

## NOTICE OF MEETING

There will be a meeting of the  
PROGRAM DEVELOPMENT COMMITTEE (PDC)  
Thursday, December 16, 2021 at 2:00pm-3:00pm  
Location: MS Teams Virtual Meeting  
AGENDA

### Formal Business

- 1 Approval of Agenda
- 2 Minutes of Meeting of November 15, 2021
- 3 Business Arising from the Minutes
- 4 Outstanding Business

### Item for Approval

- 5 Reports/New Business
  - 5.1 MBA and MD (Schulich School of Medicine) – Concurrent Program (Form C2) Kent Walker  
PDC211216-5.1
  - \*5.2 Integrative Biology -- Minor Program Change (Form C) Isabelle Barrette-Ng  
PDC211216-5.2
  - \*5.3 Integrative Biology – Minor Program Change (Form C) Isabelle Barrette-Ng  
PDC211216-5.3
  - \*5.4 Faculty of Science – Minor Program Change (Form C) Philip Dutton  
PDC211216-5.4
  - \*5.5 Minor in Biological Sciences – Minor Program Changes (Form C) Isabelle Barrette-Ng  
PDC211216-5.5
  - \*5.6 Women's and Gender Studies – Minor Program Change (Form C) Robin Wright  
PDC211216-5.6
  - \*5.7 Industrial Manufacturing System Engineering (IMSE) Multidisciplinary  
PhD – Minor Program Changes (Form C) Hoda ElMaraghy  
PDC211216-5.7
  - \*5.8 Master of Engineering Management (MEM) – Minor Program Changes (Form C) Ali Abdulhussein  
PDC211216-5.8
  - \*5.9 Chemistry and Biochemistry (Graduate) – New Course Proposal (Form D) Sirinart Ananvoranich  
PDC211216-5.9

**\*5.10 Women's and Gender Studies - New Course Proposal (Form D)**

**Betty Jo Barrette**  
PDC211216-5.10

**\*5.11 Mathematics and Statistics (Graduate) – Minor Program Changes (Form C)**

**Rick Caron**  
PDC211216-5.11

**Items for Information**

**\*5.12 Law - Summary of Minor Course and Calendar Changes (Form E)**

**Reem Bahdi**  
PDC211216-5.12

**\*5.13 Philosophy (Graduate) - - Summary of Minor Course and Calendar Changes (Form E)**

**Philip Rose**  
PDC211216-5.13

**\*5.14 Sociology and Criminology - Summary of Minor Course and Calendar Changes (Form E)**

**Shelagh Towson**  
PDC211216-5.14

**\*5.15 Chemistry and Biochemistry (Graduate) Program Learning Outcomes**

**Sirinart Ananvoranich**  
PDC211216-5.15

**\*5.16 Mathematics and Statistics (Graduate)– Course Learning Outcomes**

**Rick Caron**  
PDC211216-5.16

**\*5.17 Philosophy (Graduate) – Course Learning Outcomes**

**Philip Rose**  
PDC211216-5.17

**\*5.18 Kinesiology – Course Learning Outcomes**

**Kevin Milne**  
PDC211216-5.18

**6 Question Period/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: Concurrent MBA/MD (Schulich School of Medicine) – Concurrent Offering (Form C2)

Item for: **Approval**

**MOTION:** That the Concurrent MBA/MD (Schulich School of Medicine) program be approved in accordance with the program/course change forms.^

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The proposal has been approved by the Odette School of Business and the Faculty of Graduate Studies.
- The proposal provides a pathway for students to complete the UWindsor's MBA program and the Western University Schulich School of Medicine MD program concurrently. Program and admission requirements for both programs are unchanged. The concurrent/integrated pathway provides MD students with the opportunity to complete their MBA while enrolled in the MD program; thereby positioning them for success in leadership roles at hospitals and other health care systems or industries.
- *See attached.*

**PROGRAM DEVELOPMENT COMMITTEE  
COMBINED PROGRAM OR CONCURRENT OFFERING  
(from existing programs)  
FORM C2**

<b>TITLE OF PROGRAM/CERTIFICATE:</b>	<b>Master of Business Administration</b>
<b>DEPARTMENT(S)/SCHOOL(S):</b>	<b>Odette School of Business</b>
<b>FACULTY(IES):</b>	<b>Odette School of Business</b>

<b>Proposed combined program or concurrent offering to be effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	<b>Fall 2022</b>
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**1. RATIONALE**

*Please provide a rationale for the proposed combined program or concurrent offering.*

*NOTE: This form is for Combining programs that are created from two existing standalone programs (e.g., creating a Combined Honours in X and Y, where Honours X and Honours Y are established programs), or for offering two existing programs concurrently. Where one or more of the programs proposed to be combined or run concurrently are not currently established, a PDC Form A – New Program Proposal – is required.*

In complex and evolving world of medical care (e.g. hospitals, large clinics), practicing Medical Doctors (MDs) working as health care leaders hold roles that require both clinical and business competencies. The roles require professionals who understand patient needs and the fiduciary responsibilities of managing large, complex organizations. As a result, providing MD students with the opportunity to complete their MBA while enrolled in the MD program positions graduates for success in leadership roles at hospitals and other health care systems or industries. This education benefits the broader community by training medical professionals who have strong business acumen and are effective leaders in healthcare. Lastly, every year there are a few MD students who have openly expressed interested in completing an MBAs. This new program creates a clear pathway for these students. Students with MBAs will be well positioned for managerial and executive positions within the healthcare industry, a continuously growing and evolving industry always in need of strong talent.

A key component of a successful MBA cohort is its diversity. Traditionally, MD students have not completed an Odette MBA, and this joint program will enable them to. As medicine students they will have different skills and knowledge from traditional MBA students with commerce undergraduate degrees. They will bring a richness to classroom discussions and team activities.

**1.1 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).*

*In developing this combined program or concurrent offering, **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?*

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- *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 [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)*
- *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?*

Odette has undertaken research to provide information upon which systematic indigenization will proceed in a transparent, and collegial manner to meet the needs of the stakeholders. Odette School of Business encourages and will support course developers and instructors to incorporate Indigenous content, perspectives, and materials into the curriculum. Some examples are provided below. All course outlines of the Odette School of Business recognize that the Odette School of Business and the University of Windsor sit on the Traditional territory of the Three Fires confederacy of First Nations, comprised of the Ojibway, the Odawa, and the Potawatomie.

Our **process** has been that many of our faculty have attended workshops provided by CTL to support efforts to indigenize our curriculum. Additional discussions in preparation for this section of the PDC document were done with the Project Coordinator, Indigenous Curriculum and Pedagogies (specifically for this section); and the Director of the Centre for Teaching and Learning. Learning Specialists at the Centre for Teaching and Learning and the University Secretary also provided feedback on other elements of the proposal.

Our **how** has been to invite U of W Indigenous Scholars to present at our Faculty Council and various committees this fall and winter, (such as the undergraduate committee on November 5<sup>th</sup>, 2021). Within the MBA program specifically, we hope to introduce more indigenous content in continued consultation with Jamie Kechego. In particular, readings on an indigenous worldview and teaching cases would fit very well in the Business Ethics and Sustainability course and the program Learning Objective E: Responsible behaviour to self, others and society.

Consideration to include Indigenous perspectives, content and material includes an ongoing review of **how** the following specific books, cases and articles can be incorporated into the MBA program: The Comeback by John Ralston Saul which provides a critical analysis of settler colonialism and decolonization; Indigenous People's Perspective by Salter and Hall (1993) which describes the perspective of the Ecuadoriann Huaroni Amazon Peoples on oil exploration in their territory; Raven Indigenous Capital Partners: Designing An Impact Investing Measurement Framework by King, Majerbi and Tremblay (2021), which examines fund development to support Indigenous entrepreneurs in Vancouver; AIME High: A Social Entrepreneur's Moon Shot by Bartlett (2019), which describes an Australian success story to improve high school graduation rates among Australian Indigenous students and how this model could be applied in North America; and lastly an ongoing review of existing literature to find how an Indigenous worldview of connectivity with nature can be added to the Business Ethics and Sustainability MBA course.

**University principles 2, 8 and 11** are particularly applicable to the MBA program:

2. Be student-centered: focus on the learners, learning outcomes and learning abilities, and create opportunities that promote student success

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8. Recognize the value of promoting partnerships among educational and local Indigenous communities and continue to maintain a collaborative and consultative process on the specific needs of Indigenous students.

10. Recognize the importance of sharing information within the institution, and beyond, to inform current and prospective Indigenous students of the array of services, programs and supports available to them on campus.

11. 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

For example, and part of the **critical analysis of Settler Colonialism and/or decolonization**, we hope to build off past successes in our Master's and Professional MBA program in the STEN 8920 Building Diverse, Inclusive, and Equitable Organizations. In Modules 4 and 5 within the course students studied 'Colonialization and Colonizing Mindset: A First Primer Offered by a Settler', and 'Beyond Indigenous Colonial Awareness: Situating Yourself in Decolonial Systems'. We will examine how such material can be transferred into this new program.

**New ways of learning** include seeking to incorporate Indigenous-specific content within the context of lectures and case studies.

Further actions arising in due course from Indigenization will be appropriately incorporated in a sustainable manner into Odette's current structure, which includes a First Nations, Metis and Inuit Advisory Council to the Dean, formal policies, procedures and processes.

**A. Admission Details**

**A.1 Admission Requirements (QAF section 2.1.2)**

*Describe admission requirements for the Combined program or Concurrent offering:*

- *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.*

*Do the admission requirements differ from those of the existing standalone programs? If so, why?*

The admission requirements for this combined program will not differ from the existing standalone MBA program requirements. A minimum grade of 70% is required in the last two years of undergraduate study, and the successful completion of a GMAT test.

**A.2 Admission Requirements and Attainment of Learning Outcomes (QAF section 2.1.2)**

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

The admission requirements for this combined program will not differ from the existing standalone program requirements.

**B. Program Details**

**B.1 Program Curriculum Structure/Program of Study (QAF sections 2.1.4 and 2.1.10)**

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

***For graduate programs:** provide evidence that each graduate student in the Combined program or Concurrent offering 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 titles.*

***For Combined programs:** the degree requirements should be largely the same as those specified for the standalone programs.*

***For Concurrent offerings:** generally, the degree requirements for the two programs being offered concurrently should be the same as those specified for the standalone programs.*

*Through combined programs or concurrent program offerings, students complete two existing programs in an integrated way. If there are changes to the degree programs, these should be minor and supported by a strong rationale. Significant changes will require the submission of a PDC Form B – Major Program Change Form or a PDC Form A – New Program Proposal Form. If there are changes, identify them in **BOLD** and **STRIKETHROUGH**.*

**Total courses: 17**

**Degree requirements** (include a rationale if different from standalone programs):

**Integrated MBA/MD Program**

This special program provides students interested in a career combining management and medicine with an opportunity to complete the M.B.A. and M.D. degrees in five years. The program is jointly administrated by representatives of the Odette School of Business, the Schulich School of Medicine & Dentistry MD Program Western University, and the Faculty of Graduate Studies.

**Admission Requirements**

The admission procedure for the integrated program consists of two stages. At the first stage, students apply to the Doctor of Medicine Program at the Schulich School of Medicine & Dentistry, Western University. Upon acceptance, students would be required to complete their first year of studies. At the second stage, students would apply to the course-based MBA program at the University of Windsor. Therefore, separate applications must be submitted to Schulich Medicine at Western and to the Faculty of Graduate Studies at the University of Windsor for admission to the regular degree programs in both the MD and the MBA. Students who are accepted to both the MD and MBA programs will automatically be accepted to the integrated program. After completing their first year in the MD program, students will take a one-year leave of absence after the second or third year of MD studies to complete their MBA, before returning to the MD program.

**TERM PLANNING**

The MBA/MD Program offers students the opportunity to experience two enriching education experiences, two degrees, in an accelerated, integrated manner.

**MBA/MD students can enter into the MBA program** by deferring medicine studies for one year, complete 15 course credits toward the MBA and the Major Paper (BUSI-8960), weighted at two course credits, and then study Medicine in the regular manner.

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The **sequence of courses** would be identical to those studied by all MBA students, with one exception (noted in italics). With earning the 15 M.B.A. course credits, only the major paper (again, worth the equivalent of two courses) would remain to complete the program. The sequence is presented below:

Fall

BUSI-8010 Leadership and Interpersonal Dynamics

BUSI-8020 Core Concepts of Accounting I

BUSI-8030 Introduction to Financial Management

BUSI-8050 Marketing Management

BUSI-8140 Digital Business Systems

Winter

BUSI-8100 Core Concepts of Accounting II

BUSI-8120 Financial Management.

BUSI-8130 Human Resources Management.

STEN-8900 Entrepreneurship: New Venture Formation and Management

STEN-8110 Project Management I

Summer

MGMT-8600 Business Ethics and Sustainability

MGMT-8460 Dynamics of Business Negotiations

STEN-8120 Project Management II

STEN-8980 Strategic Management

BUSI-8150 Business Analytics

*+ BUSI-8960 Major Paper (for MBA/MD students only)*

Having met all the MBA requirements, students would then return to medicine studies in September. They are registered in medicine and finish the remainder of the MD Program.

The MBA Major Paper (BUSI-8960) for the purposes of the MBA/MD is to be completed under the supervisor of an Odette faculty member who is a member of the Faculty of Graduate Studies (FGS). Second committee members may be from medicine if they are members of FGS. Generally, the required second committee member will also be an Odette faculty member who is a member of FGS. The MBA Major Paper (BUSI-8960) must follow requirements from FGS and includes a public defense.

Please note that the MD program offered at the University of Windsor is a regional campus for the Schulich School of Medicine & Dentistry at the University of Western Ontario. The idea for a joint program was initially proposed by the Associate Dean of the Windsor Campus of the Schulich School of Medicine & Dentistry, Dr Larry Jacobs. Consultations and support were also obtained from Schulich Windsor Campus Manager of Medical Education, Anne Mullen, and the Vice Dean (Acting) of Undergraduate Medical Education, Dr Gary Tithecott, at Western University.

Schulich Medicine & Dentistry MD Program has a stream that supports academic enrichment named "MD+". The MD + stream has a goal of creating interdisciplinary, experiential learning environments and offering a wide spectrum of opportunities for a parallel graduate studies. There are over a dozen MD+ partnerships being made available to Schulich Medicine MD Program Learners, including thesis-based and course-based Master degree opportunities with a variety of Western University faculties. The proposed MBA-MD Program is a natural addition to a well-tested and popular stream of studies offered by Western University.



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The structure for this new combined program was jointly agreed upon by both Odette and Schulich. The current structure is consistent with other MD+ offerings at Schulich and is the same as the current JD/MBA program at Odette.

The MD program will be offered as is by Western University

**Courses used to calculate the major average are:** All of the above

**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]:* N/A

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

**Guidelines for experiential learning/co-op work term reports:** N/A

**General length of experiential learning/co-op work term:** N/A

**Is the completion of the experiential learning/co-op component a requirement of the program?** N/A

**B.1 Program Curriculum Structure/Program of Study (QAF sections 2.1.4 and 2.1.10) For Concurrent Offerings**

*Generally, the degree requirements for the two programs being offered concurrently should be unchanged. Through concurrent program offerings, students complete two existing degree programs in an integrated way. If there are changes to the degree programs, these should be minor and be supported by a strong rationale. Significant changes will require the submission of a Major Program Change Form or New Program Proposal Form.*

**Changes to degree requirements for one or both programs:** Unchanged per program. Students are still required to complete the regular degree requirements from both programs: the MD program and the MBA program. The only slight difference in the MBA program is that in the final semester students are required to complete the Major Research Paper (MRP) option. In the regular program students have the option to complete an MRP, additional course work, or an international exchange. Only having the MRP option is the same as in our current JD/MBA program.

**Rationale for change:** The sole MRP option is necessary as the MD students will be returning to their studies in medicine in the fall, one year after beginning their MBAs, whereas the additional course options carry forward in the fall. This structure was jointly determined by Odette and Schulich and felt to be the best option for the students.

The MD program will be offered as is by Western University.

**B.1.1 Suggested Program Sequencing**

*Provide suggested program sequencing for each year of the Combined program or Concurrent Offering, 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 Combined program or Concurrent offering. 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).*

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The **sequence of courses** would be identical to those studied by all MBA students, with one exception (noted in italics). With earning the 15 M.B.A. course credits, only the major paper (again, worth the equivalent of two courses) would remain to complete the program. The sequence is presented below:

Fall

BUSI-8010 Leadership and Interpersonal Dynamics  
BUSI-8020 Core Concepts of Accounting I  
BUSI-8030 Introduction to Financial Management  
BUSI-8050 Marketing Management  
BUSI-8140 Digital Business Systems

Winter

BUSI-8100 Core Concepts of Accounting II  
BUSI-8120 Financial Management.  
BUSI-8130 Human Resources Management.  
STEN-8900 Entrepreneurship: New Venture Formation and Management  
STEN-8110 Project Management I

Summer

MGMT-8600 Business Ethics and Sustainability  
MGMT-8460 Dynamics of Business Negotiations  
STEN-8120 Project Management II  
STEN-8980 Strategic Management  
BUSI-8150 Business Analytics  
*+ BUSI-8960 Major Paper (for MBA/MD students only)*

A note that while the summer semester may appear heavy, existing JD/MBA students at Odette have not had a problem completing their MBA requirements within the one year. To ensure success the Major Paper is discussed with the students in the first semester, and in the winter semester they are guided by the MBA director to create a committee and topic. Deadlines from the Faculty of Graduate Studies are repeatedly shared with the students to ensure timely completion of the Major Paper. All students must complete a timeline that is approved by the Major Paper Committee, the MBA Director, and the Associate Dean of Graduate Studies, in the summer semester to ensure successful completion of their Major Paper. The MD program will be offered as is by Western University.

**B.1.2 Standing Required for Continuation in Program**

*Minimum average requirements for continuation in the Combined program or each of the programs in the Concurrent offering. Must conform to the regulations for standing required for continuation in the program as set out in Senate policy. Specify standing required for continuation in the experiential learning option or co-op option, where applicable.*

The minimum average required for continuation in the program is 70% cumulative average. The MD program will be offered as is by Western University.

**B.1.3 Standing Required for Graduation**

*Minimum average requirement to graduate in the Combined program or each of the programs in the Concurrent offering. Must conform to the regulations for standing required for continuation in the program as set out in Senate policy. Specify the standing required for graduation in the experiential learning option or co-op option, where applicable.*

The minimum average required for graduation is 70% cumulative average. The MD program will be offered as is by Western University.

