u>C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)</u>

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services: No additional requirements.			
Teaching and Learning Support: No additional requirements.			
Student Support Services: No additional requirements.			
Space and Facilities: No additional requirements.			
Equipment (and Maintenance):	No additional requirements.		

#### University of Windsor Program Development Committee

5.26:	Bachelor of Education	(Concurrent) – Ma	ijor Program Chang	es (Form B)	١
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Item for: Approval

Forwarded by: Faculty of Education

MOTION: That the major program changes to the Concurrent Bachelor of Education programs be approved. ^

^Subject to approval of the expenditures required.

#### Rationale/Approvals:

- The major program changes have been approved by the Faculty of Education Council.
- This change is a result of a comprehensive review of the current Bachelor of Education programs, addressing recommendations from the Institutional Quality Assurance Process (IQAP), and aligns with recent curriculum and policy updates made by the Ontario Ministry of Education.
- Additionally, the proposed changes are in line with the new Bachelor of Education Vision Framework and the University of Windsor's Aspire Strategic Plan.
- The Major Changes to the consecutive programs were approved at Senate April 11, 2025.
- See attached.

#### A. Basic Program Information

Faculty(ies)	Faculty of Education; Faculty of Arts, Humanities, and Social Sciences; Faculty of Science
Department(s)/School(s)	Education; Department of Languages, Literatures, and Cultures, Department of Psychology, School of Creative Arts; Department of Communication, Media, and Film; School of Dramatic Art; Department of English and Creative Writing; Department of History; Department of Political Science; Department of Mathematics & Statistics; Department of Chemistry and Biochemistry; Department of Physics; Department of Integrative Biology
Name of Program as it Will Appear on the Diploma (e.g., Bachelor of Arts Honours Psychology with thesis)	Bachelor of Education
<b>Proposed Year of Offering*</b> [Fall, Winter, Spring]: *(subject to timely and clear submission)	
Mode of Delivery:	In-person
Planned steady-state Student Enrolment (per section B.4.2)	190
Normal Duration for Completion:	5 years
Will the program run on a cost- recovery basis?	In the current university budget context, it is difficult to ascertain if this new program would be cost-recovery. However, this new program will result in substantial financial savings in comparison to the current program as the new program is more streamlined and will require the delivery of far fewer courses.

#### B. Major Program Changes - Overall Plan

#### B.1 Objectives of the Program/Summary of Proposal (QAF section 2.1.2.1; Ministry section 3)

Please provide a rationale for the proposed change, including a brief statement about the direction, relevance and importance of the revised program. Describe the overall aim and intended impact of the revised program. Describe the consistency of the revised program with the institution's mission, goals and objectives as defined in its strategic plan. (to view the strategic plan go to: www.uwindsor.ca/president)

### Please provide a rationale for the proposed change, including a brief statement about the direction, relevance and importance of the revised program.

The 5-year, full-time concurrent programs at the University of Windsor are designed for students who wish to pursue a BA (General) or BSc (General) in one of our Concurrent Program Stream options, while concurrently studying education and doing field experience in schools. The proposed major program changes for the Concurrent Bachelor of Education (B.Ed.) programs follow the same curriculum changes made in the Consecutive BEd programs from a multi-year, in-depth review of the current Bachelor of Education program, including multiple points and methods of data collection (surveys, focus groups, one-on-one consultations, a full-day faculty retreat) with current and emeriti faculty, adjunct faculty, sessional instructors, and past and current B.Ed. students (see Appendix B for an overview of the results of data collection), addresses recommendations from the 2021 Institutional Quality Assurance Process (IQAP) review (period under review was 2011-2018) (see Appendix C for executive summary), and aligns with the Ontario Ministry of Education recent curriculum and policy changes for P/J (i.e., grades K to 6) and I/S (i.e. grades 7-12) education. The proposed program changes also align with the new Bachelor of Education Vision Framework (see Figure 1), and with the University of Windsor's Aspire Strategic Plan as discussed in detail below.

Figure 1. Bachelor of Education Vision Framework



The revised B.Ed. program adopts a streamlined, student-centered approach, ensuring a balance between academic rigour and manageable workloads. With fewer courses per term, the program provides greater depth and focus, while maintaining the flexibility for students to explore their individual interests. A clear distinction between Year 1 and Year 2 of the B.Ed. program allows for a more cohesive progression of learning, tailored to the developmental needs of teacher candidates.

The program's strong anti-racist, anti-oppressive, and social justice focus ensures that future educators are equipped to create inclusive and equitable learning environments. By incorporating significant Primary/Junior (P/J) and Intermediate/Senior (I/S) specific content and minimizing content overlap, the revised curriculum responds to the diverse needs of Ontario classrooms. The integration of action research and increased school and community involvement emphasizes the importance of practical, real-world applications of educational theory, ensuring that teacher candidates are prepared to address systemic inequities and foster transformative learning experiences.

The updated B.Ed. program retains its signature Service-Learning strength, a unique offering among Ontario faculties of education, highlighting its commitment to experiential learning over and above the OCT-required 80 days of school practicum. The alignment with Ontario College of Teachers (OCT) requirements ensures the program remains compliant and relevant to professional and ethical standards. Increased student choice within the program empowers teacher candidates to shape their education to align with their interests, career goals, and community needs, fostering engagement and autonomy.

#### Describe the overall aim and intended impact of the revised program.

The aim of the revised B.Ed. program is to prepare future educators who are equipped with the knowledge, skills, and experience to foster equitable, inclusive, and engaging learning environments. The program seeks to develop reflective teacher candidates capable of addressing diverse learner needs, combating systemic inequities, and contributing to positive social change. By integrating anti-racist and anti-oppressive principles, action research, community involvement, and subject-specific expertise, the program ensures graduates are innovative, adaptable, and socially conscious educators.

Teacher candidates in the program will possess subject-specific expertise essential in Primary/Junior and Intermediate/Senior (I/S) divisions, advanced pedagogical skills, and a strong foundation in anti-oppressive practices, enabling them to create impactful and inclusive learning experiences. The program's unique Service-Learning component, coupled with its focus on action research and community involvement, positions graduates as leaders in experiential and community-based education. This distinctive feature sets the program apart in Ontario and strengthens its reputation for innovation. With fewer courses per term, students can engage more deeply with content and avoid redundancy, leading to a more enriching and sustainable learning experience. By meeting the Ontario College of Teachers (OCT) requirements, the program ensures its teacher candidates are fully prepared to

enter the teaching profession in Ontario and beyond, equipped to meet the expectations of modern classrooms. The program's strong decolonizing, anti-racist, and anti-oppressive focus ensures that teacher candidates are prepared to challenge inequities within the education system and champion social justice, contributing to broader societal transformation.

Overall, the new B.Ed. program aims to produce socially aware, highly skilled educators who are prepared to lead, innovate, and advocate for equitable and transformative education in a rapidly changing world. Its impact will be felt not only in classrooms but also in the communities these educators serve.

### Describe the consistency of the revised program with the institution's mission, goals and objectives as defined in its strategic plan.

The revised B.Ed. program aligns with the following Aspire Strategic Priorities: a) Advancing the journey toward truth and reconciliation; b) Becoming an increasingly equitable, diverse, inclusive and just university; c) Ensuring high quality, relevant, and just teaching, learning, and student experience for everyone; d) Fostering an engaged, healthy, safe, and environmentally sustainable campus; and, e) Generating local and global impact through partnership and community engagement. This B.Ed. curriculum renewal enhances intentional, systematic, and evidence-based approaches to curriculum.

To specifically address the Aspire Strategic Priority of advancing the journey toward truth and reconciliation, the revised B.Ed. program incorporates Indigenous knowledge systems throughout the B.Ed. courses. Additionally, there is a required course for all B.Ed. students titled Indigenous Ways of Knowing. To address becoming an increasingly equitable, diverse, inclusive and just university, several new courses have been developed that specifically address equity, diversity and inclusion, such as Mental Health, Gender and Sexuality in Education, and Anti-Oppressive and Culturally Sustaining Pedagogy. Further, the entire program has a social justice framework. It is focused on ensuring high quality, relevant, and just teaching, learning, and student experience for everyone by developing current and relevant new courses that speak to today's educational climate and incorporate more student choice. With new courses and content focused on mental health, environmental sustainability, teaching culturally and linguistically diverse learners, and anti-oppressive and culturally sustaining pedagogy, the B.Ed. program will foster an engaged, healthy, safe, and environmentally sustainable campus. New B.Ed. courses related to interdisciplinary education for sustainability, global citizenship and democratic education, school, community, and family partnerships, and servicelearning courses that facilitate teacher candidate global exchange will address generating local and global impact through partnership and community engagement. Through community engagement with our school board partners, regional organizations, and agencies, as well as global engagement with several international partners, the new B.Ed. program will further address generating local and global impact through partnership and community engagement.

#### **B.2** Changes to Program Content (QAF Section 2.1.2.2)

Evidence that the revised curriculum is consistent with the current state of the discipline or area of study.

The new BEd program is aligned with OCTs updated regulatory guidelines and maps onto schedule 1, Regulation 347/02.

#### Schedule 1

#### **Curriculum Knowledge**

1. The program provides a student of a program of professional education with knowledge and understanding of the current Ontario curriculum and provincial policy documents that are relevant to the student's areas of study and curriculum, including planning and design, special education, equity and diversity, and learning assessment and evaluation.

Note: On January 1, 2025, the day subsection 1 (4) of Schedule 2 to the *Better Schools and Student Outcomes Act, 2023* comes into force, the French version of paragraph 1 under the heading "Curriculum Knowledge" in Schedule 1 to the Regulation is amended. (See: O. Reg. 446/24, s. 1 (1))

2. The program prepares the student of a program of professional education to use current research in teaching and learning.

#### **Pedagogical and Instructional Strategies Knowledge**

The program includes the following elements:

- 1. How to use educational research and data analysis.
- 2. How to use technology as a teaching tool.
- 3. How to use inquiry-based research, data and assessment and the selection and use of current instructional strategies to address student learning styles.
- 4. How to use learning and teaching theories and methods and differentiated instruction.
- 5. A focus on the development of classroom management and organization skills.
- 6. Child and adolescent development and student transitions to age 21 and through kindergarten to grade 12.
- 7. How to use current strategies relating to student observation, assessment and evaluation.
- 8. How to teach students whose first language is not the language of instruction, whether English or French.
- 9. Pedagogy and the assessment and evaluation of learning in the relevant areas of study in relation to specific curriculum subjects.
- 10. The policies, assessments and practices involved in responding to the needs and strengths of all students, including students identified as requiring special education supports.

Note: On January 1, 2025, the day subsection 1 (4) of Schedule 2 to the *Better Schools and Student Outcomes Act, 2023* comes into force, the French version of paragraph 10 under the heading "Pedagogical and Instructional Strategies Knowledge" in Schedule 1 to the Regulation is amended. (See: O. Reg. 446/24, s. 1 (2))

#### The Teaching Context Knowledge

The program includes the following elements:

- 1. Educating students of a program of professional education in child, youth, and parental mental health issues relevant to the elementary and secondary school environment in Ontario.
- 2. The College's "Standards of Practice for the Teaching Profession" and "Ethical Standards for the Teaching Profession".
- 3. How to prepare students for learning transitions in a variety of settings and transitions to high school, college, university, apprenticeship and the workforce.
- 4. Knowledge of the Ontario context in which elementary or secondary schools operate.
- 5. Ontario education law and related legislation, occupational health and safety legislation and legislation governing the regulation of the teaching profession in Ontario and the professional obligations of members of the College.
- 6. How to create and maintain the various types of professional relationships between and among members of the College, students, parents, the community, school staff and members of other professions.

#### B.2.1 Unique or Innovative Curriculum, Program Delivery, or Assessment Practices (QAF Section 2.1.1)

State the unique or innovative curriculum, program delivery, or assessment practices distinguishing the revised program from existing programs elsewhere, as appropriate.

The courses in the revised BEd program underscore its distinctiveness and forward-thinking approach by integrating cutting-edge pedagogical practices, addressing contemporary educational challenges, and fostering a comprehensive skill set for teacher candidates. Here's how these courses contribute to the program's uniqueness and innovation:

1. Focus on Inclusivity and Equity

Differentiated Instruction: Equips educators with strategies to address diverse learner needs, ensuring equitable access to education.

Indigenous Ways of Knowing: Centers Indigenous perspectives and knowledge systems, fostering reconciliation and cultural responsiveness.

Anti-Oppressive and Culturally Sustaining Pedagogy: Prepares educators to confront systemic inequities and create inclusive classrooms.

#### 2. Integration of Modern and Relevant Literacies

Media Literacies and Digital Pedagogy: Addresses the role of technology and media in education, equipping educators with skills for 21st-century classrooms.

Critical Literacy: Encourages teacher candidates to construct deeper meanings of language and culture, interpret the relationship between language and power, and investigate ways to promote learners' languages and cultures.

#### 3. Emphasis on Engaging Diverse Learners

Teaching Culturally and Linguistically Diverse Learners: Provides professional training with basic theoretical and pedagogical knowledge of English as a second or additional language acquisition and instruction, explore a great variety of resources of ELL policy documents and effective practices, and hence get prepared to support English language learners in any classroom setting.

Gender and Sexuality in Education: Encourages inclusive teaching practices that support diverse gender identities and sexual orientations.

Mental Health: Prepares educators to evaluate established theories of mental health and illness and considering why certain theories of mental health/illness have been privileged in Canadian systems. The course engages teacher candidates in developing mental health literacy by exploring the concepts of mental health and wellness and mental illness, including the stigma that surrounds it.

#### 4. Pedagogical Depth Across Disciplines

Music Pedagogy: Offers specialized training for aspiring music educators.

STEM Education: Prepares educators for the increasing importance of STEM fields in global competitiveness.

#### 5. Global and Community-Oriented Perspectives

Global Citizenship and Democratic Education: Encourages educators to promote active citizenship and global awareness among students.

School, Community, and Family Partnerships: Strengthens ties between schools and communities, enhancing educational outcomes through collaboration.

#### 6. Comprehensive Assessment Skills

Assessment and Evaluation: Develops expertise in evaluating student progress, a cornerstone of effective teaching and learning.

These courses reflect the program's commitment to innovation by blending traditional pedagogical foundations with contemporary priorities such as equity, digital literacy, interdisciplinary approaches, and community engagement. Together, they ensure that graduates are not only skilled educators but also leaders capable of addressing the complexities of modern education.

Additionally, the service-learning courses in the revised B.Ed. program demonstrate its unique and innovative character by integrating experiential learning with community engagement, bridging theory and practice, and fostering socially conscious educators through:

#### 1. Unparalleled Experiential Learning Opportunities

The program uniquely delivers a regularly updated menu of innovative service-learning courses, setting it apart from other teacher education programs.

Service-learning provides teacher candidates with hands-on, real-world experiences in diverse educational and community contexts, extending learning beyond the traditional classroom.

#### 2. Integration of Theory and Practice

Service-learning courses help teacher candidates apply educational theories and anti-oppressive pedagogies in authentic settings, enhancing their ability to translate knowledge into actionable practices.

These courses bridge the gap between coursework and practicum, providing a broader understanding of how educational principles function in community settings, locally and globally.

#### 3. Community and Social Justice Focus

By engaging with schools, families, and community organizations, service-learning emphasizes the importance of collaboration and partnerships in education.

The courses align with the program's anti-racist and anti-oppressive focus, encouraging teacher candidates to address systemic inequities and work toward social justice in education.

#### 4. Development of Leadership and Advocacy Skills

Service-learning empowers teacher candidates to take on active roles in community improvement, fostering leadership, advocacy, and a sense of social responsibility.

These experiences prepare educators to act as change agents, capable of driving meaningful transformations in their schools and communities.

#### 5. Customization and Relevance

The flexibility of service-learning courses allows teacher candidates to engage in projects that align with their interests and career goals, fostering deeper investment and relevance to their professional development. This personalized approach helps teacher candidates build unique skills and experiences that distinguish them in the job market.

The service-learning courses in the revised B.Ed. program are a hallmark of innovation and distinction, blending experiential learning with a commitment to equity, community, and practical application. They not only enhance the educational experience of teacher candidates but also contribute to the broader impact of education on society. These courses embody the program's vision of developing socially aware, highly skilled educators who can lead and innovate in diverse educational contexts.

#### B.2.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the <u>Truth and Reconciliation Report</u> (2015) (page 1), the unique legal requirements of the <u>Constitution Act 1982</u> (Sections 25, 35), the provincial legal requirements of the <u>Ontario Human Rights Code</u>, 1990, and provincial legislation <u>Bill Pr36</u> (1967). in <u>revising this program</u>, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum? Please consider these prompt questions and <u>additional Resources</u> including disciplinary examples:

- What **process** has your department/Faculty used to consider Indigenization?
- How have you considered the importance or relevance to the course/program?
- How has your department or faculty approached raising awareness for Indigenous knowledges in your area?
- What do the <u>TRC</u> and <u>University Principles</u> documents suggest relevant to your course?
- What have other similar courses/programs done that might be relevant to your course/program?
- In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

- What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?
- Which <u>literatures</u>, sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)
- Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?
- Have you included the information in the other relevant areas in the PDC form such as learning outcomes and/or in the syllabus where appropriate?

To specifically address the Aspire Strategic Priority of advancing the journey toward truth and reconciliation, the revised B.Ed. program incorporates Indigenous knowledge systems throughout the B.Ed. courses. Additionally, there is a required course for all B.Ed. students titled Indigenous Ways of Knowing.