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**B.2 For Graduate Program ONLY (QAF sections 2.1.3 and 3; Senate Policy on Co-op Programs):**

**B.2.1 Normal Duration for Completion**

*Provide a clear rationale for program length that ensures that the requirements of the Combined program or Concurrent offering can be reasonably completed within the proposed time period.*

The full length of the program is 5 years or 60 months. The length of completion for the MBA portion is 12 months. Twelve months is necessary because the MD students will take a one year LOA from their studies in Medicine to complete their MBA.

**B.2.2 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 Combined program or Concurrent offering.*

While the course-based MBA is not research-focused, MD/MBA students will be required to complete a Major Research Paper to ensure that they can complete their MBA in one year so that they can return to their MD studies. This contrasts with the regular MBA that takes 16 months to complete, but is consistent with our other combined program, the JD/MBA, where students take one year to complete their MBA then immediately return to their Law studies.

The MBA Major Paper (BUSI-8960) for the purposes of the MBA/MD is to be completed under the supervisor of an Odette faculty member who is a member of the Faculty of Graduate Studies (FGS). Second committee members may be from medicine if they members of FGS. Generally, the required second committee member will also be an Odette faculty member who is a member of FGS. The MBA Major Paper (BUSI-8960) must follow requirements from FGS and includes a public defense. The MD program will be offered as is by Western University.

**B.3 LEARNING OUTCOMES (Degree Level Expectations) (QAF section 2.1.1, 2.1.3, and 2.1.6)**

**COMPLETE THIS TABLE FOR GRADUATE DEGREE 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.]*

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*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.*

The following link provides a document that discusses the Learning Outcomes for the MD program at the University of Western Ontario: <https://www.schulich.uwo.ca/cbme/docs/Doctor-of-Medicine-Curriculum-Renewal.pdf> (or PDC211216-5.1.1 filed in the University Secretariat)

Please note the following:

- The document was written in 2019 and outlines their renewal to a Competency Based Medical Education (CBME) curriculum.
- They do not have a data base with all outcomes for the MD program. They are each separated by course—all included in their course Elentra sites (this is the Learning Management Software used at Schulich) .
- The document explains why they are an outcomes based/competency based curriculum.

<b>Program Learning Outcomes (Degree Level Expectations)</b> <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i>  <u>At the end of this program, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A UWindsor graduate will have the ability to demonstrate:</u>	<b>OCCS-approved Graduate Degree Level Expectations</b>
<b>A</b> Business: Distinguish and explain the relevance of data to the resolution of a business problem  Combined: Apply clinical and business competencies to solve problems related to administrative health care leadership roles.	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>B</b> Business: Complete research to inform the timely resolution of specified business issues in an organization  Combined: Complete evidence-based and data-driven decisions on organizational issues in the healthcare industry.	B. Research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	1. Depth and Breadth of Knowledge 2. Knowledge of methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge
<b>C.</b> Business: Apply a systematic evidence-based process of decision making to resolve issues in business organizations  Combined: Apply a systematic evidence-based process of decision making to resolve organizational issues in the healthcare industry.	C. critical thinking and problem-solving skills.	1. Depth and Breadth of Knowledge 2. Knowledge of methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge

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<b>Program Learning Outcomes (Degree Level Expectations)</b> <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i>  <u>At the end of this program, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A UWindsor graduate will have the ability to demonstrate:</u>	<b>OCGS-approved Graduate Degree Level Expectations</b>
D. Business: Analyze both qualitative and quantitative data, by applying appropriate techniques.	D. Literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
E. Business: Engage in ethical decision making based on systematic analysis of relevant information.  Foster and sustain collaboration among diverse members of a community group.  Combined: Demonstrate ethical, holistic and environmental decision making in making organizational recommendations.	E. Responsible behaviour to self, others and society	5. Awareness of limits of knowledge 6. Autonomy and professional capacity
F. Business: Demonstrate professionalism in appearance, behaviour and presentation in written and verbal communications.  Produce clean, clear, concise business reports, and presentations.  Combined: Produce clean, clear, concise business and organizational reports and presentations.	F. interpersonal and communications skills	4. Communication skills 6. Autonomy and professional capacity
G. Business: Work well as both a team leader, and a team member.  Lead teams to the achievement of appropriate outcomes.  Combined: Develop team skills through repeated team assignments across the program.	G. teamwork, and personal and group leadership skills	4. Communication skills 6. Autonomy and professional capacity

**PROGRAM DEVELOPMENT COMMITTEE  
COMBINED PROGRAM OR CONCURRENT OFFERING  
(from existing programs)  
FORM C2**

<b>Program Learning Outcomes (Degree Level Expectations)</b> <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i>  <u>At the end of this program, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A UWindsor graduate will have the ability to demonstrate:</u>	<b>OCGS-approved Graduate Degree Level Expectations</b>
H. Business: Convey information, ideas and insights using techniques and media appropriate to meet the needs of the audience and the purpose of the message.	H. Creativity and aesthetic appreciation	2. Knowledge of methodologies 3. Application of knowledge 6. Autonomy and professional capacity
I. Business: Apply acquired knowledge in solving business issues in organizations.  Combined: Apply acquired knowledge in solving organizational issues in the healthcare industry.	I. The ability and desire for continuous learning	6. Autonomy and professional capacity

**B.3.1 Program Structure and Regulations Ensure Learning Outcomes Can be Met**

*Describe how the Combined program or Concurrent offering requirements and program structure ensure that the specified learning outcomes can be met by successful students.*

The performance of students will be assessed through a combination of midterm exam, final exam, class participation, oral presentation, papers, and assignments. Assurance of Learning (AoL) is administered in a parallel process based on the Odette schedule of testing in its MBA courses. AoL is tested using methods and observable measures which are aligned with the learning outcome being tested.

AoL testing in the MBA program uses both direct and indirect measures. Direct measures include written assignment and exam questions in the following courses: MGMT-8460 Dynamics of Business Negotiations, STEN-8120 Project Management, STEN-8980 Strategic Management, BUSI-8010 Leadership and Interpersonal Dynamics, and MGMT-8600 Business Ethics and Sustainability. Indirect measures are included in the annual Odette Graduate Survey.

The MD program will be offered as is by Western University.

**B.3.2 Mode of Delivery (QAF section 2.1.5)**

*Demonstrate that the proposed modes of delivery are appropriate to meet the Combined program or Concurrent offering's 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.*

The courses will be delivered through face-to-face, online, or hybrid modes as appropriate for students to complete the program in a timely way. The MD program will be offered as is by Western University.

**B.3.3 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.*

**PROGRAM DEVELOPMENT COMMITTEE  
COMBINED PROGRAM OR CONCURRENT OFFERING  
(from existing programs)  
FORM C2**

The AOL process at Odette is well established, has been vetted by the Centre for Teaching and Learning. A five year plan at the graduate level is currently in place for AOL which is re-examined every year. After each year the respective program directors for all Odette graduate programs review the results and make changes to the process and curriculum as needed. Any such changes then go through an approval process first at the Odette Graduate Committee, and then subject to approval, they move on to Faculty Council for approval.

The MD program will be offered as is by Western University.

**B.3.3.1 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 stated learning outcomes and degree level expectations.*

The Odette School of Business has a grading policy and a rigorous AOL process. Whenever the course grades and/or AOL results do not meet the threshold requirements, the Graduate Committee, in consultation with the directors and instructors, develops remedies to improve the program.

The MD program will be offered as is by Western University.

**PROGRAM DEVELOPMENT COMMITTEE  
COMBINED PROGRAM OR CONCURRENT OFFERING  
(from existing programs)  
FORM C2**

**C.1 Student Workload**

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

<b>Expected Workload per 3.0 Course Credit/Week</b>	<b>Average Time <i>per week</i> the Student is Expected to Devote to Each Component Over the Course of the Combined Program or Concurrent offering</b>
Lectures	3
Tutorials	
Practical experience	
Service or experiential learning	
Independent study	1.5
Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.)	2
Studying for tests/examinations	1.5
Other: <i>[specify]</i>	
<p><b>Compare the student workload for the Combined program or Concurrent offering with the workload for the existing program and other similar programs in the AAU:</b> A total of 8 hours per week per course is a reasonable student workload for a graduate Business or MD student. At this rate, students' normal load of 5 courses per term translates into 40 hours per week of workload per term. At this rate, a student spends 120 hours over a 15-week term (12 week lecture, 1 week study break, 2 week final exam period). This is similar to the existing standalone programs and other comparable programs.</p>	

**C. RESOURCES**

**C.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 Combined program or Concurrent offering. Please do not name specific individuals.*

All courses listed for the combined program are currently offered either by full-time faculty members or long-time sessional instructors.

**C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Articulation agreement/Degree Completion Program**

*Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the Combined program or Concurrent offering.*

All courses listed in the combined program are regularly offered with the current Odette MBA program. Approximately 20-25% of the course offerings are taught by sessional instructors.

**C.1.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY)**

*Given the expected influx of students, explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the Combined program or Concurrent offering.*

We anticipate 1-3 students per year in this new combined program. For the MBA Major Paper (BUSI-8960) this would entail a supervisor from the Odette faculty who is a member of the Faculty of Graduate Studies (FGS), and a second committee member who may be from medicine if they members of FGS. Generally, the required second committee



**PROGRAM DEVELOPMENT COMMITTEE**  
**COMBINED PROGRAM OR CONCURRENT OFFERING**  
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**FORM C2**

member will also be an Odette faculty member who is a member of FGS. This is consistent with the JD/MBA requirements which are currently supported by Odette faculty, many of whom are eager to work with MD/MBA students on a potentially publishable MRP.

**C.1.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY)**

*Given the expected influx of students and where appropriate to the Combined program or Concurrent offering, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.*

The “expected influx of students” is minimal for this program, where only 1-3 per year are anticipated. MD/MBA students will be eligible for the regular MBA entrance scholarships and awards, as well as have the opportunity to work as Graduate assistants or research assistants, all of which are currently offered to MBA students.

**C.2 Other Available Resources (Ministry sections 3 and 4)**

*Provide evidence that there are adequate resources available and committed to the Combined program or Concurrent offering 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, facilities, GA/TA*

All courses listed in the combined program are offered regularly with existing resources.

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

*Describe the reliance of the proposed Combined program or Concurrent offering on existing resources from other 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.*

The combined program relies on existing resources.

**C.4 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 Combined program or Concurrent offering.*

The combined program relies on existing resources.

**C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)**

*Describe all opportunities for internal reallocation of resources and cost savings identified and pursued by the area/department in support of the Combined program or Concurrent offering. (e.g., streamlining existing programs and courses, deleting courses, etc.).*

Student recruitment, retention, advising, mentoring, etc. will be done jointly by both units.

**C.6 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 Combined program or Concurrent offering. If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

**PROGRAM DEVELOPMENT COMMITTEE  
COMBINED PROGRAM OR CONCURRENT OFFERING  
(from existing programs)  
FORM C2**

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

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

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

**D.1 Form History** *(Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)*

<b>Date of Modification</b>	<b>Approval Body Modifying</b>	<b>Reason for Modification</b>

**University of Windsor  
Program Development Committee**

**\*5.2: Integrative Biology – Minor Program Change (Form C)**

Item for: **Approval**

**MOTION: That the degree requirements for Honours BSC Biological Sciences with Thesis be changed in accordance with the program/course change forms.^**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by the Department of Integrative Biology and the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- *See attached.*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	Honours BSC Biological Sciences with Thesis
<b>DEPARTMENT(S)/SCHOOL(S):</b>	Integrative Biology
<b>FACULTY(IES):</b>	Science

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Spring 2022
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#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.

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 BSC Biological Sciences with Thesis

Total courses: forty.

(a) twenty courses, including the “Core” courses BIOL-1101, BIOL-1111, BIOL-2101, BIOL-2111, BIOM2131, and BIOL-3142; and fourteen other Biology (BIOL-and BIOM-) courses including BIOL-4904 **or BIOM-4904**\*. At least nine courses must be at the **3000** level or above. (Recommended: BIOL-2071 and BIOL-3022.)

(b) eight Science courses, including CHEM-1100, CHEM-1110, CHEM-2300, BIOC-2010, STAT-2910, ~~or~~ **and** MATH-1720 (or MATH-1760)\*\*, and at least one pair of both ESCI-1100 and ESCI-1111, or both PHYS1300 and PHYS-1310, or both PHYS-1400 and PHYS-1410, or both COMP-1047 or COMP-2067 and COMP-2057, or both COMP-1400 and COMP-1410, or both ESCI-1120 and ESCI-1130;

(c) six additional Science courses, (five additional courses if taking MATH-1720 (or MATH-1760) and MATH-1730)\* excluding \*\*ECON-XXXX and including additional courses in Biology. At least two of these courses must be at the 3000 level or above;

(d) four courses from Arts/Languages or Social Sciences, with at least one from each;

(e) two courses from any area of study.

\*Only students who have maintained a major average of 70% and a cumulative average of 60% will be considered for enrolment permitted to enroll in BIOL-4904 **or BIOM-4904**. Registration in BIOL-4904 **and BIOM-4904** is competitive and requires the consent of the **Course Instructor**. ~~Head of Department.~~

\*\*It is recommended that students who have taken MATH-1720 (or MATH-1760) also take MATH-1730.

\*\*\*ECON-XXXX courses will be counted as Social Science 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.

#### 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*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

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 Department of Biomedical Sciences was recently approved to offer a BIOM-4904 Undergraduate Thesis course, a course similar to the BIOL-4904 Undergraduate Thesis course offered by the Department of Integrative Biology. Since students completing an honours thesis in Biological Sciences can choose to be supervised by individuals in either of the two departments, depending on their interests, both courses need to be listed in the Undergraduate Calendar.

#### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).

In revising this program, **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 [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)
- 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 Integrative Biology is committed to expanding student knowledge of Indigenous ways, perspectives, and approaches. There are both faculty and staff with a strong Indigenous knowledge so our students have the opportunity to focus on this knowledge and approaches in their Undergraduate thesis.

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### 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, in general terms, all faculty expertise 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.*

N/A

##### 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 revised program.*

N/A

##### C.1.2 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

##### C.1.3 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

##### C.2 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, facilities, GA/TA*

N/A

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

*Describe the reliance of the proposed program revisions on existing resources from other 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

##### C.4 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 revisions to this program.*

None

##### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

N/A

**PROGRAM DEVELOPMENT COMMITTEE  
MINOR PROGRAM CHANGES  
FORM C**

**C.6 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. If not applicable, write n/a.*

<b>Faculty:</b>	None
<b>Staff:</b>	None
<b>GA/TAs:</b>	None

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

*Describe all **additional institutional resources and services** required by all affected 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.*

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

**University of Windsor  
Program Development Committee**

**\*5.3: Integrative Biology – Minor Program Change (Form C)**

Item for: **Approval**

**MOTION:** That the degree requirements for Honours Biological Science, Honours Biological Science with Thesis and Honours Behaviour, Cognition and Neuroscience be changed in accordance with the program/course change forms.<sup>^</sup>

*<sup>^</sup>Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by the Department of Integrative Biology and the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- *See attached.*



# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Honours BSC Biological Science (with or without Thesis) and Honours BSC Honours Behaviour, Cognition and Neuroscience
DEPARTMENT(S)/SCHOOL(S):	Integrative Biology
FACULTY(IES):	Science

Proposed change(s) effective as of* [Fall, Winter, Spring]: *(subject to timely and clear submission)	Fall 2022
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#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.

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 Biological Sciences

Undergraduate students may be allowed, with the consent of the instructor, to take one graduate course for credit.

Degree Requirements

Total courses: forty.

(a) twenty courses, including the “Core” courses BIOL-1101, BIOL-1111, BIOL-2101, BIOL-2111, BIOM2131, and BIOL-3142; and fourteen other Biology (BIOL-and BIOM-) courses. At least nine courses must be at the **3000** level or above. (Recommended: BIOL-2071 and BIOL-3022.)

(b) eight Science courses, including CHEM-1100, CHEM-1110, CHEM-2300, BIOC-2010, STAT-2910, MATH-1720 (or MATH-1760)\*, and at least one pair of both ESCI-1100 and ESCI-1111, or both PHYS1300 and PHYS-1310, or both PHYS-1400 and PHYS-1410 (**or PHYS-1310**), or both COMP-1047 or COMP-2067 and COMP-2057, or both COMP-1400 and COMP-1410, or both ~~ESCI-1120 and ESCI-1130~~ **and ESCI-2400**;

(c) six additional Science courses, ~~(five additional courses if taking MATH-1720 (or MATH-1760) and MATH-1730)\*~~ excluding \*ECON-XXXX and including additional courses in Biology. At least two of these courses must be at the **3000** level or above;

(d) four courses from Arts/Languages or Social Sciences, with at least one from each;

(e) two courses from any area of study.

~~\*It is recommended that students who have taken MATH-1720 (or MATH-1760) also take MATH-1730. \*\*ECON-XXXX courses will be counted as Social Science courses.~~

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

#### Honours Biological Sciences with Thesis

Undergraduate students may be allowed, with the consent of the instructor, to take one graduate course for credit.

Degree Requirements

Total courses: forty.

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

(a) twenty courses, including the “Core” courses BIOL-1101, BIOL-1111, BIOL-2101, BIOL-2111, BIOM2131, and BIOL-3142; and fourteen other Biology (BIOL-and BIOM-) courses including BIOL-4904\*. At least nine courses must be at the 300 level or above. (Recommended: BIOL-2071 and BIOL-3022.)

(b) eight Science courses, including CHEM-1100, CHEM-1110, CHEM-2300, BIOC-2010, STAT-2910, ~~or~~ **and** MATH-1720 (or MATH-1760)\*\*, and at least one pair of both ESCI-1100 and ESCI-1111, or both PHYS1300 and PHYS-1310, or both PHYS-1400 and PHYS-1410 **(or PHYS-1310)**, or both COMP-1047 or COMP-2067 and COMP-2057, or both COMP-1400 and COMP-1410, or both ~~ESCI-1120 and~~ ESCI-1130 **and ESCI-2400**;

(c) six additional Science courses, ~~(five additional courses if taking MATH-1720 (or MATH-1760) and MATH-1730)~~, excluding \*\*\*ECON-XXXX and including additional courses in Biology. At least two of these courses must be at the 3000 level or above;

(d) four courses from Arts/Languages or Social Sciences, with at least one from each;

(e) two courses from any area of study.

\*Only students who have maintained a major average of 70% and a cumulative average of 60% will be considered for enrolment permitted to enroll in BIOL-4904. Registration in BIOL-4904 is competitive and requires the consent of the Head of Department.

~~\*\*It is recommended that students who have taken MATH-1720 (or MATH-1760) also take MATH-1730.~~

\*\*\*ECON-XXXX courses will be counted as Social Science courses.

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

#### **BSc Honours in Behaviour, Cognition and Neuroscience**

This is a joint offering with the Department of Psychology.

Degree Requirements

Total courses: forty.

(a) Biological Sciences: BIOL-1101, BIOL-1111, BIOL-2040, BIOL-2101, BIOL-2111, BIOM-2131, BIOL2480, BIOL-3142, BIOL-4450, and BIOL-4481; plus one additional biology (BIOL-and BIOM-) course.

(b) Psychology: PSYC-1150, PSYC-1160, PSYC-2230, PSYC-2560, PSYC-3130, PSYC-3220 (or PSYC-3230), PSYC-3350, PSYC-3530, PSYC-3580 and one of PSYC-3370, PSYC-4230, or PSYC-4570.

(c) Biological Sciences or Psychology: BIOL-3230 or PSYC-3550; BIOL-3022 (or PSYC-2300); and an honours thesis in the area of behavioural or cognitive neuroscience chosen from BIOL-4904, or PSYC4960 and PSYC-4970, or CHEM-4900, or KINE-4780.

(d) STAT-2910 or SOSC-2500;

(e) one pair of both PHYS-1300 and PHYS-1310, or both PHYS-1400 and PHYS-1410 **(or PHYS-1310)**, or both COMP1047 (or COMP-2067) and COMP-2057, or both ESCI-1100 and ESCI-1111, or both ~~ESCI-1120 and~~ ESCI-1130 **and ESCI-2400**;

(f) CHEM-1100, CHEM-1110, CHEM-2300, BIOC-2010;

(g) two courses from Arts and Social Sciences excluding Psychology;

(h) four courses at 3000-level or above in Biology, Chemistry, Psychology, or Kinesiology;

(i) two courses from any area of study ~~(MATH-1720 (or MATH-1760) is recommended)~~.

Non-credit course: Colloquia and Seminars in Current Behaviour, Cognition and Neuroscience Research: bi-weekly presentations of recent research by investigators within the university and from other universities and research institutions. Attendance by key faculty members and all students is expected. A notation will be added to the student's transcript upon successful completion of the course.

#### **Recommended Course Sequence**

First Year: ten courses, including BIOL-1101, BIOL-1111, CHEM-1100, CHEM-1110, PSYC-1150, PSYC1160, SOSC-2500 or STAT-2910; at least one pair of both PHYS-1300 and PHYS-1310, or both PHYS-1400 and PHYS-1410 **(or PHYS-1310)** or both COMP-1047 (COMP-2067) and COMP-2057, or both ESCI-1100 and ESCI-1111, or both ESCI-1120 and ESCI-1130, and one additional course (MATH-1720 (or MATH-1760) recommended).

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

Second Year: ten courses, including BIOL-2040, BIOL-2101, BIOL-2111, BIOM-2131, BIOL-2480, PSYC2230, PSYC-2300, CHEM-2300 and BIOC-2010.

Third Year: ten courses, including PSYC-2560, BIOL-3142, BIOL-3230 or PSYC-3550\*, PSYC-3130, PSYC3530, and PSYC-3580

Fourth Year: ten courses: including PSYC-3220 (or PSYC-3230), PSYC-3350, BIOL-4481, one of PSYC3370, PSYC-4230, or PSYC-4570, BIOL-4904 (or PSYC-4960 and PSYC-4970, or CHEM-4900, or KINE4780), and BIOL-4450. \*BIOL-3230 or PSYC-3550 should be taken in third or fourth year.

Courses used to calculate the major average are: courses listed under requirements (a) to (c), and any **other BIOL, BIOM, or PSYC courses taken.** ~~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**.*

N/A

#### B. RATIONALE

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

There are primarily three changes identified for all three programs:

The addition of PHYS-1310 (instead of PHYS-1410) as a possible course to pair with PHYS-1400 has been in effect for some time, primarily for students transferring from a program requiring the Calculus-based PHYS-1400 & PHYS-1410 to a program with the option to take the algebra-based PHYS-1300 & PHYS-1310. This change adds flexibility to the programs.

The replacement of ESCI-2400 Geomorphology for ESCI-1120 Introduction to Geomorphology is necessary since ESCI-1120 Introduction to Geomorphology is no longer being offered by the School of the Environment. This substitution was made under the advisement from the School of the Environment. There appears to be considerable overlap in content between the two courses.

The removal of the bracketed statement about MATH courses is no longer relevant, since changes to MATH-1720 removed the requirements of the Biological Sciences courses to take both MATH-1720 and MATH-1730.

##### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

*In revising this program, 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 [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)*
- *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?*

Since only courses presently offered by UWindsor are relevant to the changes proposed in these programs and there are no changes to learning outcomes, the inclusion of Indigenous content, perspectives, and materials remains unchanged.

#### 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, in general terms, all faculty expertise 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.*

N/A

##### 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 revised program.*

N/A

##### C.1.2 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

##### C.1.3 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

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### C.2 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,
- facilities
- GA/TA

N/A

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

*Describe the reliance of the proposed program revisions on existing resources from other 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

#### C.4 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 revisions to this program.*

None

#### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

N/A

#### C.6 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.*

*If not applicable, write n/a.*

<b>Faculty:</b>	None
<b>Staff:</b>	None
<b>GA/TAs:</b>	None

**PROGRAM DEVELOPMENT COMMITTEE  
MINOR PROGRAM CHANGES  
FORM C**

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

*Describe all **additional institutional resources and services** required by all affected 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.*

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

**University of Windsor  
Program Development Committee**

**\*5.4: Faculty of Science – Minor Program Change (Form C)**

Item for: **Approval**

**MOTION:** That the requirements for BSc in Biological Sciences, Biochemistry, or General Science articulation agreements for Graduates of the Medical Laboratory Science Program be changed in accordance with the program/course change forms.^

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- *See attached.*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	BSc in Biological Sciences, Biochemistry, or General Science for Graduates of the Medical Laboratory Science Program
<b>DEPARTMENT(S)/SCHOOL(S):</b>	Faculty of Science
<b>FACULTY(IES):</b>	Faculty of Science

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Winter 2022
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#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.*

*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**.

#### **BSc in Biological Sciences, Biochemistry, or General Science for Graduates of the Medical Laboratory Science Program**

Graduates of the three-year Diploma in Medical Laboratory Science **from any Ontario College of Applied Arts and Technology (or Canadian equivalent)** with a 3.0 G.P.A. (75% or equivalent) may receive **up to** the equivalent of ~~seventeen~~ **eleven** semester course credits towards the Bachelor of Science degree in ~~Biological Sciences, Biochemistry, or General Science~~.

Bachelor of Science (General Science) for Graduates of a College Diploma Program in Medical Laboratory Technology **Science**

~~This program is for graduates of a College diploma program in Medical Laboratory Technology (Science) and can be completed by Flexible Learning. Students admitted to this program should seek academic counselling in the Faculty of Science Office.~~

**This program is for graduates of a College diploma program in Medical Laboratory Technology (Science) and may be completed by Flexible Learning (HyFlex or Distance Education) depending on program demand and course offerings. Students admitted to this program should seek academic counselling in the Faculty of Science Office by contacting [scienceundergrad@uwindsor.ca](mailto:scienceundergrad@uwindsor.ca).**

#### 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



# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### B. RATIONALE

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

The proposed changes would:

- Not be specific to a particular college, acknowledging that these diplomas are relatively similar since they follow the Ministry standard and approved accredited curriculum guidelines for this health field
- Not be particular to a specific Science degree (not sure if this would be an issue), allowing them to use the credits in the degree of their choosing, however they might fit their degree requirements
- Makes the GPA consistent with how we treat 3.0 in other agreements and GPA evaluations for admissions purposes.

#### B.1 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 revising this program(s), how has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?*

The Faculty of Science is looking to welcome an expert in indigenous-centred relationships who is a recognized Knowledge Keeper in their community into a role within the Integrative Biology Department to pursue community-based interests in research, teaching, and capacity development. With the help and support of this individual we hope to build and develop new and innovative initiatives to further indigenous-focussed research co-production and lifelong learning within the Department and across the Faculty of Science. In person in this role will support the creation of an indigenized space for Indigenous students, community members and allies to engage, learn and create. It is expected that courses will be offered relating to Indigenous Natural Science and ecology, natural resource management, conservation, and governance. The Indigenous Knowledge Keeper will provide counsel to the Office of the Dean to create further space for Indigenous knowledge and partnerships in the Faculty of Science and across the University of Windsor.

#### 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, in general terms, all faculty expertise 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.*

Faculty of Science Undergraduate Affairs Office – includes the Associate Dean of Undergraduate Affairs, the Undergraduate Affairs Secretary/ Coordinator, and the Faculty of Science Secretary/ Event Coordinator.

##### 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 revised program.*

N/A

##### C.1.2 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

##### C.1.3 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

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### C.2 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, facilities, GA/TA*

N/A

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

*Describe the reliance of the proposed program revisions on existing resources from other 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

#### C.4 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 revisions to this program.*

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

N/A

#### C.6 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. If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

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

*Describe all **additional institutional resources and services** required by all affected 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.*

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

**University of Windsor  
Program Development Committee**

**\*5.5: Minor in Biological Sciences – Minor Program Change (Form C)**

Item for: **Approval**

**MOTION: That the requirements for Minor in Biological Science be changed in accordance with the program/course change forms.^**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by the Department of Integrative Biology and the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council).
- *See attached.*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Minor in Biological Science
DEPARTMENT(S)/SCHOOL(S):	Integrative Biology
FACULTY(IES):	Science

Proposed change(s) effective as of* [Fall, Winter, Spring]: *(subject to timely and clear submission)	Spring 2022
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#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.

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**.

#### Minor in Biological Sciences

A **The** minor in Biological Sciences **consists of six courses including** requires an average of 60% or better in the six Biology courses, BIOL1101, BIOL-1111, **plus four BIOL- or BIOM- courses at the 2000 level or above, one of which must be at the 3XXX level or above. Courses that cannot count toward the Biological Sciences minor are BIOL-1013, BIOM-1073, and BIOM-2093. A minimum grade of 60% must be received in each course.**  
~~BIOL 2101, BIOL 2111, BIOM 2131, and BIOL 3142.~~

#### 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 minor in the Biological Sciences program is quite rigid, requiring completion of the six core Biology courses of the Biological Sciences major. With the proposed changes, students will now have greater flexibility in choosing courses that meet their needs, interests, and/or future goals when completing a Biological Sciences minor. This minor better aligns with the level of flexibility of other minors in the Faculty of Science.

#### 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 **Truth and Reconciliation Report** (2015) (page 1), the unique legal requirements of the **Constitution Act 1982** (Sections 25,

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).

*In revising this program, 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 [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)
- 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 Integrative Biology is in the process of hiring an Indigenous knowledge holder who will help in the Indigenization of Biology courses in the Faculty of Science. We look forward to working with this individual to incorporate Indigenous knowledge and perspectives in teaching our Biology courses.

#### 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, in general terms, all faculty expertise 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.*

N/A

##### 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 revised program.*

N/A

##### C.1.2 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

##### C.1.3 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

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### C.2 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, facilitiesGA/TA*

N/A

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

*Describe the reliance of the proposed program revisions on existing resources from other 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

#### C.4 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 revisions to this program.*

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

N/A

#### C.6 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. If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

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

*Describe all **additional institutional resources and services** required by all affected 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.*

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

**University of Windsor  
Program Development Committee**

**\*5.6: Women's and Gender Studies – Minor Program Change (Form C)**

Item for: **Approval**

**MOTION:** That the degree requirements for Honours Bachelor of Social Work and Women's Studies, General BA in Women's and Gender Studies, Certificate in Women's Studies, Women's and Gender Studies Major and Minor Concentrations – Bachelor of Interdisciplinary Arts and Science, be changed in accordance with the program/course change forms.^

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by Women's and Gender Studies and the Faculty of Arts, Humanities Science Coordinating Council.
- *See attached.*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	<b>Women's and Gender Studies, Social Work</b>
<b>DEPARTMENT(S)/SCHOOL(S):</b>	<b>School of Social Work</b>
<b>FACULTY(IES):</b>	<b>Arts, Humanities, and Social Sciences</b>

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Winter 2022 Undergraduate
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#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.*

*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 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, SWRK-3390, SWRK-3440, SWRK-3710, SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), and SWRK-4750 (12 credit hours).

(b) Women's Studies:

(i) WGST-1000, WGST-2200, WGST-2500, WGST-3060;

(ii) WGST-2510 or HIST-2510;

(iii) WGST-2100 or SACR-2100;

(iv) one of WGST-3590, PHIL-3590, WGST-3050;

(v) two of WGST/POLS-2110, ~~POLS-2110~~, ~~53~~**WGST**/WORK-2600, WGST-3100, WGST-~~3530~~/SACR-3530, **or** WGST/HIST-3400, ~~or WGST-3900~~;

(vi) SWRK/WGST-3550; one of SWRK/WGST-3470 WGST-3300 OR WGST-3850\*;

(vii) three additional Women's and Gender Studies courses.

(c) GART-1500, GART-1510;

(d) SOSC-2500;

(e) One science course;

(f) 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) GART-1500, GART-1510, SWRK-1170, SWRK-1180, WGST-1000, WGST-2100 (or SACR-2100), WGST-XXXX (one Women's and Gender Studies course), one science course, and two



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courses from any area of study, excluding Social Work and Women's and Gender Studies.

Year 2: (Ten Courses) SOSC-2500, SWRK-2040, WGST-2510 (or HIST-2510), WGST-2200, WGST-2500; two of WGST/POLS-2110, WGST/WORK-2600, WGST-3100, WGST-3530/SACR-3530 or WGST/HIST-3400, or WGST-3900;

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, WGST-3590 (or PHIL-3590 or WGST-3050), WGST-3060, SWRK/WGST-3550 ~~Feminist Social Work Practice~~; and one of SWRK/WGST-3470 or WGST-3300 or WGST-3850\*;

Year 4: SWRK-4230, SWRK-4300, SWRK-4310, SWRK-4730 (9 credit hours), SWRK-4750 (12 credit hours).

#### General BA in Women's and Gender Studies

Degree Requirements

Total courses: thirty.

(a) WGST-1000, WGST-2500, WGST-3060

(b) WGST-2510/HIST-2510

(c) at least one of WGST-2100/SACR-2100, or WGST-2200

(d) one of WGST-3590/PHIL-3590, or WGST-3050

(e) at least two of WGST/WORK-2400, POLS/WGST-2110, WGST/WORK-2600, WGST-3100, WGST-3530/SACR-3530, WGST-3300, WGST/HIST-3400

(f) three Women's and Gender Studies or Women's and Gender Studies Emphasis courses

(g) two courses from Arts

(h) one course from Science

(i) two courses from any area of study, excluding Social Sciences

(j) GART-1500, GART-1510

(k) six courses from any area of study, including Women's and Gender Studies (WGST)

(l) six courses from any area of study, excluding Women's and Gender Studies (WGST)

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.

#### Certificate in Women's Studies

Admission Requirements

Admission requirements are the same as those for the Honours Women and Gender Studies program.

Requirements

Total courses: ten.

(a) WGST-1000 and WGST-2510/HIST-2510;

(b) at least one of WGST-2100/SACR-2100 or WGST-2200;

(c) at least one of WGST/~~PHIL~~-3590 (or WGST-3050) or WGST-3060;

(d) at least one of POLS/WGST-2110, WGST/WORK-2600, WGST-3100, or WGST-3530/SACR-3530; ~~or WGST-3900~~;

(e) five Women's and Gender Studies or Women's and Gender Studies Emphasis courses, with at least one at the 1000-level.

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#### Major and Minor Concentrations - Bachelor of Interdisciplinary Arts and Science (IAS) - Women's and Gender Studies

Major Concentration: WGST-1000, WGST-~~2510~~/HIST-2510, WGST-~~2100~~/SACR-2100, WGST-2200; at least one of WGST-~~3590~~/PHIL-3590, WGST-3050, or WGST-3060; at least two of POLS/WGST-2110, WGST/WORK-2600, WGST-3100, WGST-~~3530~~/SACR-3530, or WGST/HIST-3400, ~~or WGST-3900~~; one Women's and Gender Studies/Women's and Gender Studies Emphasis course at the 1000-level or above, one Women's and Gender Studies/Women's and Gender Studies Emphasis course at the 2000-level or above, three Women's and Gender Studies/ Women's and Gender Studies Emphasis courses at the 3000-level or above.

Minor Concentration: six Women's and Gender Studies (WGST-) courses, including WGST-1000; and one Women's and Gender Studies (WGST-) course at the 3000- or 4000-level, no more than one other course may be at the 1000-level.

#### 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).*

WGST-3900 was deleted from the academic calendar but not from degree program requirements. This adjusts the degree requirements and cleans up typos.

#### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).*

*In revising this program, **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?

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- 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 [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)
- 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?

All Women's and Gender Studies courses apply an intersectional analysis to the subject matter under study. Inclusive to this analysis is an examination of the ways in which social and political identities overlap and intersect to create diverse experiences for members of specific racial and ethnic populations, including Indigenous populations.

#### 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, in general terms, all faculty expertise 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.*

N/A

##### 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 revised program.*

N/A

##### C.1.2 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

##### C.1.3 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

##### C.2 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, facilities, GA/TA*

N/A

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

*Describe the reliance of the proposed program revisions on existing resources from other 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

#### C.4 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 revisions to this program.*

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

N/A

#### C.6 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. If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

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

*Describe all **additional institutional resources and services** required by all affected 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.*

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

**University of Windsor  
Program Development Committee**

**\*5.7: Industrial Manufacturing System Engineering (IMSE) Multidisciplinary PhD – Minor Program Change (Form C)**

Item for: **Approval**

**MOTION:** That the degree requirements for IMSE Multi Disciplinary PhD program be changed in accordance with the program/course change forms.^

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by the MAME Council, the Faculty of Engineering Coordinating Council, and the Faculty of Graduate Studies Council.
- *See attached.*

# PROGRAM DEVELOPMENT COMMITTEE

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### FORM C

TITLE OF PROGRAM(S)/CERTIFICATE(S):	IMSE – Multi Disciplinary PhD
DEPARTMENT(S)/SCHOOL(S):	MAME
FACULTY(IES):	Engineering

Proposed change(s) effective as of* [Fall, Winter, Spring]: *(subject to timely and clear submission)	Spring 2022
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#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**. 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.