#### EDUC 5206. Indigenous Ways of Knowing

Indigenous Ways of Knowing addresses the urgent need to decolonize education and honour Indigenous peoples' knowledge systems, histories, and worldviews. Education has historically been a tool of colonization, marginalizing Indigenous perspectives and perpetuating systemic inequities. This course will equip future educators with the tools to challenge these narratives and create inclusive, respectful, and transformative learning environments. This course reflects the Faculty of Education's commitment to equity, reconciliation, and developing educators who can contribute to decolonizing education and promoting social justice. It was designed in conversation with CTL and through resources cultivated by Leddy Library and previous course instructors. In practice, this can be achieved by having teacher candidates learn about and reflect on Indigenous philosophies of education, including, but not limited to, Dr. Marie Battiste's framework for decolonizing education, Lorna Stolarchuk and Jaimie Kechegos' Indigenous Pedagogies, Nicole Bell's Teaching by the Medicine Wheel: An Anishinaabe Framework for Indigenous Education, Shannon Leddy and Lorrie Miller's (2024) Teaching Where you are: Weaving Indigenous and Slow Principles and Pedagogies, Andrea Sullivan-Clarke's (2023) Ways of being in the world: An introduction to Indigenous philosophies of Turtle Island, and online resources, such as Walking Together: First Nations, Métis and Inuit Perspectives in Curriculum and The First Nation Seven Teachings. Further, by incorporating resources on the Truth and Reconciliation Commission (TRC) of Canada's Calls to Action, such as Spirit Bear's Guide to the Truth and Reconciliation Commission of Canada Calls to Action, critically analyzing how the Government of Canada is responding to the TRC's Calls to Action in Education, and examining the historical, intergenerational, and ongoing impact of the Canadian Residential School System, teacher candidates can learn how education can be a pathway for reconciliation and transformative change. The course will also provide teacher candidates with opportunities for place-based learning and engagement with local Indigenous communities.

Indigenous Ways of Knowing and critical analysis of settler colonialism and decolonization is also directly addressed in the following courses:

#### EDUC 5201. Philosophy of Education

This course engages with multiple philosophical perspectives on education including Indigenous knowledge systems, as stated explicitly in the course description ("Teacher candidates will explore a range of educational philosophies from diverse perspectives including Indigenous knowledge systems") and the Learning Outcome. In practice, this can be achieved by incorporating Indigenous philosophies of education, such as Dr. Marie Battiste's framework for decolonizing education, and analyzing how these perspectives are increasingly being embedded in the K-12 education system in Ontario, as well as identifying areas in which this incorporation may be performative or unrealized, which constitutes a critical analysis of settler colonialism and decolonization. Incorporating Indigenous philosophies of and approaches to education in this required course will expose all students to these perspectives and present them as philosophies teacher candidates can consider incorporating into their own teaching philosophies, alongside educational philosophers who have shaped Western education such as John Dewey and Plato as well as other antioppressive educational philosophies such as those of bell hooks and Paulo Freire. While each instructor may approach

this task differently, one approach within the course syllabus is to organize the course alongside different thematic interpretations of the purpose of education (Education for Knowledge, Education for Democracy, Education for Imagination), with a week focused on Education for Reconciliation making a clear reference to the Truth and Reconciliation Commission. Other anti-oppressive and social justice oriented philosophical perspectives also incorporate attention to decolonization in a Canadian context, for example in the week on Education for Critical Consciousness which, if taught in the Fall, often aligns with Orange Shirt Day, involves encouraging teacher candidates to think about how to apply Freire's concept of critical consciousness to teaching about residential schools in Canada, drawing on resources from Spirit Bear's Guide to Truth and Reconciliation in Canada Calls to Action (First Nations Caring Society, 2023).

Each of the below courses engages with multiple perspectives on its respective subject area, including Indigenous knowledge systems, as indicated in the course descriptions and Learning Outcomes. In practice, this can be achieved by incorporating Indigenous perspectives and analyzing how these perspectives are increasingly being embedded in the K-12 education system in Ontario. Additionally, the courses explore identifying areas in which this incorporation may be performative or unrealized, constituting a critical analysis of settler colonialism and decolonization. Incorporating Indigenous philosophies and approaches exposes all students to these perspectives and presents them as philosophies teacher candidates can consider incorporating into their own teaching practices. While each instructor may approach this task differently, one approach within the course syllabi is to include readings, art, music, dramatic works, dances, or other forms of knowledge sharing that integrate Indigenous perspectives.

EDUC 5211. Mental Health: Students will evaluate established theories of mental health/illness and analyze why certain theories are privileged in Canadian systems. The course includes anti-oppressive and social justice-oriented perspectives, including Indigenous, anti-Black racism, and 2SLGBTQIA+ perspectives on mental health within education.

EDUC 5311. Visual Arts Methodology: Students engage with Indigenous perspectives on visual arts methodology, with an emphasis on Indigenous philosophies for teaching visual arts.

EDUC 5312. Media Literacies and Digital Pedagogy: The focus includes identifying and addressing equity issues (e.g., class, gender, race, dis/ability) in relation to media and the selection and implementation of digital tools in education.

EDUC 5316. Music Pedagogy: The syllabus includes music, instruments, and Indigenous approaches to music pedagogy.

#### B.3 Changes to Program Name and Degree Designation/Nomenclature (QAF Section 2.1.2.1; Ministry section 1)

Explanation of the appropriateness of the proposed new name and degree designation for the program content and current usage in the discipline

N/A

#### **B.4 DEMAND FOR THE MODIFIED PROGRAM**

#### **B.4.1** Student and Market Demand/Societal Need (Ministry section 1)

Describe the tools and methodology used to conduct the market assessment and/or societal need assessment in support of the proposed program revisions, where appropriate. Provide quantitative evidence of student and market demand for the revisions to the program, both within and outside the local region (e.g., responses/statistics from surveys, etc.), where appropriate. Provide evidence of societal need for graduates of the revised program, including expert input. Proposers should consider, where appropriate, the:

- dimensions of the societal need (e.g., socio-cultural, economic, scientific, or technological),
- 2) the geographic scope of the societal need (e.g., local, regional, provincial, or national), and/or
- 3) the anticipated duration of, and trends in societal need.

Append any comments or letters solicited from potential employers and/or relevant professional associations regarding the need for graduates of the revised program within their organization and field of endeavour.

Currently, there is a teacher shortage locally, provincially, nationally, and internationally making it necessary to produce graduates from the B.Ed. program. Ontario, in particular, is facing a critical shortage that has impacts across the province, specifically in French, Northern, and Rural communities. In 2020, the Ontario College of Teachers (OCT) forecasted that teacher retirements could reach as many as 5,800 annually over the next several years (<a href="https://www.oct.ca/en">https://www.oct.ca/en</a>). Further, in its labour market projections for 2021 to 2030, Stokes Economics found that Ontario would need 67,300+ new K-12 teachers during this timeframe (Stokes Economics, 2021).

In addition, the applications for the University of Windsor Bachelor of Education programs have increased dramatically since 2015, demonstrating the demand for the program. Applications for teacher education increased by 7.3% in 2023 over the previous year. However, due to existing funding caps, qualified prospective teachers are being turned away. There were 8,549 students who applied to teacher education last year, with less than 50% accepted due to these existing caps. As of January 2025, the University of Windsor's teacher education program saw an increase in applications of 1.1% from the previous year (Ontario Universities Application Centre, 2025). For an environmental scan of the universities offering comparable programs, please see Appendix D.

#### **B.4.2** Estimated Enrolments (Senate Co-op Policy)

Provide details on projected enrolments for the first five years of operation of the revised program in the following table. (If the program is in operation, use actual and projected data.) For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning components.

	First Year of Operation						Operation		Fifth Year of Operation/Steady- state enrolment overall)	
	Domestic	Int'l	Domestic	Int'l	Domestic	Int'l	Domesti c	Int'l	Domestic	Int'l
In the regular program (non-co-op)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
In the co-op/ experiential learning stream (if applicable)	190	minimal	190	minimal	190	minimal	190	minimal	190	minimal

#### **B.4.3 Duplication (Ministry section 3)**

Indicate whether the revised program is in a new area of study or delivery for the institution. List similar programs at the same credential level offered by other institutions in the Ontario university system. Resources to identify similar programs offered in Ontario include <a href="https://www.ontariouniversitiesinfo.ca/programs">https://www.ontariouniversitiesinfo.ca/programs</a> and <a href="https://www.universitystudy.ca/search-programs/">https://www.universitystudy.ca/search-programs/</a>. Also, list similar programs in the geographically contiguous area, e.g., Michigan/Detroit. If the revised program is similar to others in the Ontario university system, demonstrate that societal need and student demand justify the duplication. Identify innovative and distinguishing features of the revised program in comparison to similar programs

The revised program is not a new area of study or delivery for the institution.

The following 14 publicly funded schools have similar programs at the same credential level:

- 1. Brock University
- 2. Lakehead University

- 3. Laurentian University
- 4. Nipissing University
- 5. Ontario Tech University
- 6. Université de l'Ontario français
- 7. University of Ottawa
- 8. Queen's University
- 9. OISE (University of Toronto)
- **10.Trent University**
- 11. Western University
- 12. Wilfrid Laurier University
- 13. University of Windsor
- 14. York University

There are also 3 independent schools offering similar teacher education programs:

- 1. Redeemer
- 2. Tyndale
- 3. Niagara

All of the publicly funded Faculties of Education offer a consecutive program, most of which are two years in length. Ontario Tech University, Université de l'Ontario français, Queen's University and Western University offer programs that are 16 months in length. Brock University's Technological Education and York University's Waaban Indigenous Teacher Education programs are also 16 months in length. 10 Faculties of Education within this list also offer concurrent programs, most of which are five years in length. Seven Faculties of Education offer multi-session programs. In addition, six programs offer technological education programs offered in consecutive and multi-session formats. Seven Faculties of Education offer Indigenous teacher education program, which are offered in consecutive, concurrent, and multi-session formats. The courses in the revised B.Ed. program underscore its distinctiveness and forward-thinking approach by integrating cutting-edge pedagogical practices, addressing contemporary educational challenges, and fostering a comprehensive skill set for teacher candidates. The program offers innovative components such as:

- Focus on inclusivity and equity
- Integration of modern and relevant literacies
- Emphasis on engaging diverse learners
- Pedagogical depth across disciplines
- Global and community-oriented perspectives
- Comprehensive assessment skills

The courses are a reflection of the programs commitment to innovation through integrating traditional pedagogical foundations with contemporary priorities. Together, these courses ensure that graduates are not only skilled educators but also leaders capable of addressing the complexities of modern education.

Additionally, the service-learning courses in the revised B.Ed. program demonstrate its unique and innovative character by integrating experiential learning with community engagement, bridging theory and practice, and fostering socially conscious educators through:

- Unparalleled Experiential Learning Opportunities
- Integration of Theory and Practice
- Community and Social Justice Focus
- Development of Leadership and Advocacy Skills
- Customization and Relevance

The service-learning courses are instrumental in blending experiential learning with the theoretical concepts learned through the courses. These service-learning courses not only enhance the teacher candidates' educational experience but also embody the program's vision.

#### **B.5 RESOURCES**

[The resource impact of a proposal is almost never neutral. Note: Proposers must also complete and submit the attached **Budget Summary** (Appendix A) with the revised program proposal.]

#### **B.5.1** Resources Available

### B.5.1.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA

#### **Faculty Resources**

All EDUC courses are offered by Education members: 26 full-time faculty members (maximum teaching load of 4 courses), and sessional instructors.

#### **Existing Courses**

The courses will not impact existing EDUC courses.

#### Staff support

The B.Ed. program will continue to be supported by full-time staff, which currently includes: 6 full-time support staff including, the Administrative Assistant to the Associate Dean, Student Success Coordinator, Field Experience Coordinator, Practice Teaching Specialist, Practice Teaching Assistant, and Program Support Assistant. In addition, the program is supported by three full time support staff in the Office of the Dean including a Manager, Finance and Administration, Secretary to the Dean of Education, and Secretary, Dean's Office.

#### Library

There is sufficient library support for the degree program. Faculty and students can find relevant sources either in the paper and online collections of the Leddy Library or via interlibrary loan.

#### **Teaching and Learning Support**

Faculty are encouraged to reach out to the Centre for Teaching and Learning (CTL) for support in the area of course development and delivery.

#### Information Technology Support

Faculty and students will have access to Brightspace, the University of Windsor's Learning Management System. All classrooms are equipped with modern technologies for teaching.

#### **Student Support Services**

Students will have access to all support services provided by the Faculty of Education, including the Faculty's Student Success Coordinator, as well as those student services offered by the wider university community.

#### Space

The Faculty of Education has a number of classrooms which are designed for specific methodologies and include essential course supplies: Education Gym, Music Room, Art Room, Science Room, Geography Room, Math Room, History Room, Active Learning Centre. Large auditoriums are available for foundation courses such as 1101, 1121 and 1123.

Faculty offices are located on 3R of the Leonard & Dorothy Neal Education Building. No additional office space is needed. B.Ed. program staff offices, including the Student Success Coordinator are on the 3<sup>rd</sup> floor and no additional space is needed. There is also a B.Ed. program Student Learning Resource Centre available to students on 1R of the Education building.

#### GA/TA

Each Faculty has limited funds for GA support. Distribution is first provided to faculty members. Sessional instructors of large lecture courses are provided a GA when funds are available. Given the nature of the B.Ed. program Education does not hire TAs.

### B.5.1.1a Faculty Expertise Available and Committed to Supporting the Revised Program (QAF section 2.1.2.6; 2.1.2.7; 2.1.2.8)

Assess faculty expertise available and actively committed to supporting the revised program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in and achieve the goals of the revised program and foster the appropriate academic environment, and of the appropriateness of this collective faculty expertise to contribute substantially to the revised program including student mentoring.

#### Include:

- evidence of the quality of the faculty (e.g., qualifications, funding, honours, awards, research, innovation and scholarly record)
- Evidence that faculty have the recent research or professional/clinical expertise needed to sustain the revised program, promote innovation, and foster an appropriate intellectual climate
- any other evidence that the revised program and faculty will ensure the intellectual quality of the student experience

#### Dr. Ken Montgomery, Dean of Education

Antiracism and critical multicultural education, post-colonialism, sociology of education, philosophy and education, discourse analysis, social justice, treaty education, critical approaches to the study of social identity and social oppression, nationalism, and cultural studies.

#### Dr. Shijing Xu, Acting Associate Dean, Teacher Education; Canada Research Chair

Dr. Shijing Xu is Canada Research Chair (Tier 2) in *International and Intercultural Reciprocal Learning in Education* at the University of Windsor. As the Principal Investigator, she co-directed the SSHRC Partnership Grant Project, "Reciprocal Learning in teacher education and school education between Canada and China" with Dr. Michael Connelly at OISE/University of Toronto. The project has involved six Canadian and Chinese universities, the Greater Essex County District School Board (GECDSB), the Toronto District School Board (TDSB) and more than 40 Canadian and Chinese schools participating in reciprocal learning for pre- and in-service teachers and school students. Six cross-cultural research teams of university researchers and graduate students study the process thereby ensuring global impact by bringing social, cultural, educational and economic benefits to both countries. *(e.g. See participant events, activities* 

and assessments captured in news reports and conferences here <a href="https://reciprocal-learning.ca/pages/news\_n\_events.php">https://reciprocal-learning.ca/pages/news\_n\_events.php</a>; https://reciprocallearning.ca/c2019/).

#### Dr. Mike MacDonald, Associate Dean, Graduate Studies

Dr. MacDonald is the Associate Dean for Graduate Studies and Research in the Faculty of Education. Dr. MacDonald holds teacher certification in Alberta (K-12) and Ontario (Primary-Junior, Special Education) and is a member of the Ontario College of Teachers. Dr. MacDonald has extensive postsecondary teaching experience in Australia, Canada, and the United States. His teaching interests include educational psychology, health promotion, special and inclusive education, and teacher education. His research interests include health promotion, suicide prevention, program evaluation, and teacher education.

#### Dr. Andrew Allen

Dr. Allen has extensive expertise in Race, Class and Gender and Issues of Social Difference and Marginalization in Education and Schooling, Urban Education, Critical Teacher Education and Negotiating a Critical Teaching Practice, International Service Learning, Critical Race Theory, Critical Anti-Racism, Developing Teacher Identity and Factors Contributing to and Affecting the Process of Learning to Teach.

#### Dr. Naved Bakali

Naved Bakali completed his PhD from McGill University, Montreal, in Cultural and International Studies in Education. Prior to joining University of Windsor's Faculty of Education, Naved was an Assistant Professor of Education at the American University in Dubai. Drawing from critical race theory and post-colonial studies, Naved's research focuses on the study of anti-Muslim racism, also referred to as Islamophobia. Additionally, his research interests include internationalizing and decolonizing higher education, refugee education, Islamic pedagogy, and educational programing for survivors of trauma. His research provides a fresh and innovative perspective on Islamophobia within institutional settings, thus demonstrating the institutionalization of anti-Muslim racism across the global North and South. Naved has been the recipient of major international, national, and departmental grants and awards in recognition of his work. He is a dynamic scholar who believes in socially oriented action-research that challenges prejudice and inequality by combining his research with grassroots activism.

#### Dr. Clinton Beckford, Vice President People, Equity, and Inclusion

Dr. Beckford is the vice president of people, equity, and inclusion. His interests are geography education, environmental and sustainability education, teacher education, vulnerability and marginalization, participatory and collaborative active research methodologies, research in non-western contexts, service learning, and teacher development. Dr. Beckford is also interested in sustainable agriculture and tropical small-scale farming systems, food security and food justice, food, agriculture, and rural development, urban agriculture, environmental change, food, and agriculture, local, traditional, indigenous epistemologies in food and agriculture, participatory and collaborative action research methodologies.

#### **Professor Juliet Bushi**

Juliet is passionate about quality education and community invitation into educational spaces. Her scholarship and research centres on Black voices, experiences and history. Juliet is interested in research that aims to dismantle anti-Black racism, improve education practices and policies, and enhance physical and health literacy. Juliet is the founder of Canahari Multidisciplinary Summer Programs (<a href="www.canahari.ca">www.canahari.ca</a>), a non-profit organization she founded over six years ago that provides accessible, culturally and socially responsive summer programming and employment opportunities to Black and racial minority school-aged children and youths. She currently teaches health and physical education Course (EDUC 5313). Through research and community engagements, Juliet aims to combat social issues, injustices and disparities that impact learning and teaching. Juliet's research spans beyond North America to Europe and Africa. Juliet has taught courses such as Indigenous Health Studies, Introductory Health Studies, Lifestyle, Health and Wellness. Prior to joining the University of Windsor, Juliet was an elected school board trustee for the Regina

Catholic School Division. Juliet is currently a co-investigator on a SSHRC Partnership Development Grant focused on the impact of the living environment on older racialized immigrants' social connectedness.

#### Dr. Finney Cherian

Dr. Cherian's research interests are teacher education, social Justice/equity & educational law, Minority Language Learners (EAL), critical literacy & language arts, healthy literacy among minority populations and refugee groups (Specifically Women and Children), and literacy and technology.

#### Dr. Cam Cobb

Cam Cobb teaches in the Faculty of Education and Academic Development at the University of Windsor. He has lived and worked in South Korea and taught with the Toronto District School Board for eleven years. His research focuses on such topics as social justice issues in special education, co-teaching in adult leaning contexts, and narrative pedagogy in the arts.

#### Dr. Priscilla Corrêa

Priscila holds a Ph.D. in Mathematics Education and a Master of Science in Electrical Engineering. She has been involved in research about mathematics education in Canada and in Brazil. As a mathematics educator, Priscila is concerned about making the most out of her students' experiences in mathematics.

#### Dr. Lara Doan (on leave)

Dr. Doan's research is oriented by recent research into classroom life and the collectivities therein, particularly as informed by developments in ecological theories of learning and teaching as they relate to schooling systems. Her immediate research interests fall within the following clusters of scholarship: Pedagogies and mediating technologies; social equity and schooling; lived experiences of schooling as they relate to experiences of alienation and isolation; learning identities in schooled contexts, schooling traumas; and teaching transitions (e.g. from teacher candidate to beginning teacher). Dr. Doan teaches courses (e.g. "issues in Education") in the pre-service Teacher Education program developed around the relevance for curriculum development, social equity and social justice as these notions relate to experiences of teaching and learning, and healing histories of schooled hurts in formal learning contexts.

#### Dr. Christopher Greig

A historian, Christopher J. Greig's program of research is primarily focused on historical perspectives on Canadian men, boys, and masculinities. His work has looked at the production of 'idealized of boyhood' in postwar Ontario, 1945-1960. He is the author of various books including Ontario Boys: Masculinity and the Idea of Boyhood in Postwar Ontario, 1945 to 1960 (2014). His co-edited book Canadian Men and Masculinities: Historical Contemporary Perspectives appeared in 2012. His co-authored book Next to the Ice: Exploring the Culture and Community of Hockey in Canada was published in 2016.

#### Dr. Susan Holloway

Dr. Holloway's research interests are: multiliteracies, adult education, critical literacy, multimodal literacies, content area literacy, critical theory, feminist theory, socio-cultural approaches to second language acquisition theory, and Canadian literature.

#### Dr. Lindsey Jaber

Dr. Lindsey Jaber (née Leenaars) is an associate professor of Educational Psychology in the Faculty of Education. Dr. Jaber is also a registered Psychologist in the areas of School, Clinical, and Counselling Psychology with the College of Psychologists of Ontario. Dr. Jaber has extensive experience in the assessment and treatment of children, adolescents, and adults and is actively engaged in research regarding mental health, trauma, and intervention. Her professional and scholarly experience working in schools, community settings, and private practice has informed her research. Dr. Jaber has numerous publications, including research articles and book chapters on topics ranging from mental health and

wellness, childhood/adolescent development to violence, bullying, trauma, and suicide. She has presented at many national and international conferences and facilitated multiple training workshops for professionals.

#### Dr. Jean Kaya

Dr. Kaya is an Assistant Professor in Language and Literacy Education at the University of Windsor. His work magnifies how critical literacies in teacher education may serve to mediate social justice issues and engage communities in equitable practices and transformative social action. His work also focuses on teachers' intercultural learning, identities, experiences, and perspectives to inform decisions regarding the support they need to enhance their practices and students' experiences.

#### Dr. Alleson Mason

Alleson's work explores the important learning that takes place outside of schools, Black community education programs, community engagement and activism in education, and the experiences of Black students in the Canadian K-12 education system. She is intrigued by the concept of "community" and how people create and sustain communities.

#### Dr. James Oloo

James Oloo is an assistant professor in Educational Administration, Policy and Leadership. His research explores ways of improving learning experiences for all students. Dr. Oloo's research also seeks to better understand factors and conditions that enhance success among underrepresented students, including Indigenous students, and those from immigrant and refugee backgrounds. He is a former high school teacher.

#### Dr. Lana Parker

Lana holds a PhD in Language, Culture and Teaching from York University. She has taught in elementary and post-secondary contexts in Canada and abroad with an emphasis on improving equitable outcomes for all students. Lana writes and researches about relationality in education, meaning-making, neoliberalism, and the possibilities for ethically-informed pedagogy.

#### **Professor Aamer Shujah**

Professor Aamer Shujah is a permanent Sessional Lecturer in the Faculty of Education where he teaches Primary/Junior Science and the Urban Education Service Learning Course. In recognition of his contributions to education, Professor Shujah recently received the OPUS Teacher of the Year Award from the Organization of Part-Time University Students.

#### Dr. Clayton Smith

Dr. Smith's research interests include the International student experience: student satisfaction with promising practices for teaching culturally and linguistically diverse international students; sense of belonging for international students; micro-aggression of international students. Dr. Smith is also interested in student mentoring: mentoring teacher candidates within faculties of education; student mentoring in higher educational institutions. Lastly, he is interested in strategic enrollment management: connections and intersection of strategic enrollment management with equity, diversity, inclusion, and decolonization; strategic enrollment management plan analysis; critical analysis of strategic enrollment management in Canada.

#### Dr. Darren Stanley

Dr. Stanley's research interests are interdisciplinary in nature, touching upon the areas of complexity studies, cognition, teaching and learning, curriculum theory and design, ecojustice, and transdisciplinarity. Most recently, his attention has focused on course design, concept mapping, the pedagogy of statistics, and computational text and corpus analysis.

#### **Dr. Bonnie Stewart**

Dr. Stewart explores who we are within shifting identity constructs, institutional contexts, and the contemporary information ecosystem. Associate Professor of Online Pedagogy and Workplace Learning, Bonnie (she/they) has an extensive background in digital and experiential education, and in adult learning approaches to digital practice. Bonnie was an early MOOC researcher and ethnographer of Twitter as an academic environment, and currently investigates digital belonging, digital and data literacies, and systemic change in education, as well as the ethics of Generative AI.

#### **Dr. Christine Vanderkooy**

Pianist Dr. Christine Vanderkooy has performed as a soloist across Canada, and in the USA and Europe, including a European recital tour, the Eckhardt-Grammaté National Piano Competition, the Gaudeamus International Competition in the Netherlands, and was invited to perform at Carnegie Hall in the Dietrich Fischer Dieskau Workshop. Recent performances include an invitation to New York City by the Leschetizky Association, a debut of commissioned works by David L. McIntyre at the CFMTA national convention, a recital for the University Music Society national conference, and appearances with the Windsor Symphony Orchestra including Mozart's Concerto for Two Pianos, K. 365, Samuel Coleridge-Taylor's Nonet, and Bach's Concerto No. 5 in F minor. Her first CD release, Schubert and Schumann, was recorded at the Banff Centre for the Arts and has enjoyed critical acclaim including a cover story for Tempo magazine as well as radio play on CBC Radio and stations across the continent. Dr. Vanderkooy's newest album release, Schubert: Late Piano Works, produced by Mark Willsher, was recorded at the Glenn Gould Studio during Toronto's pandemic lockdown and comprises two works composed by Franz Schubert in the twilight of his life—the Sonata in C-minor, D. 958, and Drei Klavierstücke, D. 946.

#### Dr. Catherine Vanner, VPRI Research Chair

Catherine Vanner uses qualitative and participatory visual methods to study gender and education, with a focus on the ways in which education can transform and/or perpetuate norms and behaviours related to gender-based violence. She has conducted research in North America, in Africa, and transnationally. Her work centers feminist critical theories and perspectives. Prior to joining the Faculty of Education at the University of Windsor, she was a Postdoctoral Research Fellow in the Department of Integrated Studies in Education at McGill University. She previously worked as an Education Advisor or Consultant for organizations including Plan International, UNESCO, and the Canadian International Development Agency (now Global Affairs Canada).

#### Dr. Zuochen Zhang

Dr. Zhang holds a PhD in Curriculum Studies from the University of British Columbia in Canada. His research interests include action research, E-learning, ICT for development and ICT integration into school curriculum, International education, teacher education, and Teaching English as a Second Language (TESL)/ Teaching English as a Foreign Language (TEFL). He is the team leader of ICT Education in Xu and Connelly's (2013-2020) SSHRC Partnership Grant Project and Co-Editor of the Palgrave Macmillan Book, West-East Reciprocal Learning in Teacher Education: From Knowing to Doing.

#### Dr. Guoqiang (George) Zhou

Dr. Zhou taught at City University of New York before he joined in the University of Windsor. Using the post-colonial theory as a framework, Dr. Zhou proposed an inquiry-based argument approach to science teaching (Zhou, 2010 & 2012). According to his approach, the purpose of teaching is to convince students to appreciate science through a process of argumentation, rather than the use of scientific ideas to replace students' intuitive preconceptions. This approach emphasizes the inclusion of all students with various social, cultural, and experiential backgrounds during the process of knowledge construction. It implies a new understanding of being an effective science teacher. Traditionally, we think a person is a good teacher if he or she can speak clearly and present materials in a logical way. With the awareness of student preconception, we expect teachers to start their teaching from where students are. They do not only present information clearly and logically, but also know how to negotiate with students and persuade students to appreciate scientific notions.

### B.5.1.1b Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.

The Faculty has appointed 13 full-time faculty members since 2017 but continues to rely heavily on sessional instructors due to high enrolment. This new/revised program is more streamlined than the existing program, while still meeting accreditation requirements, and thus will reduce the overall number of sessional instructors. Forthcoming changes to the practicum component of the B.Ed. program are anticipated to further decrease the reliance on practicum advisors.

### B.5.1.1c Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.

N/A

### B.5.1.1d Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.

N/A

#### **B.5.1.2** Anticipated New Resources (QAF sections 2.1.2.6)

List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.

N/A

#### **B.5.1.3 Planned Reallocation of Resources and Cost-Savings**

Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)

N/A

#### B.5.1.4a Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)

Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.

Faculty:	N/A
Staff:	N/A
GA/TAs:	N/A

### **B.5.1.4b** Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)

Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	N/A
Space and Facilities:	The new/revised program may result in a heavier reliance on large lecture rooms, which will mean more use of 1101, 1121 & 1123 in the Education building, and/or reserving lecture rooms in other areas on campus.
Equipment (and Maintenance):	N/A

#### C. Program Details

### C.1 Admission Requirements (QAF section 2.1.2.5)

Describe new or changes to

- program-specific admission requirements,
- selection criteria,
- credit transfer,
- arrangements for exemptions or special entry, and
- alternative admission requirements, if any, for admission into the program, such as minimum average, additional language requirements or portfolios, recognition of prior work or learning experience (and how this will be assessed), etc.

N/A

#### C.1.1 Admission Requirements and Attainment of Learning Outcomes (QAF section 2.1.2.5)

Demonstrate that admission requirements for the revised program are sufficient to prepare students for successful attainment of the intended learning outcomes (degree level expectations) established for completion of the program.

#### Concurrent General Bachelor of Arts (Communication, Media and Film)/Bachelor of Education

Admission is to first-year only with a minimum high school average of 75% in six Grade 12 "U" or "M" courses including Grade 12 "U" English. Candidates not enrolling directly from secondary school may apply for the first year of the concurrent program and will be considered for admission on a case-by-case basis. Students must successfully complete the Bachelor of Arts degree program to be eligible to graduate with a Bachelor of Education degree.

#### Concurrent General Bachelor of Arts (Drama)/Bachelor of Education

Admission is to first-year only with a minimum of 75%. Applicants from high school must present six Grade 12 "U" or "M" courses including Grade 12 "U" English. Enrolment in this program is limited.

#### Concurrent General Bachelor of Arts (English)/Bachelor of Education

Admission is to first-year only with a minimum of 75%. Applicants from high school must present six Grade 12 "U" or "M" courses including Grade 12 "U" English. Enrolment in this program is limited

#### Concurrent General Bachelor of Arts (French Studies)/Bachelor of Education

Admission is to first-year only with a minimum of 75%. Applicants from high school must present six Grade 12"U" or "M" courses including Grade 12"U" English I, Grade 12"U" French, or their equivalents (such as College Boreal High School equivalency French courses) to be accepted. In addition, a minimum 75% in Grade 12U French (or equivalent) is required.

#### Concurrent General Bachelor of Arts (History)/Bachelor of Education

Admission is to first-year only with a minimum of 75%. Applicants from high school must present six Grade 12 "U" or "M" courses, including Grade 12 "U" English. Enrolment in this program is limited.

#### Concurrent General Bachelor of Arts (Political Science)/Bachelor of Education

Admission is to first-year only with a minimum of 75%. Applicants from high school must present six Grade 12 "U" or "M" courses including Grade 12 "U" English. Admission to this program is limited.

#### Concurrent General Bachelor of Arts (Psychology)/Bachelor of Education/Diploma in Early Childhood Education

Admission is to first-year only with a minimum of 75%. Applicants from high school must present six Grade 12 "U" or "M" courses including Grade 12 "U" English. Enrolment in this program is limited.

#### Concurrent General Bachelor of Arts (Visual Arts)/Bachelor of Education

Admission is to first-year only with an average of a minimum of 75%. Applicants from high school must present six Grade 12 "U" or "M" courses including Grade 12 "U" English. Enrolment in this program is limited.

#### Concurrent General Bachelor of Science (General Science)/ Bachelor of Education

Admission is to first-year only with a minimum of 80%. ENG4U, MHF4U, and two of SCH4U, SBI4U or SPH4U is required for applicants from high school. MCV4U is strongly recommended. A second science and math average of 70% is required.

#### Concurrent General Bachelor of Mathematics/Bachelor of Education

Admission is to first-year only with a minimum of 80%. ENG4U, MHF4U and MCV4U is required for applicants from high school. SPH4U is recommended. A minimum 70% average of math courses is also required.

#### Concurrent Modern Languages with Second Language Acquisition / Bachelor of Education

Normally, admission will be to first year only, with a minimum high school (or equivalent) average of 75%. Alternatively, students will be able to apply to transfer into the program with a minimum high school (or equivalent) average of 75%, at the sole discretion of the Associate Dean, Pre-Service. In order to be considered, applicants will need to present six Grade 12 "U" or "M" courses, including Grade 12 "U" English, or equivalent. Admission to this program will be limited.

Concurrent Bachelor of Music Education/ Bachelor of Education Admission will be to first year entering directly from high school only, with a minimum average of 75%. In addition to meeting the regular requirements for admission to the University, admission to Bachelor of Music programs is conditional upon a successful audition evaluated by faculty members in Music. The audition will consist of: (a) a theory evaluation test designed to show the nature and extent of the student's aptitude in music theory; (b) a performance of at least ten minutes' length on the student's major instrument, showing a grasp of a variety of styles. Candidates should contact a program advisor in Music for specific requirements in the various performance media. If an accompanist from Music is required, four weeks' prior notice must be given to the Music office, and an accompanist's fee will be charged. Candidates auditioning in Voice or Orchestral Instruments must perform at least one selection with accompaniment. Candidates should apply for an audition on-line at www.uwindsor.ca/music/audition-requirements.

The following are required of all accepted applicants:

- (a) completed application form with the documents noted on form;
- (b) birth certificate and Social Insurance Number (S.I.N.);
- (c) proof of Canadian Citizenship or permanent residency as defined by the Immigration Act (Canada), or of eligibility for employment in Canada (if the Ontario Certificate of Qualification or a Temporary Letter of Standing is to be awarded);
- (d) legal proof of change of name must be submitted where the name being used differs from that shown on the birth certificate.