#### Multi Disciplinary PhD (IMSE)

The minimum course requirement for the multi-disciplinary PhD. Program is 4; at least 2 from the INDE-8XXX courses **(Category A)** ~~listed in Category A~~ and a minimum of one from Category B would be selected. This is in addition to the Graduate Seminar course (INDE-8595). Students will be required to register throughout the entire program and give presentations, and all students will be expected to attend each seminar (no less than 75% of all seminars). The course will be graded on a PASS/FAIL basis (1 Lecture Hour a week). This course will include presentations by graduate students, staff, and visiting scientists.

The Category B courses are: **(ECON-8XXX, COMP-8XXX, MATH-8XXX, STAT-8XXX, MSCI-8XXX, STEN-8XXX, BUSI-8XXX, ELEC-8XXX, MECH-8XXX, ENVE-8XXX, KINE-8XXX).**

~~ECON-8030. Microeconomic Theory II~~

~~ECON-8310. Industrial Organization~~

~~ECON-8800. Models of Strategic Behaviour~~

~~POLS-8910. Selected Topics in Political Science~~

~~COMP-8490. Virtual Reality~~

~~COMP-8700. Introduction to Artificial Intelligence~~

~~COMP-8510. Visual Processing~~

~~COMP-8540. Advanced Algorithms~~

~~COMP-8700. Introduction to Artificial Intelligence~~

~~COMP-8760. Advanced Search Methods~~

~~MATH-8820. Portfolio Optimization~~

~~STAT-8460. Statistical Data Analysis~~

~~STAT-8520. Experimental Design~~

~~MSCI-8020. Special topics in Management Science~~

~~STEN-8820. Manufacturing Strategy~~

~~STEN-8980. Strategic Management~~

~~BUSI-8040. Quantitative Techniques in Management~~

~~BUSI-8140. Management Information Systems~~

~~CIVL-8900. Special Topics In Civil Engineering (Urban Transportation Planning)~~

~~ELEC-8230. System Theory~~

~~INDE-8310. Stochastic Processes~~

~~ELEC-8330. Computational Intelligence~~

~~ELEC-8350. Nonlinear Systems~~

~~MECH-8245. Automotive Control Systems~~

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MECH-8240. Applied Finite Element Analysis  
 MECH-8293. Introduction to Finite Element Analysis  
 ENVE-8500. Sustainability: Principles and Practices  
 KINE-8220. Instrumentation and Modeling in Kinesiology  
 KINE-8230. Applied Biomechanics of Human Performance  
 KINE-8240. Biomechanics in the Workplace

#### 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).*

Clearer description of the requirements, that will not require frequent Calendar updates to the list of courses.

#### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967). In revising this program, **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 [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)*
- *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?*

N/A. The purpose of this minor change is to clarify the calendar description of the program course requirements efficiently. It does not concern any course content or delivery.

# PROGRAM DEVELOPMENT COMMITTEE

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### FORM C

#### 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, in general terms, all faculty expertise 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.*

N/A

##### 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 revised program.*

N/A

##### C.1.2 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

##### C.1.3 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

##### C.2 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, facilities, GA/TA*

N/A

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

*Describe the reliance of the proposed program revisions on existing resources from other 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

##### C.4 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 revisions to this program.*

N/A

##### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

N/A



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#### C.6 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. 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

Describe all **additional institutional resources and services** required by all affected 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**

**\*5.8 Master of Engineering Management (MEM)– Minor Program Change (Form C)**

Item for: **Approval**

**MOTION: That the degree requirements for Master of Engineering Management be changed in accordance with the program/course change forms.^**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by the Faculty of Engineering Coordinating Council, the Odette School of Business, and the Faculty of Graduate Studies Council.
- *See attached.*

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## MINOR PROGRAM CHANGES

### FORM C

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	Master of Engineering Management
<b>DEPARTMENT(S)/SCHOOL(S):</b>	Faculty of Engineering/Odette School of Business
<b>FACULTY(IES):</b>	Faculty of Graduate Studies

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Spring 2022
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#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**. 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.*

Master of Engineering Management

#### A: Core Business Courses:

BUSI-8310. Financial and Managerial Accounting for Engineers  
 BUSI-8300. Applied Finance for Engineering Managers  
 STEN-8980. Strategic Management

#### B: Core Engineering Courses

INDE-8430. Product Innovation and Design Management  
~~INDE-8340. Engineering Design, Methodology and Applications~~  
 GENG-8020. Engineering Project Management  
**GENG-8050 Data Analytics and Decision-Making**

#### C: Non-Core Engineering Courses "Choose one of:"

INDE-8390. Work Organization: Analysis and Design  
 INDE-8420. Supply Chain Management and Logistics  
 ENVE-8500. Sustainability: Principles and Practice  
 ELEC-8900-2. Electronic Commerce  
 ELEC-8900-40. Technology Entrepreneurship

#### D: Non-Core Business Courses: "Choose one of:"

MSCI-8040. Operations Management  
 BUSI-8050. Marketing Management  
 STEN-8820. Manufacturing Strategy  
 BSMM-8130. Managing Employees  
 STEN-8920. Special Topics (depending on semester)

No change to sections A, C and D of the curriculum.

#### 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*

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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).

1. The proposed replacement course, GENG-8050 Data Analytics and Decision-Making offers insight on how to utilize data analytics and decision-making tools and models in making more informed and intelligent decisions in an engineering firm.
2. This proposed replacement course delivers the following program learning outcome (PLO)  
“D. Analyze both qualitative and quantitative data and findings by applying appropriate techniques to resolve strategic and operational issues arising from business activities of research, development, and commercialization.”
3. Surveys of graduating students in the program indicate the increasing need for how to interpret data, validate data, and choose sources of data, as well as be able to make decisions based on data. There is an evident need for students to learn how to understand data and be able to make decisions based on data.
4. In today's highly dynamic and globalized environment, and with the abundance of available data, there is an increasing need for the ability to understand data and utilize it in making more informed decisions in engineering firms.

#### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).

In revising this program, **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?

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- 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)
  - 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?*

Based on ongoing discussions and access to resources provided to members of standing committees at the Odette School of Business, a process is being undertaken to inform faculty engaged in the MEM program of how to systematically incorporate First Nations, Metis, and Inuit (FNMI) perspectives into the program. Collaborative efforts are ongoing between the Faculty of Engineering and the Odette School of Business to determine how best to incorporate an FNMI pedagogy and content. In addition, consideration is being given to how to recruit, retain and deliver online courses to overcome limitations imposed by the current infrastructure to provide equitable access to qualified students.

Many of our faculty have also attended workshops organized by CTL regarding efforts to indigenize the MEM curriculum. This is part of our process. The how was accomplished through the invitation of many University of Windsor Indigenous Scholars to present at our Faculty Council meetings. This has also enhanced faculty knowledge of history and ways to incorporate land acknowledgment in our course material.

University principles that are relevant to our program courses include:

2. Be student-centered: focus on the learners, learning outcomes, and learning abilities, and create opportunities that promote student success
8. Recognize the value of promoting partnerships among educational and local Indigenous communities and continue to maintain a collaborative and consultative process on the specific needs of Indigenous students.
10. Recognize the importance of sharing information within the institution, and beyond, to inform current and prospective Indigenous students of the array of services, programs, and supports available to them on campus.
11. 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

A new way for learning, we aim to integrate more Indigenous-related material in MEM teaching content, including lectures and project assignments.

Other Action: we also encourage faculty to add a reference to Indigenization in the Learning-Centred Syllabus Checklist to encourage instructors to make the information public through their syllabus. Faculty are also encouraged to be transparent about their curriculum approach regarding Indigenization pedagogy. Faculty are encouraged to provide students with material to enhance their cultural competency in the matter.

In additionally engaging in critical analysis of Settler Colonialism and/or Decolonization, we utilized many resources. One existing resource are Indigenous workshops on many issues and how the non-Indigenous process obstructs Indigenous access.

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### 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, in general terms, all faculty expertise 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.*

It is expected that a full-time faculty member at the Faculty of Engineering will deliver the proposed course. In some cases, qualified and experienced sessional instructors or limited-term appointments may deliver the class.

##### 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 revised program.*

It is expected that a full-time faculty member at the Faculty of Engineering will deliver the proposed course. In some cases, qualified and experienced sessional instructors or limited-term appointments may deliver the class.

##### C.1.2 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.*

The proposed course relies on the existing resources. No further resources are required.

##### C.1.3 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

##### C.2 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, facilities, GA/TA*

The proposed course relies on the existing resources. No further resources are required.

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

*Describe the reliance of the proposed program revisions on existing resources from other 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.*

The proposed course relies on the existing resources. No further resources are required.

##### C.4 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 revisions to this program.*

The new course will utilize the resources available at the Faculty of Engineering s to deliver this course.

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

The new course will utilize the resources available at the Faculty of Engineering to deliver this course.

#### C.6 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. If not applicable, write n/a.*

<b>Faculty:</b>	The existing faculty member will teach the proposed course
<b>Staff:</b>	Existing support staff at the Faculty of Engineering will be utilized for administrative help with photocopying, exam preparation, as well as, room and equipment bookings
<b>GA/TAs:</b>	Some GA may be required to assist with project, office hours, and marking of all assignments.

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

*Describe all **additional institutional resources and services** required by all affected 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.*

<b>Library Resources and Services:</b>	No additional library resources or services are likely required. Access to existing library resources should be adequate
<b>Teaching and Learning Support:</b>	No additional teaching and learning support services are likely required. Access to existing resources should be adequate
<b>Student Support Services:</b>	No additional student support services are likely required. Access to existing resources for student support should be adequate
<b>Space and Facilities:</b>	The proposed course will utilize the space and facilities in the existing faculty space. Access to existing resources is adequate.
<b>Equipment (and Maintenance):</b>	No additional equipment is likely required. Access to existing resources and labs should be adequate.

University of Windsor  
Program Development Committee

\*5.9:      **Chemistry and Biochemistry (Graduate) – New Course Proposal (Form D)**

Item for:   **Approval**

**MOTION: That the following courses be approved:^**  
              **CHEM-8599. Applications of Inorganic Spectroscopy**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

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



# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	MSc and PhD Chemistry
<b>DEPARTMENT(S)/SCHOOL(S):</b>	Chemistry and Biochemistry
<b>FACULTY(IES):</b>	Science

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Spring 2022
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#### A. NEW COURSE PROFILE

**Course # and Title:** CHEM-8599. Applications of Inorganic Spectroscopy

##### 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.*

The field of Inorganic Chemistry has relied on spectroscopy to gain insight into the structure and dynamics of species from small molecules to the active sites of metalloenzymes. The objective of this course is to learn different spectroscopic techniques that can be used in combination to identify and characterize inorganic compounds. This course will focus on three techniques with vastly different energies, spectroscopic timescales and resolution: NMR, EPR, and Mössbauer spectroscopy. All these spectroscopies have the influence of nuclear spin states in common, and are among the most informative available for the study of molecules. The course is aimed to be practical, with an emphasis on problem solving, so that it may aid you in your own research endeavours. (3 lecture hours a week.) (Cross-listed with CHEM-4599)

##### A.2 Experiential Learning Categories

*Does the course include experiential learning? Check all that apply.*

*For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>*

- |  |  |
|--|--|
| <input type="checkbox"/> applied research<br><input type="checkbox"/> capstone<br><input type="checkbox"/> clinic<br><input type="checkbox"/> co-op<br><input type="checkbox"/> community service learning<br><input type="checkbox"/> creative performance or exhibit ( <i>for visual and performing arts</i> )<br><input type="checkbox"/> entrepreneurship<br><input type="checkbox"/> field experience or site visit<br><input type="checkbox"/> labs<br><input checked="" type="checkbox"/> No experiential learning in this course | <input type="checkbox"/> field work<br><input type="checkbox"/> industry/community consulting project<br><input type="checkbox"/> interactive simulations<br><input type="checkbox"/> internship – full-time<br><input type="checkbox"/> internship – part-time<br><input type="checkbox"/> professional practicum<br><input type="checkbox"/> research project<br><input type="checkbox"/> study abroad |
|--|--|

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

#### A.3 Other Course Information

*Please complete the following tables.*

Credit weight	Total contact hours	Delivery format				Breakdown of contact hours/week			
		In-class	e-learning	Distance	Other flexible learning delivery [please specify]	Lecture	Lab/Tutorial	Online	Co-op/practicum/experiential learning
3	36	X				3 h/week			

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:	Required course?	Replacing old course*** [provide old course number]
			CHEM-4599	No	Was taught under generic "topics in" course code CHEM-8518 and CHEM-4660

**\*\*\*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 course is an advanced course with an emphasis on problem solving. The students gain insight into the unique spectroscopic techniques available and phenomena observable in inorganic chemistry. The course is presented in a way so as to give skills directly applicable to students doing in-lab research projects, where the interpretation of spectra is a key component. The course also gives a larger canvas for students to apply their previous years' knowledge in making reasonable assignments of structures and dynamic behavior consistent with the observed spectra, and thus also serves to solidify concepts from previous courses.

Aspects of NMR taught include: data collection and processing, diamagnetic and paramagnetic contributions to chemical shift, chemical and magnetic inequivalence, 2<sup>nd</sup> order effects, quadrupolar nuclei, fluxionality, isotope shifts, isotopic perturbation of equilibrium, the NMR of paramagnetic complexes, and Fermi contact and dipolar effects. Aspects of EPR taught include: data collection and processing, solution vs solid state spectra, spin-orbit coupling effects, g value and hyperfine anisotropy, multiple unpaired electrons and zero-field splitting. An introduction to Mössbauer is provided which describes the utility of the technique in determination electronic structure and local environment in molecule, biomolecular and materials applications. The application of mathematical modelling will be done using software, rather than derivations from first principals, though formula that give some fundamental understanding will be introduced.

##### 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 Department of Chemistry and Biochemistry, led by the current Head of Department, has started conversations with members of the University's Aboriginal Education Council (AEC) to create a knowledge base which can support not only appropriate curriculum changes but also identify Indigenous examples which faculty can implement to

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

contextualize course content. The Department, 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 our Indigenous communities. These might include examples drawn from historical Indigenous knowledge of the natural world and/or material relevant to contemporary Indigenous societies. Appropriate examples will first be discussed with the AEC prior to integration into the curriculum to ensure the topic and content are incorporated in a fashion appropriate to our Indigenous cultures. The Department is actively striving to increase participation of Indigenous peoples as part of a process of engaging with all under-represented groups.

#### 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 <i>This is a sentence completion exercise.</i>	Characteristics of a University of Windsor Graduate
<u>At the end of this course, the successful student will know and be able to:</u>	<u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. Use the knowledge of the fundamentals of NMR, EPR, and Mössbauer spectroscopy to solve spectroscopic problems regarding chemical identity, structure and dynamics.  Utilize sophisticated NMR studies such as isotopic perturbation of equilibria, influence of low-lying paramagnetic states on NMR, crystal-field parameters from paramagnetic NMR spectra etc. to analyze in greater detail structural phenomena and the electronic structure of molecules.	A. the acquisition, application and integration of knowledge
B. determine the structure or dynamics of unknown complexes from spectra; Devise experiments to probe structure and dynamics; Acquire and process data to provide maximum insight; Model complex spectra; Suggest techniques to probe details beyond connectivity.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Propose and critically analyze structural assignments based on spectra; Propose alternate and confirmatory spectroscopic experiments; Apply course ideas (e.g. design and application of spectroscopic experiments to characterize species and their solution structures and dynamics) to their own research interests	C. critical thinking and problem-solving skills
D. Read and interpret questions about molecular structure; Predict or fit spectra by applying statistics and quantum mechanics-based models.	D. literacy and numeracy skills
E. N/A	E. responsible behaviour to self, others and society

**PROGRAM DEVELOPMENT COMMITTEE**  
**NEW COURSE PROPOSALS**  
**FORM D**

<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
F. critique and refine multiple hypotheses as small groups; Work as small groups modelling spectra. (Also relevant to G) Research and present a relevant spectroscopic technique/application.	F. interpersonal and communications skills
G. Take multiple hypotheses and apply scientific method to refine solutions in groups	G. teamwork, and personal and group leadership skills
H. solve problems that go beyond algorithmic approaches. Creatively apply course material to research (e.g. to gain insight about structure and dynamics). (Also relevant to I.)	H. creativity and aesthetic appreciation
See H	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 new course.	Year 1	Year 2	Year 3	Year 4	Year 5
	6	8	10	10	10

**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?*

Minimal change, course has existed under the generic "Special Topics" description previously.

**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.**

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

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

#### 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 do not name specific individuals.*

Course will be taught by an existing faculty member in Chemistry & Biochemistry

##### 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.*

Faculty is available for course delivery

##### 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 other 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.*

There is no reliance 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.*

No additional resources are required

##### 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 internal reallocation of resources and cost savings 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.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

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

*Describe all **additional institutional resources and services** required by all affected 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.*

<b>Library Resources and Services:</b>	No additional resources are needed, but will use existing resources
<b>Teaching and Learning Support:</b>	No additional resources are needed, but will use existing resources
<b>Student Support Services:</b>	No additional resources are needed, but will use existing resources
<b>Space and Facilities:</b>	No additional resources are needed, but will use existing resources
<b>Equipment (and Maintenance):</b>	No additional resources are needed, but will use existing resources

University of Windsor  
Program Development Committee

\*5.10: **Women's and Gender Studies – New Course Proposal (Form D)**

Item for: **Approval**

**MOTION: That the following course be approved:^**  
**WGST/SJST-2300. Disability, Madness, and Social Justice**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by Women's and Gender Studies and the Faculty of Arts, Humanities Science Coordinating Council.
- *See attached.*

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	Bachelor of Arts
<b>DEPARTMENT(S)/SCHOOL(S):</b>	Women's and Gender Studies
<b>FACULTY(IES):</b>	FAHSS

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Spring 2022 Undergraduate
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#### A. NEW COURSE PROFILE

**Course # and Title:** WGST/SJST-2300, Disability, Madness, and Social Justice

##### 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 uses first-person narratives to engage students in experiences of disability and madness. Students learn to develop a feminist intersectional, anti-ableist analysis of their own thoughts, feelings and behaviours in relation to disability, madness, and other intersecting forms of oppression. Intersections of disability, madness, race, class, sexuality, and gender identity are explored. Topics may include disability and madness in popular culture, disability and sexuality, mad activism, disability justice, and feminist perspectives on disability and madness. (Prerequisites: WGST-1000 or SJST/DISB-1000)

##### A.2 Experiential Learning Categories

*Does the course include experiential learning? Check all that apply.*

*For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>*

- |  |  |
|--|--|
| <input type="checkbox"/> applied research<br><input type="checkbox"/> capstone<br><input type="checkbox"/> clinic<br><input type="checkbox"/> co-op<br><input type="checkbox"/> community service learning<br><input type="checkbox"/> creative performance or exhibit <i>(for visual and performing arts)</i><br><input type="checkbox"/> entrepreneurship<br><input type="checkbox"/> field experience or site visit<br><input type="checkbox"/> labs<br><input checked="" type="checkbox"/> No experiential learning in this course | <input type="checkbox"/> field work<br><input type="checkbox"/> industry/community consulting project<br><input type="checkbox"/> interactive simulations<br><input type="checkbox"/> internship – full-time<br><input type="checkbox"/> internship – part-time<br><input type="checkbox"/> professional practicum<br><input type="checkbox"/> research project<br><input type="checkbox"/> study abroad |
|--|--|

##### A.3 Other Course Information

*Please complete the following tables.*

Credit weight	Total contact hours	Delivery format				Breakdown of contact hours/week			
		In-class	e-learning	Distance	Other flexible learning delivery <i>[please specify]</i>	Lecture	Lab/Tutorial	Online	Co-op/practicum/experiential learning
3.0	36					3			

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:	Required course?	Replacing old course*** [provide old course number]
WGST-1000 or SJST/DISB-1000			SJST-2300	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?**

#### 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.*

This course addresses increased student interest in the intersections of disability, madness, and Women's and Gender Studies and fills an important gap in the program as there is currently no course devoted to disability. This course will serve WGST majors and minors as a WGST elective course that can count towards elective requirements the major or minor. The course directly contributes to the recommendations of WGST's recent IQAP review, in which the reviewers explicitly recommended more integrated content on disability in our program (see section 2.3 of the IQAP report).

##### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).*

*In developing this course, **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 [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)*
- *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?*



# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

This course includes readings by Indigenous scholars and activists. There is one week devoted to Indigenous narratives, and an analysis of the intersections of ableism and settler colonialism is threaded throughout the course.

#### 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 <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	Characteristics of a University of Windsor Graduate <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. Define and explain the meaning and significance of foundational concepts and ideas about disability and madness from an intersectional feminist perspective.	A. the acquisition, application and integration of knowledge
B. Evaluate the usefulness of personal narrative as an authoritative source of knowledge about madness and disability. (Also applies to D.)  Cite sources correctly and consistently adhering to a specific citation style.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Engage critically with readings and concepts using a critical disability studies and mad studies lens	C. critical thinking and problem-solving skills
D. See B.	D. literacy and numeracy skills
E. Use course concepts and ideas to critically reflect on personal beliefs and practices as they pertain to disability, madness, and social justice.  Interrogate and assess internalized sanism and ableism. (Also applies to I.)	E. responsible behaviour to self, others and society
F. Describe ideas persuasively orally or in writing.  Articulate the rationale for challenging sanism, ableism, and other intersecting forms of oppression. (Also applies to C, G.)	F. interpersonal and communications skills
G. Discuss ideas and collaborate respectfully with peers.	G. teamwork, and personal and group leadership skills
H. N/A	H. creativity and aesthetic appreciation

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i> At the end of this course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> A U of Windsor graduate will have the ability to demonstrate:
I. Relate course ideas to current events and global issues as they pertain to disability justice and social change.  Describe how disability justice and mad activism challenge ideas about gender, race, and sexuality. (See also E)	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 new course.	Year 1	Year 2	Year 3	Year 4	Year 5
	40	40	40-50	40-50	40-50

#### 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 course will be taught on load by a full time WGST faculty member, so no new resources are required. With recent retirements in WGST over the last three years, WGST currently has a shortage of WGST elective courses at the 2000+ level and this course will help address that shortage.

#### 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.*

Average number of hours per week that the student will be expected to devote to:	
3	Lectures
0	Tutorials
0	Labs
0	Practical experience
0	Independent Study
2	Reading for the course
1	Work for assessment (essays, papers, projects, laboratory work)
2	Meeting with others for group work/project assignments
1	Studying for tests/examinations
0	Other: <u>[specify]</u>
<b>How does the student workload for this course compare with other similar courses in the department/program area?</b>	Similar

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

#### 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 do not name specific individuals.*

This course will be taught on-load by WGST faculty with expertise in Disability Studies and Mad Studies, so no new resources are required.

##### 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.*

The course will be taught on load by a three year LTA.

##### 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 other 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.*

WGST will not rely on other teaching resources from other units. It will directly contribute to other units because the course has no pre-requisites, and it will be open to students of all majors and thus will make a more general contribution to FAHSS.

##### 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.*

None.

##### 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 internal reallocation of resources and cost savings identified and pursued by the area/department in support of the new course. (e.g., streamlining existing programs and courses, deleting courses, etc.).*

WGST is currently undergoing a curriculum review process during which some courses will be deleted based on no longer having the necessary faculty expertise to teach them on load. This course will replace elective courses that have been deleted from the calendar to ensure that WGST students have enough variability in elective offerings to meet degree requirements.

##### 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:	N/A
Staff:	N/A
GA/TAs:	N/A

No new resources required; TA will be allocated within existing TA allotment.

**PROGRAM DEVELOPMENT COMMITTEE  
NEW COURSE PROPOSALS  
FORM D**

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

*Describe all **additional institutional resources and services** required by all affected 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.*

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

**D.1 Form History** *(Leave blank if there have been no changes. Changes can also be noted directly in the Workflow)*

<b>Date of Modification</b>	<b>Approval Body Modifying</b>	<b>Reason for Modification</b>

**University of Windsor  
Program Development Committee**

**\*5.11: Mathematics and Statistics (Graduate) – Minor Program Change (Form C)**

Item for: **Approval**

**MOTION: That the admission requirements for the PhD in Mathematics and Statistics be changed in accordance with the program/course change forms.^**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by the Department of Mathematics and Statistics, the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council), and the Faculty of Graduate Studies Council.
- *See attached.*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

TITLE OF PROGRAM(S)/CERTIFICATE(S):	Mathematics and Statistics (PhD)
DEPARTMENT(S)/SCHOOL(S):	Department of Mathematics and Statistics
FACULTY(IES):	Science

Proposed change(s) effective as of* [Fall, Winter, Spring]: *(subject to timely and clear submission)	Spring 2022
--	-------------

#### 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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.*

*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.*

Mathematics and Statistics (PhD)

#### Admission Requirements

For admission requirements and period of study, the general regulations of the Faculty of Graduate Studies should be consulted (see the section titled, The Degree of Doctor of Philosophy). Qualifying examinations will not normally be required. Students in a Master's program may apply for fast-track admission to a PhD program according to the Faculty Regulations for the Doctor of Philosophy (**recommendations must be made no earlier than term 3 and be approved prior to the completion of term 4 of the Master's degree, and the actual transfer has to happen no later than term 5 of the Master's degree. Student must have completed all graduate courses for the Master's degree and obtained a minimum 80% average). In the Department of Mathematics and Statistics, students will require a written recommendation from their supervisor, completion of at least four (4) graduate-level courses, and a minimum 80% average in those courses. Students must also write and pass the first two comprehensive exams, which will be counted toward the PhD degree requirements. If, on the recommendation of the supervisor, the Graduate Studies Committee feels that the student is not making progress toward completion of the PhD, or if the student wishes to withdraw from the doctoral program, in exceptional circumstances the student may transfer back to the MSc program and complete the requirements of that degree.**

#### 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

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### B. RATIONALE

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

This change clarifies the process for students to switch from the MSc program to the PhD program, providing department-specific metrics and procedures for approval (including adding the requirement for completion of two comprehensive exams). It also provides an option for the student to return to the MSc program if appropriate.

#### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).*

*In revising this program, 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 [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)*
- *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?*

Given that this is a change to the admission requirements into the PhD program, this question is not applicable.

#### 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, in general terms, all faculty expertise 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.*

N/A

#### 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 revised program.*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### C.1.2 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

#### C.1.3 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

#### C.2 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, facilities, GA/TA*

N/A

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

*Describe the reliance of the proposed program revisions on existing resources from other 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

#### C.4 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 revisions to this program.*

N/A

#### C.5 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

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

N/A

#### C.6 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. If not applicable, write n/a.*

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



**PROGRAM DEVELOPMENT COMMITTEE  
MINOR PROGRAM CHANGES  
FORM C**

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

*Describe all **additional institutional resources and services** required by all affected 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.*

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

University of Windsor  
Program Development Committee

\*5.12: Law - Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Law

**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
April 9.2021	Senate	A new course was established

**INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.**

ALL SECTIONS OF THIS FORM **MUST** 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 <https://ctl2.uwindsor.ca/cuma/public/>)

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 <https://ctl2.uwindsor.ca/cuma/public/>)

**Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes**

AAU Consulted	AAU Head/Directors	Date Consulted	Supportive	
			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.			Winter 2022	

**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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) 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**

LAWG-5707. Class Action Clinic.

The Clinic is the first of its kind in any jurisdiction focused on the needs of class members. The Clinic provides a range of services, from summary advice, public education and outreach, to assistance with filing claims in settlement distribution processes, and legal representation at court hearings. Students will provide legal information and services to clients, as well as participate in legal research projects related to class action practice and policy. **(Pre- or Corequisite : LAWG-5908.) 1.5 hours seminar and 2.5 hours of office hours/week. Enrollment**

# PROGRAM DEVELOPMENT COMMITTEE

## SUMMARY OF MINOR COURSE AND CALENDAR CHANGES

### FORM E

**with permission of the instructor. Applications to the Clinic are accepted in both the fall and winter semesters. Students may apply to work at the Clinic for one or both semesters.**

#### 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967). 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 [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)*
- *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?*

This Clinic routinely serves Indigenous clients in a number of class action settlements, including the Sixties Scoop and Day Schools. The required readings for the in-class portion of the course include the National Centre for Truth & Reconciliation's *Lessons Learned Report* (2020) and Carrie Menkel-Meadow's "Unsettling the Lawyers: Other Forms of Justice in Indigenous Claims of Expropriation, Abuse, and Injustice" (2014) 64:4 UTLJ 620.

#### A.2 Experiential Learning Categories

*Does the proposed course revision include the addition or deletion of an experiential learning component? For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>*

- ☒ **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:

Experiential Learning Categories	Addition	Deletion
applied research	<input type="checkbox"/>	<input type="checkbox"/>
capstone	<input type="checkbox"/>	<input type="checkbox"/>
Clinic	<input type="checkbox"/>	<input type="checkbox"/>
co-op	<input type="checkbox"/>	<input type="checkbox"/>
community service learning	<input type="checkbox"/>	<input type="checkbox"/>
creative performance or exhibit (for visual and performing arts)	<input type="checkbox"/>	<input type="checkbox"/>

**PROGRAM DEVELOPMENT COMMITTEE  
SUMMARY OF MINOR COURSE AND CALENDAR CHANGES  
FORM E**

entrepreneurship	<input type="checkbox"/>	<input type="checkbox"/>
field experience or site visit	<input type="checkbox"/>	<input type="checkbox"/>
field work	<input type="checkbox"/>	<input type="checkbox"/>
industry/community consulting project	<input type="checkbox"/>	<input type="checkbox"/>
interactive simulations	<input type="checkbox"/>	<input type="checkbox"/>
internship – full-time	<input type="checkbox"/>	<input type="checkbox"/>
internship – part-time	<input type="checkbox"/>	<input type="checkbox"/>
professional practicum	<input type="checkbox"/>	<input type="checkbox"/>
research project	<input type="checkbox"/>	<input type="checkbox"/>
study abroad	<input type="checkbox"/>	<input type="checkbox"/>
Labs	<input type="checkbox"/>	<input type="checkbox"/>

**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.	
<b>COURSE NUMBER AND TITLE:</b>	<b>LAWG-5707. Class Action Clinic.</b> (Learning Outcomes were last updated April 9, 2021)
<b>SELECT ONE OF THE FOLLOWING:</b>	
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> )	_____ Provide learning outcomes for the course by completing the Learning Outcomes Table below.
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.	<u><b>x</b></u> Learning outcomes need not be submitted. PROVIDE DATE LAST REVIEWED BY PDC/SENATE then go to the next course: <b>Senate Approved April 9, 2021.</b> (check CUMA database at: <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )

University of Windsor  
Program Development Committee

\*5.13 Philosophy (Graduate) – Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: Faculty of Graduate Studies

**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 **MUST** 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 <https://ctl2.uwindsor.ca/cuma/public/>)

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 <https://ctl2.uwindsor.ca/cuma/public/>)

**Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes**

AAU Consulted	AAU Head/Directors	Date Consulted	Supportive	
			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.**

Winter 2022

**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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) 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**

~~PHIL-8700. Recent German Philosophy~~

Significant developments in German philosophy in the twentieth century will be examined. Portions of the course may be devoted to Husserl (the founder of the phenomenological school), Heidegger (a seminal figure in existentialism), Gadamer (a key figure in the development of hermeneutics), Critical Theory (a Freudian and Marxist approach to social and economic issues), and second-generation critical theorists such as Habermas. ~~((Cross-listed with PHIL-4700.))~~

#### **PHIL-4700. Recent German Philosophy**

Significant developments in German philosophy in the twentieth century will be examined. Portions of the course may be devoted to Husserl (the founder of the phenomenological school), Heidegger (a seminal figure in existentialism), Gadamer (a key figure in the development of hermeneutics), Critical Theory (a Freudian and Marxist approach to social and economic issues), and second-generation critical theorists such as Habermas. (Prerequisite: PHIL-1120, and one 2000-level or above Philosophy course, and semester 5 or above standing, or permission of instructor.) ~~(Cross-listed with PHIL-8700.)~~

#### **PHIL-8710. Recent French Continental Philosophy**

A study of significant developments in recent French Continental thought. **The content of the course will vary according to the Instructor's interests and background. Traditions that might be examined include existential phenomenology, Marxism, deconstruction, and post-structuralism.** ~~as found in Bergson, Sartre, Merleau-Ponty, Bataille, and Levi-Strauss, for example.~~ This course may be taken for credit more than once, provided that the content differs substantively from a previous year. (Cross-listed with PHIL-4710.)

#### **PHIL-4710. Recent French Continental Philosophy**

A study of significant developments in recent French Continental thought. **The content of the course will vary according to the Instructor's interests and background. Traditions that might be examined include existential phenomenology, Marxism, deconstruction, and post-structuralism.** ~~as found in Bergson, Sartre, Merleau-Ponty, Bataille, and Levi-Strauss, for example.~~ This course may be taken for credit more than once, provided that the content differs substantively from a previous year. (Prerequisite: PHIL-1100 or PHIL-1120, at least one 2000-level or above Philosophy course, and semester 5 or above standing, or consent of the instructor.) (Cross-listed with PHIL-8710.)

#### **PHIL-8720. Recent Analytic or Pragmatist Philosophy**

Advanced study of themes and trends in Analytic or Pragmatist philosophy. **Ordinarily, the topic will rotate on a yearly basis between Analytic Philosophy**, in which logic, language, and scientific evidence play central roles and **Pragmatist Philosophy** which takes practice, in a broad sense of the term, to have a central role in most if not all philosophical issues. (Cross-listed with PHIL-4720.)

#### **PHIL-4720. Recent Analytic or Pragmatist Philosophy**

Advanced study of themes and trends in Analytic or Pragmatist philosophy. **Ordinarily, the topic will rotate on a yearly basis between Analytic Philosophy**, in which logic, language, and scientific evidence play central roles and **Pragmatist Philosophy** which takes practice, in a broad sense of the term, to have a central role in most if not all philosophical issues. (Prerequisite: PHIL-1100, or PHIL-1120, and at least one 2000-level or above Philosophy course, and semester 5 or above standing, or permission of instructor.) (Cross-listed with PHIL-8720.)

#### **PHIL-8730. Pragmatist Philosophy**

~~Advanced study of some of the major themes or figures in pragmatist philosophy, which takes practice, in a broad sense of the term, to have a central role in most if not all philosophical issues. (Cross-listed with PHIL-4730.)~~

#### **PHIL-4730. Pragmatist Philosophy**

~~Advanced study of some of the major themes or figures in pragmatist philosophy, which takes practice, in a broad sense of the term, to have a central role in most if not all philosophical issues. (Prerequisite: PHIL-1100 or PHIL-1120, and at least one 2000-level or above Philosophy course, and semester 5 or above standing, or permission of the instructor.) (Cross-listed with PHIL-8730.)~~

**\*\*\*NOTE:** This change will also be made to the cross-listed undergraduate courses and as they appear in degree requirements as a list of options. **\*\*\***

## 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 [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).

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 [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)
- 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 course PHIL-8710 Recent Continental Philosophy focuses on philosophical traditions that developed primarily in Continental Europe, but whose representative thinkers may also lie outside that geographical region. Comparisons, contrasts, or complementarities between Continental, Indigenous and other traditions and perspectives are and will be explored.

The course PHIL-8720. Recent Analytic or Pragmatist Philosophy focuses on philosophical traditions that developed primarily in the United Kingdom and The United States of America, but whose representative thinkers may also lie outside those geographical regions. Comparisons, contrasts, or complementarities between Analytic or Pragmatist traditions, Indigenous and other perspectives are and will be explored.