- 4) Additional requirements:
- (a) Prior to September 9<sup>th</sup> August 31st, the candidate must present proof of a <u>clear (i.e., negative)</u> tuberculin test as required by the Ontario Ministry of Health. The test must have been administered during the previous twelve months. Failure to do so may result in removal from the program.
- (b) An official <u>clear (i.e., negative)</u> Police Vulnerable Sector Check. The <u>clear</u> check must have been obtained within the previous six months.
- (c) After acceptance, students are required to submit to the Faculty a recent photograph (passport-size) for identification purposes within the Faculty of Education.
- (d) Proof of various vaccination(s) may be required at times by school boards, the university and /or health unit mandates

As a note, the admission decisions are subsequently based on GPA and capacity related to teachable and division targets established in consultation with the Registrar's office.

#### C.2 Program Curriculum Structure/Program of Study (QAF sections 2.1.2.3 and 2.1.10)

NB: For graduate programs, provide evidence that each graduate student in the revised program is required to take a minimum of two-thirds of the course requirements from among graduate-level courses. Include course requirements with course numbers and course names. Identify in BOLD and STRIKETHROUGH the changes to program requirements.

#### Bachelor of Education (P/J)

#### Degree requirements:

**Total courses:** 60 credits (20 course equivalents)

(a) For all PJ Divisions (P/J, J/I, I/S):

#### Foundations (6 credits)

EDUC-5201. Foundations of Practice Pt. I (1.5) EDUC-5202. Foundations of Practice Pt. II (1.5) Philosophy of Education (1.5)

EDUC-5203. Educational Psychology (3)

EDUC-5210. Foundations of Practice (III) Law and Ethics - School Governance (1.5)

EDUC-5209. Critical Analysis of Social, Global & Cultural Issues in Education (1.5)

EDUC-5209. Critical Analysis of Social, Global & Cultural Issues in Education (1.5)

#### **Broadening Horizons (12 Credits)**

EDUC-5204. Differentiated Instruction (3)

EDUC-5206. Aboriginal Indigenous Ways of Knowing: Cultural, Political & Linguistic Contexts (1.5)

EDUC-5212. Anti-Oppressive and Culturally Sustaining Pedagogy (1.5)

EDUC-5312. Media Literacies and Digital Pedagogy (3.0)

EDUC 5211. Mental Health (1.5)

EDUC 5213. Teaching Culturally and Linguistically Diverse Learners (1.5)

(i) Primary/Junior Stream

#### **General Methodology Courses (24 Credits):**

EDUC-5215. Mathematics Foundations (1.5)

EDUC-5214. Critical Literacy (1.5)

EDUC-5216. Foundations of Elementary Math Pedagogy (3.0)

EDUC-5217. Differentiated Approaches in Elementary School Mathematics (1.5)

EDUC-5218. Concepts and Practices in Health and Physical Education (3.0)

EDUC-5311. Visual Arts Methodology (3) (1.5)

EDUC-5312. Digital Technology and Social Media Applications (3)

EDUC-5313. Health and Physical Education (3)

EDUC-5314. Language Arts Methodology (3)

EDUC-5315. Mathematics Methodology (3)

EDUC-5316. Music Methodology Pedagogy (3) (1.5)

EDUC-5317. Science and Technology (3)

EDUC-5318. Social Studies (3)

EDUC-5411. Drama Methodology (1.5)

EDUC-5412. Dance Methodology (1.5)

EDUC-5414. Language and Media Literacy (1.5)

#### **Electives (3.0 credits)**

One elective course that incorporates project-based learning and/or opportunities to conduct research (3 each):

EDUC-5219. Interdisciplinary Education for Sustainability (3)

EDUC-5401. Global Citizenship and Democratic Education (3)

EDUC-5208. Assessment and Evaluation (3)

EDUC-5405. Music Pedagogy (3)

EDUC-5406. STEM Education (3)

EDUC-5402. School, Community, and Family Partnerships (3)

**EDUC-5403. Gender and Sexuality in Education (3)** 

EDUC-5207. Service Learning Specialization (3)

EDUC-5499. Practicum (12)

For students who wish to teach in the Catholic school system in Ontario: EDUC-5200. Religious Education in Roman Catholic Schools (1.5)

Professional Development: Professional Learning Series (approximately 10 days during the Fall/Winter) (non-credit)

Courses used to calculate the major average are: All credit courses

#### Bachelor of Education (I/S)

Total courses: 60 credits (20 course equivalents)

#### Degree requirements:

(a) For all IS Divisions (P/J, J/I, I/S):

#### Foundations (6 credits)

EDUC-5201. Foundations of Practice Pt. I (1.5) EDUC-5202. Foundations of Practice Pt. II (1.5) Philosophy of Education (1.5)

EDUC-5203. Educational Psychology (3)

EDUC-5210. Foundations of Practice (III) Law and Ethics - School Governance (1.5)

EDUC-5209. Critical Analysis of Social, Global & Cultural Issues in Education (1.5)

EDUC-5209. Critical Analysis of Social, Global & Cultural Issues in Education (1.5)

#### **Broadening Horizons (9 Credits)**

EDUC-5204. Differentiated Instruction (3)

EDUC-5206. Aboriginal Indigenous Ways of Knowing: Cultural, Political & Linguistic Contexts (1.5)

EDUC-5212. Anti-Oppressive and Culturally Sustaining Pedagogy (1.5)

EDUC-5312. Media Literacies and Digital Pedagogy (3.0)

(ii) Junior/Intermediate Stream General Methodology Courses: EDUC 5221. Pedagogy of the Arts (1.5) EDUC-5225. Mathematics Foundations (1.5) EDUC-5321. Visual Arts Methodology (3.0) EDUC-5322. Digital Technology and Social Media Applications (3) EDUC-5323. Health and Physical Education (1.5) EDUC-5324. Language Arts (1.5) EDUC-5325. Mathematics Methodology (1.5) EDUC 5326. Music Methodology (1.5) EDUC-5327. Science (3) EDUC-5328. Social Studies (1.5) EDUC-5421. Drama Methodology (1.5) EDUC-5422. Dance Methodology (1.5) EDUC-5424. Language and Media Literacy (1.5) Specialised Methodology Courses: One Teachable (6) to be selected from the following: EDUC-5352. Art (6) EDUC-5356. English (6) EDUC-5358. French (6) EDUC-5359. Geography (6) EDUC-5362. History (6) EDUC-5366. Mathematics (6) EDUC-5367. Music (Vocals) (6) EDUC-5368. Music (Instruments) (6) EDUC-5369. Health and Physical Education (6) EDUC-5379. Drama (6) EDUC-5380. General Science (6) For students who wish to teach in the Catholic school system in Ontario: EDUC-5200. Religious Education in Roman Catholic Schools (1.5) (ii) Intermediate/Senior Stream

#### General Methodology Courses (24 Credits):

EDUC-5231. Pedagogy of the Arts (1.5 3)

EDUC-5331. Visual Arts Methodology (1.5)

EDUC-5332. Digital Technology and Social Media Applications (3)

EDUC-5333. Health and Physical Education (1.5)

EDUC-5335. Mathematics (1.5)

EDUC-5336 Music Methodology (1.5)

EDUC-5337. Science (1.5)

EDUC-5338. Social Studies (1.5)

EDUC-5339. Career and Guidance Education (1.5)

EDUC-5431 Drama Methodology (1.5)

EDUC-5408. Engaging and Supporting the Adolescent Learner (3)

EDUC-5334. Language across the Curriculum (1.5 3)

**EDUC-5407. Teaching Scientific and Mathematical Inquiry (3)** 

#### **Specialised Methodology Courses:**

Two Teachable (6 each) to be selected from the following:

EDUC-5352. Art (6)

EDUC-5356. English (6)

EDUC-5358. French (6)

EDUC-5359. Geography (6)

EDUC-5360. Media Arts (6)

EDUC-5362. History (6)

EDUC-5366. Mathematics (6)

EDUC-5367. Music (Vocals) (6)

EDUC-5368. Music (Instruments) (6)

EDUC-5369. Health and Physical Education (6)

EDUC-5370. Business Studies (6)

EDUC-5373. Biology (6)

EDUC-5374. Chemistry (6)

**EDUC-5376. Physics (6)** 

EDUC-5377. Social Sciences (6)

EDUC-5379. Drama (6)

EDUC-5380. General Science (6)

#### Other Requirements (6.0 credits)

#### Two additional courses that incorporate project-based learning and/or opportunities to conduct research (3 each):

EDUC-5219. Interdisciplinary Education for Sustainability (3)

EDUC-5401. Global Citizenship and Democratic Education (3)

EDUC-5208. Assessment and Evaluation (3)

EDUC-5405. Music Pedagogy (3)

EDUC-5406. STEM Education (3)

EDUC-5402. School, Community, and Family Partnerships (3)

EDUC-5403. Gender and Sexuality in Education (3)

EDUC-5207. Service Learning Specialization (3)

EDUC-5499. Practicum (12)

For students who wish to teach in the Catholic school system in Ontario: EDUC-5200. Religious Education in Roman Catholic Schools (1.5)

Professional Development: Professional Learning Series (approximately 10 days during the Fall/Winter) (non-credit)

Courses used to calculate the major average are: All credit courses

Description of thesis option (if applicable): N/A

### Changes to the Concurrent Bachelor of Science (General Science)/ Bachelor of Education program

(See document PDC250515-5.11 for more details))

[...]

Computer Science: COMP-1400 and COMP-1410, or COMP-1047 and COMP-2057, or COMP-2067 and COMP-2087

Note: COMP-1047 or COMP-2067 and COMP-2087 count as a 'science pair' (see requirement (b) above) and will be included in the calculation of the major average.

#### C.2.1 Co-op/Experiential Learning Component (if applicable)

Provide requirements for the co-op/experiential learning component, including length of co-op/experiential learning component and credit weight, and explain how they differ for students who complete the experiential learning option and those who opt not to.

\*Ensure that learning outcomes for the co-op/experiential learning component have been included in the learning outcomes table. (C.4)

EDUC-5499. Practicum is a required experiential learning course for all B.Ed. students. Students cannot opt out of the experiential learning component as it is a requirement of the OCT. EDUC-5499 has an overall course weight of 12. Teacher Candidates are required by the OCT to successfully complete a minimum of 80 days of practice teaching with an associate teacher. Teacher candidates in the University of Windsor B.Ed. program complete four practicum placements over the two years of the program. The practicum placements occur at the end of the fall and winter terms for 4-5 weeks in year 1 and year 2. The learning outcomes for EDUC-5499 are included in the learning outcomes table below.

#### Is the completion of the experiential learning/co-op component a requirement of the revised program?

Yes.

#### C.2.2 Suggested Sequencing for Revised Program (Optional)

Provide suggested program sequencing for each year of the revised program (including any work/study/placement sequencing), ensuring that all pre-requisites are met in the sequencing. For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

The suggested sequencing is currently being developed and so is not included here.

#### C.2.3 Program Structure/Requirements and Attainment of Learning Outcomes (QAF section 2.1.2.6)

Describe how the structure and requirements of the revised program are sufficient to prepare students for successful attainment of the intended program-level learning outcomes and the associated undergraduate or graduate degree level expectations.

The program has been specifically designed to meet the requirements of OCT and the current needs within the classroom. Course learning outcomes have been specifically developed with these requirements in mind. The requirements for a graduate have also been aligned to the University of Windsor's characteristics of a graduate. Assessment in the Faculty of Education is performed using a wide range of approaches including exams, class participation, case studies, research papers, presentations, and self-and peer-evaluation to curate a rich assessment of the attainment of learning outcomes and provide students with a diverse number of ways to express their knowledge.

#### C.3.1 For Graduate Program ONLY (QAF sections 2.1.2.3; Senate Co-op Policy)

#### **C.3.1.1** Normal Duration for Completion

Provide a clear rationale for program length that ensures that the revised program requirements can be reasonably completed within the proposed time period.

N/A

#### **C.3.1.2** Program Research Requirements

For research-focused graduate programs, provide a clear indication of the nature and suitability of the major research requirements for completion of the revised program.

N/A

#### C.3.1.3 New or Changes to Fields in a Graduate Program (optional)

Where fields are contemplated, provide the following information: The master's program comprises the following fields: ...[list, as applicable] The PhD program comprises the following fields: ...[list, as applicable]

N/A

#### **C.3.2 For All Program Proposals**

#### C.3.2.1 New or Changes to Standing Required for Continuation in Program

Minimum average requirements for continuation in the program. Just conform to the regulations for standing required for continuation in the program as set out in Senate policy. Specify new or changes to standing required for continuation in the experiential learning option or co-op option of the revised program, where applicable.

STANDING REQUIRED FOR CONTINUATION

#### **Faculty Courses:**

Teacher Candidates must maintain an overall cumulative average of 70% throughout the duration of the program.

Teacher Candidates, who obtain three or more final grades below a 60-62.9% in any course in the program, or one or more final grades of 0-49.9% in any course in the program, over the duration of the program, will have failed the Bachelor of Education (BEd) Degree and will not be eligible for recommendation to the Ontario College of Teachers for certification. In all such cases, upon a cumulative academic record as defined above, Teacher Candidates will be required to meet with the Associate Dean, Teacher Education immediately to review their academic standing, which may lead to the requirement to withdraw from the program. Teacher Candidates may be provided with an opportunity to return to the Faculty of Education to fulfill outstanding requirements for the completion of the BEd Degree. Conditions of reinstatement are the sole prerogative of the Dean or her/his their designate.

#### Practicum:

Each teacher candidate receives a final Pass/Fail Non-Pass grade for Practice Teaching Practicum (EDUC-5499). A pass is an essential prerequisite for both the BEd degree and recommendation for certification to the Ontario College of Teachers. The Faculty Advisor determines the Pass/Non-Pass based on practicum reports and course assignments/assessments. The Pass/ Fail determination is based on the Faculty Advisor's Final Summative Practicum Report/Portfolio Assessment, which documents the overall field experience using a range of criteria. Satisfactory performance in practice teaching is essential for success. Generally, in order to pass, a teacher candidate will have received "Satisfactory" Summative assessments from the Associate/Mentor Teacher at the end of each placement. However, in cases where a teacher candidate receives a "Borderline" Summative assessment in the first placement, but receives "Satisfactory" Summative evaluations in all subsequent placements, the teacher candidate's status will be reviewed by the Associate Dean, Pre-Service.

A teacher candidate who receives a "Borderline" assessment in either of the final two placements will be required to complete an additional placement and obtain a "Satisfactory" Summative assessment. A teacher candidate who receives a Summative "Borderline" assessment will be notified in writing that he/she is in danger of not meeting the standard required in order to obtain a Pass. Teacher candidates who receive either two Summative "Borderline" assessments or one Summative "Unsatisfactory" assessment have not met the standard required to obtain a Pass in EDUC-5499. All such cases will be reviewed by the Associate Dean, Pre-Service, who will determine the next steps in the process. Placements which are terminated by the school will be considered "Unsatisfactory."

Teacher Candidates who receive an "Unsatisfactory" Summative Assessment are at-risk of receiving a Non-Pass (NP) in Practicum (EDUC 5499), and will be referred to the Associate Dean, Teacher Education. The Associate Dean will determine the Teacher Candidate's status in the program, which may include the requirement to withdraw, the completion of a makeup placement, or referral to the Professional Standards Committee. This determination will be communicated to Teacher Candidates in writing. Teacher Candidates who have received an Unsatisfactory Summative Assessment are encouraged to contact the Student Success Coordinator. It should be noted that Teacher

<u>Candidates who need to complete an additional placement in their graduating year may have their convocation</u> postponed.

#### Practicum Failure

It should be noted that failure may result from any serious contravention of the Ontario College of Teachers Standards of Practice and Ethical Standards for the Teaching Profession, including, but not limited to:

- Professional misconduct during the practicum component of the Faculty of Education program;
- · Academic misconduct during the practicum component of the Faculty of Education program; and/or
- Neglect of teaching responsibilities and/or poor teaching performance during the practicum.

Failure due to issues related to performance in teaching practice, include, but are not limited to:

- Unsatisfactory performance in teaching practice
- (2 borderline or 1 unsatisfactory summative assessment); and/or
- An unsatisfactory portfolio assessment by the Faculty Advisor.
- Receiving NP in EDUC 5499 from the Faculty Advisor as a result of an unsatisfactory placement or non-pass of course assignments/assessments.

#### Failure for Cause

In certain circumstances a candidate may be deemed to have failed the Practice Teaching Practicum course, EDUC 5499, for cause. Failure for cause may result from professional misconduct during the practicum and/or gross neglect of teaching duties. All cases of this kind are referred for investigation and decision to the Associate Dean, Pre Service Teacher Education, who may refer the matter to the Professional Standards Committee.

#### Sessional records

Sessional records include term assignments, oral and written tests, and practical work. The general attitude of the candidate to his or her work, adaptability to teaching, and the probability of future success as a teacher may be taken into consideration in determining sessional standing.

#### Final grades

Final grades awarded are based upon the accumulated evaluation of the candidate. Formal final examinations may be held; however, no formal supplemental examinations will be allowed.

#### C.3.2.2 New or Changes to Standing Required for Graduation

Minimum average requirement to graduate in the program. Must conform to the regulations for standing required for continuation in the program as set out in Senate policy. Specify new or changes to standing required for graduation in the experiential learning option or co-op option of the revised program, where applicable.