## A.2 Experiential Learning Categories

Does the proposed course revision include the addition or deletion of an experiential learning component? For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>

- ☒ **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:

Experiential Learning Categories	Addition	Deletion
applied research	<input type="checkbox"/>	<input type="checkbox"/>
capstone	<input type="checkbox"/>	<input type="checkbox"/>
Clinic	<input type="checkbox"/>	<input type="checkbox"/>
co-op	<input type="checkbox"/>	<input type="checkbox"/>
community service learning	<input type="checkbox"/>	<input type="checkbox"/>



creative performance or exhibit ( <i>for visual and performing arts</i> )	<input type="checkbox"/>	<input type="checkbox"/>
entrepreneurship	<input type="checkbox"/>	<input type="checkbox"/>
field experience or site visit	<input type="checkbox"/>	<input type="checkbox"/>
field work	<input type="checkbox"/>	<input type="checkbox"/>
industry/community consulting project	<input type="checkbox"/>	<input type="checkbox"/>
interactive simulations	<input type="checkbox"/>	<input type="checkbox"/>
internship – full-time	<input type="checkbox"/>	<input type="checkbox"/>
internship – part-time	<input type="checkbox"/>	<input type="checkbox"/>
professional practicum	<input type="checkbox"/>	<input type="checkbox"/>
research project	<input type="checkbox"/>	<input type="checkbox"/>
study abroad	<input type="checkbox"/>	<input type="checkbox"/>
Labs	<input type="checkbox"/>	<input type="checkbox"/>

#### 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.	
COURSE NUMBER AND TITLE:	PHIL-8710. Recent Continental Philosophy PHIL-8720. Recent Analytic or Pragmatist Philosophy (Learning outcomes were last Updated: May 25, 2018)
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> )	_____ Provide learning outcomes for the course by completing the Learning Outcomes Table below.
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.	<u><b>X</b></u> Learning outcomes need not be submitted. PROVIDE DATE LAST REVIEWED BY PDC/SENATE then go to the next course: May 25, 2018 (check CUMA database at: <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )



University of Windsor  
Program Development Committee

\*5.14: Sociology and Criminology – Summary of Minor Course and Calendar Changes (Form E)

Item for: Information

Forwarded by: FAHSS

**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
Sept. 21, 2021	Sociology, Anthropology and Criminology Department Council	Suggestions provided by primary course instructor (Dr. Jacqueline Lewis) increase course flexibility and clarity.

**INSTRUCTIONS ARE PROVIDED IN SHADED AREAS. DO NOT WRITE IN SHADED AREAS.**

ALL SECTIONS OF THIS FORM **MUST** 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 <https://ctl2.uwindsor.ca/cuma/public/>)

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 <https://ctl2.uwindsor.ca/cuma/public/>)

**Confirmation of Consultation with AAUs That Will Be Affected, in Major Ways, by the Changes**

AAU Consulted	AAU Head/Directors	Date Consulted	Supportive	
			Yes	No
SAC	Dr. Shelagh Towson	July 2, 2021	X	

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  
Winter 2022

**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 ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) 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**

# PROGRAM DEVELOPMENT COMMITTEE

## SUMMARY OF MINOR COURSE AND CALENDAR CHANGES

### FORM E

SACR-4600. Advanced Seminar in ~~Constructions of Deviance~~ **and Social Issues: Policies and Debates**  
**Using relevant theory and research**, ~~This course~~ **engages in a critical** exploration theory and research concerned  
~~with constructions of~~ **policies and debates concerning** deviant behavior and social issues. It involves the  
~~application of constructionist theory to a variety of behaviours and issues including the role of moral entrepreneurs,~~  
~~symbolic crusades and the medicalization on deviance.~~ Substantive topics will vary by instructor. (Prerequisites:  
 SACR-2600, SACR-3910 or SACR-3730 or SACR-3560; SACR-3900 or SACR-3080 and semester 7 or higher standing; at  
~~least one 3000-level course from the 300-level criminology course selection,~~ or consent of instructor.)

#### A.1 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 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?*

Based on a resource search for the course, relevant academic and community resources that speak to Indigenous cultural views and practices pertaining to gender, gender-identity and sexual orientation have been identified for inclusion in the course (e.g., *The Aboriginal Gender Study Community Report* [https://aboriginalgenderstudy.ahcsa.org.au/app/uploads/2019/06/AHC\\_Community\\_Report\\_online.pdf](https://aboriginalgenderstudy.ahcsa.org.au/app/uploads/2019/06/AHC_Community_Report_online.pdf); Hunt, S. 2016. *An Introduction to the Health of Two-Spirit People: Historical, Contemporary and Emergent Issues*. Prince George BC: National Collaborating Centre for Aboriginal Health. <https://www.ccnsa-nccah.ca/docs/emerging/RPT-HealthTwoSpirit-Hunt-EN.pdf>).

The department has sought feedback from the Project Coordinator – Indigenous Curriculum and Pedagogy Initiatives, in the Centre for Teaching and Learning and will be working with her in the future to bring Indigenous voices and experiences into the classroom.

#### 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.	
<b>COURSE NUMBER AND TITLE:</b>	SACR-4600 Advanced Seminar in <del>Constructions of Deviance</del> <b>and Social Issues: Policies and Debates</b> (Note: Learning outcomes were last outdated October 26, 2018. These are revised learning outcomes.)

# PROGRAM DEVELOPMENT COMMITTEE

## SUMMARY OF MINOR COURSE AND CALENDAR CHANGES

### FORM E

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> )	_____ Provide learning outcomes for the course by completing the Learning Outcomes Table below.
II. There are changes to the course learning outcomes	<u>  X  </u> 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: <u>          2018-10-26          </u> (check CUMA database at: <a href="https://ctl2.uwindsor.ca/cuma/public/">https://ctl2.uwindsor.ca/cuma/public/</a> )

#### LEARNING OUTCOMES TABLE

Course Learning Outcomes <i>This is a sentence completion exercise.</i>	Characteristics of a University of Windsor Graduate
At the end of the course, the successful student will know and be able to:	<u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. <u>Identify, describe, and integrate, evaluate and apply key concepts /theories/policies/debates related to constructionist theory to the study of social issues/policy (Also applies to C).</u>  <u>Recognize the value of social research/a social science orientation to understanding social issues/policy debates.</u>	A. the acquisition, application and integration of knowledge
B. <u>Identify important material from verbal and written resources and consult alternative resources for further understanding.</u>  Read <del>and</del> , evaluate and apply ideas and research by scholars pertaining to <del>constructionist theory and</del> social issues/policy ( <u>also relevant to C and D</u> ).	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. <u>Compare, evaluate, and apply key concepts tied to social issues/policies/debates.</u>	C. critical thinking and problem-solving skills
D. Construct and articulate arguments clearly and concisely in <del>both written and oral format and organize and present evidence coherently</del> (Also applies to F).  <u>Organize and present evidence coherently (also relevant to F).</u>	D. literacy and numeracy skills

**PROGRAM DEVELOPMENT COMMITTEE**  
**SUMMARY OF MINOR COURSE AND CALENDAR CHANGES**  
**FORM E**

<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i>	<b>Characteristics of a University of Windsor Graduate</b>
<u>At the end of the course, the successful student will know and be able to:</u>	<u>A U of Windsor graduate will have the ability to demonstrate:</u>
<del>E. Reflect critically on personal choices regarding social behaviour and interaction as well as to consider and respond to important social policy and issues.</del>	E. responsible behaviour to self, others and society
<b><u>F. Express ideas clearly and persuasively in written and oral formats related to the study of social issues, supporting positions with empirical evidence (also relevant to B).</u></b>  <b><u>Generate discussion and debate about issues pertaining to the study of social issues (also relevant to G).</u></b>	F. interpersonal and communications skills
<del>G. Develop plans to generate discussion and debate about the application of constructionist theory to a specific social issue/policy.</del>	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
<b><u>I. Link core course concepts to other research and to social issues/policy debates.</u></b>	I. the ability and desire for continuous learning

## MSc in Chemistry and Biochemistry

### Program Learning Outcomes

Last Updated: April 29, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b>  The University of Windsor graduate will have the ability to demonstrate:	<b>OCGS-approved Graduate Degree Level Expectations</b>
Articulate a systematic integration of key concepts in a specialized area of chemistry and/or biochemistry (Also applies to D.) <hr/> Identify challenges in the cognate discipline (Also applies to C, D, I.)	<b>A.</b> the acquisition, application and integration of knowledge	1. Depth and breadth of knowledge 2. Research and scholarship 3. Level of application of knowledge 6. Awareness of limits of knowledge
Formulate working hypotheses to address scientific challenges in the relevant discipline(s) (Also applies to C, I.) <hr/> Propose, design and perform appropriate research methodologies relevant to chemistry or biochemistry (Also applies to C, D.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	2. Research and scholarship 3. Level of application of knowledge 6. Awareness of limits of knowledge

<p>Analyze data using appropriate scientific literature and statistical methods (Also applies to D, I.)</p> <hr/> <p>Analyze and assess the limitation of the experimental designs and methodologies (Also applies to D.)</p>	<p><b>C.</b> critical thinking and problem-solving skills</p>	<ol style="list-style-type: none"> <li>1. Depth and breadth of knowledge</li> <li>2. Research and scholarship</li> <li>3. Level of application of knowledge</li> <li>4. Professional capacity/autonomy</li> <li>6. Awareness of limits of knowledge</li> </ol>
	<p><b>D.</b> literacy and numeracy skills</p>	<ol style="list-style-type: none"> <li>2. Research and scholarship</li> <li>5. Level of communication skills</li> </ol>
<p>Conduct themselves in laboratories in accordance with safety rules and regulations</p> <hr/> <p>Behave ethically, consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research.</p>	<p><b>E.</b> responsible behaviour to self, others and society</p>	<ol style="list-style-type: none"> <li>4. Professional capacity/autonomy</li> <li>6. Awareness of limits of knowledge</li> </ol>
<p>Contribute to scientific discussion and/or conference within the University, at national, and/or international venues (Also applies to I.)</p> <hr/> <p>Work within a team towards a common shared goal (Also applies to G.)</p> <hr/> <p>Produce scientific reports (Also applies to H.)</p>	<p><b>F.</b> interpersonal and communications skills</p>	<ol style="list-style-type: none"> <li>5. Level of communication skills</li> </ol>
<p>Plan and delegate activities for a research group</p> <hr/> <p>Establish research network via participation in scientific discussion</p>	<p><b>G.</b> teamwork, and personal and group leadership skills</p>	<ol style="list-style-type: none"> <li>4. Professional capacity/autonomy</li> <li>5. Level of communication skills</li> </ol>

<p>Articulate implications of applying knowledge to boarder context(s) in the field of study. (Also applies to I.)</p>	<p><b>H.</b> creativity and aesthetic appreciation</p>	<p>2. Research and scholarship</p> <p>4. Professional capacity/autonomy</p> <p>6. Awareness of limits of knowledge</p>
	<p><b>I.</b> the ability and desire for continuous learning</p>	<p>4. Professional capacity/autonomy</p>

## Ph.D. in Chemistry and Biochemistry

### Program Learning Outcomes

Last Updated: April 29, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b>  The University of Windsor graduate will have the ability to demonstrate:	<b>OCGS-approved Graduate Degree Level Expectations</b>
Articulate challenges to, and avenues for advancement of, knowledge in a specialized area of chemistry and/or biochemistry (Also applies to D, I.) <hr/> Identify challenges in the cognate discipline (Also applies to C, D, I.)	<b>A.</b> the acquisition, application and integration of knowledge	1. Depth and breadth of knowledge 2. Research and scholarship 3. Level of application of knowledge 6. Awareness of limits of knowledge
Formulate working hypotheses to address scientific challenges in the relevant discipline(s) (Also applies to C.) <hr/> Conceptualize, design, and implement research for the generation of new knowledge, applications, or understanding at the forefront of the discipline, and to adjust the research design or methodology in the light of unforeseen problems (Also applies to C, D, I.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	2. Research and scholarship 3. Level of application of knowledge 6. Awareness of limits of knowledge



<p>Analyze data using appropriate scientific literature and statistical methods (Also applies to D.)</p> <hr/> <p>Analyze and assess the limitation of the experimental designs and methodologies (Also applies to D.)</p>	<p><b>C.</b> critical thinking and problem-solving skills</p>	<ol style="list-style-type: none"> <li>1. Depth and breadth of knowledge</li> <li>2. Research and scholarship</li> <li>3. Level of application of knowledge</li> <li>4. Professional capacity/autonomy</li> <li>6. Awareness of limits of knowledge</li> </ol>
	<p><b>D.</b> literacy and numeracy skills</p>	<ol style="list-style-type: none"> <li>2. Research and scholarship</li> <li>5. Level of communication skills</li> </ol>
<p>Conduct themselves in laboratories in accordance with safety rules and regulations</p> <hr/> <p>Behave ethically, consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research.</p> <hr/> <p>Contribute to scientific discussion and/or conference within the University, at national, and/or international venues (Also applies to G, I.)</p>	<p><b>E.</b> responsible behaviour to self, others and society</p>	<ol style="list-style-type: none"> <li>4. Professional capacity/autonomy</li> <li>6. Awareness of limits of knowledge</li> </ol>
<p>Write original research articles, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication. (Also applies to H, I.)</p> <hr/> <p>Work within a team towards a common shared goal (Also applies to G.)</p> <hr/> <p>Communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.</p>	<p><b>F.</b> interpersonal and communications skills</p>	<ol style="list-style-type: none"> <li>5. Level of communication skills</li> </ol>

Plan and delegate activities for a research group	<b>G.</b> teamwork, and personal and group leadership skills	4. Professional capacity/autonomy 5. Level of communication skills
Articulate implications of applying knowledge to particular and/or boarder context(s) in the field of study.	<b>H.</b> creativity and aesthetic appreciation	2. Research and scholarship 4. Professional capacity/autonomy 6. Awareness of limits of knowledge
	<b>I.</b> the ability and desire for continuous learning	4. Professional capacity/autonomy

**BIOC-8640. Advanced DNA Sciences**

Formerly known as: 59-564

**Learning Outcomes**

Last Updated: April 30, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Acquire, review, and report on current conceptual and empirical research of nucleic acid research and applications (Also applies to B.)	<b>A.</b> the acquisition, application and integration of knowledge
Access research material relevant to the analysis and development of contemporary issues pertinent to DNA science  Formulate, both orally and in writing, complex ideas, problems, and propositions related to the advancement of nucleic acid research (Also applies to C, D, F.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Identify, analyze, and critically assess scientific and societal challenges relevant to DNA science (Also applies to D, E.)	<b>C.</b> critical thinking and problem-solving skills
Collaborate with others to present and discuss scholarly literature and research pertinent to nucleic acids and their applications (Also applies to F, G.)	<b>D.</b> literacy and numeracy skills
Engage with others in debates and discussions of the scientific and ethical issues related to researching and practicing in the areas of DNA science and applications (Also applies to F, G.)	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
Demonstrate some independent ability to access and discuss contemporary challenges and significant applications of DNA science (Also applies to H.)	<b>I.</b> the ability and desire for continuous learning

**University of Windsor  
Program Development Committee**

**\*5.16            Mathematics and Statistics (Graduate) Learning Outcomes**

Item for:        **Information**

Forwarded by: **Faculty of Graduate Studies**

This package contains the following learning outcomes:

MATH-8100. Functions of a Real Variable I  
MATH-8120. Functional Analysis I  
MATH-8200. Abstract Algebra  
MATH-8300. General Topology  
MATH-8960. Major Paper  
MATH-8970. Master's Thesis (MSc)  
MATH-8980. Special Topics  
STAT-8410. Stochastic Processes  
STAT-8420. Advanced Mathematical Statistics  
STAT-8430. Statistical Inference  
STAT-8460. Statistical Data Analysis  
STAT-8490. Discrete Multivariate Analysis  
STAT-8500. Generalized Linear Models  
STAT-8520. Experimental Design  
STAT-8540. Theory of Sampling and Surveys  
STAT-8550. Regression Analysis  
STAT-8950. Topics in Statistics  
STAT-8960. Major Paper  
STAT-8970. Thesis (MSc)  
STAT-9980. Dissertation (Phd)

## MATH-8100. Functions of a Real Variable I

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b>	<b>Characteristics of a University of Windsor Graduate</b>
At the end of the course, the successful student will know and be able to:	The University of Windsor graduate will have the ability to demonstrate:
Define, recognize, discuss, prove properties of, and employ orderings, cardinality, metric spaces, $\sigma$ -algebras. (Also applies to C, D.)	<b>A.</b> the acquisition, application and integration of knowledge
Define, recognize, discuss, prove properties of and employ measures, measurable sets, measure spaces. (Also applies to C, D.)	
Define and prove properties of outer measures. Prove the construction of measure spaces from outer measures using Caratheodory's Theorem. (Also applies to C, D.)	
Define and prove standard properties of Borel measures. (Also applies to C, D.)	
Define and prove standard properties of Lebesgue measure. (Also applies to C, D.)	
Define, recognize, and prove standard properties of measurable functions on sets with $\sigma$ -algebras and on metric spaces. (Also applies to C, D.)	
Integrate measurable functions (non-negative, real, complex). (Also applies to C, D.)	
State, prove, and employ the Monotone Convergence Theorem, Fatou's Lemma, and the Dominated Convergence Theorem. (Also applies to C, D.)	
Discuss and prove equality of the Riemann integral and Lebesgue integral. (Also applies to C, D.)	