#### STANDING REQUIRED FOR GRADUATION

To complete the Bachelor of Education (BEd) Degree and be recommended to the Ontario College of Teachers for certification, teacher candidates must meet the expectations in all areas of the <u>pre-service teacher</u> education program <u>including a 70% cumulative average</u>. This means that candidates must successfully complete their course work, field experience (Each teacher candidate must receive a pass in EDUC-5499 as a prerequisite for both the BEd degree and recommendation for certification to the Ontario College of Teachers), <u>and the</u> professional learning series activities and the <u>Professional Growth Portfolio</u>. <u>For additional information please refer to 'Standing Required for Continuation'.</u>

#### **TEACHER CERTIFICATION**

The Faculty of Education provides programs and courses in teacher education but does not issue a teaching certificate. The responsibility for teacher certification lies with the Ontario College of Teachers. Upon successful completion of the requirements for teacher certification in Ontario, a recommendation will be made by the Dean of the Faculty to the Ontario College of Teachers indicating eligibility for the Ontario Certificate of Qualification. Candidates who

successfully complete either the Consecutive or the Concurrent Programs of Study including Practice Teaching Practicum will be awarded the BEd degree of the University of Windsor, and will be recommended to the Ontario College of Teachers indicating eligibility for an Ontario Certificate of Qualification.

#### **All Concurrent Programs**

70% major average and 60% cumulative average in the General BA/BSc/BMath/BMus. 70% major average in the Bachelor of Education.

### C.4 NEW OR CHANGES TO LEARNING OUTCOMES (Degree Level Expectations)(QAF section 2) COMPLETE THIS TABLE FOR UNDERGRADUATE PROGRAMS

In the following table, provide the specific learning outcomes (degree level expectations) that constitute the overall goals of the Combined program or Concurrent offering (i.e., the intended skills and qualities of graduates of this program). Link each learning outcome to the Characteristics of a University of Windsor Graduate" by listing them in the appropriate rows. A learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate. All University of Windsor programs should produce graduates able to demonstrate each of the nine characteristics. Program design must demonstrate how students acquire all these characteristics. All individual courses should contribute to the development of one or more of these traits: a program in its entirety must demonstrate how students meet all of these outcomes through the complete program of coursework. Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes (degree level expectations). For Combined Programs and Concurrent Offerings: The program learning outcomes would include the outcomes for the two standalone programs with a few additional outcomes to reflect the benefits of pursuing the two disciplines in an integrated manner. [For learning outcome A, the integration of knowledge can be within a program and between the two programs.] For programs with an Experiential Learning or Co-op Option: Include learning outcomes for the program with a few additional outcomes highlighted to reflect the benefits of pursuing the experiential learning/co-op option.

#### Concurrent PJ Learning Outcomes (Senate approved April 11, 2025)

Program Learning Outcomes (Degree Level Expectations)  This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.  At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate  A UWindsor graduate will have the ability to	COU-approved Undergraduate Degree Level Expectations
A. Make decisions based on an understanding of the development of children (intellectual, physical, emotional, social, creative, spiritual, moral), and the nature of learning; demonstrating this understanding by the following:  • Respect and care for all students' physical, psychological, and educational well-being, guided in their work by the nature and characteristics of the learners (Also applies to E, F & G)  • Create and maintain inclusive classroom environments that engage and facilitate the learning of all students (Also applies to E)  • Design lesson and unit plans with clear	A. the acquisition, application and integration of knowledge	1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
curricular and pedagogical goals, and with appropriate assessment and evaluation metrics (Also C, E, G, & H)  • Recognize, differentiate among, select, and apply general and subject specific theories and models of teaching and learning (Also applies to C, E, F, G, H.)		
Apply their knowledge of subject-matter in Ministry of Education curriculum documents in the primary/junior division and curriculum specialization (Also applies to C, H.)		
B. Identify a range of knowledge and perspectives, including the importance of research.  Locate, examine, assess, analyze and apply professional literature related to educational practice at the Primary/Junior level.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	<ol> <li>Depth and Breadth of Knowledge</li> <li>Knowledge of Methodologies</li> <li>Application of Knowledge</li> <li>Awareness of Limits Knowledge</li> </ol>
Critically examine the impact of colonization on education and identify strategies for decolonizing teaching practices.	l .	
C. Critically reflect and articulate a plan for continued professional learning to enhance and develop their practice (Also applies to I.)	C. critical thinking and problem-solving skills	Depth and Breadth of     Knowledge     Knowledge of Methodologies     Application of Knowledge
Engage in observation, critique, and assessment focused on improving student learning.		5. Awareness of Limits of Knowledge
Engage in critical perspectives on different theories of assessment at the Primary/Junior level		
Use instructional strategies, technologies, tools, and media, including assistive and adaptive learning technologies appropriate to students' needs, abilities and contexts		
Employ strategies to elicit critical and creative thinking and develop problem solving capabilities in students (Also applies to H.)		

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
Critically analyze issues in education and the role of teachers in society, informed by a sound knowledge of the social, historical, political, and cultural foundations of public education.		
D. Apply literacies, ways of knowing, and pedagogical expertise in the context of subject-matter knowledge at the Primary/Junior level (Also applies to A.)	D. literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
Communicate fluently and proficiently in both oral and written forms in academic and professional settings (Also applies to F.)		
Employ effective practices and subject expertise to support and develop students' abilities in reading, writing and mathematics including financial literacy, and physical and mental health literacy.		
E. Describe the values of social justice, equity, and diversity in all aspects of their professional roles. Engage and embrace the strengths of English language learners and multi-lingual learners	E. responsible behaviour to self, others and society	<ul><li>5. Awareness of Limits of Knowledge</li><li>6. Autonomy and Professional Capacity</li></ul>
Contribute to the life of the school and community by employing effective approaches to communication and collaboration with school and community partners (Also applies to F.)		
Incorporate materials and/or strategies that raise local, national and global issues of equity and justice		
Utilize effective curricular, pedagogical, and evaluative tools and practices to promote the educational success of Indigenous learners (Also applies to A, C, F.)		
Utilize effective curricular, pedagogical, and evaluative tools and practice to promote the educational success of marginalized and racialized learners		

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
Identify opportunities to advance social responsibility and environmental sustainability.(Also applies to A.)		
Facilitate the civic responsibility of students and the development of citizenship		
F. Cultivate and support collaborative and communicative abilities in learners through a variety of approaches appropriate for the Primary/Junior level	F. interpersonal and communications skills	<ul><li>4. Communication Skills</li><li>6. Autonomy and Professional Capacity</li></ul>
Apply and integrate educationally appropriate uses of social media and communications technologies for children. (Also applies to G.)		
G. Respond to and be responsible to learners, families, colleagues, and communities (Also applies to A, F.)	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
Promote collegiality, cooperation, and professionalism in schools and among teachers in an equity-based context (Also applies to A, F.)		
H. Engage in inclusive and collaborative pedagogical praxis that values diversity and prepares students for living in a global, multicultural and equity-informed context (Also applies to A, C.)	H. creativity and aesthetic appreciation	<ol> <li>Knowledge of Methodologies</li> <li>Application of Knowledge</li> <li>Autonomy and Professional Capacity</li> </ol>
I. Explain the transformative power of learning for individuals and communities.  Develop diagnostic, formative and summative tools to assess individual and community learning at the Primary/Junior level	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity
Utilize classroom research to advance their own professional practice (Also applies to B, D.)		
Facilitate the application of subject-matter to real-life experience in areas such as career education and financial literacy, and foster lifelong learning habits and postsecondary aspirations in students (Also applies to B.)		

Concurrent IS Learning Outcomes (Senate approval April 11, 2025)

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
A. Make decisions based on an understanding of the development of youth (intellectual, physical, emotional, social, creative, spiritual, moral), and the nature of learning; demonstrating this understanding by the following:  • Respect and care for all students' physical, psychological, and educational well-being, guided in their work by the nature and characteristics of the learners (Also applies to E, F, G)  • Create and maintain inclusive classroom environments that engage and facilitate the learning of all students (Also applies to E)  • Design lesson and unit plans with clear curricular and pedagogical goals, and with appropriate assessment and evaluation metrics (Also applies to C, E, G, & H)  • Recognize, differentiate among, select, and apply general and subject specific theories and models of teaching and learning (Also applies to C, E, F, G, H)  Apply their knowledge of subject-matter in Ministry of Education curriculum documents in the Intermediate/Senior division and curriculum specialization (Also applies to C, H.)	application and integration of knowledge	1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge
B. Identify a range of knowledge and perspectives, including the importance of research  Locate, examine, assess, analyze and apply professional literature related to educational practice at the Intermediate/Senior level  Critically examine the impact of colonization on	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	<ol> <li>Depth and Breadth of Knowledge</li> <li>Knowledge of Methodologies</li> <li>Application of Knowledge</li> <li>Awareness of Limits Knowledge</li> </ol>
education and identify strategies for decolonizing teaching practices.  C. Critically reflect and articulate a plan for continued professional learning to enhance and develop their practice (Also applies to I.)	C. critical thinking and problem-solving skills	Depth and Breadth of     Knowledge     Knowledge of Methodologies     Application of Knowledge

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
Engage in observation, critique and assessment to improve student learning.		5. Awareness of Limits of Knowledge
Engage in critical perspectives on different theories of assessment at the Intermediate/Senior level		
Use instructional strategies, technologies, tools, and media, including assistive and adaptive learning technologies appropriate to students' needs, abilities and contexts		
Employ strategies to elicit critical and creative thinking and develop problem solving capabilities in students (Also applies to H.)		
Critically analyze issues in education and the role of teachers in society, informed by a sound knowledge of the social, historical, political and cultural foundations of public education		
D. Apply literacies, ways of knowing, and pedagogical expertise in the context of subject-matter knowledge at the Intermediate/Senior level. (Also applies to A.)	D. literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
Communicate fluently and proficiently in both oral and written forms in academic and professional settings (Also applies to F.)		
Employ effective practices and subject expertise to support and develop students' abilities in reading, writing and mathematics including financial literacy, and physical and mental health literacy		
E. Describe the values of social justice, equity, and diversity in all aspects of their professional roles	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional
Engage and embrace the strengths of English language learners and multi-lingual learners		Capacity

Program Learning Outcomes (Degree Level Expectations) This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.	Characteristics of a University of Windsor Graduate	COU-approved Undergraduate Degree Level Expectations
At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
Contribute to the life of the school and community by employing effective approaches to communication and collaboration with school and community partners (Also applies to F.)		
Incorporate materials and/or strategies that raise local, national and global issues of equity and justice		
Utilize effective curricular, pedagogical, and evaluative tools and practices to promote the educational success of Indigenous learners (Also applies to A, C, F.)		
Utilize effective curricular, pedagogical, and evaluative tools and practice to promote the educational success of marginalized and racialized learners. (Also applies to A, C, F).		
Identify opportunities to advance social responsibility and environmental sustainability (Also applies to A.)		
Facilitate the civic responsibility of students and the development of citizenship		
F. Cultivate and support collaborative and communicative abilities in learners through a variety of approaches appropriate for the Intermediate/Senior level.	F. interpersonal and communications skills	<ul><li>4. Communication Skills</li><li>6. Autonomy and Professional Capacity</li></ul>
Apply and integrate educationally appropriate uses of social media and communications technologies for youth (Also applies to G.)		
G. Respond to and be responsible to learners, families, colleagues, and communities (Also applies to A, F.)	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
Promote collegiality, cooperation, and professionalism in schools and among teachers in an equity-based context (Also applies to A, F.)		

Program Learning Outcomes (Degree Level	Characteristics of a	COLL ammount lindament dusts
Expectations)	University of Windsor	COU-approved Undergraduate
This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each	Graduate	Degree Level Expectations
of the boxes associated with a graduate attribute.		
At the end of this program, the successful student will know and be able to:	A UWindsor graduate will have the ability to demonstrate:	
H. Engage in inclusive and collaborative pedagogical praxis that values diversity and prepares students	H. creativity and aesthetic appreciation	Knowledge of Methodologies     Application of Knowledge
for living in a global, multicultural and equity- informed context (Also applies to A, C.)	destricte appresiation	Autonomy and Professional     Capacity
I. Explain the transformative power of learning for individuals and communities	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity
Develop diagnostic, formative and summative tools to assess individual and community learning at the Intermediate/Senior level		
Utilize classroom research to advance their own professional practice (Also applies to B, D.)		
Facilitate the application of subject-matter to real- life		
experience in areas such as career education and financial literacy, and foster lifelong learning habits and postsecondary aspirations in students (Also applies to B.)		

#### C.4.3 Mode of Delivery (QAF section 2.1.2.2)

Demonstrate that the proposed modes of delivery are appropriate to facilitate students' successful attainment of the new or revised program learning outcomes. Discuss online vs. face-to-face (e.g., lecture, seminar, tutorial, lab) modes of delivery, as well as specialized approaches intended to facilitate the acquisition of specific skills, knowledge, and attitudes.

Delivering Methodology courses in a Bachelor of Education program face-to-face in small classes of approximately 40 students ensures personalized instruction, active engagement, and practical skill development. Small class sizes allow for interactive discussions, hands-on teaching practice, and immediate feedback from instructors. Face-to-face learning fosters collaboration, peer support, and real-time problem-solving, which is essential for preparing future educators. Additionally, in-person instruction enables the modelling of effective teaching strategies, classroom management techniques, and student-centered learning approaches that are difficult to replicate in online or large lecture settings. Similarly, all Foundations and Broadening Horizons courses will be offered face-to-face; however, in recognition of changing student needs as expressed through student feedback, financial pressures on the university, and the advanced online pedagogical skills of our faculty and instructors, we will consider certain sections of Foundations/Broadening Horizons for online delivery.

#### D. MONITORING AND EVALUATION (QAF section 2.1.2.4)

Describe and explain the appropriateness of the proposed methods of assessing student achievement given the new or revised intended learning outcomes and degree level expectations.

There are no significant changes here from the existing program.

#### D.1 Plan for Documenting and Demonstrating Program Quality and Student Performance (QAF section 2.1.2.4)

Describe the appropriateness of the plans to monitor and assess:

- the overall quality of the revised program;
- whether the revised program is achieving in practice its proposed objectives;
- whether its students are achieving the program-level learning outcomes;
- the perceived student workload and student experience; and
- how the resulting information will be documented and subsequently used to inform continuous program improvement.

There are no significant changes here from the existing program. However, the Faculty of Education is currently developing a strategic plan that aligns with the University of Windsor Aspire Strategic Plan, which will be released shortly. In addition, the Faculty of Education is preparing for an accreditation process with the Ontario College of Teachers (OCT) for the new program. The faculty will also undergo another IQAP review beginning next year.

#### E. NEW OR REVISIONS TO EXPERIENTIAL LEARNING/CO-OP COMPONENT ONLY (Senate Co-op Policy)

[Complete this section ONLY if the program change includes new or revisions to the experiential learning/co-op component involving paid or unpaid placements.]

#### E.1 Experiential Learning Component and Nature of Experience (Ministry section 2)

Describe the new or revised experiential learning component and the nature of the experience (field placement, required professional practice, service-learning, internship, etc.)

N/A

#### E.2 Knowledge and Skills Brought to the Workplace

Provide a description of the knowledge and skills that students will be bringing to the workplace/placement based on the revised curriculum.

The program's strong anti-racist, anti-oppressive, and social justice focus ensures that future educators are equipped to create inclusive and equitable learning environments. By incorporating significant Primary/Junior (P/J) and Intermediate/Senior (I/S) specific content and minimizing content overlap, the revised curriculum responds to the diverse needs of Ontario classrooms. The integration of action research and increased school and community involvement emphasizes the importance of practical, real-world applications of educational theory, ensuring that teacher candidates are prepared to address systemic inequities and foster transformative learning experiences.

#### E.3 Evidence of Availability of Placements (Ministry section 2)

Provide evidence of the availability of **sufficient** good quality positions both inside and outside the Windsor area for the new or revised co-op/experiential learning option (including names and contact information of potential employers, written statements or surveys from potential employers; and employer feedback concerning the hiring of graduates). Provide a summary of the types of positions that would be suitable at each level of work-term. How will these placements/opportunities be developed? [NB: For co-op programs, the majority of Ontario placements should qualify for the Co-op Education tax credit. See Policy on Co-op Programs for more details.]

Our B.Ed. program performs an important and invaluable service function in the community. Every student in the B.Ed. program spends between 80-100 days working in a school with elementary and/or secondary learners and alongside Associate Teachers of a regional school board (The Greater-Essex County District School Board, The Windsor-Essex Catholic District School Board, The Lambton-Kent District School Board, The St. Clair Catholic District School Board) or, more recently, from a schoolboard elsewhere in Ontario. By working in professional communities that include associate teachers, school administration, faculty advisors, and a course-based peer group, teacher candidates are responsive and responsible to learners, schools, colleagues, and communities and work in partnership with these

groups. As a token of appreciation for the associate teachers that take the teacher candidates, the faculty hosts a yearly banquet in celebration of the dedication of the school boards and teachers.

Throughout the semester the faculty also hosts a number of school boards so that they may recruit and promote themselves to the teacher candidates.

#### E.4 Supervision of Placements (QAF section 2.1.2.6)

If required, explain the provision of supervision of new or revised experiential learning opportunities.

There are no significant changes here from the existing program.

#### **E.5 Fees Associated with Experiential Learning Component**

Provide information on the fees associated with the new or revised experiential learning component, if applicable. NB: all proposed fees must be approved as part of the University's operating budget, via the Ancillary Fee Committee.

There is no change from the current program with respect to fees associated with the experiential learning component.

#### E.6 AAU Council Approval of New or Revised Co-op Component

Please obtain signatures for the following statement for new/revised co-op programs.

Before a determination can be made regarding the feasibility of a co-op program, there must be a clear indication of support for the program from the AAU. Support implies that the area will provide ongoing departmental funding to establish a co-op faculty representative who will liaise with the Centre for Career Education in the operation of the program and that the area will ensure that an adequate number of faculty members in the AAU or program contribute to the co-operative education program by grading work-term reports, attending and evaluating work-term presentations, assisting in the job development process, establishing a departmental co-op committee as appropriate, etc. (see Policy on Co-op Programs, Summary of AAU/Faculty Member Involvement in a Co-operative Education Program, for more on the role of the AAU and faculty members). This commitment must be agreed to by the AAU Council at a meeting at which the development or modification of a co-op program was considered and approved.

Signed agreement by the AAU Head, acting as chair of the AAU Council, that AAU members support the development of the co-op program.\*

Name of AAU Head (typed or e-signature): [Approval of the program by the AAU Council shall constitute agreement and support by AAU members of development of the co-op program.]	the
Name of Director of the Co-op Services (typed or e-signature ):	nent

#### E.7 Guidelines for the Establishment of New/Revised Co-op Programs: CHECKLIST

Final Overview: Please complete this checklist to ensure that the Senate-approved guidelines for the establishment of a new co-op program have been addressed.

N/A

#### **APPENDIX A – BUDGET SUMMARY SHEET**

No additional funds will be required for the program change. Contact the Office of Quality Assurance for assistance in completing this form. Tuition Fee and Funding Level (Program Weight) Assessed by Ministry (sections 4&5)

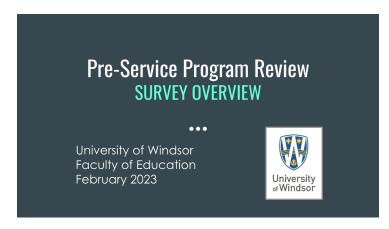
Projections of Enrolment, Expenditures and Revenues						
(enrolments over 5 years)						
Year	1	2	3	4	5	Total
Revenue						
Tuition income*						
Potential Provincial funding**						
Other sources of funding (please list)						
Total Revenue						
Expenses						
Additional Faculty member						
Additional Staff/Technician						
GA/TA***						
External Examiners (for graduate programs)						
Library Resources						
New Facilities/Equipment						
Facilities/Equipment Maintenance						
Technology/CTL resources						
Other expenses						
(please list)						
Total Expenses						
Net Income						

<sup>\*</sup>Estimate \$xxx per full-time equivalent domestic undergraduate student; \$xxx per full-time equivalent international undergraduate student; \$xxxx per full-time equivalent domestic Masters student; \$xxxx per full-time equivalent international Masters student; \$xxxx per full-time equivalent domestic doctoral student; \$xxxx per full-time equivalent international doctoral student.

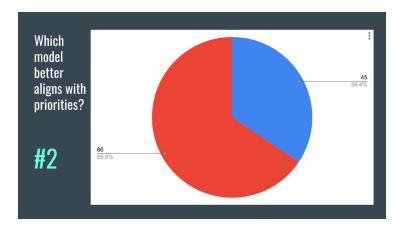
<sup>\*\*</sup>Estimate \$xxx per full-time equivalent domestic undergraduate student; \$xxx per full-time equivalent international undergraduate student; \$xxxx per full-time equivalent domestic Masters student; \$xxxx per full-time equivalent international Masters student; \$xxxx per full-time equivalent domestic doctoral student; \$xxxx per full-time equivalent international doctoral student.

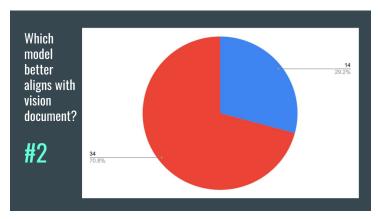
<sup>\*\*\*</sup>Estimate \$xxx per GA/TA allocation

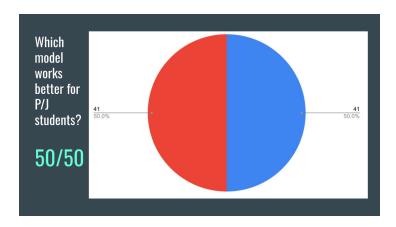
APPENDIX B — SUMMARY OF MULTIPLE POINTS OF DATA COLLECTION

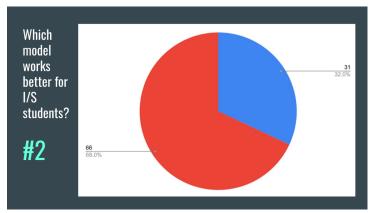


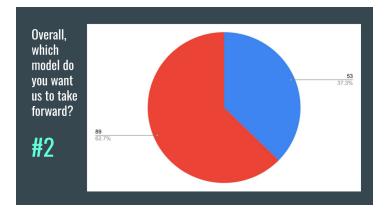


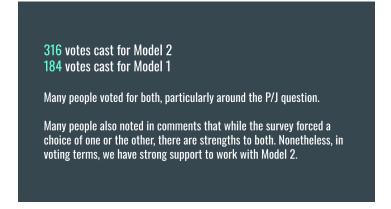












#### **SO.**

- 1. What are key distinctions of Model 2?
- 2. What changes were suggested/need addressing with Model 2? How do we propose to address them?
- 3. What is our process/mandate?

#### WHAT MAKES MODEL 2 DISTINCT?

- Student specialization & choice: SLP Yr 1 + Elective stream Yr 2
- Mandatory courses:

Methodologies = same

Broadening Horizons = 10.5 credits vs 18 (Mental Health & Sustainability move to streams, Assessment/Evaluation & Reflective Practitioner gone)

#### COMMON FEATURES OF BOTH NEW MODELS:

- All courses are single term (except Service Learning)
- Students take fewer courses per term
- Separate P/J & I/S Methodologies
- More courses are 3 credit rather than 1.5

#### **ISSUES IDENTIFIED IN COMMENTS:**

CAVEAT #1 - not all issues relate to Model 1 v Model 2 but to common features or to specific courses

CAVEAT #2 - 'as intended' vs. 'as taught' is an HR issue, not a design issue Also...soapboxes. & sessional/adjunct points about schools

### Faculty/Adjunct/Sessional Changes Suggested:

- Do not combine Arts classes ++

- Keep Pedagogy of the Arts +++
  Limit Arts: it # 43% of PJ instruction
  Special Projects too broad +++
  Extend SLP into Special Projects/stop
  overlap between the two +++
- More collaboration in teaching Faculty / advisors may not be able to support Creativity stream ++ Don't reduce PJ math credits ++

- Remove Career/Guidance from IS
- Stronger collaboration with Boards
  How to teach multi-/destreamed levels

- Keep Assessment & evaluation ++ Critical methods/two-eyed seeing More culturally relevant/responsive Add Math to JIS Methodologies Statistical or data literacy

- Classroom management Integrate metacognitive instruction into numeracy, literacy, STEM Reflective Practitioner part of Advisory
- Keep Mental Health as mandatory
- Extend Language Arts/literacy focus +-Teach Right to Read/Growing Success
- Justice/Praxis/Ways of Knowing, not Plato in Foundations/Philosophy

#### **Student Changes Suggested:**

- Still fewer courses, less overlap ++++
  Faculty collaboration to limit overlap
  Make Special Projects broad enough to engage all/tie to school needs
  Still fewer courses, less overlap ++++
  Make Special Projects to to hone and to engage all/tie to school needs
  Still fewer courses, less overlap ++++
  Make Special Project in streams ++
  Senior Curriculum Methodology
  Inquiry learning course + modelling +++
  Mandatory ELL ++
  Mandatory Mental Health ++
  Drop Career & Guidance
  Conflict resolution
  Keep Math/science/STEM/drama in IS ++
  Add Disabilities & Inclusivity
  More math/literacy core instructional strategies & applications
  No music/dance/music a half course++

#### **Bachelor of Education Curriculum Motion**

Motion: The faculty council approves the attached curriculum map as the new curriculum for our teacher education programs (for the two-year Bachelor of Education programs at the Primary/Junior and Intermediate/Senior levels).

#### Rationale:

On Oct 26, the teacher education committee proposed this motion after an intensive discussion around the feedback the committee received. The motion was passed within the committee following an anonymous vote.

Following the previous pre-service committee's effort on curriculum review (2020-2021), the teacher education committee diligently worked on this task last year (2022-2023). In addition to committee meetings, an ad-hoc committee, comprised of all faculty members on the committee and several student and sessional representatives, met regularly on Fridays. Early versions of two new curriculum maps were presented to the faculty at an in-person consultation meeting and to students and sessional instructors through a survey in February, 2023, when extensive feedback was gathered. Based on the feedback collected, a revised version was presented to faculty council for discussion in April, 2023. More revisions were made after that council meeting. In May, 2023, the faculty council passed the new curriculum map in principle pending any new requirements from OCT and Ministry of Education.

The Teacher Education committee resumed work on this task in September 2023. The ad-hoc committee has met three times. The attached curriculum map is the latest version of new curriculum that has been steadily developed over the past year. The major differences between this version and the May version that was approved in principle are:

- 1. The elective streams were removed but students can still choose two elective courses at the I/S level and one elective course at the P/J level. This was done because the leadership team thought the streams model was too expensive and logistically challenging to operate.
- 2. The course titles for Language Arts, Mathematics, and Health and Physical Education methodology courses were changed to better reflect the necessary content.
- 3. Several adjustments were made to bring the P/J and I/S curriculum more in line with each other, including the reduction of the Anti-Oppressive Education course at the I/S level by 1.5 credits and the removal of Mental Health, Social Emotional Learning, and Teaching Linguistically and Culturally Diverse Leaners as I/S elective courses, instead folding these topics into the required Language Across the Curriculum and Supporting Adolescent Learners courses.
- 4. Gender and Sexuality in Education was added as an elective course to both the P/J and I/S streams.
- 5. Advanced Music Pedagogy was added to the IS curriculum as well so that this course is available for both P/J and I/S divisions.

The proposed new curriculum maps explicitly emphasize the topics considered relevant for modernized teacher education programs, as requested by Ministry of Education, namely numeracy and literacy, mental health, special education, digital and online pedagogy, and anti- racism education. It significantly reduces the number of courses students will take each semester (from 10 to 6).

Approving this motion enables the faculty to start the lengthy OCT accreditation process and to move toward offering the revised curriculum starting in September 2024. That said, the Teacher Education committee will continue to adjust the new program after it has been implemented for a couple of years. The proposed changes have been thoughtfully and deliberately arrived at yet will require ongoing adaptation as we embark upon implementation of the new curriculum.

**Curriculum Consultation Notetaker Sheets** 

Notes were recorded by PSC committee members. Consultation participants (faculty members) will rotate between tables responding to each question. One PSC Committee member was at each table prompting participants to respond to the question, providing context, and recording and summarizing participants' responses to the questions. Paper copies of the model were available at each table.

#### **TOPIC 1: KEY PRIORITIES**

PSC Committee member: Catherine

**Key Priorities:** 

- Too many courses for each semester
- Content overlap
- Lack of choices
- Consistency between advisory groups
- Irrelevant learning in IS division
- · Social justice and anti-racism education
- Program flow, distinguishing Yr1 from Yr 2 clearly

#### Question 1: Which model best responds to the key priorities identified by the committee?

Model 1 accomplishes more easily in short term. Like Model 1 Broadening Horizons

Model 2 – genuinely innovative & exciting

Faculty will be more inclined to Model 2 because better incorporates their subject areas Like choice of Model 2

#### Question 2: Why does this model best respond to the key priorities identified by the committee?

Need to streamline program, fewer courses for students and teachers at once Model 2 – more student choice Really like Faculty Advisor – team teaching model. Still provides scope for freedom. Model 2 better responds to student choice priority.

Model 2 has more choice for students but also more opportunity for Faculty to do something that interests them.

#### Question 3: How could it be improved in this respect?

Curious about Model 2, concerned about logistics Readiness for implementation of Model 2.

Model 2 is amazing, but needs more thoughtfulness in terms of indicators to monitor and assess achievement of outcomes.

Remediation needs to be more clearly addressed in both models Course descriptions need to highlight EDI more explicitly.

Model 1 is more feasible, easy to implement more quickly.

Model 1 better attends to all key priorities in Ontario curriculum documents – mental health, anti-oppressive ed. Suggestion for phased approach: Phase 1 (Model 1), Phase 2 (Model 2) – tiered restructuring of the program? Model 1 as a starting point. Challenge (Ken, who happened to be in that conversation): accreditation poses a big challenge. Need to pick one and get accredited on the basis of the new model.

Possible to move to Model 2 with a few elective streams and then gradually expand to add more streams (still complicated but possible from OCT perspective, have experience from service learning).

Model 2: Distinguish priorities between PJ and IS more distinctly in Model 2. Stronger arts orientation – possibly instead of one elective course or by dropping Special Projects Course to

1.5 credits (only at PJ level).

Practicum Schedule – put practicum in the middle of the semester. Enables to build relationship between theory and practice. Relevant for either model

Could be even further choice within Model 2 - e.g., alternate places. Important to keep the Special Projects Course broad, open flexible.

Model 2 but tweaks: Model 1 prepares for lifetime of teaching. Needs bit more in Broadening Horizons in Model 2.

Amendments needed for PJ – perhaps reducing Broadening Horizons in PJ to enable greater subject methodology. PJ and IS curriculum should be more starkly different.

Mixed model – PJ to have fewer electives.

Arts – model priority of having time allocated to arts in a scheduling perspective.

#### **TOPIC 2: VISION DOCUMENT**

PSC Committee member: Bonnie

Had paper copies of the vision document available at the table. *Question 1: Which model best responds to the vision document?* 

#### **GROUP 1**

Model 2 allows for addressing issues more clearly, we have values and principles but don't formalize paths for them to be fully addressed

When it comes to student interests, students can pursue their inclinations and pursue their specific pathways in model 2

Both models capture values well

(Faculty colleague hat) - both do a great job on justice, model 2 does open up more possibilities in terms of ways of knowing (though model 1 is still good), praxis maybe not so much though streamlining of I/S addresses that and we could address praxis more through practicum

Do wonder what the response will be to deleting specific Assessment & Evaluation course & embedding in other courses, but feedback has been strong to drop that course

The 9 keywords in the vision doc could be used as shorthand tags identifying which course(s) represent them Model 2 offers more room for the Broadening horizons courses Changes

The main question is class sizes, how do we get praxis into large classes? Esp in anti- oppressive ed

#### **GROUP 2**

Potentially Model 2 could embrace all of the vision, more exciting, concerned about logistics

Model 2 is the best way to go and aligns beautifully, but implies a cultural change of practice of talking to each other Model 2 gets to the potential for praxis, but practicum is void of leadership on ideology, structure and praxis (practicum course)

Changes

Model 2 requires alignment and communication between faculty and there is a lot of invisible work in co-teaching and vertical team planning but there has to be a real openness to people doing their own thing as well, people come from different theoretical perspectives

Logistically should cultural and linguistically diverse learners be allowed as both an SLP and a stream, in Model 2?

Ideally a connection between ATs as adult educators with a developmental chart for what a Year 1 preservice teacher would come in with or go out with

#### **GROUP 3**

Both models attend to the priorities laid out in vision doc, it depends on understanding details of what's in the content of the courses

Praxis is evenly covered in both models, but a little different – electives allow students to tilt more vs justice and ways of knowing

Broadening horizons component is integral to values element of vision, though 8 vs 4 BH courses in the different models means candidates encounter different experiences

More flexibility in Model 2 is appealing and isn't going to compromise skill set for I/S but for P/Js they are expected to come out as generalists so Model 1 may serve that goal better (generalists was not always the way of P/J in Ontario, but was phased out)

Changes

How practicum blocks are considered – to integrate components, marriage between theory and practice is harder if students don't come back after practicum, eliminates assignments being practicum focused after the fact

#### **GROUP 4**

Both align to the vision doc, which sections of the circle are larger in one or smaller in another?

We started with the notion of distinguishing P/J and I/S - before we make a choice

between Model 1 and Model 2, we need to clarify that there is difference between P/J and I/S

Changes

Communication of values as core of each course as something we should connect to all our courses, ask each of us to ground our teaching in the Vision Doc – expected in syllabus

Programmatic coherence

Something to show the overlap

#### **TOPIC 3: STUDENT NEEDS**

PSC Committee member: Andrew

#### Question 1: Which model best responds to the needs of students?

Model 2 for I/S

Model 1 for P/J

I/S suits the second year specialization in Models. They already have a specialization fits better with Model 2 for I/S. P/J are generalist and they might miss out on the competencies for teaching every subjects if they are asked to specialize.

When students see the word 'research,' the might freakout.

Model 2 offers more choices. Flexibilities and pathways – pursuing fields of interests. More intellectual. Choice and distinguishes Year 1 from Year 2.

The Model 2 might pose a challenge for Concurrent students. Meeting the needs:

Immediate needs of the Ontario classrooms - Model 1

Aspirational needs – Model 2 for thinking beyond – explores much more possibilities

#### Question 2: Why does this model best respond to the needs of students?

Model 2 does a better job of aligning with students' needs and the list that was put on the screen. The courses would need to be tweaked. The Special Projects course would need to be presented in a way that does not scare prospective students. We can call it Teacher Inquiry.

However, we would need to make sure we develop all the competencies for P/J students who are expected to teach all subject areas.

#### Question 3: How could it be improved in this respect?

Being clear about what the program is about. Our promotion of the program needs to be clear that so that it highlights what is unique and attractive about our program.