<p>Define, recognize, and employ sequences that are Cauchy in measure and sequences which converge in measure. (Also applies to C, D.)</p>	
<p>Define and employ product measures. State and prove standard properties and Fubini's Theorem. (Also applies to C, D.)</p>	
<p>Extend Lebesgue measure to "<math>\mathbb{R}^n</math>" and discuss and prove standard properties and the properties of Lebesgue measurable functions. (Also applies to C, D.)</p>	
<p>Define and discuss signed measures. State, prove, and apply the Hahn Decomposition Theorem and the Jordan Decomposition Theorem. (Also applies to C, D.)</p>	
<p>State, prove, and employ the Radon-Nikodym Theorem. (Also applies to C, D.)</p>	
<p>Define, recognize, and prove properties of LP spaces and their duals including Minkowski's and Holder's Inequalities. (Also applies to C, D.)</p>	
<p>Extend given definitions, techniques, and theorems to prove complex results in real analysis without being given a prescribed method. (Also applies to C, G, H, I.)</p> <p>Find, read, and integrate knowledge from the academic literature on topics related to Functions of a Real Variable.</p>	<p><b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p>
	<p><b>C.</b> critical thinking and problem-solving skills</p>
<p>Discuss and solve real analysis problems using real analysis terminology and structural framework.</p> <p>Compose organized and logical solutions to real analysis problems. (Also applies to F, H.)</p>	<p><b>D.</b> literacy and numeracy skills</p>
<p>Recognize, evaluate and construct logically sound arguments and deductions in real analysis.</p>	<p><b>E.</b> responsible behaviour to self, others and society</p>

	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
Discuss how the classical theory of integration is generalized.	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

## MATH-8120. Functional Analysis I

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
<p>Define, state and prove Hilbert space concepts and properties: inner product, norm, distance, completeness, orthogonality, Pythagorean Theorem, linear functional (equivalence of boundedness and continuity), Riesz Representation Theorem, orthonormal sets and bases, Gram-Schmidt Orthogonalization Process, Fourier transform for the circle, the Riemann-Lebesgue Lemma, direct sums.</p> <p style="text-align: right;">(Also applies to C, D.)</p> <hr/> <p>Define, state and prove concepts and properties of operators on Hilbert spaces: bounded linear operators, continuity (equivalence with continuity at 0 or an arbitrary point, boundedness), norms, adjoint of an operator, Hermitian/self-adjoint, normal, unitary, normal isometry, projections, idempotents, compactness, finite rank, separability, eigenvalue, Spectral Theorem for compact self-adjoint operators, Spectral Theorem for compact normal operators, partition of the identity, unitary equivalence.</p> <p style="text-align: right;">(Also applies to C, D.)</p> <hr/> <p>Define, state and prove concepts and properties of Banach spaces: norm, normed space, Banach space (constructions from spaces of functions, duals), equivalent norms, finite dimensional normed spaces, quotients and products of normed spaces, <math>\ell^p</math>, Riesz Representation Theorem, the Hahn-Banach Theorem, Runge's Theorem, quotient space and subspace duals, reflexive spaces, the Inverse Mapping Theorem, the Open Mapping Theorem, the Closed Graph Theorem, the Principle of Uniform Boundedness, weak and weak topologies.</p> <p style="text-align: right;">(Also applies to C, D.)</p>	<p><b>A.</b> the acquisition, application and integration of knowledge</p>
<p>Extend given definitions, techniques, and theorems to prove complex results in functional analysis without being given a prescribed method.</p> <p style="text-align: right;">(Also applies to C, G, H, I.)</p> <hr/> <p>Find, read, and integrate knowledge from the academic literature on topics related to Functional Analysis.</p>	<p><b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p>
	<p><b>C.</b> critical thinking and problem-solving skills</p>



<p>discuss and solve functional analysis problems using real analysis terminology and structural framework.</p> <hr/> <p>compose organized and logical solutions to functional analysis problems.</p> <p>(Also applies to F, H.)</p>	<p><b>D.</b> literacy and numeracy skills</p>
<p>recognize, evaluate and construct logically sound arguments and deductions in functional analysis.</p>	<p><b>E.</b> responsible behaviour to self, others and society</p>
	<p><b>F.</b> interpersonal and communications skills</p>
	<p><b>G.</b> teamwork, and personal and group leadership skills</p>
	<p><b>H.</b> creativity and aesthetic appreciation</p>
	<p><b>I.</b> the ability and desire for continuous learning</p>

## MATH-8200. Abstract Algebra

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
<p>Illustrate a fundamental knowledge of group theory using the dihedral, cyclic, symmetric, and matrix groups.</p> <hr/> <p>Define, recognize, compute (where relevant) and apply to proofs the following concepts: homomorphisms, isomorphisms, cosets, group actions, orbits, centralizers, normalizers, stabilizers, kernels, composition series.</p> <p style="text-align: right;">(Also applies to D.)</p> <hr/> <p>State and use the four isomorphism theorems.</p> <hr/> <p>State and use Sylow's Theorem.</p> <hr/> <p>Construct and deconstruct groups using direct products, semidirect products, quotients.</p> <hr/> <p>Recall proofs of major results in the course.</p>	<p><b>A.</b> the acquisition, application and integration of knowledge</p>
<p>Apply given definitions and theorems to prove complex results in group theory without being given a prescribed method</p> <p style="text-align: right;">(Also applies to C, G, H, I.)</p> <hr/> <p>Find, read, and integrate knowledge from the academic literature on topics related to group theory.</p>	<p><b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p>
	<p><b>C.</b> critical thinking and problem-solving skills</p>
<p>Discuss and solve group theory problems using group theory terminology and structural framework.</p> <hr/> <p>compose organized and logical solutions to group theory problems.</p> <p style="text-align: right;">(Also applies to F, H.)</p>	<p><b>D.</b> literacy and numeracy skills</p>
<p>recognize, evaluate and construct logically sound arguments and deductions in group theory.</p>	<p><b>E.</b> responsible behaviour to self, others and society</p>

	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

## MATH-8300. General Topology

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b>	<b>Characteristics of a University of Windsor Graduate</b>
At the end of the course, the successful student will know and be able to:	The University of Windsor graduate will have the ability to demonstrate:
<p>Discuss the concept of cardinality in the context of infinite sets. (Also applies to B, C.)</p> <hr/> <p>Apply definitions to prove statements about the cardinality of sets and relations between cardinalities. (Also applies to B, C.)</p> <hr/> <p>Apply definitions and theorems to derive the various relationships among normed spaces, metric spaces, topological spaces, Hausdorff spaces, limits, continuity, compactness, completeness, connectedness, and homeomorphisms. (Also applies to B, C.)</p> <hr/> <p>Identify, using the terminology of Hausdorff space, Lindelhof space, metric space, first-countable, second-countable, etc., the relationship between convergence and compactness. Apply these abstract relationships to specific examples (for example, the Bolzano- Weierstrass theorem in the real numbers). (Also applies to B, C, I.)</p> <hr/> <p>Identify the relationships between boundedness, compactness, continuity, closure, and completeness in abstract topological space or metric space, and apply these relationships in various examples (for example, proving the Heine-Borel theorem or the Intermediate Value theorem in the real numbers). (Also applies to B, C, I.)</p> <hr/> <p>Use key theorems in topology (such as the Stone-Weierstrass theorem, Tychonoff's theorem) and reproduce their proofs. (Also applies to B, C.)</p>	<p><b>A.</b> the acquisition, application and integration of knowledge</p>
<p>Apply given definitions and theorems to prove novel statements in the domains of set theory, normed and metric spaces, and topological spaces. (Also applies to C, H, I.)</p> <hr/> <p>Find, read, and integrate knowledge from the academic literature on topics related to Topology.</p>	<p><b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p>

	<b>C.</b> critical thinking and problem-solving skills
<p>Interpret and discuss mathematical statements using the technical terminology in the domain of Topology, such as countable, norm, metric, open, closed, compact, connected, complete, second-countable, Hausdorff, Lindelhof, etc. (Also applies to F.)</p> <hr/> <p>Compose well-structured and logically valid proofs of statements in set theory and topology. (Also applies to F, H.)</p>	<b>D.</b> literacy and numeracy skills
Deconstruct logical arguments in topology and set theory to assess their validity.	<b>E.</b> responsible behaviour to self, others and society
Communicate mathematical ideas using the appropriate language, rigour, and detail, given the level of the course.	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
<p>Assess some of the mathematical concerns that underlie set theory, such as cardinality, the axiom of choice, and Russell's paradox.</p> <hr/> <p>Interpret abstract topological concepts as generalizations of familiar concepts from Calculus and the real numbers, such as limits, continuity, boundedness, etc. (Also applies to I.)</p>	<b>H.</b> creativity and aesthetic appreciation
<p>Apply the theorems from the general setting of abstract topological space to particular topological spaces in various areas of mathematics and recognize the variety of uses of set theoretic topology when applied to different mathematical domains. (Also applies to H.)</p>	<b>I.</b> the ability and desire for continuous learning

**MATH-8960. Major Paper****Learning Outcomes**

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Complete a literature review related to a selected research topics (Also applies to B, C, D, H.) <hr/> Identify the key mathematical ideas related to a selected research topics (Also applies to B, C, D, H.) <hr/> Identify the key mathematical ideas related to a selected research topic (Also applies to B, C, D, H.)	<b>A.</b> the acquisition, application and integration of knowledge
Write the conjectures and proofs in a format meeting the standards of the international mathematical community. (Also applies to C.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Explain the arguments needed to support the ideas examined in the major paper. (Also applies to A, B, D.)	<b>C.</b> critical thinking and problem-solving skills
Apply appropriate and relevant quantitative or qualitative research methodology in support of the topics explored in the major paper. (Also applies to A, B, C, H.)	<b>D.</b> literacy and numeracy skills
Properly cite all sources used in the major paper.	<b>E.</b> responsible behaviour to self, others and society
Work successfully with a Supervisor. <hr/> Demonstrate the ability to deliver an effective presentation of the major paper in a seminar. (Also applies to I.)	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
Write mathematical ideas and concepts in a clear and succinct way demonstrating the natural aesthetic beauty of mathematics.	<b>H.</b> creativity and aesthetic appreciation

Articulate future research ideas that flow from the dissertation including a sketch of how the ideas will be pursued.

I. the ability and desire for continuous learning

**MATH-8970. Master's Thesis (MSc)****Learning Outcomes**

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Complete a thorough literature review and identify a knowledge gap of sufficient importance to be developed into a master's thesis.  (Also applies to B, C, D, H.)	<b>A.</b> the acquisition, application and integration of knowledge
Identify the key mathematical conjectures that need to be proved in order to fill the knowledge gap.  Identify the published works whose results support the conjectures and that are needed to create the required proofs.  Write the conjectures and proofs in a format meeting the standards of the international mathematical community.  (Also applies to C.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Create the mathematical proofs to support the thesis of the research.  (Also applies to A, B, D.)	<b>C.</b> critical thinking and problem-solving skills
Apply appropriate and relevant quantitative or qualitative research methodology in support of thesis research.  (Also applies to A, B, C, H.)	<b>D.</b> literacy and numeracy skills
Properly cite all sources used in the creation of the thesis and properly acknowledge others that have influenced the development of the research	<b>E.</b> responsible behaviour to self, others and society
Work successfully with a thesis Supervisor.  Demonstrate the ability to deliver an effective presentation of the thesis research in a committee defense setting.  (Also applies to I.)	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
Write mathematical ideas and concepts in a clear and succinct way demonstrating the natural aesthetic beauty of mathematics.	<b>H.</b> creativity and aesthetic appreciation



Articulate future research ideas that flow from the thesis including a sketch of how the ideas will be pursued.

I. the ability and desire for continuous learning

**MATH-8980. Special Topics****Learning Outcomes**

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Illustrate a fundamental knowledge of an advance topic in mathematics. (Also applies to D.) <hr/> Provide precise definitions for the mathematical terms and concepts. (Also applies to D.) <hr/> State and prove the main theorems in the topic area (Also applies to D.)	<b>A.</b> the acquisition, application and integration of knowledge
Find and evaluate current published peer review articles in the topic area. (Also applies to C, G, H, I.) <hr/> Find, read, and integrate knowledge from the academic literature on topics related to Functions of a Real Variable.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills
Discuss and solve problems in the topic area using appropriate terminology and notation. <hr/> Compose organized and logical solutions to problems in the topic area.	<b>D.</b> literacy and numeracy skills
Recognize, evaluate and construct logically sound arguments and deductions in the topic area.	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

## STAT-8410. Stochastic Processes

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
<p>Define, recognize, discuss, prove and apply properties of discrete time Markov chains, continuous time Markov processes, birth and death processes, queuing models. Set up Kolmogorov differential equations for continuous time Markov processes, Find limiting probabilities for continuous time Markov processes. Set up Chapman Kolmogorov equations for discrete time Markov chains. Find limiting probabilities for discrete time Markov chains. State and prove the Fundamental Theorem of branching processes. Classify states in discrete Markov chains as periodic, null recurrent, positive recurrent, transient, absorbing. State and prove stability properties for discrete and continuous Markov processes. Test Markov transition matrices for reversibility and apply reversibility property to find limiting probabilities Study random walks as special cases of discrete Markov chains and of birth and death processes. Define M/M/1 queuing systems and variants of that system. Compute the limiting probabilities. Use Markov chain Monte Carlo methods to simulate stochastic systems and to simulate random variables. Define a renewal process and proof the renewal equation. (Also applies to C, D.)</p>	<b>A.</b> the acquisition, application and integration of knowledge
<p>Extend given definitions, techniques, and theorems to prove complex results in stochastic processes without being given a prescribed method. (Also applies to C, G, H, I.)</p> <hr/> <p>Recognize relevant examples, formulate conjectures based on these examples, prove/disprove/discard as intractable these conjectures. (Also applies to C, G, H, I.)</p> <hr/> <p>Find, read, and integrate knowledge from the academic literature on topics related to Stochastic Processes.</p>	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills

<p>Discuss and solve stochastic processes problems using stochastic processes terminology and structural framework. (Also applies to F, H.)</p> <hr/> <p>Compose organized and logical solutions to stochastic processes problems. (Also applies to F, H.)</p>	<p><b>D.</b> literacy and numeracy skills</p>
<p>Recognize, evaluate and construct logically sound arguments and deductions in the theory of stochastic processes.</p>	<p><b>E.</b> responsible behaviour to self, others and society</p>
	<p><b>F.</b> interpersonal and communications skills</p>
	<p><b>G.</b> teamwork, and personal and group leadership skills</p>
<p>Discuss how the methods of stochastic processes can be applied to seemingly unrelated problems by creatively setting up the problems in special ways.</p>	<p><b>H.</b> creativity and aesthetic appreciation</p>
	<p><b>I.</b> the ability and desire for continuous learning</p>

## STAT-8420. Advanced Mathematical Statistics

### Learning Outcomes

Last Updated: September 16, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
<p>Demonstrate a knowledge of, and ability to use, concepts in probability theory, transformations, and expectations.</p> <hr/> <p>Present and discuss the attributes of common families of distributions. (Also applies to C, F.)</p> <hr/> <p>Demonstrate a knowledge of and ability to use identities and inequalities pertinent to mathematical statistics. (Also applies to C, F.)</p> <hr/> <p>Describe the properties of a random sample. (Also applies to F.)</p> <hr/> <p>Demonstrate a knowledge of data reduction and estimation techniques and describe how to choose the appropriate strategy for a variety of situations. (Also applies to C, E, F.)</p> <hr/> <p>Demonstrate an ability to present elegant, well-written proofs of the main theoretical foundations of mathematical statistics. (Also applies to C, F, H.)</p>	<p><b>A.</b> the acquisition, application and integration of knowledge</p>
<p>Find, read, and integrate knowledge from the academic literature on topics related to Mathematical Statistics.</p>	<p><b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p>
	<p><b>C.</b> critical thinking and problem-solving skills</p>
	<p><b>D.</b> literacy and numeracy skills</p>
	<p><b>E.</b> responsible behaviour to self, others and society</p>
	<p><b>F.</b> interpersonal and communications skills</p>

	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

**STAT-8430. Statistical Inference****Learning Outcomes**

Last Updated: September 16, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Demonstrate a knowledge of measures of performance, pure significance tests, formal hypothesis testing, interval estimation, asymptotic evaluations, analysis of variation, regression, and analysis of categorical data. (Also applies to F.)	<b>A.</b> the acquisition, application and integration of knowledge
Find, read, and integrate knowledge from the academic literature on topics related to Statistical Inference.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Demonstrate an ability to present elegant, well-written proofs of the main theoretical foundations of mathematical statistics. (Also applies to F, H.) <hr/> <hr/> <hr/> <hr/>	<b>C.</b> critical thinking and problem-solving skills
	<b>D.</b> literacy and numeracy skills
	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

## STAT-8460. Statistical Data Analysis

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Use a computer to analyze data, design experiments, present results. (Also applies to C, D.)	<b>A.</b> the acquisition, application and integration of knowledge
Extend given definitions, techniques, and theorems to prove complex results in statistical data 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 the academic literature on topics related to Statistical Data Analysis.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills
Discuss and solve statistical data analysis problems using statistical data analysis terminology and structural framework.  Compose organized and logical solutions to statistical data analysis problems. (Also applies to F, H.)	<b>D.</b> literacy and numeracy skills
Recognize, evaluate and construct logically sound arguments and deductions in statistical data analysis.	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning



## STAT-8490. Discrete Multivariate Analysis

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Analyze discrete data mainly in the form of contingency tables. (Also applies to C, D.)  Recall important results about, explain the theory of, solve problems related to, and utilize techniques involved in multinomial distributions, marginal and conditional distributions and asymptotic properties, Two-Way Contingency Tables, Independence and Homogeneity, Conditional Models, and Generalized Linear Models. (Also applies to C, D.)	<b>A.</b> the acquisition, application and integration of knowledge
Extend given definitions, techniques, and theorems to prove complex results in discrete multivariate 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 the academic literature on topics related to Discrete Multivariate Analysis.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills
Discuss and solve discrete multivariate analysis problems using discrete multivariate analysis terminology and structural framework.  Compose organized and logical solutions to discrete multivariate analysis problems. (Also applies to F, H.)	<b>D.</b> literacy and numeracy skills
Recognize, evaluate and construct logically sound arguments and deductions in discrete multivariate analysis.	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills

	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

## STAT-8500. Generalized Linear Models

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Analyze discrete or continuous data using the generalized linear models and other semi-parametric models where full distributional assumptions cannot be justified. (Also applies to C, D.)	<b>A.</b> the acquisition, application and integration of knowledge
Extend given definitions, techniques, and theorems to prove complex results in generalized linear models 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 the academic literature on topics related to Generalized Linear Models.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills
Discuss and solve generalized linear models using the relevant terminology and structural framework.  Compose organized and logical solutions to generalized linear models. (Also applies to F, H.)	<b>D.</b> literacy and numeracy skills
Recognize, evaluate and construct logically sound arguments and deductions in generalized linear models.	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

## STAT-8520. Experimental Design

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Design experiments using factorial designs with and without interactions, randomized block, Latin square, balanced incomplete block, nested design, confounding factorial and other designs. Utilize fixed, random and mixed models. (Also applies to C, D.)	<b>A.</b> the acquisition, application and integration of knowledge
Extend given definitions, techniques, and theorems to prove complex results in experimental design 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 the academic literature on topics related to Experimental Design.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills
discuss and solve experimental design problems using the relevant terminology and structural framework.  compose organized and logical solutions to experimental design problems. (Also applies to F, H.)	<b>D.</b> literacy and numeracy skills
Recognize, evaluate and construct logically sound arguments and deductions in experimental design.	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation

	I. the ability and desire for continuous learning
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## STAT-8540. Theory of Sampling and Surveys

### Learning Outcomes

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Utilize sampling methods including simple random, stratified, cluster, PPS and multistage, ratio and regression estimates.  All the above are relevant to C and D as well.	<b>A.</b> the acquisition, application and integration of knowledge
Extend given definitions, techniques, and theorems to prove complex results in the theory of sampling and surveys without being given a prescribed method.  Recognize relevant examples, formulate conjectures based on these examples, prove/disprove/discard as intractable these conjectures. (also relevant to C, G, and H, and I) <b>(Also applies to C, G, H, I.)</b>  Find, read, and integrate knowledge from the academic literature on topics related to Topology.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills
Discuss and solve problems in the theory of sampling and surveys using the relevant terminology and structural framework  Compose organized and logical solutions to sampling and surveys problems (also relevant to F and H) <b>(Also applies to F, H.)</b>	<b>D.</b> literacy and numeracy skills
Recognize, evaluate and construct logically sound arguments and deductions in the theory of sampling and surveys.	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