For P/J, look really closely at the Methodology course to make sure that students develop competencies in all the areas needed for teaching.

We could more easier pull off Model 1. Model 2 is courageous. The concern is that with either model, we could revert to the ways that we have always done things. We will need to streamline our program and big board or concept map to make sure we meet that priorities that we set out.

Streamlining should mean 2 courses and 2 courses for the year.

Model 2 has more potential for meeting the needs for both P/J and I/S. The challenge is to make sure we reduce the number of courses and not add on more courses.

#### **TOPIC 4: NEEDS OF THE FACULTY**

PSC Committee Member: George

#### Group 1:

Model 1 has immediate changes with anti-racism education, mental health, sustainability, costs less, easy to be implemented

Model 2 is more like a Master of teaching in OISE. Cost more, need more high quality of students.

Does the specialization really help students to be hired?

Difficulty picking one out of two. It seems that Model is better for PJ and Model 2 is better for IS Transition issues to new model needs to be discussed.

#### Group 2:

Model 2 may cost extra work load to faculty

Names of courses in both models are more appealing Assessment and evaluation should be a stand along course.

#### Group 3:

Model does address the issue with the number of course, fills gaps in current curriculum. Model 2 is promising, but needs better streamline between SLP and streams.

Streams/electives can be different between PJ and IS

#### Group 4:

Model 1 was picked up by both members in this group. More doable, less workload. Should not be more than 5 courses each semester.

#### FACULTY RETREAT – JUNE 20, 2023 SESSION NOTES

#### Session 1, Table 3

OCT Requirements 3.1 – Schedule 1 and ARG Elements

Identify connections between new courses in program to Curriculum Knowledge, Pedagogical and Instructional Strategies Knowledge, and Teaching Context Knowledge

#### New Courses (P/J):

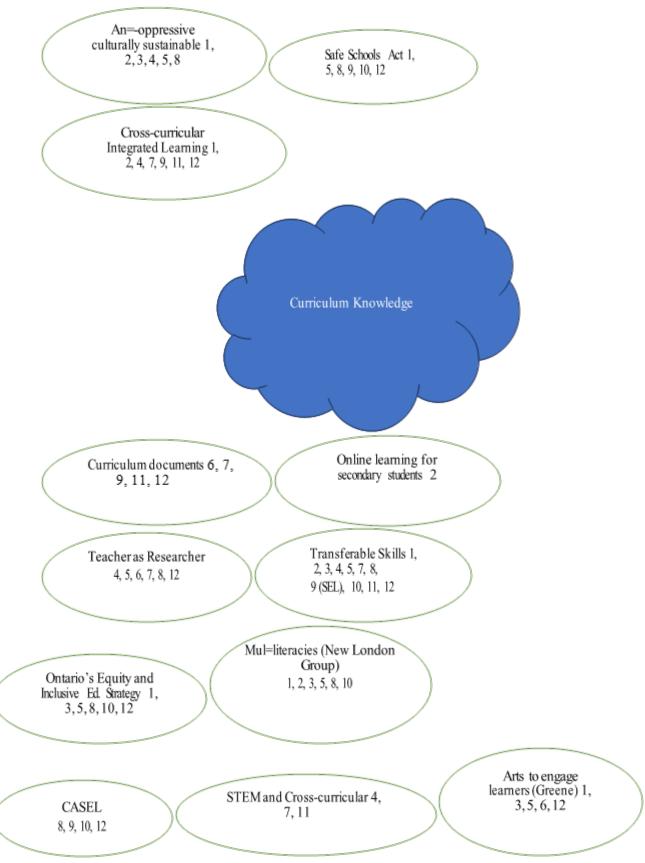
- 1. Anti-oppressive and culturally sustaining ped.
- 2. Media literacy and digital ped.
- 3. Teaching English Language Learners
- 4. Inter dis. ed. for sustainability (elective)
- 5. Global citizenship and democratic ed. (elective)
- 6. Advanced music ped. (elective)
- 7. STEM ed. (elective)
- 8. Schools, community and family partnerships (elective)
- 9. HPE and SEL

#### New Courses (I/S):

- 1. Anti oppressive and culturally sustaining ped.
- 2. Media literacy and digital ped.
- 3. Teaching English Language Learners
- 4. Inter dis. ed. for sustainability (elective)
- 5. Global citizenship and democratic ed. (elective)
- 6. Schools, community and family partnerships (elective)
- 7. Engaging and supporting adolescent learner
- 8. Teaching sci. and math inquiry
- 9. SEL (elective)

#### Pedagogical and Institutional Strategist Know.

- 1. Electives (4 8, 12) + 11
- 2. 2, 7, 11
- 3. 1-12
- 4. 1, 3, 8, 9, 10, 12
- 5. 1, 3, 4, 8, 9, 10, 12 (Place-based; outdoor ed.)
- 6. 1, 3, 5, 8, 9, 10, 12
- 7. 1, 3, 6, 7, 8, 9, 10, 11, 12 (report cards)
- 8. 1, 2, 3, 5, 8, 9, 10, 12
- 9. 2, 3, 6, 7, 9, 11
- 10. 1-12



FACULTY RETREAT – JUNE 20, 2023 SESSION NOTES Session 1, Table 2

OCT Requirement 3: In what ways are any new courses consistent with and reflective for the College's 'Standards of Practice for the Teaching Professional" and the "Ethical Standards for the Teaching Profession"

- Would suggest switching around STEP Education for P/J with I/S course for Teaching Scientific and Mathematical Inquiry
- The current I/S course should be extended to Gr. 9-12 beyond Gr. 7-8
- Review of the new curriculum documents for Science should demonstrate that the nature of STEM in P/J is not
  congruent with the current course (P/J) description and would better fit with I/S course description and viceversa
- Perhaps need to reconsider focus of each proposed course re: STEM/Science/Math Theory
- Need to have more details of course descriptions and syllabi to allow for more meaningful feedback above alignment with "Standards of Practice" and "Ethical Standards of Practice" with new courses
- Course syllabi typically don't speak to ethical standards but are typically translated in context of instructional delivery
- Need to consider greater communication with Associate Teachers to ensure greater congruence with course objectives to practicum settings
- · Need to reconsider list of mandatory assignments/requirements within practice teaching settings
- Need to see more consistent outcomes being developed from courses on campus to expectations and outcomes
  in practicums to truly reflect "Standards of Practice" and "Ethical Standards" as enacted in the space where it
  truly needs to be realized (i.e. classrooms and schools)
- Need to consider common outcomes in course syllabi to ensure consistent reflection of "Standards of Practice" and "Ethical Standards" across all courses (new and current)
- Need to ensure redevelopment of common template for course syllabi to further reflect the different standards beyond learning outcomes
- Consideration of pass/fail assessment Would work best is ensure a rigorous baseline for minimum expectations
  and learning standards to be met. Problem of ambiguity on how minimum standards are interpreted to measure
  as a pass. Question of levels of motivation to achieve vs learning when considering grading system vs pass/fail.
  Greater focus on ongoing formative assessment of learning through course experiences. Concern over levels of
  motivation being maintained with pass/fail
- Need to consider our current process of orienting ATs and advisors
- What about early intake/orientation for ATs and advisors together in August/September. This would require a tentative roster of ATs from June
- Need to also consider restructuring practicum calendar and organizing one day a week in schools to better
  acclimate TCs to schools/classrooms and allow for more direct connection and familiarity with schools and
  classrooms where they will be placed
- Need to ensure that advisory group classes/meetings take place on campus/in our faculty to signal importance of meeting/class sessions
- Need to require minimum visits to observe TCs
- Need to ensure that advisors are available when needed to visit schools and manage crises situations with students in practice teaching
- Need to consider limiting external placements to 2<sup>nd</sup> year students based on certain criteria of demonstrating success
- Need to consider hybrid/virtual elements for advisory group meetings/classes
- 9 x /semester = 18hrs x 2 = 36hrs: 1 full course Will visits to school placements require additional compensation or increased course load abatement for time spent visiting TCs during their practicums? Perhaps need to reconsider number of TCs per advisory groups to make visits to school placements possible
- How else to facilitate minimum number and regular school placement visits?
- Need to support ATs in addition to TCs
- Need to consider guidelines for how to cover controversial topics/issues in our classrooms and the program

APPENDIX C — IQAP EXECUTIVE SUMMARY

S220610-5.1.1b

**FOR SENATE** 

UNIVERSITY OF WINDSOR
UNIVERSITY PROGRAM REVIEW (UPR)
FINAL ASSESSMENT REPORT ON: Education
UNDERGRADUATE AND MASTERS PROGRAMS
May 2022

Executive Summary of the Cyclical Program Review of the Faculty of Education Undergraduate and Masters Programs The Faculty of Education's 2018-2019 Self-Study, submitted to the Office of Quality Assurance in October 2021, included: 1) descriptions and an analysis of the programs, their learning outcomes, curriculum structure, and student experience; 2) information on enrolments as well as financial, physical and human resources; and 3) the program data including the standard data package provided by the Office of Quality Assurance. Appended to the Self-Study were faculty member CVs, the Leddy Library report, course descriptions and syllabi, student experience report, sample student publications, field experience handbook, pre-service program guide, AAU policies, and the prior cyclical program review report.

The Faculty of Education programs were reviewed by Dr. Goli Rezai-Rashti, Faculty of Education, Western University; Dr. Deborah Britzman, Faculty of Education, York University; and Dr. Isabelle Barrette-Ng, Faculty of Science, University of Windsor. In addition to assessing the Self-Study, the Review Team conducted a three-day virtual site visit on December 7-9, 2021, which included meetings with faculty, students, managers and administrative staff, the Associate Deans, the Dean of the Faculty of Education, and the Associate Vice-President, Academic.

The Review Team began their report (June 2021) with a disclaimer that the period under review was 2011-2018, providing context that the delay was due to a number of factors, including continuous leadership changes at the Dean and Associate Dean levels and, most recently, the onset of the pandemic. Focusing on the programs as at 2018, the Review Team noted that the Masters and undergraduate programs are consistent with the University of Windsor's mission statement, and that the admission requirements, modes of delivery, and methods of assessment are appropriate. The programs are delivered by tenured and tenure-track faculty members with strong teaching and research profiles, as well as qualified sessional and adjunct faculty, several of whom have published in refereed journals. The Review Team noted the dedication of faculty and staff to the student experience, while raising concerns about the high faculty and staff to student ratio, resulting from a significant jump in enrolments, and its impact on the ability of the Faculty of Education to deliver effective advising and supports to students. Of specific concern was graduate students' difficulty in navigating the various Masters streams or identifying graduate supervisors.

The Review Team also identified a number of areas for investment, including faculty and staff hires; all of which will be considered by the Faculty of Education as it develops its Faculty Financial Sustainability Plan. The Review Team noted that undergraduate and graduate learning outcomes and curriculum mapping were incomplete or had not been revisited since 2014; though the Faculty has been working diligently on undergraduate and graduate curriculum redesign, including learning outcomes and curriculum mapping, with a completion date of 2024 for OCT reaccreditation. As the Faculty embarks on this curriculum redesign, the Review Team emphasized consideration of: more experimental pedagogies and alternative modes of delivery; reintroduction of experience profiles or similar tool for a more equitable process; restructuring programs with a focus on streamlining and providing greater flexibility in program requirements; moving to pass/fail model for all undergraduate courses; greater clarity on graduate streams; and deeper, more meaningful integration of equity, diversity, inclusion, and Indigeneity throughout its programs. Overall, the Review Team found that the undergraduate and Masters programs met the evaluation criteria in the IQAP, but that curriculum renewal was needed to address the new post-pandemic education.

The Dean of the Faculty of Education's response to the External Reviewers' Report (February 2022) addressed the recommendations, identified follow-up actions, and provided clarification or corrections, as appropriate. The Senate Program Development Committee (PDC) Final Assessment Report and Implementation Plan (May 2022) considered all the above documentation. The Executive Summary and Implementation Plan, along with any response from the area on the final recommendations, were submitted to Senate in June 2022. Final Recommendations and Implementation Plan (in priority order)

Final recommendations were arrived at by the Program Development Committee, following a review and assessment of the External Reviewers report and the Dean's response.

Recommendation 1: That Education undertake an undergraduate curriculum review and renewal exercise, with a view to having a BEd program that develops teachers as change agents committed to innovative and ethical educational approaches, including: a. b. c. creating an academic framework with timelines and stages of implementation [ER Recommendation 6] establishing learning outcomes and curriculum maps for each of its undergraduate programs and courses increasing course choice and flexibility, and autonomy in the programs. Courses might emphasize that knowledge is always subject to interpretation, debate, doubt, and transformation [ER recommendation 1] d. ensuring that the curriculum reflects equity, diversity, inclusion, and Indigeneity across the board, as well as

environmental sustainability education. The key issues in education require a broad conceptualization of the shifting sands of inequality, mental health, poverty, transphobia, sexism, racism, and classism.

[ER Recommendation 3]

Agents: Dean, Faculty Council, Pre-Service Committee, Centre for Teaching and Learning Completion by: a. Fall 2022; b.-d. Fall 2024

Recommendation 2: That Education undertake a graduate curriculum review and renewal exercise, including a review of structures of faculty governance, with a view:

- a. placing greater emphasis on equity, diversity, inclusion, Indigeneity, and environmental sustainability education
- b. reducing repetition in course requirements
- c. increasing course options and flexibility
- d. possibly developing a Masters of Teaching degree.

[ER Recommendation 5]

Agents: Dean, Faculty Council, Graduate Studies Committee

Completion by: Fall 2024

Recommendation 3: That Education consider the merits of moving all BEd programs to the pass/fail system. This shift, from grading to learning, would provide a philosophical basis for the evaluation of learning and provide autonomy for students to understand and evaluate their progress. [ER Recommendation 4]

Agents: Dean, faculty members, Faculty Council

Completion by: Fall 2024

Recommendation 4: That Education identity a dedicated advisor for the concurrent programs. [ER Recommendation

2] Agents: Dean

Completion by: Fall 2024

Recommendation 5: That Education report on efforts to revitalize teacher candidate engagement with the Leddy Library and Windsor-Essex public library resources. Undergraduate programs need to be more attuned to new developments in technology and to library services and their offerings.

[ER Recommendation 2]

Agents: Dean, faculty members, Leddy Library

Completion by: Fall 2024

APPENDIX D

**Environmental Scan of Comparable Bachelor of Education Programs** 

	Environmental Scan of Comparable Bachelor of Education Programs										
University	Program Length	Admission Requirements	Off GPA	Delivery	Divisions	J/I Teachable Offered	I/S Teachable Offered	Technological Education			
University of Windsor - Consecutive Education	2 years full-time	Minimum 3- year degree, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Primary Junior (JK to Grade 6); Junior/Inter mediate (Grades 4 to 10) Intermediat e/Senior (Grades 7 - 12)	Dramatic Arts; English; French as a Second Language; Geography; Health and Physical Education; History; Mathematics; Music – Vocal; Science – General; Visual Arts	Business Studies – General Dramatic Arts English French as a Second Language Geography Health and Physical Education History Mathematics Media Arts Music Vocal or Instrumental Biology Chemistry Science – General Physics Social Sciences – General Visual Arts	Teaching Subjects offered: Communication Technology; Computer Technology; Construction Technology; Green Industries; Hairstyling and Aesthetics; Health Care; Hospitality and Tourism; Manufacturing Technology; Technological Design; Transportation Technology			
University of Windsor - Concurrent Education	6 years full time	Students admitted directly from secondary school, plus requirements specific for the division into which they are applying to.	Min 75%	In-person with practicum requireme nts	Primary Junior (JK to Grade 6); Junior/Inter mediate (Grades 4 to 10) Intermediat e/Senior (Grades 7 - 12)	Concurrent General Bachelor of Arts (Psychology)/B achelor of Education/Dipl oma in Early Childhood Education; Concurrent Honours Modern Languages with Second Language Education (Intercultural Stream)/Bache lor of Education External Link	Concurrent Bachelor of Music in Music Education (Honours) and Bachelor of Education; Concurrent General Bachelor of Arts (Communication, Media and Film)/Bachelor of Education; Concurrent General Bachelor of Arts (Drama)/Bachelor of Education; Concurrent General Bachelor of Arts (Drama)/Bachelor of Education; Concurrent General Bachelor of Arts (English Language and Literature)/Bachelor of Education; Concurrent General Bachelor of Arts (Political Science)/Bachelor of Education; Concurrent General Bachelor of Arts (French Studies)/Bachelor of Education; Concurrent General Bachelor of Arts (History)/Bachelor of Education; Concurrent General Bachelor of Arts (History)/Bachelor of Education; Concurrent General Bachelor of Arts (History)/Bachelor of Education;	N/A			

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Brock	2 years	Minimum 3-	70%	In-person	Primary	Dramatic Arts;	Concurrent General Bachelor of Arts (Visual Arts) /Bachelor of Education; Concurrent General Bachelor of Science (General Science)/Bachelor of Education; Concurrent General Bachelor of Mathematics/Bachelo r of Education  Dramatic Arts;	Teaching Subjects		
University - Consecutive Education	z years full-time	year degree, plus requirements specific for the division into which they are applying to.	70%	with practicum requireme nts	Junior (JK to Grade 6); Junior/Inter mediate (Grades 4 to 10) Intermediat e/Senior (Grades 7 - 12)	English; French as a Second Language; Geography; Health and Physical Education; History; Mathematics; Music – Vocal; Science – General; Visual Arts	English; French as a Second Language; Geography; Health and Physical Education; History; Mathematics; Science – Biology; Science – Chemistry; Science – General; Science – Physics; Visual Arts	offered: Communications Technology; Computer Technology; Construction Technology; Green Industries; Hairstyling and Aesthetics; Health Care; Hospitality and Tourism; Manufacturing Technology; Technological Design; Transportation Technology		
Brock University - Concurrent Education	Six years full-time	Students admitted directly from secondary school, plus requirements specific for the division into which they are applying to.	Mid 80s	In-person with practicum requireme nts	Primary Junior (JK to Grade 6); Junior/Inter mediate (Grades 4 to 10) Intermediat e/Senior (Grades 7 - 12)	Concurrent BA Integrated Studies (Honours)/BEd ; Concurrent BSc Integrated Studies (Honours)/BEd ; Concurrent BEd (Honours)/BEd ; Concurrent BA Interactive Arts and Science (Honours)/BEd	Concurrent BA (Honours)/BEd; Concurrent BSc (Honours)/BEd; Concurrent BEd/BEd (Honours)/BEd	N/A		
York University - Consecutive Education	2 years full-time	Minimum 3- year degree, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Primary Junior (JK to Grade 6); Junior/Inter mediate (Grades 4 to 10) Intermediat e/Senior (Grades 7 - 12)	Dance; Dramatic Arts; English; First Nations, Métis and Inuit Studies; French as a Second Language; Geography; Health and	Business Studies – Accounting; Business Studies – Entrepreneurship; Business Studies – General; Business Studies – Information and Communication Technology; Computer Studies;	Teaching Subjects offered: Communication Technology; Computer Technology; Construction Technology Green Industries; Hairstyling & Aesthetics;		

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York	Six years	Experience	Mid	In-person	Primary	Physical Education; History; Mathematics; Music – Instrumental; Science – General; Visual Arts;	Dance; Dramatic Arts; Economics; English; Environmental Science; Family Studies; First Nations, Métis and Inuit Studies; French as a Second Language; Geography; Health and Physical Education; History; Law; Mathematics; Music – Instrumental; Philosophy; Politics; Religious Education in Catholic Schools; Science – Biology; Chemistry; General; Physics Social Sciences – General Visual Arts four-year Honours	Health Care; Hospitality and Tourism; Manufacturing Technology; Technological Design; Transportation Technology
University - Concurrent Education	full-time	profile Experience summary Personal statement Two online letters of recommendati on. Students admitted directly from secondary school, plus requirements specific for the division into which they are applying to.	80s	with practicum requireme nts	Junior (JK to Grade 6); Junior/Inter mediate (Grades 4 to 10) Intermediat e/Senior (Grades 7 - 12)	general degree (90 credits) with teaching levels in Primary-Junior or Junior- Intermediate	degree (120 credits) with teaching levels in Primary-Junior, Junior- Intermediate, or Intermediate-Senior	
Western University - Consecutive Education	2 years full-time	Minimum 3- year degree, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Primary Junior (JK to Grade 6); French as a Second Language Primary/Juni or; Junior/Inter mediate (Grades 4 to 10) Intermediat e/Senior	French as a Second Language; Music – Instrumental; Music – Vocal; Religious Education in Catholic Schools	Economics; English; Environmental Science; Family Studies; French as a Second Language; Geography; Health & Physical Education; History; Law; Mathematics; Music – Instrumental;	N/A

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					(Grades 7 - 12)		Music – Vocal; Philosophy; Politics; Religious Education in Catholic Schools; Science – Biology; Chemistry; General; Physics; Social Sci – General	
Western University - Concurrent Education					Not Of	fered		
University of Toronto				Only a Mast	ter of Teaching	Program Offered	(No BEd)	
Wilfred Laurier - Consecutive Education	2 years full-time	Minimum 3- year degree, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Primary Junior (JK to Grade 6); Junior/Inter mediate (Grades 4 to 10)	English French as a Second Language Geography Health and Physical Education History Mathematics Music- Instrumental Music- Vocal Science (General)	N/A	N/A
Wilfred Laurier Concurrent Education					Not Of	fered		
Lakehead University - Consecutive Education	2 years full-time	A minimum of 5 fullyear course equivalents must be completed at the time of application for admission consideration.	70%	In-person with practicum requireme nts	Primary- Junior (Thunder Bay Campus) Primary- Junior (Orillia Campus) Intermediat e-Senior (Thunder Bay Campus)	N/A	English; Environmental Science; First Nations, Métis and Inuit Studies; French as a Second Language; Geography; Health & Physical Education; History; Mathematics; Music – Instrumental; Music – Vocal; Native Languages; Science – Biology; Science – Chemistry; Science – General; Science – Physics; Social Sciences – General (second teaching subject only); Visual Arts;	N/A
Lakehead University - Concurrent Education	5 - 6 years full time	High school students, transfer	70%	In-person with practicum	Primary- Junior (Thunder Bay and	Concurrent Bachelor of Education Primary/Junior	Intermediate/Senior Honours Concurrent Bachelor of Education Primary/Junior* or	N/A

		options from college		requireme nts	Orillia Campus) Intermediat e-Senior (Thunder Bay Campus)		Intermediate/Senior Concurrent Bachelor of Education (Native Teacher Education Program) Intermediate/Senior* Honours Bachelor of Education (Aboriginal) Primary/Junior *	
Laurentian University - Consecutive Education	2 years full-time; Part time option for Junior/Inte rmediate	Written and oral components of the French language proficiency test	70%	In-person with practicum requireme nts	French Only - Primary/Juni or; Junior/Inter mediate; Junior/Inter mediate - part time	Anglais – langue maternelle; Arts dramatiques; Arts visuels; Danse; Études religieuses; Français – langue maternelle; Géographie; Histoire; Mathématique s; Musique – instrumentale; Santé et éducation physique; Sciences – générales	N/A	N/A
Laurentian University - Concurrent Education	5 years	High school students, transfer options from college/Univer sity	75%	In-person with practicum requireme nts	Primary- Junior and Junior- Intermediat e divisions	English; French; History; Geography; Science; FNMI Studies; Mathematics; Religious Studies; Music (instrumental, vocal); Health and Physical Education	N/A	N/A
Nippissing University - Consecutive Education	2 years full-time	Applicants must have a minimum of ten full courses (20 semester courses) to their undergraduate degree; plus, requirements specific for the division into	70%	In-person with practicum requireme nts	Primary/Juni or P11 – Primary/Juni or – French as a Second Language P20 – Junior/Inter mediate P30 – Intermediat e/Senior	English; French as a Second Language; Geography; Health and Physical Education; History; Mathematics; Music – Instrumental; Science –	Business Studies – General; English; French as a Second Language; Geography; Health and Physical Education; History; Mathematics; Music – Instrumental; Science – Biology; Science – Chemistry; Science – Physics;	N/A

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		which they are applying to.				General; Visual Arts	Social Sciences – General; Visual Arts	
Nippissing University - Concurrent Education	6 years full time	High school students, transfer options from college/Univer sity	Min 70- 75%	In-person with practicum requireme nts	Primary/Juni or (P/J) - J/K to Grade 6  Junior/Inter mediate (J/I) - Grades 4 to 10  Intermediat e/Senior (I/S) - Grades 7 to 12	Concurrent Education is applicable to all undergraduate programs with the exception of the BScN and the BComm. All divisions (P/J, J/I or I/S) are available with the eligible undergraduate degrees with the exception of Child and Family Studies, which is only eligible with the P/J division.	Concurrent Education is applicable to all undergraduate programs with the exception of the BScN and the BComm. All divisions (P/J, J/I or I/S) are available with the eligible undergraduate degrees.	N/A
Queens University - Consecutive Education	16-month Consecutiv e Education program that starts in May 2020 and ends in August 2021 for both Primary/Ju nior (K- Grade 6) and Intermedia te/Senior (Grades 7- 12) and Technologi cal Education candidates	minimum 3- year General degree, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Primary/Juni or; Aboriginal Teacher Education (Primary/Junior); Aboriginal Teacher Education Community-Based (Primary/Junior) – Mushkegow uk Territory; Aboriginal Teacher Education Community-Based (Primary/Junior) – Manitoulin Island; Artist in Community Education (Primary/Junior); Outdoor & Experiential Education (Primary/Junior);	N/A	Dramatic Arts; English; First Nations, Métis and Inuit Studies; French as a Second Language; Geography; History; Mathematics; Music – Instrumental; Music – Vocal; Science – Biology; Science – Chemistry; Science – Physics; Visual Arts	Communications Technology; Computer Technology Construction Technology; Green Industries; Hairstyling and Aesthetics (regulated trades, meaning you must hold a certificate of qualification in your trade); Health Care; Hospitality portion of Hospitality and Tourism; Manufacturing Technology; Technological Design; Transportation Technology (regulated trades, meaning you must hold a certificate of qualification in your trade)

Queens University - Concurrent Education	5 years plus one term			In-person with practicum requireme nts	Intermediat e/Senior; Aboriginal Teacher Education (Intermediat e/Senior); Artist in Community Education (Intermediat e/Senior); Outdoor & Experiential Education (Intermediat e/Senior); Technologic al Education (BEd); Technologic al Education (DipEd); Technologic al Education Multi- Session Program (BEd); Technologic al Education Multi- Session Program (DipEd) Primary- Junior (JK- Grade 6) and Intermediat	Bachelor's in Arts, Fine Art, Music or Science and a Bachelor of	Bachelor's in Arts, Fine Art, Music or Science and a Bachelor of Education	
Trent	2 years	minimum 3-	70%	In-person	e-Senior (Grades 7- 12) Primary/Juni	Education N/A	Anishnaabemowin	N/A
University - Consecutive Education	full-time	year General degree, plus requirements specific for the division into which they are applying to.	70%	with practicum requireme nts	or (Full- time) R30 – Intermediat e/Senior (Full-time)	IV/A	(Ojibwe); Dramatic Arts; English; First Nations, Métis and Inuit Studies; French as a Second Language; Geography; Health and Physical Education; History; Mathematics; Science – Biology; Science – Chemistry; Science – Physics; Visual Arts	

Trent University - Concurrent Education	Not Offered							
Ontario Tech University- Consecutive Education	16-month	minimum 3- year General degree, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Primary/Juni or; Intermediat e/Senior	N/A	English; Health and Physical Education; History; Mathematics; Science – Biology; Science – Chemistry; Science – General; Science – Physics;	N/A
Ontario Tech University - Concurrent Education	Four years for undergrad uate degree followed by 16 months for Bachelor of Education	Students admitted directly from secondary school, plus requirements specific for the division into which they are applying to.	85%	In-person with practicum requireme nts	Primary/Juni or; Intermediat e/Senior	Primary/Junior Concurrent Education program is available for undergraduate students in the following faculties:  Faculty of Business and Information Technology; Faculty of Health Sciences (Nursing program only); Faculty of Social Science and Humanities.	Intermediate/Senior Concurrent Education program is available for undergraduate students in the following faculties:  Faculty of Energy Systems and Nuclear Science; Faculty of Engineering and Applied Sciences; Faculty of Health Sciences (excluding the Nursing program); Faculty of Science	N/A
University of British Colombia - Consecutive Education	11 month	Minimum 3- year degree, plus requirements specific for the division into which they are applying to; 75 hours (minimum) of practical experience working with groups of children or youth	Min 65%	In-person with practicum requireme nts	Elementary, Indigenous Teacher Education Program, Internationa I Baccalaurea te, Middle Years, French, Secondary, Teaching Children, West Kootenay Rural Teacher Education, Teaching Adolescents	N/A	Art; Business Education; Computer Science; Culinary Arts; English; English Language Learner Ed; French; Home Economics; Mathematics; Modern Languages (Mandarin, German, Italian, Japanese, Korean, Punjabi, Russian; Spanish); Music; Physical Education; Science (Biological Sciences; Chemistry; Earth Science; Physics) Social Studies; Geography; History; Social Science;	N/A

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							Technology Education; Theatre	
University of British Colombia - Concurrent Education (Dual degree)	5 years	75 hours (minimum) of practical experience working with groups of children or youth	Min 65%	In-person with practicum requireme nts	Food, Nutrition and Health (Faculty of Land and Food Systems, BSc); Math (Faculty of Science, BSc); General Studies: Secondary Music Education (School of Music, BMus); Physical and Health Education (School of Kinesiology, BKin); Physics (Faculty of Science, BSc)	N/A	Physical Education; Band or Music; Home Economics; Biology; Mathematics; Physics	N/A
University of Alberta - Consecutive Education	Option of 4 year elementar y, 4 year secondary, or after degree program	Students admitted directly from secondary school OR minimum 3- year General degree, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Elementary, Secondary Education, Career and Technology Studies	N/A	Art; Biological Sciences Career and Technology Studies: Business, Administration, Finance (BIT); Career and Technology Studies: Computer Science (BIT); Career and Technology Studies: Health; Career and Technology Studies: Recreation Career and Technology Studies: Human Sciences (HRH); Career and Technology Studies: Media; Career and Technology Studies: Media; Career and Technology Studies: Design (MDC); Career and Technology Studies: Communication Arts (MDC); Career and	Business, Administration, Finance, and IT (BIT); Health, Recreation, and Human Sciences (HRH); Media, Design, and Communication Arts (MDC); Natural Resources (NAT); and Trades, Manufacturing, and Transportation (TMT).

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							Technology Studies: Natural Resources (NAT); Career and Technology Studies: Trades, Manufacturing, and Transportation (TMT); Chemistry; Drama; English Language Arts; General Sciences; Mathematics; Music: Wind Band; Physical Education; Physical Education; Physical Sciences; Physics; Second Languages: Other; Second Languages: Cree; Second Languages: French; Second Languages: German; Second Languages: Italian; Second Languages: Japanese; Second Languages: Spanish; Second Languages: Ukrainian Social Studies	
University of Alberta - Concurrent Education (Combined Degree Program)	5 years	Students admitted directly from secondary school, plus requirements specific for the division into which they are applying to.	70%	In-person with practicum requireme nts	Elementary, Secondary	Bachelor of Arts (Native Studies)/Bache lor of Education; Bachelor of Music/Bachelo r of Education; Bachelor of Kinesiology/Ba chelor of Education	Bachelor of Arts (Native Studies)/Bachelor of Education; Bachelor of Arts (Drama)/Bachelor of Education; Bachelor of Music/Bachelor of Education; Bachelor of Music/Bachelor of Education; Bachelor of Education; Bachelor of Education; Bachelor of Science/Bachelor of Education; Bachelor of Science/Bachelor of Education	N/A

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						only eligible		
						with the P/J		
						division.		
Queens	16-	minimum	70%	In-	Primary/J	N/A	Dramatic Arts;	Communications
University	month	3-year		person	unior;		English;	Technology;
-	Consecut	General		with	Aboriginal		First Nations,	Computer
Consecutiv	ive	degree,		practicu	Teacher		Métis and Inuit	Technology
е	Educatio	plus		m	Education		Studies;	Construction
Education	n	requirem		require	(Primary/J		French as a	Technology;
	program	ents		ments	unior);		Second Language;	Green
	that	specific			Aboriginal		Geography;	Industries;
	starts in	for the			Teacher		History;	Hairstyling and
	May	division			Education		Mathematics;	Aesthetics
	2020 and	into			Communi		Music –	(regulated
	ends in	which			ty-Based		Instrumental;	trades, meaning
	August	they are			(Primary/J		Music – Vocal;	you must hold a
	2021 for	applying			unior) –		Science – Biology;	certificate of
	both	to.			Mushkeg		Science –	qualification in
	Primary/J				owuk		Chemistry;	your trade);
	unior (K-				Territory;		Science – Physics;	Health Care;
	Grade 6)				Aboriginal		Visual Arts	Hospitality
	and				Teacher			portion of
	Intermed				Education			Hospitality and
	iate/Seni				Communi			Tourism;
	or				ty-Based			Manufacturing
	(Grades				(Primary/J			Technology;
	7-12) and				unior) –			Technological
	Technolo				Manitouli			Design;
	gical				n Island;			Transportation
	Educatio				Artist in			Technology
	n				Communi			(regulated
	candidat				ty			trades, meaning
	es.				Education			you must hold a
					(Primary/J			certificate of
					unior);			qualification in
					Outdoor			your trade)
					&			
					Experienti			
					al			
					Education			
					(Primary/J			
					unior);			
					Intermedi			
					ate/Senio			
					r;			
					Aboriginal			
					Teacher			
					Education			
					(Intermed			
					iate/Senio			

Queens University - Concurrent Education	5 years plus one term			In- person with practicu m require ments	r); Artist in Communi ty Education (Intermed iate/Senio r); Outdoor & Experienti al Education (Intermed iate/Senio r); Technolog ical Education (BEd); Technolog ical Education (DipEd); Technolog ical Education Multi- Session Program (BEd); Technolog ical Education Multi- Session Program (DipEd) Primary- Junior (JK- Grade 6) and Intermedi ate-Senior (Grades 7-	Bachelor's in Arts, Fine Art, Music or Science and a Bachelor of	Bachelor's in Arts, Fine Art, Music or Science and a Bachelor of Education	
				ments	(Grades 7-	Education		
					12)			
Trent	2 years	minimum	70%	In-	Primary/J	N/A	Anishnaabemowin	N/A
University	full-time	3-year		person	unior		(Ojibwe);	
-  -		General		with	(Full-time)		Dramatic Arts;	
Consecutiv		degree,		practicu	R30 –		English;	