## STAT-8550. Regression Analysis

### Learning Outcomes

Last Updated: September 13, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
<ul style="list-style-type: none"><li>• Define the standard simple linear regression model, with proper assumptions.</li><li>• Set up normal equations and solve for estimated parameters.</li><li>• Understand the projection method onto the appropriate vector space to estimate the coefficients</li><li>• Generalize simple linear regression to multiple linear regression and use the matrix formulation.</li><li>• Examine collinearity and its characteristics.</li><li>• Perform hypothesis tests to check for significance of the coefficients of the model, including testing for single coefficients.</li><li>• Use polynomial regression and perform related hypothesis tests.</li><li>• Examine diagnostic measures to check if assumptions are satisfied.</li><li>• Use transformations to transform nonlinear models to linear models.</li><li>• Use indicator variables and examine interaction effects.</li><li>• Perform weighted least squares regression.</li><li>• Set up models for logistic regression, and nonlinear regression.</li><li>• Apply regression techniques to actual data sets</li><li>• Use R and SAS to help perform regression analysis.</li><li>• Use regression analysis to study more general linear models, such as analysis of variance.</li></ul> <p>(Also applies to C, D.)</p>	<b>A.</b> the acquisition, application and integration of knowledge

<p>Extend given definitions, techniques, and theorems to prove complex results in regression analysis without being given a prescribed method.</p> <hr/> <p>Recognize relevant examples, formulate conjectures based on these examples, prove/disprove/discard as intractable these conjectures.</p> <p style="text-align: right;">(Also applies to C, G, H, I.)</p> <hr/> <p>Find, read, and integrate knowledge from the academic literature on topics related to Regression Analysis.</p>	<p><b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p>
	<p><b>C.</b> critical thinking and problem-solving skills</p>
<p>Discuss and solve regression analysis problems using the relevant terminology and structural framework.</p> <hr/> <p>Compose organized and logical solutions to regression analysis problems.</p> <p style="text-align: right;">(Also applies to F, H.)</p>	<p><b>D.</b> literacy and numeracy skills</p>
<p>Recognize, evaluate and construct logically sound arguments and deductions in regression analysis.</p>	<p><b>E.</b> responsible behaviour to self, others and society</p>
	<p><b>F.</b> interpersonal and communications skills</p>
	<p><b>G.</b> teamwork, and personal and group leadership skills</p>
<p>Recognize that regression methods can be used in nonconventional ways.</p> <hr/> <p>Create counterexamples to show regression model assumptions must be examined very carefully.</p>	<p><b>H.</b> creativity and aesthetic appreciation</p>
	<p><b>I.</b> the ability and desire for continuous learning</p>



## STAT-8950. Topics in Statistics

### Learning Outcomes

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Illustrate a fundamental knowledge of an advance topic in mathematics. (Also applies to D.) <hr/> Provide precise definitions for the mathematical terms and concepts. (Also applies to D.) <hr/> State and prove the main theorems in the topic area (Also applies to D.)	<b>A.</b> the acquisition, application and integration of knowledge
Find and evaluate current published peer review articles in the topic area. (Also applies to C, G, H, I.) <hr/> Find, read, and integrate knowledge from the academic literature on topics related to Functions of a Real Variable.	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
	<b>C.</b> critical thinking and problem-solving skills
Discuss and solve problems in the topic area using appropriate terminology and notation. <hr/> Compose organized and logical solutions to problems in the topic area.	<b>D.</b> literacy and numeracy skills
Recognize, evaluate and construct logically sound arguments and deductions in the topic area.	<b>E.</b> responsible behaviour to self, others and society
	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
	<b>H.</b> creativity and aesthetic appreciation
	<b>I.</b> the ability and desire for continuous learning

**STAT-8960. Major Paper****Learning Outcomes**

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Complete a literature review related to a selected research topic. (Also applies to B, C, D, H.) <hr/> Identify the key statistical ideas related to a selected research topic. (Also applies to B, C, D, H.) <hr/> Identify the key published works related to a selected research topics. (Also applies to B, C, D, H.)	<b>A.</b> the acquisition, application and integration of knowledge
Write the conjectures and proofs in a format meeting the standards of the international statistics community. (Also applies to C.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Explain the arguments needed to support the ideas examined in the major paper. (Also applies to A, B, D.)	<b>C.</b> critical thinking and problem-solving skills
Apply appropriate and relevant quantitative or qualitative research methodology in support of the topics explored in the major paper. (Also applies to C.)	<b>D.</b> literacy and numeracy skills
Properly cite all sources used in the major paper.	<b>E.</b> responsible behaviour to self, others and society
Work successfully with a Supervisor <hr/> Demonstrate the ability to deliver an effective presentation of the major paper in a seminar. (Also applies to I.)	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
Write mathematical ideas and concepts in a clear and succinct way demonstrating the natural aesthetic beauty of statistics.	<b>H.</b> creativity and aesthetic appreciation

Articulate future research ideas that flow from the major paper.

I. the ability and desire for continuous learning

**STAT-8970. Thesis (MSc.)****Learning Outcomes**

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Complete a literature review and identify a knowledge gap of sufficient importance to be developed into a Master's thesis. (Also applies to B, C, D, H.)	<b>A.</b> the acquisition, application and integration of knowledge
Identify the key statistical conjectures that need to be proved in order to fill the knowledge gap.  Identify the published works whose results support the conjectures and that are needed to create the required proofs.  Write the conjectures and proofs in a format meeting the standards of the international statistics community. (Also applies to C.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Create the arguments needed to support the thesis. (Also applies to A, B, D.)	<b>C.</b> critical thinking and problem-solving skills
Apply appropriate and relevant quantitative or qualitative research methodology in support of thesis research.	<b>D.</b> literacy and numeracy skills
Properly cite all sources used in the creation of the thesis and properly acknowledge others that have influenced the development of the research	<b>E.</b> responsible behaviour to self, others and society
Work successfully with a thesis Supervisor.  Demonstrate the ability to deliver an effective presentation of the thesis research in a committee defense setting. (Also applies to I.)	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
Write mathematical ideas and concepts in a clear and succinct way demonstrating the natural aesthetic beauty of statistics.	<b>H.</b> creativity and aesthetic appreciation
Articulate future research ideas that flow from the thesis including a sketch of how the ideas will be pursued.	<b>I.</b> the ability and desire for continuous learning

**STAT-9980. Dissertation (Phd)****Learning Outcomes**

Last Updated: September 14, 2021

<b>Learning Outcomes</b> At the end of the course, the successful student will know and be able to:	<b>Characteristics of a University of Windsor Graduate</b> The University of Windsor graduate will have the ability to demonstrate:
Complete a thorough literature review and identify a knowledge gap of sufficient importance to be developed into a doctoral dissertation.  (Also applies to B, C, D, H.)	<b>A.</b> the acquisition, application and integration of knowledge
Identify the key statistical conjectures that need to be proved in order to fill the knowledge gap.  Identify the published works whose results support the conjectures and that are needed to create the required proofs.  Write the conjectures and proofs in a format meeting the standards of the international statistics community.  (Also applies to C.)	<b>B.</b> research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
Create the arguments needed to support the thesis of the research.  (Also applies to A, B, D.)	<b>C.</b> critical thinking and problem-solving skills
Apply appropriate and relevant quantitative or qualitative research methodology in support of dissertation research.	<b>D.</b> literacy and numeracy skills
Properly cite all sources used in the creation of the dissertation and properly acknowledge others that have influenced the development of the research	<b>E.</b> responsible behaviour to self, others and society
Work successfully with a Dissertation Supervisor and Committee.  Demonstrate the ability to deliver an effective presentation of the dissertation research in a committee defense setting.  (Also applies to I.)	<b>F.</b> interpersonal and communications skills
	<b>G.</b> teamwork, and personal and group leadership skills
Write mathematical ideas and concepts in a clear and succinct way demonstrating the natural aesthetic beauty of statistics.	<b>H.</b> creativity and aesthetic appreciation
Articulate future research ideas that flow from the dissertation including a sketch of how the ideas will be pursued.	<b>I.</b> the ability and desire for continuous learning

**University of Windsor  
Program Development Committee**

**\*5.17            Philosophy (Graduate) Learning Outcomes**

Item for:        **Information**

Forwarded by: **Faculty of Graduate Studies**

This package contains the following course learning outcomes:

- PHIL-8200. Topics in Ethics and Value Theory
- PHIL-8210. Topics in Social and Political Philosophy
- PHIL-8220. Topics in Environmental Philosophy
- PHIL-8260. Philosophy of Law
- PHIL-8300. Topics in Gender and Sexuality
- PHIL-8500. Topics in Mind or Knowledge
- PHIL-8600. Movements and Figures in Argumentation Theory and Informal Logic
- PHIL-8610. Problems in Argumentation and Informal Logic
- PHIL-8710. Recent French Philosophy
- PHIL-8720. Analytic Philosophy
- PHIL-8770. Topics in Continental Philosophy
- PHIL-8900. Departmental Seminar: The History of Philosophy in Perspective

<b>PHIL-8200. Topics in Ethics and Value Theory</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i>	<b>Characteristics of a University of Windsor Graduate</b>
<u>At the end of this course, the successful student will know and be able to:</u>	<u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in <u>ethics and value theory</u> . A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Examine philosophical explanations in historical context.	A. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in <u>ethics and value theory</u> . B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical arguments in <u>ethics and value theory</u> . C.2 Present and reconstruct philosophical arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically read and interpret philosophical texts in <u>ethics and value theory</u> . D.2 Write systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Present philosophical research and answer questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Respectfully and rationally argue towards a common position. G.2 Explain and defend points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in <u>ethics and value theory</u> in one's own voice. H.2 Develop an appreciation for elegant thinking and writing in <u>ethics and value theory</u> .	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to some of life's problems. I.2 Identify new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>Phil 8210 – Topics in Social and Political Philosophy</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i>  <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in social and political philosophy. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in social and political philosophy with their historical, cultural, and other contexts.	B. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in social and political philosophy. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in social and political philosophy. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in social and political philosophy. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in social and political philosophy in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in social and political philosophy. H.3 Construct thought experiments to test and assess different approaches to or perspectives on social and political philosophy.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. H.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning



<b>Phil 8220 – Topics in Environmental Philosophy</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. Identify and explain some of the most important concepts in environmental philosophy. Critically apply philosophical knowledge to a new problem or to an existing problem in a new setting. Relate and integrate contemporary concepts in environmental philosophy with their historical, cultural, and other contexts.	C. the acquisition, application and integration of knowledge
B. Independently access and retrieve primary and secondary philosophical sources in environmental philosophy. Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Formulate, develop, and critically assess philosophical positions and arguments in environmental philosophy. Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D. Critically study and interpret philosophical texts in environmental philosophy. Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F. Report philosophical research and formulate answers to questions about research clearly and cogently. Listen empathetically. Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G. Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H. Independently formulate positions on key problems in environmental philosophy in one's own voice. Propose novel approaches to or perspectives on philosophical questions in environmental philosophy. Construct hypotheticals, thought experiments, or other conceptual experiments to test and assess different approaches to or perspectives on environmental philosophy.	H. creativity and aesthetic appreciation
I. Apply philosophical thinking to a wide range of issues, present and future. Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>Phil 8260 – Philosophy of Law</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in philosophy of law. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in philosophy of law with their historical, cultural, and other contexts.	D. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in the philosophy of law. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in philosophy of law. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in philosophy of law. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in philosophy of law in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in philosophy of law. H.3 Construct thought experiments to test and assess different approaches to or perspectives on philosophy of law.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>PHIL-8300 – Topics in Gender and Sexuality</b> <b>Learn Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in the philosophy of gender and sexuality. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in the philosophy of gender and sexuality with their historical, cultural, and other contexts.	E. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in gender and sexuality. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in the philosophy of gender and sexuality. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in gender and sexuality. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in gender and sexuality in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in gender and sexuality. H.3 Construct thought experiments to test and assess different approaches to or perspectives on <u>ethics and value theory</u> .	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>PHIL 8500 – Topics in Mind and Knowledge</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i>  <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in philosophy of mind and knowledge. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in the philosophy of mind and knowledge with their historical, cultural, and other contexts.	F. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in the philosophy of mind and knowledge. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in the philosophy of mind and knowledge. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in the philosophy of mind and knowledge. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in the philosophy of mind and knowledge in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in the philosophy of mind and knowledge. H.3 Construct thought experiments to test and assess different approaches to or perspectives on mind and knowledge.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>PHIL 8600 – Movements and Figures in Argumentation Theory and Informal Logic</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important figures and movements in argumentation theory and informal logic. A.2 Relate and integrate figures and movements in argumentation theory and informal logic with their historical, cultural, and other contexts.	G. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in the study of figures and movements in argumentation theory and informal logic. B.2 Critically engage with current philosophical research and scholarship on figures and movements in argumentation theory and informal logic.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Critically assess philosophical positions and arguments in the study of figures and movements in argumentation theory and informal logic. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts on figures and movements in argumentation theory and informal logic. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in the study of movements and figures in argumentation theory and informal logic in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in the study of figures and movements in argumentation theory and informal logic. H.3 Construct thought experiments to test and assess different approaches to or perspectives on figures and movements in argumentation theory and informal logic.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such	I. the ability and desire for continuous learning

**PHIL 8600 – Movements and Figures in Argumentation Theory and Informal Logic**

*This is a sentence completion exercise.*

At the end of this course, the successful student will know and be able to:

problems.

**Characteristics of a University of Windsor Graduate**

A U of Windsor graduate will have the ability to demonstrate:

<b>Phil 8610 – Problems in Argumentation and Informal Logic</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in argumentation and informal logic. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in argumentation and informal logic with their historical, cultural, and other contexts.	H. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in argumentation and informal logic. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in argumentation and informal logic. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in argumentation and informal logic. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in argumentation and informal logic in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in argumentation and informal logic. H.3 Construct thought experiments to test and assess different approaches to or perspectives on argumentation and informal logic.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>Phil 8710 – Continental Philosophy</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in Continental philosophy. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in Continental philosophy with their historical, cultural, and other contexts.	I. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in Continental philosophy. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in Continental philosophy. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in Continental philosophy. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in recent Continental philosophy in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in Continental philosophy. H.3 Construct thought experiments to test and assess different approaches to or perspectives on Continental philosophy.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning



<b>Phil 8720 – Analytic or Pragmatist Philosophy</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in analytic or pragmatist philosophy. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in analytic or pragmatist philosophy with their historical, cultural, and other contexts.	A. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in analytic or pragmatist philosophy. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in analytic or pragmatist philosophy. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in analytic or pragmatist philosophy. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in analytic or pragmatist philosophy in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in analytic or pragmatist philosophy. H.3 Construct thought experiments to test and assess different approaches to or perspectives on analytic or pragmatist philosophy.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>Phil 8770 – Topics in Continental Philosophy</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i>  <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in the study of advanced topics in Continental philosophy. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in Continental philosophy with their historical, cultural, and other contexts.	B. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources in the study of advanced topics in Continental philosophy. B.2 Critically engage with current philosophical research and scholarship and reflect on its development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C.1 Formulate, develop, and critically assess philosophical positions and arguments in the study of advanced topics in Continental philosophy. C.2 Present and reconstruct philosophical positions and arguments in historical perspective.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts on advanced topics in Continental philosophy. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in the study of advanced topics in Continental philosophy in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions in the study of advanced topics in Continental philosophy. H.3 Construct thought experiments to test and assess different approaches to or perspectives on advanced topics in Continental philosophy.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

<b>Phil 8900 – Departmental Seminar</b> <b>Learning Outcomes</b> <i>This is a sentence completion exercise.</i>  <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A.1 Identify and explain some of the most important concepts in the history of philosophy. A.2 Critically apply philosophical knowledge to new problems or to existing problems in new settings. A.3 Relate and integrate contemporary concepts in philosophy with their historical, cultural, and other contexts.	A. the acquisition, application and integration of knowledge
B.1 Independently access and retrieve primary and secondary philosophical sources. B.2 Critically engage with philosophical research and scholarship and reflect on its historical development.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Formulate, develop, and critically assess philosophical positions and arguments in the history of philosophy.	C. critical thinking and problem-solving skills
D.1 Critically study and interpret philosophical texts in historical perspective. D.2 Construct essays systematically and coherently in both expository and argumentative modes.	D. literacy and numeracy skills
E. Engage in philosophical discussions respectfully and constructively.	E. responsible behaviour to self, others and society
F.1 Report philosophical research and formulate answers to questions about research clearly and cogently. F.2 Listen empathetically. F.3 Ask critical questions of others in a constructive way.	F. interpersonal and communications skills
G.1 Discuss, compare, evaluate, and debate, respectfully and rationally, towards a common position. G.2 Explain and justify points of disagreement.	G. teamwork, and personal and group leadership skills
H.1 Independently formulate positions on key problems in the history of philosophy in one's own voice. H.2 Propose novel approaches to or perspectives on philosophical questions. H.3 Construct thought experiments to test and assess different approaches to or perspectives on philosophical problems.	H. creativity and aesthetic appreciation
I.1 Apply philosophical thinking to a wide range of issues, present and future. I.2 Locate new and emerging philosophical research on such problems.	I. the ability and desire for continuous learning

University of Windsor  
Program Development Committee

\*5.18            **Human Kinetics (Graduate) Learning Outcomes**

Item for:        **Information**

Forwarded by: **Faculty of Graduate Studies**

This package contains the following learning outcome:  
KINE-8080. Strategic Management in the Sport Industry

## KINE-8080. Strategic Management in the Sport Industry

### LEARNING OUTCOMES TABLE

<b>Course Learning Outcomes</b>	<b>Characteristics of a University of Windsor Graduate</b>
<i>This is a sentence completion exercise.</i>  <u>At the end of the course, the successful student will know and be able to:</u>	<u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. identify and discuss the importance of strategy creation and implementation for sport organizations	A. the acquisition, application and integration of knowledge
B. interpret and evaluate organizational strategies using a variety of theoretical and analytical tools derived from the strategic management literature (also applies to C)	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. demonstrate critical thinking, problem-solving, and decision-making skills by analyzing challenges faced by 'real' organizations in various sectors of the sport industry and formulate strategic solutions to address these challenges (also applies to A)	C. critical thinking and problem-solving skills
D. appraise financial statements and compute financial ratios to assess the financial health of sport organizations	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. illustrate persuasive oral and written communication skills through substantive debate and the completion of weekly case briefs	F. interpersonal and communications skills
G. identify, recognize, and resolve the challenges associated with working in a team environment (also applies to E)	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning