University of Windsor

Sa180525

NOTICE OF MEETING

There will be a meeting of the Senate
on, Friday, May 25, 2018, at 2:30 p.m.
Room 203 in the Anthony P. Toldo Health Education Centre

A G E N D A

Memorial - remembering those students, faculty and staff who have contributed to the academic life of the university and who have passed away during the past year

1	**Approval of Agenda** (Unstarring agenda items)	
2	**Minutes of the meetings of May 11, 2018**	SM180511
3	**Business arising from the minutes**	
4	**Outstanding Business/Action Items**	
4.1	**Candidates for Degrees, Diplomas and Certificates**	**Alan Wildeman**-Approval To be distributed
4.2	**Aboriginal Education Council Response to the Report of the Senate Working Group on Benchmarking the University of Windsor in Relation to Universities Canada 13 Principles on Indigenous Education**	Discussion Sa180525-4.2
5	**Reports/New Business**	
5.1	**Report from the Student Presidents** (UWSA, OPUS, GSS)	**UWSA**-Information **OPUS**-Information **GSS**-Information
5.2	**Report of the President**	
5.3	**Report of the Academic Colleague**	
5.4	**Senate Student Caucus**	
5.5	**Program Development Committee**	
5.5.1	**International Masters in Civil Engineering (IMCE) – New Program Proposal *(Dual-credential program with University of Udine, Italy)***	**Greg Chung-Yan**-Approval Sa180525-5.5.1
5.5.2	**Anthrozoology – New Certificate Program**	**Greg Chung-Yan**-Approval Sa180525-5.5.2
	***5.5.2.1 Anthrozoology – New Course Proposal**	Sa180525-5.5.2.1
5.5.3	**Certificate in Sport Media, Communication and Social Issues – New Certificate Program**	**Greg Chung-Yan**-Approval Sa180525-5.5.3
5.5.4	**Bachelor of Engineering Technology Mechatronics Stream – Major Program Changes**	**Greg Chung-Yan**-Approval Sa180525-5.5.4
	***5.5.4.1 Bachelor of Engineering Technology - New Course Proposals**	Sa180525-5.5.4.1

5.5.5 Master of Education - Online - Major Program Changes — **Greg Chung-Yan**-Approval Sa180525-5.5.5

5.5.6 Internship Option for Chemistry and Biochemistry Programs - Major Program Change — **Greg Chung-Yan**-Approval Sa180525-5.5.6

***5.5.6.1 Chemistry/Biochemistry - New Course Proposals** — Sa180525-5.5.6.1

***5.5.7 Program Course Changes** — **Greg Chung-Yan**-Approval Sa180525-5.5.7a-k

- ***a) Bachelor of Commerce – (Honours Business Administration and Mathematics with or without thesis) – (Specialization in Finance) (Specialization in Supply Chain and Business Analytics)**
- ***b) Electrical and Computer Engineering – Minor Program Changes**
- ***c) Electrical Engineering – New Course Proposal**
- ***d) Computer Science (Combined Honours Program) – Minor Program Changes**
- ***e) Physics (Combined Honours Program) – Minor Program Changes**
- ***f) Master of Arts in Philosophy - Minor Program Changes**
- ***g) Master of Engineering Management - Minor Program Changes**
- ***h) Science - New Course Proposal**
- ***i) Argumentation Studies – New Course Proposal**
- ***j) Languages, Literatures and Cultures - New Course Proposals**
- ***k) Mathematics and Statistics (Graduate) - New Course Proposals**

***5.5.8 Learning Outcomes** — **Greg Chung-Yan**-Information Sa180525-5.5.8a-d

- ***a) Master of Human Kinetics (MHK) Applied Human Performance**
- ***b) Master of Human Kinetics Sports Management**
- ***c) PhD in Kinesiology**
- ***d) Philosophy (Undergraduate) – Courses**

5.6 Academic Policy Committee

***5.6.1 Academic Integrity Office Annual Report (2016-2017)** — **Antonio Rossini**-Information Sa180525-5.6.1

5.7 Senate Governance Committee

5.7.1 Research Ethics Board – Report 2015-2017 — **Alan Wildeman**- Information Sa180525-5.7.1

***5.7.2 Senate Standing Committees – Membership** — **Alan Wildeman**-Approval Sa180525-5.7.2

5.8 Report of the Provost — **Douglas Kneale**

5.9 Report of Vice-President, Research and Innovation — **K W Michael Siu**

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
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4.2: **Aboriginal Education Council Response to the Report of the Senate Working Group on Benchmarking the University of Windsor in Relation to Universities Canada 13 Principles on Indigenous Education**

Item for: **Discussion**

The Aboriginal Education Council (AEC) has had the opportunity to discuss the *Recommendations of the Senate Working Group* report at their retreat on May 18, 2017. After working through the recommendations and discussion about the report with Dr. Wildeman the AEC has put together the following response for Senate's consideration.

The 12 recommendations were broken down into four areas: student oriented, indigenization of campus, history project and other. While there has been much progress and initiative on campus since the original report, the council feels that continuing a dialogue on the recommendations needs to be a priority. One way for the university to build relations with the Indigenous community is to work alongside the AEC. The following are the 12 recommendations divided into the four sections identified by the council with feedback provided on each item.

Student Orientated:

#2 The University of Windsor should work with Turtle Island and the AEC to better recruit First Nations, Métis and Inuit students and to ensure their access to support and their success. This will address the TRC Call to Action to address the backlog of First Nations students seeking university education.

In order to address this recommendation, the University of Windsor must develop a strategy for attracting, retaining, supporting and graduating Indigenous students. While these functions generally act independent of one another, a targeted approach is necessary if it is to ensure success of these students.

A strong area of interest for Indigenous students is taking programs with Indigenous content. The Indigenous Scholars Program is an exciting initiative because it has the potential to recruit faculty that could develop an Indigenous Studies program at the university. This in turn, will help with the recruitment of students. In addition to students having representation in the classroom, the university should consider a commitment of not only Indigenous faculty but staff as well. Students who see a reflection of themselves in their environment are more likely to succeed.

An important component of ensuring student success is providing cultural support services like at the Aboriginal Education Centre. If the university is looking to act on the 12 recommendations, providing additional resources and support to the centre will need to be a part of the overall strategy. Additional funds committed to the programming at the Centre beyond the Postsecondary Education Fund for Aboriginal Learners (PEFAL) that come directly from the province would demonstrate a commitment as well as exploring the option for additional staffing. With increased awareness on campus concerning Indigenous content, it has created a new demand for resources that the centre is currently expected to fulfil.

#6 The space allocated to The Aboriginal Education Centre -- Turtle Island should be reviewed as part of the Campus Plan so that space is allocated to make Turtle Island the "hub" of Indigenous culture on this campus. The space should provide for community use and class-room related activities, and promote dialogue between Indigenous and non-indigenous students and other members of our campus community. ***See Appendix 2***[1] *on Aboriginal Centres in Ontario Universities.*

[1] All Appendices mentioned hereinafter are attached in the original *Report of Senate Working Group on Benchmarking the University of Windsor in relations to Universities Canada 13 Principles on Indigenous Education.*

While the AEC understands that there is a re-envisioning process happening with the CAW, open communication about progress reports are not being communicated to interested parties. Any ongoing discussion and decision making regarding a new space on campus should involve staff, students and the AEC. This is an integral part of the relationship building that needs to happen between the university and the Indigenous community.

Commitment to current Indigenous students on campus is not being given priority with their critically under equipped space in the CAW Student Centre. If the re-envisioning process of CAW building is expected to take several years, the university must find a way in the interim to address the needs of these students.

#12 The University of Windsor should conduct an annual census of the following activities and report them on the University website as a means to resource and enable systemic and cohesive academic planning.

a. indigenization of programs, courses and course content,
b. community-based initiatives contributing to indigenization such as National Aboriginal Day Celebrations[2] (June 21st) and Bookfest, among others,
c. community-outreach activities contributing to high quality K-12 experiences for Indigenous youth, and
d. research relevant to the wellbeing, history and culture of First Nations, Métis and Inuit communities.

The Indigenous peoples page is a good first step to implementing this recommendation. Moving forward with its development, the page link should be added to the university's main landing page so that visitors to the website have easy access to the information. In addition to the university making information more accessible, the AEC is working on updating its information on the Aboriginal Education Centre website regarding membership, meeting minutes and contact information.

Indigenization of campus:

#5 The University of Windsor should develop a sustainable strategy to indigenize and decolonize its curricula, particularly those of disciplines identified by the TRC Calls to Action. See ***Appendix 1[3]*** *concerning Strategies for indigenizing and decolonizing the curriculum undertaken by other Canadian universities.*

The AEC has taken it upon itself to assist with this endeavour and have organized the Brown Bag Series – The Road to Decolonizing your Pedagogy. While this is a first step, a campus wide strategy will demonstrate a commitment towards reconciliation. The AEC encourages all faculties to work together to develop a strategy on how to indigenize and decolonize its curricula so that there is a consistent effort. An initial first step would be allocating the resources by each department to developing this strategy.

In regard to the disciplines identified by the TRC Calls to Action we recognize the work being done in each area.

- Faculty of Law has established a TRC Steering Committee in addition to hiring 3 Indigenous faculty and developed the new position of Indigenous Coordinator. As well, a new mandatory course Indigenous Legal Traditions for all law students.
- Faculty of Education under the guidance of Dr. Doan had established Beginning Time Teachings program. We understand that this program is currently being reviewed, but is looking to build a sustainable program to educate teacher candidates with Indigenous content courses.
- School of Medicine has incorporated mandatory Indigenous cultural training for its medical students and is looking to further implement the calls to action.

#7 The University of Windsor can serve as a role model to other institutions by providing meaningful funding in support of the 13 Principles, including assistance to help fund indigenization of conferences, visiting speakers/authors, theatre productions, panels, workshops, land-based learning and other such related events. ***See Appendix 3*** *on How Universities are creating respectful, welcoming and equitable environments.*

The AEC supports this recommendation and suggests a committed pool of funding for those wishing to work on Indigenous topics. As it currently stands, the AEC does not have financial resources but received financial

[2] Now called National Indigenous Peoples Day which is in the process of becoming a statutory holiday.

contribution from the Transnational Law and Justice Network to assist with the Brown Bag Series. A committed pool of funding for projects like this will motivate future projects at the university regarding indigeneity and ensure the longevity of projects like the Brown Bag Series.

#8 The University of Windsor should continue to address diversity in its hiring policy. Data from University of Windsor's 2011 Employment Equity Work Force Census indicates 1.6% of those responding to the Census self-identified as Aboriginal. Indigenization of the professoriate is also a part of the indigenization of the curriculum as discussed in ***Appendix 1****.*

There continues to be much excitement amongst the AEC with the announcement of the President's Indigenous Peoples Scholars Program. The commitment for 5 tenure track faculty in addition to the Indigenous faculty already at the university demonstrates a commitment to indigenization of the professoriate.

In order to continue addressing issues of diversity there needs to be an assessment of the hiring practices and processes currently in place that contain barriers to Indigenous people (amongst other marginalized groups). The university could commit to employment equity by ensuring that targeted recruiting of Indigenous people takes place for all external openings. Consideration to barriers on issues such as rules of seniority need to be addressed between the university and unions. This barrier prevents advancement of career tracks for not only Indigenous people, but all members of equity categories. When these designated groups become staff, the current system inherently puts these applicants at a disadvantage. If the university is committed to addressing diversity, additional designated roles (including management positions) may be necessary to combat this.

An important role that the university should consider would be to hire an Indigenous recruitment officer. This would allow targeted recruitment in programs like the Aboriginal Post-Secondary Information Program (APSIP). Much like the University Information Program (UIP), respective universities send designated Indigenous recruitment officers to communities with targeted and culturally relevant information. A commitment such as this not only addresses diversity issues, but makes a commitment towards recommendation #2 with the recruitment of Indigenous students.

#9 The University of Windsor as a whole needs to create a process for academic planning with Indigenous leadership, particularly the leadership of the AEC and members of Turtle Island, and consultation with Indigenous communities, to make this possible across all Faculties and disciplines. For an example of effective academic planning see the report of Nipissing University at http://www.nipissingu.ca/departments/aboriginal-initiatives/Pages/default.aspx

The most important element of this recommendation is coming to a collective understanding of what is meant by *consultation with Indigenous communities* and what consultation looks like from an Indigenous perspective. Moving forward, the *duty to consult and accommodate with Aboriginal peoples* is a framework that needs to be engrained in decision making with regards to Indigenous related matter.

A component of indigenization in academic planning could include adding a mandatory section in course planning that asks - How does this course/program include Indigenous content? Furthermore, making this a requirement of all new courses and programs will advance the commitment of decolonizing and indigenizing the university. Moving forward, the AEC is open to establishing a partnership on academic planning related to such matters.

History Project:

#11 The University of Windsor should support the Department of History to develop a public history project about the mission of the Assumption Church to the First Nations of the region. Although the Assumption Church and the Jesuit mission did not involve a residential school, it would be appropriate to create a public history project as a means to answer the TRC Call to Action 59 concerning the role of churches in colonization.

The AEC suggests that the proposed public history project should be expanded beyond the establishment of the Assumption Church and its mission towards area First Nations and that any such work should closely examine the First Nations themselves pre and post contact so that the university can have an accurate understanding of the history of the land that the university is situated on.

Other:

#1 The University of Windsor should implement an external review in order to gather further information about how best to implement strategies answering the TRC Calls to Action and the 13 Principles on Indigenous Education.

Since the benchmarking report took place, several initiatives have developed on campus to implement the TRC Calls to Action. The university has not devised a strategy on how to implement the calls to action and much of the work being done on campus is happening independently of one another. An overseeing body or designated position on campus could increase the efficiency and effectiveness of a strategy and reduce the redundancy in projects and resources. This is another opportunity for the university to look to increasing Indigenous staff on campus. A management position would address the disparity in the lack of representation in senior roles on campus.

#3 The University of Windsor should evaluate its Education programs in relation recommendations made in final Report of the Minister of the Department of Indian Affairs and Northern Development's National Working Group on Education, including the recommendation that "post-secondary institutions and teacher education programs adopt multiple strategies to increase substantially the number of Aboriginal secondary school teachers…" (p. 43).

Going back to the importance of a designated Indigenous recruiter, this recommendation speaks to the importance of targeted recruitment of Indigenous students in particular, potential teacher candidates.

#4 The Faculty of Education at the University of Windsor should evaluate the opportunity to develop a Bachelor of Education in Indigenous Learning or its equivalent. Five Ontario universities now offer a Bachelor of Education in Indigenous Learning.

The AEC understands that discussion is already underway in the Faculty of Education in regards to new programming and is working towards addressing this recommendation and that of recommendation #3.

#10 The University of Windsor should establish a Memorandum of Understanding with the Walpole Island First Nation and its Heritage Centre. In addition, the University of Windsor should identify other opportunities to work more broadly with First Nations, Métis and Inuit communities.

The importance of a new MOU with the University of Windsor and Walpole Island has the potential to strengthen its relationship and look to help build capacity in the community. The expired MOU was primarily based on the view of research in the community. Relationship building between leaders in Walpole and the university will help prioritize goals of both parties so that it is a mutually beneficial partnership. Historically speaking, Walpole has had a very one-sided relationship with research being done in their communities. Building capacity will address this disparity and ensure the longevity of the partnership.

Further Comments:

The importance of an overall strategy to oversee and implement Indigenization at the University of Windsor is the driving force to address all of the recommendations in the Benchmarking Report. Moving forward, building a committee between Senate and the AEC will become necessary to further examine course of action on the recommendations. Again, resources and the involvement of senior administration and staff is crucial. As such, a task of this magnitude relies on the leadership and drive of all parties involved. Consideration should be given for an Indigenous designated role to help develop and implement a campus wide strategy. The AEC would lend its support to such a strategy and believes that it can also contribute to its success.

The Aboriginal Education Council would like to thank the Senate Working Group for putting together this report and pushing for a commitment from the university on matters relating to Indigenous education.

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5.5.1: **International Masters in Civil Engineering – New Program Proposal**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the International Masters in Civil Engineering (International Master of Applied Science in Civil Engineering/Laurea Magistrale in Civil Engineering) dual degree program be approved.*

**Subject to approval of expenditures required.*

Rationale/Approval:

- The proposal has been approved by the Departmental Council, the Faculty of Engineering Coordinating Council, the Faculty of Graduate Studies Council, the Provost and the Program Development Committee.
- See attached.

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM "A"

A. Basic Program Information

FACULTY:	Engineering/Graduate Studies
AAU:	Civil and Environmental Engineering
Program Title:	International Masters in Civil Engineering
Name of Program as it Will Appear on the Diploma (*e.g.*, Bachelor of Arts Honours Psychology with thesis) *[Please note that, for general degrees, the discipline is not included on diplomas.]*	International Master of Applied Science in Civil Engineering will appear on the diploma parchment issued by the University of Windsor.
Proposed Year of Offering *[Fall 20xx]*:	Fall 2019
Mode of Delivery:	Lectures/ laboratories/ design projects /internships offered jointly at the University of Windsor campus, and the University of Udine campus in Udine, Italy. Students will study at their home institution for the first year and become exchange students at the other (host) institution for the final year.
Planned Student Enrolment	Three (3) students in the first year with enrolment growing to 12 students in subsequent years (6 Canadians and 6 Italians).
Normal Duration for Completion:	Two full calendar years, consisting of three (3) terms in Canada and two (2) semesters in Italy

B. Overall Program Plan

Abstract/Summary of Proposal

Please provide a brief statement about the direction, relevance and importance of the new program.

The Department of Civil and Environmental Engineering currently offers a Master of Applied Science program in Civil Engineering. The proposed International Master's degree program in Civil Engineering will provide students with suitable training and education to give them the opportunity to enter the professional world with a full and international background in Civil Engineering. This dual-credential program includes the exchange of students who will achieve two degrees from two universities, each of which has established research programs. The two degrees, which will be issued by the concerned universities with a time difference of a maximum six months, are respectively the *"Laurea Magistrale in Civil Engineering*" issued by University of Udine (Udine, Italy) and the *International Master of Applied Science in Civil Engineering* issued by the University of Windsor.

Academic Goal

Overall aim and intended impact of the proposed new program

In recent years, globalization has affected many areas of engineering and civil engineering in particular. Civil Engineering professionals deal with issues that may have global impact, including the outsourcing of engineering services, and the design and construction of civil engineering infrastructures. Recognizing that the world is increasingly interconnected, many universities offer to students' joint programs to enrich their educational experience. There is an increasing recognition around the world that engineering education and experience must be portable and that as the global economy develops and trade barriers fall, there is a major benefit to having an international outlook on the education of engineers who develop new products for these global markets.

The Washington Accord, signed in 1989, is an international agreement among bodies responsible for accrediting engineering degree programs. It recognizes the substantial equivalency of programs accredited by those bodies and recommends that graduates of programs accredited by any of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering. Washington Accord signatories include Australia, Canada, Chinese Taipei, Hong Kong China, Ireland, Japan, Korea, Malaysia, New Zealand, Singapore,

South Africa, United Kingdom, and United States. Provisional status is held by Germany, India, Pakistan, Russia, Sri Lanka and Turkey.

The Bologna Accord covers participating European countries. Every participating country has adopted the format of two basic degrees, bachelors and masters. Sometimes these degree formats are operating in parallel to existing degrees during a transition period while in other cases, they replace older or legacy degrees completely. European universities are currently in the implementation phase of the Bologna Accord and consequently, there are a growing number of graduates who already hold these degrees. The European Credit Transfer and Accumulation System (ECTS) provides the platform by which the applicable degrees are monitored and awarded. Typically, a bachelor's degree requires 180-240 ECTS credits and a master's degree program incorporates between 90 and 120 ECTS credits depending on the discipline.

To earn a license to practice engineering in Europe a graduate must hold a master's level degree (referred to as a *Laurea Magistrale* in Italy). This is the foundation on which the proposed University of Windsor – University of Udine dual degree in Civil Engineering is being established.

Recently, the Canada-Europe Comprehensive Economic Trade Agreement (CETA) was finalized. On February 29, 2016, Canada's Minister of International Trade and the European Union's Commissioner for Trade announced the completion of the legal review of CETA. This agreement will permit the free movement of labour between Canada and Europe. This is a reason for the higher-education sector to pay attention. The proposed program is an on-time response to the potential change in the labour market in the engineering sector.

For the graduates of the proposed program, the effects of the Washington and Bologna Accords and CETA are profound. As a result of taking this program, they will be knowledgeable about civil engineering practices both from a European and a North American point of view, which will obviously make them highly valued in the strongly globalized construction industry. Engineering graduates from an Italian University must pass the National Board of Engineering evaluation exam in order to practice in Italy. Graduates wishing to practice engineering in Canada must have their credentials examined by a provincial licensing body, fulfill the work experience requirement, and pass the Professional Practice Exam.

Program Content

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

The Civil Engineering curriculum at both the University of Windsor and the University of Udine have been developed with the ever increasing complexity of Civil Engineering practice top of mind and by examining similar programs at leading universities all over the world. Both institutions have operated their respective programs for many years (in the case of Windsor since 1963) and so the content of the programs is well established as being relevant, current, and appropriate for the field.

Unique or innovative curriculum, program delivery, or assessment practices distinguishing this proposal from existing programs elsewhere.

The key distinguishing feature of the proposed program is the opportunity it offers students to study at two universities in two different countries in the field of civil engineering on important and relevant civil engineering research and development issues.

Program Name and Degree Designation/Nomenclature

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

There are very few international dual degree programs in engineering in Canada, one of them is the "*International Masters of Applied Science in Automotive Engineering*" offered between the University of Windsor and *Politecnico di Torino*, Italy. The proposed program is similar to this successful program initiated in 2013. The proposed program

name of *International Masters in Civil Engineering* and the UWindsor degree designation of *International Master of Applied Science in Civil Engineering* are both designed to convey the international character of the program and the collaboration being built between the University of Windsor and the University of Udine, one of Italy's leading engineering schools.

Collaborative Program

If this is a collaborative program with another college/university, identification of partners and institutional arrangements for reporting eligible enrolments for funding purposes.

The proposed program is a collaboration with the University of Udine. The number of students participating in the program will be agreed upon each year by the participants and is intended to be approximately equal on both sides. In view of the number of students involved being approximately equal and to facilitate easier student mobility, the two institutions have both agreed that students will pay tuition fees to their home institution only, *e.g.* while at Udine in their second year, the Windsor students will be registered at Windsor and pay tuition fees to Windsor. The details of the reporting and financial components of the agreement between the University of Windsor and the University of Udine is embodied in an agreement between the two institutions signed on October 1, 2014 (Appendix B).

RELATIONSHIP OF GOALS AND OBJECTIVES TO UNIVERSITY AND OTHER PRIORITIES

Area/Department's Goals and Objectives

Consistency of proposed program with the area/department's overall goals and objectives.

The Department of Civil and Environmental Engineering (CEE) carries out teaching and research in various areas pertaining to the construction industry and environmental issues. The mandate of the Department is similar to that of other Civil and Environmental Engineering departments in Canada and abroad. CEE is the second-largest department in the Faculty of Engineering at the University of Windsor, with over 330 undergraduate and 97 graduate students. Its 21 faculty and staff support a wide range of teaching and research programs in areas such as Structural Engineering, Transportation, Water Resources, Air Pollution Control, and Bioenergy. Civil and environmental engineers are responsible for the design, analysis, construction, maintenance, and operation of infrastructure. Civil engineers commonly go beyond the limits of purely construction design and implementation, and are found at all levels of management in private industry and the public sector. Thus, the proposed International Masters in Civil Engineering fits within the existing goals and purview of the Civil Engineering discipline and of the relevant department at the University of Windsor.

Faculty Five Year Plan

Consistency of proposed program with the Faculty's overall goals and objectives as defined in its Five-year Plan.

The proposed Master's degree program is in full accord with the Faculty of Engineering five-year plan which calls for increased enrolment while building stronger engineering capabilities in our students in discipline areas which contribute to prosperity in a socially and environmentally responsible fashion and which enhance job creation both for engineers and for other Canadians who build and use engineered products.

The current University of Windsor strategic research plan states that one of the University objectives is to "Train highly qualified personnel who will become next-generation industrial entrepreneurs, leaders, scientists and engineers." The Faculty of Engineering at the University of Windsor's mandate is to ensure a steady supply of highly skilled and appropriately educated engineers for the 21st century global economy. Thus, the initiation of a collaborative program with a leading school abroad is aligned with the University and the Faculty mandates.

University Strategic Plan

Consistency of proposed program with the University's mission, overall goals and objectives as defined in its strategic plan.

The University of Windsor Strategic Plan (Thinking Forward – Taking Action) lists the following mission statement:

Enabling people to make a better world through education, scholarship, research and engagement. The proposed program aligns with the strategic plan. The initiation of a new International Masters in Civil Engineering would provide Windsor students with the opportunity to expand our involvement and solidify our leadership in one of the most exciting and fast-moving technology fields in the world, at a time when Canada's infrastructure industry is undergoing a strong recovery from the recent economic downturn. These developments provide a major opportunity for Canadian firms to create great jobs for tens of thousands of our citizens – but only if they have the people to do the engineering necessary to develop these new projects.

The other related aspect of the University's strategic plan that is supported by the proposed dual-credential program is the priority placed on the new Ed Lumley Centre for Engineering Innovation (CEI) facility. It is vital that we build enrolment by attracting the strongest possible students. This will require bolstering our existing suite of programs in engineering as well as creating new ones that will excite our students, attract people to Windsor and bring industrial partnerships into the CEI that will justify the investment made by our institution, our community and the people of Ontario and Canada.

The proposed dual credential directly addresses all of the above objectives as a result of the strategic importance of the infrastructure sector to Canada's economy, and provides exciting research prospects for the next generation of Civil and Environmental Engineers.

DEMAND FOR THE NEW PROGRAM/PROGRAM CHANGE

Student and Market Demand

Tools and methodology used to conduct the market assessment.

Interest and demand for the proposed new dual-degree program have been gauged by means of surveys of the existing undergraduate and graduate student body at the University of Windsor. In Fall 2013, as a pilot trial, two students from Udine University spent two months in Windsor to work on their Masters theses. One student worked with Dr. Faouzi Ghrib and the other student worked with Dr. Edwin Tam. Both students were asked to report on their experiences. Both were very positive about the experience and wished they could spend more time in Windsor.

Quantitative evidence of student and market demand both within and outside the local region (e.g., responses/statistics from surveys, etc.).

The demand for the proposed international Master's degree program has been gauged in surveys taken in classes within the existing University of Windsor Engineering programs. For example, nineteen 3rd year Civil Engineering students participated in the survey. The survey had three questions:
Question 1: Do you have the intention to pursue a graduate program?
Question 2: If you have the intention to pursue a graduate program, are you considering joining the graduate program in Windsor?
Question 3: A New Masters Program Windsor/ Udine University Italy:

The Department of Civil and Environmental Engineering has worked with the Department of Civil Engineering at the University of Udine, Italy to develop this dual credential program. During this Masters Program, the Windsor students will spend their first year at home to take three graduate courses and start their research program, then in the second year they will join the University of Udine, Italy and should take three courses (in English language) and continue working on the thesis with an Italian Professor.

The surveyed students were asked to select among four choices:
4. Strong interest 3. Interested 2. Neutral 1. Not interested at all

The results of the survey are summarized in the following table:

Response	Question 1		Question 2		Question 3	
	# of responses	Percentage	# of responses	Percentage	# of responses	Percentage
4	4	21.05%	3	16.67%	7	36.84%
3	11	57.89%	6	33.33%	5	26.32%
2	4	21.05%	8	44.44%	5	26.32%
1	0	0.00%	1	5.56%	2	10.53%

The results of this survey indicate that potential students were very receptive to the idea and the response was positive. After the survey, the students were enthusiastic and a large number (>10) enquired about when the program would be available and how they could take part in it.

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

Students most likely will be drawn from existing undergraduate Civil Engineering programs. While the program will almost certainly draw students from other universities, it is anticipated that the initial class will be drawn from the University of Windsor student body and later from Canadian sources.

Estimated Enrolments

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

Projected enrolment levels for the first five years of operation. (If the program is in operation, use actual and projected data.)	First Year of Operation (2019-20)	Second Year of Operation (2020-21)	Third Year of Operation (2021-22)	Fourth Year of Operation (2022-23)	Fifth Year of Operation (2023-24)
In the regular program (non-Co-op)	3	6	6	6*	6*
In the Co-op stream (if applicable)	N/A	N/A	N/A	N/A	N/A
Projected number of international students enrolled in the Co-op component	N/A	N/A	N/A	N/A	N/A

* beyond duration of original agreement

Projected steady-state student enrolment per academic year:	# of First-year students	# of Second-year students	# of Third-year students	# of Fourth-year students
	3	6	N/A	N/A
In the regular program (non-co-op)	3	6	N/A	N/A
In the Co-op stream (if applicable)	N/A	N/A	N/A	N/A

Projected steady-state student enrolment overall:	Approximately 6 University of Windsor students and 6 students from the University of Udine

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Societal Need

Evidence of societal need for the program will typically include a review of relevant industry and provincial survey and statistical data, as well as review of the proposed program by relevant experts in the field. The development of this proposal included consideration of:

• *comments or letters solicited from potential employers regarding the need for graduates of the proposed program within their organization and field of endeavour.*	___ *Yes*	*X___No*
• *comments or letters solicited from relevant professional societies or associations about the need for graduates of the proposed program.*	___*Yes*	*_X__No*
• *review of industry employment surveys for evidence of societal need (indicating numbers of positions in the field, numbers of new positions anticipated in the field, number of positions in the field current being advertised, etc.)?*	___*Yes*	*X___No*
• *statistical evidence of the number of Ontario students leaving the province to study the field elsewhere in Canada or abroad?*	___*Yes*	*_X__No*

If yes, append letters, survey or statistics to proposal.

If no, explain: please provide an explanation

There is an abundant literature on the major aspect of globalization and its impact on the future of engineering practice as well as the need to incorporate global engineering in Civil Engineering curriculum. The new proposed program proposal is a step to offer students opportunity to enlarge their view of engineering practice by studying in two different institutions. A few examples of the literature illustrating the societal need of the proposed program are listed hereafter.

Many professional societies for civil and environmental engineers, such as the American Society of Civil Engineers (ASCE), have noted the need to include an understanding of globalization as part of professional licensure. In the ASCE Body of Knowledge (BOK2) (ASCE, 2008), Civil Engineering students are expected to achieve the first three levels of achievement (LOA) of Bloom's taxonomy with respect to globalization. The fourth LOA should be acquired via work experience prior to professional licensure (Bielfeldt, 2014).

In 2009, the University of Toronto Dean's Task Force on Globalization and Engineering Final Report (Cheng et al, 2009) concluded that globalization-related activities have resonance with engineering students and faculty and that it become mandatory for engineering curriculum to incorporate global engineering education.

In 2011, Merill Lynch estimated that $6 trillion would be invested in infrastructure. It has been predicted that there will be $71 trillion invested in global infrastructure by 2030 (Max and McGuire, 2012).

Tools and methodology used to assess societal need.

The impetus for the proposed program has come from several directions. Our own students have expressed an interest in study abroad as well as in increased involvement in industrially-based projects. This program also addresses a recommendation of the University Program Review to provide CEE students with additional opportunities for international experience. In addition, a key impetus for the program has been the enthusiastic support and encouragement of senior administrators of both the University of Udine and the University of Windsor.

References

Angela R. Bielefeldt, (2014) "Global Interests among First-Year Civil and Environmental Engineering Students", J. Prof. Issues Eng. Educ. Pract., 2014, 140(2)

ASCE (2008), (American Society of Civil Engineering) "Civil Engineering Body of Knowledge for the 21st Century Preparing the Civil Engineer for the Future", retrieved from http://www.asce.org/uploadedFiles/Education_and_Careers/Body_of_Knowledge/Content_Pieces/body-of-knowledge.pdf

Bielefeldt A. (2013) "Global Interests among First-year Civil and Environmental Engineering students" ASCE, Journal of Professional Issues in Engineering Education & Practice, 140(2)

Max K. and McGuire E. (2012) "Global Infrastructure-The $71 Trillion Opportunity", ASCE 142nd Annual Civil Engineering Conf. ASCE.

Yu-Ling Cheng, Bryan Karney, Murray Metcalfe, Lisa Romkey, amd Zhirui Wang (2009), "Dean's Task Force on Globalisation and Engineering", University of Toronto, retrieved from http://www.engineering.utoronto.ca/files/2015/02/Report-Globalization-Task-Force.pdf, on September 20, 2016.

Dimensions and evidence of societal need for graduates of the new program (e.g., socio-cultural, economic, scientific, or technological).

The infrastructure industry is undergoing a revolution on how projects are engineered, developed, designed and executed. The growth in infrastructure needed in rapidly developing countries provides opportunities for civil engineering works. Many of the world's most innovative recent structural designs have been developed and elaborated with collaboration of various engineering firms dispersed geographically across the globe. These changes call to educate engineering students for global competency.

In addition to the technical needs of the industry for differently skilled engineers, there is a strong need for people who can live and work in different jurisdictions and who have an understanding of the business practices and cultures of various locales in the world. Industry prizes people with that type of flexibility; and in developing the present proposal for a Windsor-Udine program, it is apparent that the need for the graduates of such a program is strong and will grow in the future. The entire infrastructure industry is moving in the direction of increased global collaboration and so the need for graduates of this type of program is going to grow strongly over the next decade or more.

Evidence of geographic scope of societal need for graduates of the new program (e.g., local, regional, provincial, or national)

Due to the multi-billion-dollar cost of developing new projects, the infrastructure industry operates on a global scale so that the final cost is made as low as possible. Consequently, engineering work can be produced in multiple countries (also known as "*global platforms*") to achieve economies of scale. As a result, the need for engineers who can work in their own countries as well as abroad is on-going and increasing.

Evidence of anticipated duration of, and trends in, societal need for graduates of the new program.

The need for graduates of the proposed Masters degree program in Civil Engineering is not foreseen to have a definite end. As the global economic recovery stabilizes and sustains itself, the need for new projects will generate a strong need for talented and highly skilled engineers in every country where challenging projects are developed. The nations that will succeed most clearly are those where the best engineering services can be offered competitively – and that requires the best possible human resources. Producing those human resources is the goal of the proposed dual degree program in Civil Engineering.

List similar programs offered by other institutions in the Ontario university system. Resources to identify similar programs offered in Ontario include www.electronicinfo.ca, www.electronicinfo.ca/einfo.php, and www.oraweb.aucc.ca/showdcu.html.

The closest example of program with some similarities to the proposed initiative is the MASc program offered by the

Department of Mechanical Automotive and Materials Engineering (MAME) at the University of Windsor. This program is coordinated between the University of Windsor and the Politecnico di Torino, Italy.

Other programs in the Ontario university system offer students the possibility of an exchange at the international level.

The exchange program at the University of Waterloo's Faculty of Engineering offers students an opportunity to study aboard within exchange agreements encompassing institutions throughout Europe, Asia, Australia, Europe, Mexico, and the Pacific Rim (http://www.eng.uwaterloo.ca/~exchange/index.htm).

The Department of Civil Engineering at Western University established an International Development Option where students are placed during a work-term outside Canada.
http://www.eng.uwo.ca/undergraduate/Civil/CivilandInternationalDevelopment.pdf

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

The proposed program offers an opportunity for differentiation. Compared to other existing programs, we expect a full immersion of our graduate students into a different culture and language for a period of one year. This immersion is not restricted to the cultural aspect as MASc students will have the opportunity to conduct research on subjects of mutual interest between the University of Windsor and Udine University. MASc students enrolled in the proposed program will explore research methodologies and technical solutions from two different points of view.

RESOURCES

Identify, in detail:

- *resources currently available*
- *anticipated sources of new resources,*
- *reallocation of resources or cost-savings, and*
- *additional resources required to run the proposed new program.*

The resource impact of a proposal is almost never neutral.

*Note: Proposers must also complete and submit the attached **Budget Summary** with the new program proposal.*

Some additional resources are required if the proposed program is to be successful. Scholarships for students are included in the proposed budget (Appendix C), as well as travel funds for faculty members to visit Udine and develop collaborative research projects. Some additional technical staff may be required.

RESOURCES AVAILABLE

Available Faculty and Staff Resources

Describe all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to the proposed program.

No additional faculty resources will be required for the proposed program.

Assess faculty expertise available and actively committed to the new program. Provide evidence of the appropriateness of collective faculty expertise to contribute substantially to the proposed program.

Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/ clinical expertise needed to:

- *sustain the program*

- *promote innovation, and*
- *foster an appropriate intellectual climate.*

[Append curricula vitae of all faculty members in the AAU offering the program as well as from faculty members from other AAUs who are core to the delivery of the program.]

Since the basis of the proposed program is the existing graduate program in Civil and Environmental Engineering, the existing faculty members in the CEE department possess the necessary skills and knowledge to support the proposed new program. The following table lists the faculty members associated with the Civil Engineering program in CEE as well as Udine department members in the University of Udine. Their CVs are provided in Appendix A.

Faculty members by field in University of Windsor:

Faculty Name & Rank (alphabetical)	**Gender**	**Supervisory Privileges**	**Courses** (taught 2017-18)	**Program Fields and research areas***		
Category 1*:* Tenured Professors teaching exclusively in this AAU (Civil Engineering Area)				*Structural Engineering*	*Water Resources*	*Transportation Engineering*
Dr. R. Balachandar Professor	M	Yes			x	
Dr. T. Bolisetti Associate Professor	M	Yes	87-590-6 Climate Change Adaptation		x	
Dr. R. Carriveau Associate Professor	M	Yes	87-524 Adv. Hydromechanics 87-590-41 Renew.Energy Sys.		x	
Dr. S. Cheng Associate Professor	F	Yes	87-590-23 Wind Engineering	x		
Dr. S. Das Professor	M	Yes	87-500 Theory of Elasticity & Plasticity	x		
Dr. F. Ghrib Associate Professor	M	Yes	87-501 Finite Element Method for Solids & Structures	x		
Dr. Y.H. Kim Assistant Professor	M	Pending				x
Dr. C. Lee Associate Professor	M	Yes	87-590-36 Road Safety Analysis			x
Dr. H. Maoh Associate Professor	M	Yes	87-590-35 Trans.Sys.Analysis 87-590-26 Freight Trans.Anal.			x
Dr. N. Van Engelen Assistant Professor	M	Pending		x		

** There are no fields identified in the Civil Engineering Master's programs. At the doctoral level, two fields have been approved in Civil Engineering (Structural Engineering and Water Resources Engineering). New faculty, expected to be hired in 2018, will teach courses in Geotechnical Engineering and Construction and Planning.*

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Department members by field in University of Udine:
Only instructors identified as "English Teaching" will participate in the program.

Name		Academic Rank	Gender	Supervisory Privileges	Course	Program Field and Research area				
						Structural Engineering	Water Resources	Geotechnical	Transportation Engineering	Construction & Planning
Department Members	Nicola BALDO	Assistant Professor	M	Yes	-				x	
	Silvia BOSA	Assistant Professor	F	Yes	-		x			
	Elio CABIB	Associate Professor	M	Yes	Differential Equations and Variational Problems (6 ECTS)	x				
	Anna FRANGIPANE	Associate Professor	F	Yes	Advances in Building Constructions (6 ECTS)					x
	Fabio MIANI	Associate Professor	M	Yes	Steel Making for Construction Engineering (6 ECTS)					x
	Matteo NICOLINI	Assistant Professor	M	Yes	-		x			
	Piero PEDROCCO	Assistant Professor	M	Yes	Territorial Engineering (6 ECTS)					x
	Marco PETTI	Full Professor	M	Yes	-		x			
	Igino PITACCO	Assistant Professor	M	Yes	-	x				
	Eric PUNTEL	Assistant Professor	M	Yes	Plasticity and Stability of Structures (6 ECTS)	x				
	Giuliana SOMMA	Assistant Professor	F	Yes	Steel Constructions (6 ECTS)	x				
	Fulvio TONON	Associate Professor	M	Yes	-			x		
Appointed staff	Massimo BLASONE	-	M	Yes	Bridge Constructions (6 ECTS)	x				
	Nicola ROVERE	-	M	Yes	Advances in Computational Mechanics (6 ECTS)	x				

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

Adjunct or limited-term faculty members, who have graduate faculty status, will play the same role as in any of the available programs offered by the department, such as engaging as co-advisors of graduate students and participating in thesis committees.

***For graduate programs**: Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision.*

Each student will be supervised by one or more University of Windsor faculty members who will be members of Graduate Faculty as per the requirements of the existing Master of Applied Science in Civil Engineering. In addition, each student will have one or more academic advisors at the University of Udine to facilitate their research project.

Other Available Resources

Describe all other resources currently available and actively committed to the proposed program, including for example:

- *library,*
- *teaching and learning support,*
- *student support services,*
- *space,*
- *equipment,*
- *facilities*
- *GA/TA*

The proposed program will use the existing resources of the University of Windsor. No additional or new resources are required to implement or operate the new program.

Resource Implications for Other Campus Units

Describe the proposed program's reliance on existing resources from <u>other</u> campus units, including for example:

- *existing courses,*
- *equipment or facilities outside the proposer's control,*
- *external resources requiring maintenance or upgrading using external resources*

Provide relevant details.

N/A

<u>ANTICIPATED NEW RESOURCES</u>

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

Although not necessary, Canadian students and University of Windsor Engineering faculty are encouraged to contact industrial partners, grant agencies and International Scholarships Canada to seek financial support. This support will take the form of cash stipends for the students (through MITACS industrial/academic internships, internal supports, other scholarships, *etc*.) to support them while they are at the respective company's R & D facilities as well as in-kind support in the form of lab space, materials and technical support staff and engineering time and the use of company resources and equipment.

<u>PLANNED REALLOCATION OF RESOURCES AND COST-SAVINGS</u>

Identify all opportunities for

- *internal reallocation of resources and*

- *cost savings*

identified and pursued by the area/department in preparing this proposal.

N/A

ADDITIONAL RESOURCES REQUIRED

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

Faculty:
No additional faculty resources are required to support the proposed new program beyond those for any other Masters level engineering student.

Staff:
Currently, CEE is in the process of hiring another technician to reduce the backlog of experimental work in its laboratories. Given the tight timelines to completion under this program, it is crucial that faculty feel comfortable that research experimentation will be completed in a timely fashion, before they will take students into this program. This may require additional technical staff beyond the currently anticipated hiring. Other than that, no additional staff resources are required to support the proposed new program beyond those for any other Masters level engineering student.

GA/TAs:
No additional GA/TA resources are required to support the proposed new program beyond those for any other Masters level engineering student.

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

Library Resources and Services:
No additional library resources are required to support the proposed new program beyond those for any other Masters level engineering student.

Teaching and Learning Support:
No additional teaching and learning support resources are required to support the proposed new program beyond those for any other Masters level engineering student.

Student Support Services:
The University of Windsor International Student Centre should be prepared to handle an additional 3 students per year coming from Italy to Windsor.

Space and Facilities:
No additional space or facility resources are required to support the proposed new program beyond those for any other Masters level engineering student.

Equipment (and Maintenance):
No additional equipment will be required to support the proposed new program beyond those for any other Masters level engineering student.

Demonstrate the consistency of requested additional resources with the focus of and requests in the area's Faculty Plan.

As a result of the design of the program, there are few additional resources required to implement the proposed International Windsor-Udine dual degree Master's program in Civil Engineering.

In terms of the overall alignment of the dual-degree program with the Faculty of Engineering Plan, the additional students, enhanced profile, and closer relationship between the two universities are all in accord with the Faculty's plans to grow and enhance its offerings in concert with the availability of the new Centre for Engineering Innovation.

C. Program Details

Program Description

Provide a brief program description (2-3 sentences) for possible use in recruitment initiatives.

The University of Windsor-Udine International Masters Degree in Civil Engineering provides students with an opportunity to study in two of the leading Civil Engineering programs while doing their graduate thesis research on a relevant R&D problem, in conjunction with an industrial partner, if available.

The program will involve a year of study at the University of Windsor followed by a year at the University of Udine, Italy and will place students in modern up-to-date R&D facilities in a comprehensive program of study that will prepare them for leadership roles in the infrastructure industry of the future.

Admission Requirements

Describe

- *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 additional language requirements or portfolios, recognition of prior work or learning experience, etc.*

Admission will be granted, within the limits of program availability (initially 3 students/year) to University of Windsor students possessing a Bachelor of Applied Science degree in Civil Engineering (or equivalent engineering degree) from an accredited Canadian university. Standard admission requirements for entry in the Civil Engineering MASc program will be met. This includes acceptance by a thesis advisor, who must have a plan for the research and coursework approved by the Department Head and the Graduate Coordinator at Windsor, as well as the Udine Head of the Department. The regular admissions process in each of the partner schools will be supplemented by an interview by a panel made up of representatives from the home institution of the student. As is normal practice, applications will be reviewed by the Graduate Coordinator of the Civil Engineering program. Student application files will be forwarded to the Faculty of Graduate Studies, with a request for formal admission of those students approved by the Graduate Coordinator. Accepted students will be enrolled at the University of Windsor with M2 status (Master candidate) in the International Masters in Civil Engineering.

For University of Udine students, admission will be granted, within the limits of program availability (initially 3 students/year) to students possessing a Laurea *[Bachelor's degree]* in Civil Engineering (or equivalent engineering degree) from an accredited European university. Student files will be reviewed by the Course of Studies Coordinator; similar to the University of Windsor process. Accepted students will begin the first year in the Laurea Magistrale in Civil Engineering at the University of Udine.

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Demonstrate that admission requirements are sufficient to prepare students for successful attainment of the intended learning outcomes established for completion of the program.

Program Curriculum Structure/Program of Study

[NB: For graduate programs, each graduate student in the program is required to take a minimum of two-thirds of the course requirements from among graduate-level courses.]

Total courses:

The program is designed around the existing course offerings at the two universities, thus leveraging existing infrastructure and teaching resources.

The course requirements are three (3) Windsor courses and 60 ECTS credits at Udine for the Udine students, and three (3) courses plus 30 ECTS credits at Udine for the Windsor students. Students from both institutions will be required to complete the graduate seminar course while at the University of Windsor. University of Windsor students must complete at least two of their courses in Term 1 of Year 1, and three no later than Term 2 of Year 1.

The suggested course choices at each school will be streamed into five key areas: Structural Engineering, Water Resources, and Transportation Engineering, Geotechnical Engineering, and Building and Construction Management. Each student will be required to take courses in at least two key areas. In this way, all the graduates of the proposed program will receive a well-rounded education in civil engineering and an opportunity to build a significant level of specialized expertise in an area that is of particular interest to them.

Major requirements:

The students will complete 3 Windsor graduate courses and 30 ECTS credits in courses in Italy. The total course requirements will be equivalent to the weight of study done to complete a Windsor Master of Applied Science degree in Engineering with a thesis (thus making the students eligible to continue their studies at the doctoral level).

The Udine students will complete 60 ECTS course credits and 3 Windsor graduate courses which makes them eligible for doctoral work in Europe when completed, in conjunction with their major thesis.

Other requirements:

Each student will complete a thesis with supervision and advisement by both Windsor faculty and Udine department members. The Windsor students will carry out 58% of their thesis work in Windsor and the remainder in Udine and the Udine students will work on their thesis primarily in Windsor.

For the purposes of the University of Windsor degree, the thesis committee will consist of the principal and co-advisor, an internal program reader, and an external program reader, as per Windsor's standard requirements for thesis committees. Additional Committee members may be added to meet the requirements of the Udine program. The principal advisor for the Windsor students will be a Windsor faculty member, with a department member from Udine acting as an advisor. Similarly, for Udine students the principal advisor will be a department member from Udine, with an advisor assigned from Windsor faculty. The thesis committee will be formed in the beginning of the first year when students plan their approach to the thesis. The coordination of supervision will be conducted through progress report meetings via tele- or videoconference. Under supervision of the advisors, the thesis will be written and submitted to the committees at both universities in a format that is acceptable to both institutions. An oral defense of the thesis will be accomplished by an in-person examination at the University of Windsor with a video teleconference link to the University of Udine. The student must also give a presentation on the thesis at the University of Udine.

The thesis should be significant in its embodiment of an advance in the state of the art of the field. It must be delivered at a level commensurate with the Engineering Masters of Applied Science Degree.

Recommended options (if any): N/A

Description of thesis option (if applicable):
Each student in the program will complete a Master of Applied Science thesis as is customary in the University of Windsor MASc program.

Description of experiential learning components (if applicable): Udine University signed an agreement with the ANCE FVG (Builders National Association of Friuli Venezia Giulia Region) aimed at providing unpaid internship opportunities in local companies of the building sector to Windsor students. This internship would largely replace physical laboratory work at Udine University.

Explanation of how credit will be awarded for the experiential learning component (length of component, credit weighting, etc.), if applicable: The internship will replace lab work at Udine University. Most of the credit weight of the thesis work would be shifted to the internship.

For Co-op components:

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

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

Standing Required for Continuation in Program

GPA requirements for continuation in the program *Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].*

The proposed dual degree program will use the same average requirements for continuation as are presently in use in graduate programs in Civil Engineering at Windsor.

The following paragraph is from the graduate calendar:

The Faculty of Engineering requires that students maintain at least a 70% average at all times.

Courses in which a grade of 70% or higher is received will be accepted for graduate credit. In addition, upon the positive recommendation of the Chair of the Program Graduate Committee and advisor concerned, credit may be granted by the Faculty of Graduate Studies for not more than two term courses in which a grade between 65-69% has been obtained.

If a student fails to obtain credit in a course, the course may be repeated only once, at the discretion of the Chair of the Program Graduate Committee concerned and the Dean of Graduate Studies. No student may repeat, or replace with another course, more than two term courses in which credit was not obtained.

Make-up courses will not count for graduate credit. Make-up courses are those courses required to compensate for deficiencies in the student's academic background.

Standing Required for Graduation

Minimum GPA requirement to graduate in the program *Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].*

The proposed dual degree program will use the same average and other requirements (including completion of an acceptable thesis) as are presently in use in graduate programs in Civil Engineering at Windsor.

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Suggested Program Sequencing

Provide suggested program sequencing for each year of the program, ensuring that all pre-requisites are met in the sequencing.

University of Windsor students will begin their study period abroad in September of the second year of their Master of Applied Science program. The program abroad will consist of at least one year of study at University of Udine, Italy, including course attendance and thesis development.

Udine students will begin their study period abroad in September of the second year of their *Laurea Magistrale* program. The program abroad will consist of at least one year of study at the University of Windsor, including course attendance and thesis development.

The specific program requirements will be clearly communicated to both Windsor and Italian students before they begin their study. A standard form will be developed to document the students home and host advisors, proposed research, and anticipated coursework.

The program layouts are shown schematically below:

<table>
<tr><td rowspan="3"></td><td colspan="3">Year 1
(at University of Windsor)</td><td colspan="2">Year 2
(Udine)</td><td rowspan="2">Comments</td></tr>
<tr><td>Term 1</td><td>Term 2</td><td>Term 3</td><td>Sem. 1</td><td>Sem. 2</td></tr>
<tr><td rowspan="2">University of Windsor students</td><td colspan="3" rowspan="2">3 Windsor Courses = 18 ECTS
Grad Seminar = 6 ECTS
Thesis Preparation = 21 ECTS</td><td colspan="2">Udine Courses = 30 ECTS
(Note 2)</td><td rowspan="2">Total courses/credits
= 18 ECTS for Windsor courses
+ 6 ECTS for Graduate Seminar
+ 30 ECTS for Udine courses
+ 36 ECTS for thesis</td></tr>
<tr><td colspan="2">Thesis = 15 ECTS</td></tr>
<tr><td>Total:</td><td colspan="3">45 ECTS</td><td colspan="2">45 ECTS</td><td>Total 90 ECTS</td></tr>
</table>

<table>
<tr><td rowspan="3"></td><td colspan="2">Year 1
(Udine)</td><td colspan="3">Year 2
(at University of Windsor)</td><td rowspan="2">Comments</td></tr>
<tr><td>Sem. 1</td><td>Sem. 2</td><td>Term 1</td><td>Term 2</td><td>Term 3</td></tr>
<tr><td rowspan="2">Udine students</td><td colspan="2" rowspan="2">Udine Courses = 60 ECTS
Planning of Thesis
(Note 3)</td><td colspan="3">3 Windsor Courses = 18 ECTS
Grad Seminar = 6 ECTS</td><td rowspan="2">Total courses/credits
= 60 ECTS for Udine courses
+ 18 ECTS for Windsor courses
+ 6 ECTS for Graduate Seminar
+ 36 ECTS for thesis</td></tr>
<tr><td colspan="3">Thesis = 36 ECTS
(Note 3)</td></tr>
<tr><td>Total:</td><td colspan="2">60 ECTS</td><td colspan="3">60 ECTS</td><td>Total 120 ECTS</td></tr>
</table>

NOTES:

1) The term "*ECTS*" refers to the *European Credit Transfer and Accumulation System* which is an EU designation for a number of credit-hours that are equivalent to a comparable number of University of Windsor graduate course credits. The total number of ECTS and Windsor credits undertaken by each student will be *at least* equal to that required to earn a traditional Windsor Master of Applied Science (MASc.) degree – which is 30 credits of work or 60 ECTS.

   NOTE: Windsor uses an equivalency of 1 Windsor course (3 credits) = 6 ECTS

2) The Windsor MASc. requires four courses (12 credits) plus a graduate seminar (3 credits) plus a thesis (18 credits). The Windsor students take three of these courses and the seminar course while in Windsor during Year I. During Year 2, they take several courses in Udine to a total of 30 ECTS (equivalent to 5 credits) and one of those courses is selected to complete their course work requirement for the Windsor degree. Students must present their thesis in Udine to earn one (1) ECTS. Where available, students may participate in an unpaid internship through the Builders National Association of Friuli Venezia Giulia Region, which is worth 12 ECTS and replaces some thesis work in Year 2.
3) In Year 1, the Udine students enter the program following a *3-year* bachelor's degree preceded by five years of secondary school (the University of Windsor students enter after completing a *4-year* bachelor's degree preceded by four years of secondary school). This accounts for the larger number of courses taken by the Udine students in Year 1 while they are still in Italy – one of which is counted toward the four-course MASc. requirement by Windsor. The remaining three courses required for the Windsor degree are taken during Year 2 in Windsor along with the thesis, and these courses are also counted by Udine toward their Year 2 degree requirements.

   Only a small amount of planning is done by the Italian students on their thesis during Year 1 while they are in Italy – the bulk of the work on the thesis is done while the students are in Windsor during Year 2. Students must present their thesis in Udine to earn one (1) ECTS.

LEARNING OUTCOMES

In the following table provide the specific learning outcomes that constitute the overall goals of the program (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 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 Office of the Vice-Provost, Teaching and Learning, for assistance with the articulation of learning outcomes.

The Learning Outcomes for the program are unique in that they combine a Canadian experience at the University of Windsor with a research and learning experience in Europe at the Udine. In addition, the program incorporates thesis research work. This thesis research provides the students with the opportunity to work on a topic of key relevance to the global infrastructure industry and thus round-out their academic preparation as engineers.

To refer to the specific learning outcomes in the table that follows, the following mapping is planned:

COURSEWORK**:** The specific requirements of the courses will vary for each student but they will generally require students to critically analyze and synthesize research literature (A, C and I), present linkages between the topic area and the larger engineering and industrial community (E and F), lead group discussions (G) and successfully work with classmates in group settings (E and G).

THESIS RESEARCH: In the examination of the thesis, the students will be evaluated on their ability to: critically analyze and synthesize research literature (A, C and I), design theoretically and methodologically sound research studies which will generate valid and trustworthy results (B and H), conduct their research program and use appropriate analysis techniques (C, D, E, G and H), and communicate and defend their findings and their own analysis of them in written form and orally (B, C, D, F, G, H and I).

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Program Learning Outcomes (Degree Level Expectations) At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**OCGS-approved Graduate Degree Level Expectations**
A. appropriately incorporate an international perspective in economics and business practices, such as project, risk, and change management, into the practice of engineering, and to understand its limitations.	A. 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
B. Apply research skills to define and solve complex engineering problems within the Civil Engineering discipline in an international context (eg. with an understanding of different practices and regulatory standards in different jurisdictions).	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
C. Design solutions for complex, open-ended engineering problems, and design systems, components, or processes that meet specified needs with appropriate attention to the assessment of health and safety risks, legislative/regulatory standards, cultural, societal, economic, and environmental considerations, including multi-national level design and compliance issues.	C. critical thinking and problem-solving skills	1. Depth and Breadth of Knowledge 2. Research and Scholarship 3. Level of Application of Knowledge 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
D. Integrate their literacy and numeracy skills in the formulation, discussion, solution, and reporting of engineering projects in a bilingual environment.	D. literacy and numeracy skills	2. Research and Scholarship 5. Level of Communication Skills
E. Explain the roles and responsibilities of the professional engineer in society, especially the primary role of protecting the public and the public interest. Demonstrate through actions adherence to the Code of Ethics of Professional Engineers Ontario, including its requirements to behave ethically toward the public, employers and other practitioners.	E. responsible behaviour to self, others and society	4. Professional Capacity/Autonomy 6. Awareness of Limits
F. Communicate effectively in a bilingual international setting about complex engineering activities within the engineering profession and with society at large, and he/she will write effective reports and design documentation, comprehend such reports and documentation prepared by others, make	F. interpersonal and communications skills	5. Level of Communication Skills

Program Learning Outcomes (Degree Level Expectations) At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**OCGS-approved Graduate Degree Level Expectations**
effective presentations, and to give and effectively respond to clear instructions or take the steps necessary to clarify them.		
G. Work independently and as a member and/or leader of diverse teams and in multi-disciplinary and multi-cultural settings.	G. teamwork, and personal and group leadership skills	4. Professional Capacity/Autonomy 5. Level of Communication Skills
H. Design solutions for complex, open-ended engineering problems that both meet engineering requirements and the imperative to respond to consumer or other end-user desires for innovative and successful solutions that will lead the marketplace and command a premium.	H. creativity and aesthetic appreciation	2. Research and Scholarship 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
I. Assess and defend the commitment to engage in, life-long learning as part of maintaining their professional competence and their commitment to ensuring the best possible engineering solutions to the problems within their scope of practice.	I. the ability and desire for continuous learning	4. Professional Capacity/autonomy

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

No changes to student assessments or performance measurement are proposed. These will be demonstrated in the same fashion as is done within the other graduate programs in Civil Engineering at Windsor. The assessment of the coursework is usually performed through examinations and term papers and/or term projects. It is left to the instructors of the graduate courses to decide the most effective way to assess students' performance.

For the research work, each candidate must have a minimum of two co-advisors: one from Windsor and one from Udine. A thesis incorporating the results of an original investigation is required of all candidates. For each student, a Windsor Masters committee shall be formed that includes the necessary two co-advisors. At least one member of the Committee shall be from a program within the University of Windsor other than the one in which the student is majoring. The student's advisor in Windsor will propose the names of the Masters committee and these will be subject to the approval of the Program Graduate Committee and the Executive Committee of the Faculty of Graduate Studies. Within one month after registration at Windsor, each student will be assigned to a Masters committee. Before finalizing the research approach, the student must meet with the Masters committee and present a proposal. For Windsor students, the proposal must be before the end of the Term 2 of Year 1. Students from Udine must have their proposal at the beginning of the second year when they join the University of Windsor. After completion of the thesis, each candidate will be required to make a satisfactory oral presentation and defense of the thesis at Windsor, and present the thesis at Udine. The order of these events is always host university, then home university. The written thesis will be in a format acceptable to both institutions.

The success of the dual degree program will be monitored and evaluated in the same fashion as is presently done within the other graduate programs in Civil Engineering at Windsor. There are four levels of oversights to monitor student achievement: (i) the individual advisor; (ii) the Course of Studies Coordinator for Udine; (iii) the Department Head; and (iv) the Graduate Coordinator in Windsor. Key data will include: incoming enrolment and student grades from the undergraduate program; success rates of students in completing the program within the prescribed 2-year period, feedback from the supporting companies (if industrially-sponsored research), employer satisfaction with Windsor-Udine graduates, and overall student satisfaction with the program as determined during exit interviews.

Student Workload

Provide information on the expected workload per course credit (3.0) of a student enrolled in this new program/major program change.

Expected Workload per 3.0 Course Credit/week	**Average Time the Student is Expected to Devote to Each Component Over the Course of the Program per week**
Lectures (per course @ 2 courses per term)	6 hours/week
Tutorials (per course @ 2 courses per term)	-
Practical experience	-
Service or experiential learning	-
Independent study (per course @ 2 courses per term)	
Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.)	12 hours/week
Studying for tests/examinations	2 hours/week
Other: *[specify]*	20 hours/week
Compare the student workload for this program with other similar programs in the department or program. The students in the proposed dual degree program will experience a workload that is equivalent to that of students in any other graduate program in Civil Engineering at Windsor: two courses @ 10 hours per week; and 20 hours per week for thesis for a total of 40 hours per week.	

Mode of Delivery

Demonstrate that the proposed modes of delivery are appropriate to meet the intended program learning outcomes. Discuss online vs. face-to-face modes of delivery, as well as specialized approaches intended to facilitate the acquisition of specific skills, knowledge, and attitudes.

The proposed program will utilize the same mode of delivery as is presently used in the Master of Applied Science program at the University of Windsor and the *Laurea Magistrale* program at the University of Udine – namely a combination of lectures and laboratory sessions coupled with a substantial amount of independent study during the thesis research project component.

D. MONITORING AND EVALUATION

Explain the appropriateness of the proposed methods of assessing student achievement given the intended learning outcomes and degree level expectations.

The progress of students in the proposed program will be monitored in the same fashion as is presently done in the Master of Applied Science program at Windsor: course grades will be reviewed and approved by the Department Head and submitted to the Faculty of Graduate Studies for review and approval.

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

Because the proposed program is built upon the existing Master of Applied Science program, the same performance documentation procedures will be employed. These will include student grades on courses and progress toward the completion of the thesis.

Describe how the success of the program will be monitored and evaluated. The description should include types of data to be gathered, criteria for evaluation, review process, and use of information to adjust program activities or planning.

No changes to student assessments or performance measurement are proposed. It is anticipated that each student's co-advisors (Windsor and Udine) will communicate regularly about the research progress. Course grades for each student will be communicated, following each term/semester, between the Graduate Coordinator of Civil Engineering in Windsor and the Course of Studies Coordinator at Udine.

The success of the program will be monitored and evaluated in the same fashion as is presently done within the other graduate programs in Civil Engineering at Windsor. Once approved, performance indicators of students graduating from the proposed program will be included in the Institutional Quality Approval Program report. Key types of data will include: incoming enrolment and student grades from undergraduate program; success rates of students in completing the program within the prescribed 2-year period, feedback from employers of Windsor-Udine graduates following graduation, and overall student satisfaction with the program as determined during exit interviews.

E. GRADUATE PROGRAMS ONLY

Normal Duration for Completion

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

The duration of the proposed program will be two full calendar years (as required by EU law) consisting of three (3) terms of study in Canada and two (2) semesters in Italy.

Program Research Requirements

Explain the nature and suitability of the major research requirements for completion of the degree.

The existing research requirements of the University of Windsor Master of Applied Science program will be utilized by the proposed program.

Program Financial Assistance Resources

Provide evidence that financial assistance for graduate students will be sufficient to ensure a well-qualified and sufficient pool of applicants.

Because the proposed program builds upon the existing Master of Applied Science program of the University of Windsor (for the Canadian students involved), the financial support of these students includes the usual mix of research and graduate assistantships, scholarships, and the student's own financial resources. Students are also eligible to receive a research assistantship from an industrial partner if the project is sponsored by industry.

Canadian students in the program will be provided with a $5,000 per year scholarship from the Faculty of Engineering, to be paid at the beginning of each year of the program.

The international travel of the students will be funded from the support provided by any scholarships won by the students, any research assistantships or internships, the supplementary funding from the Dean of Engineering, and from the student's personal resources.

No financial support is provided for the Italian students in the program beyond those provided by the Udine from its own resources. Similarly, no financial support is provided for Canadian students from Udine.

F. EXPERIENTIAL LEARNING COMPONENT ONLY (including Co-op programs)

[Complete this section ONLY if the proposed program includes an experiential learning component involving paid or unpaid placements.]

Definitions:
Co-operative Education provides students with a well-rounded education that is founded both in academic theory and real world application. Co-op Education combines semesters of study with semesters of full-time, paid employment in career-related positions.

All other unpaid placement opportunities or initiatives fall under the category of other "Experiential Learning components involving placements". (this may include field placements, internships, etc.)

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

Udine University signed an agreement with the ANCE FVG (Builders National Association of Friuli Venezia Giulia Region) aimed at providing unpaid internship opportunities in local companies of the building sector to Windsor students. This internship would largely replace lab work at Udine University.

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

Because of his/her Bachelor's degree, the student will bring technical knowledge of civil engineering equivalent to that of an Engineer-in-Training. In addition, because of the advanced course and research work completed in Year 1, the student will bring analytical capabilities, problem solving and time-management skills to the company.

Provide evidence of the availability of an adequate number of positions of good quality both inside and outside the Windsor area (including names and contact information of potential employers, written statements or surveys from potential employers; and employer feedback concerning the hiring of graduates).

How will these placements/opportunities be developed?

[NB: For co-op programs, the majority of Ontario placements should qualify for the Co-op Education tax credit. See Policy on Co-op Programs for more details.]

As noted above, Udine University signed an agreement with the ANCE FVG (Builders National Association of Friuli Venezia Giulia Region) aimed at providing unpaid internship opportunities in local companies of the building sector to Windsor students. This internship would largely replace lab work at Udine University.

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

The student's progress in the internship will be monitored by the student's Udine co-advisor.

Provide information on the fees associated with the experiential learning component, if applicable.

NB: all proposed fees must be approved as part of the University's operating budget, via the Ancillary Fee Committee.

No fees are anticipated.

Is the completion of the experiential learning component a requirement of the program?

No.

Program Requirements

Describe how the program requirements differ for students who complete the experiential learning option and those who opt not to.

Students who complete the internship will not do laboratory work while at Udine.

Learning Outcomes

Describe how the experiential learning/co-op component changes the emphasis or the means of achieving the intended learning outcomes for the program.

As noted above, the internship will replace most of the lab work at Udine University.

Standing Required for Continuation in the Experiential Learning Option of the Program

GPA requirements for continuation in the program
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

The internship replaces most of the lab work at Udine University. There is no separate standing required for continuation.

Standing Required for Graduation in the Experiential Learning Option of the Program

Minimum GPA requirement to graduate in the program
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

The internship replaces most of the lab work at Udine University. There is no separate standing required for graduation.

Suggested Program Sequencing and Work/Study/Placement sequencing, as appropriate

Provide program and work/study/placement sequencing for each year of the program. Please ensure that all pre-requisites are met in the sequencing.

The internship will be incorporated into the study terms at Udine University. There is no separate sequencing.

G. <u>TO BE COMLPETED FOR CO-OP COMPONENT ONLY</u>

N/A

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM "A"

Appendix I: FINAL CHECKLIST FOR PROPOSERS

*Having completed the program/course change proposal form, please complete the following table by marking an "**X**" in the appropriate column.*

PRIMARY CRITERIA	Yes	No	N/A
Does the program or course tie into the University's Strategic Plan?	**X**		
Is the program or course "Unique" in Ontario? In Canada? In North America?	**X**		
Is there evidence that a market exists for this program or course (a) on-campus; and/or (b) off-campus?	**X**		
Does this program or course have income potential? (How many students would it generate?)	**X**		
Does this program or course address current issues? (*e.g.*, double cohort, large-class problem, absence of upper-level on-line classes, *etc.*)		**X**	
Are there U of W courses which have been developed for flexible learning indicating either (a) partial development already exists, or (b) a degree of expertise exists?		**X**	
Are there departmental procedures in place for (a) course planning; (b) course development; and, (c) course delivery (Policy documents, Committees, Timelines, *etc.*)?			**X**
Is there evidence of support from the Dean(s), AAU Head(s)/Director(s)/Chair(s) for this program?	**X**		

SECONDARY CRITERIA	Yes	No	N/A
Does the new program and course have partnership options (with other departments or faculties, or other universities)?	**X**		
Does the new program or course allow for staggering options (*e.g.*, every other year, or Windsor one year and another site the following year)?	**X**		
Is the new program or course a complement to other Windsor flexible learning programs (will not interfere with other programs)?		**X**	
Is the new program or course a complement to other Windsor on-campus programs (will not interfere with other programs)?	**X**		
Does the department have the "critical mass" to undertake the program or course (a) sufficient interested and capable faculty; (b) academic support; and (c) TA/GA support?	 **X** **X** **X**		
Are additional resources required: (a) faculty/staff/GA/TA; (b) equipment; (c) library; (d) IT support?		 **X** **X** **X** **X**	
Are there data on (a) incoming student demographics (profiles) that align with flexible learning (age, geographic location, employment, family responsibilities, *etc.*); and (b) technological profiles (hardware and software resources and skills)?		 **X** **X**	
Does the department have a plan regarding (a) marketing flexible learning courses; (b) the timely appointment of instructors; (c) technical support (CTL, Tutorials, TA/GAs, staff contact person, *etc.*); (d) intra-departmental communications (committees, policies); and (e) inter-department communications (committees)?	 X X X X X		
Are there mechanisms and policies in place to address quality-control of (a) instruction; (b) materials (audio, video, PowerPoint, textual load, discussions and so on; and (c) learning (student assessment)?	 X X X		

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM "A"

APPENDIX A

FACULTY CURRICULA VITAE
(not required for undergraduate diploma or certificate proposals)

[Append curricula vitae of all faculty members in the AAU offering the program as well as from faculty members from other AAUs who are core to the delivery of the program. Faculty CVs should be in a standardized format - contact the Quality Assurance office for instructions about how to obtain properly formatted CVs from the UWindsor eCV system. Other standardized formats are acceptable as well, such as that used by one of the Tri-Councils]

Faculty CVs have been filed in the University Secretariat

University of Windsor
Senate

5.5.2: **Certificate in Anthrozoology – New Program Proposal**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the Certificate in Anthrozoology be approved.*

**Subject to approval of expenditures required.*

Rationale/Approval:

- The proposal has been approved by the FAHSS Coordinating Council, the Provost and the Program Development Committee.
- *See attached.*

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

A. Basic Program Information

Faculty(ies)	FAHSS
Department(s)/School(s)	
Name of Program as it Will Appear on the Diploma (*e.g.*, Bachelor of Arts Honours Psychology with thesis) *[Please note that, for general degrees, the discipline is not included on diplomas.]*	Certificate in Anthrozoology
Proposed Year of Offering* [Fall, Winter, Spring]: **(subject to timely and clear submission)*	Fall 2018
Mode of Delivery:	Regular, on-campus courses. Full-time.
Planned steady-state Student Enrolment (per section B.4.2)	35[1]
Normal Duration for Completion:	3-4 years.
Will the program run on a cost-recovery basis?	No

[1] *The Steady State Enrolment figure is based on the current identified minors in Anthrozoology. However, this is likely to be a higher number. Because of the changes to Inter-Faculty programs, students were not encouraged to identify as minors until the program was re-established in FAHSS.*

B. Overall Program Plan

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

Please provide a brief statement about the direction, relevance and importance of the new program.

Describe the overall aim and intended impact of the proposed new program.

Describe the consistency of the proposed new program with the institution's mission, goals and objectives as defined in its strategic plan. (to view the strategic plan go to: www.uwindsor.ca/president)

Anthrozoology, the study of human-animal relationships, is a rapidly growing global academic field. In fact, a 2013 article[1] in *Scientific American* called for the growing interest in anthrozoology, and gives some background to the field. The unique interdisciplinary approach includes courses from a variety of disciplines, including (but not limited to) biology, sociology, law, literature, philosophy, and the humanities. There currently exist no undergraduate certificates or degree programs in Anthrozoology in Canada; this will be the first of its kind, and one of the first undergraduate certificates in the world.

In this certificate program, students will explore the complexities and interactions between humans and animals from a variety of perspectives. These perspectives include the significance of animals in human evolution, the history of animal domestication, food issues, literary and visual representations of animals and humans, companion animals and pet-keeping practices, ethical concerns related to animals for human use and entertainment, animal welfare, and other relevant topics. Moreover, there has also been a notable concern regarding the change in relationships and attitudes between "millennials" and their pets[2]. That they are "involved pet parents"[2] suggests a significant interest in better understanding the human-animal relationships, an interest which has been evidenced by growing interest in anthrozoology programs and the courses at the University of Windsor.

Students will be able to customize their programs based on their disciplinary interests, including a final capstone course, which will provide opportunities to enhance their educational experiences by engaging in meaningful applied practices. These will be to gain specialized insights, and perhaps be related to particular careers of interest, or to

[1] https://blogs.scientificamerican.com/dog-spies/anthrozoology-not-a-study-of-ants/
[2] http://www.cbc.ca/news/canada/london/ontario-veterinarian-shortage-1.4562604

engage in major projects to help prepare for graduate work of their chosen major. This certificate, combined with their major, will fill a gap for this type of programming, given the international interest and rise of academic research and students interested in entering related graduate programs at other institutions.

The proposed certificate aligns with the University of Windsor's strategic plan as it has the opportunity to connect with such areas as:

- Creative Arts and Media (ie., documentary films, literature);
- Environmental and Ecosystem Adaption and Recovery (*ie.*, global warming impact of habitats and ecosystems; poaching; intensive farming, *etc*.);
- Health and Wellness (therapeutic animals for physical and mental health; PTSD; animals for people with disabilities, *etc*.); and
- Law, Education, and Philosophy, as well as International Borders (*ie*., legal context of animals globally, illegal international trade, animal welfare and protection laws, *etc*.).

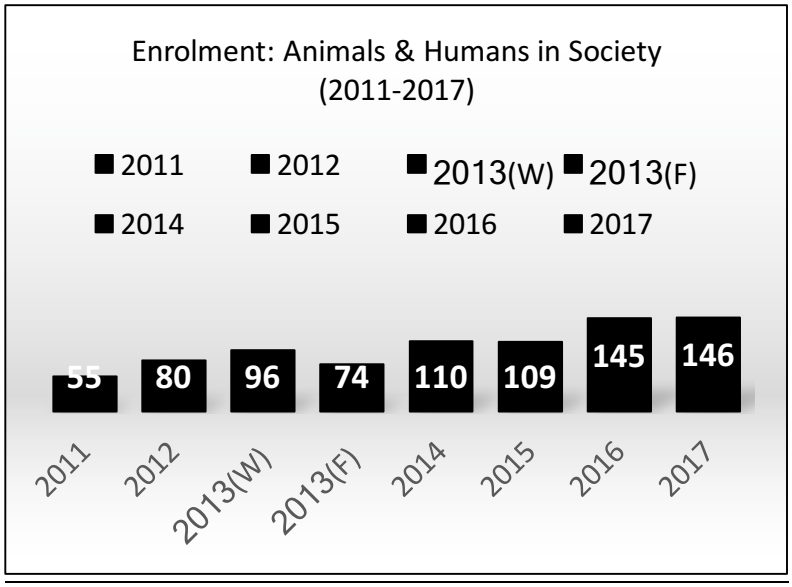
This certificate's uniqueness will match this growing interest in ecological, environmental, and animal welfare issues globally, the latter of which is of particular growing concern with respect to such issues as elephant poaching[3] and the exotic pet trade[4]. Growing national and international concerns suggest there is a need for people with a knowledge base in anthrozoology to work in various fields that tackle these issues. Specifically, there is a need for Canadian students to be educated in areas related to captive animals for entertainment[5], and the growing disputes related to individuals with mental health issues and their pets.[6]

There is also the unique need for individuals to understand the relationships between animals and Canada's Indigenous populations. There remains much debate and misunderstanding related to such controversial issues as the seal hunt and the impact of global warming on Indigenous people[7,8] . These are very emotional issues that could be tempered and better understood if individuals were educated in understanding such concerns.

The lack of undergraduate programming is especially wanting, particularly given the recent and rapid rise of study and empirical research in anthrozoology scholarship among graduate and faculty members across academic fields. In fact, this flourishing body of recent research informing the significance of animals to humans underscores the need for academic programs which educate and prepare students for career opportunities which require a range of expertise and knowledge in anthrozoology across disciplines, such as, but not limited to, biology, criminology, education, environmental studies, law, political science, psychology, social justice, and sociology.

The first dedicated Anthrozoology courses, "Animals and Humans in Society" and "Animals for Sport and Entertainment" have both seen a steady increase since they were first offered in 2011 and 2013, respectively (see chart below).

[3] http://therevelator.org/nations-save-elephants/
[4] http://www.cbc.ca/news/canada/new-brunswick/exotic-pets-stricter-regulations-1.4379983
[5] http://www.cbc.ca/news/politics/liberal-government-ban-cetaceans-1.4524432
[6] http://www.cbc.ca/news/business/canada-airlines-comfort-animals-1.4534676
[7] http://nationalpost.com/news/canada/despite-vanishing-sea-ice-canadas-polar-bears-appear-to-be-hanging-on-in-the-arctic-study-says
[8] http://www.cbc.ca/news/canada/saskatoon/importance-of-seal-hunt-to-the-inuit-is-focus-of-documentary-screening-panel-in-saskatoon-1.4557644



B.2 Program Content (QAF Section 2.1.4)

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

This certificate is comprised of several unique courses created specifically to address issues in anthrozoology, and several additional courses which already exist. Eight courses will be taken over a period of 3-4 years to obtain the certificate, and have been developed to address the lack of such unique programming in the province and country at the undergraduate level, and to support the growing field of academic research world-wide. For instance, the *International Society of Anthrozoology* (ISAZ) has a "Career Opportunities" section[9] which currently includes openings for academic teaching and research positions in Canada, Belgium, England, and the United States.

The certificate program, offered in FAHSS, is open to all undergraduate students at the University of Windsor. This certificate would be ideal for students interested in pursuing careers in some of the following areas: animal welfare (all disciplines), law (all disciplines), human health and therapy (psychology, nursing), animal sanctuaries and zoos (biology, psychology, business), and environmental issues (biology, psychology, environmental studies). It is particularly attractive to science majors who are interested in pursuing veterinary medicine, especially given the competitive nature of veterinary schools (see section B.4.1, Market Demand), as the certificate would be a significant advantage for applicants.

This certificate will also help ensure that University of Windsor graduates are better prepared to work in professional environments that would be advantageous for those who have a good understanding of the role animals play in many areas of life, including health, therapeutic, academic, and social environments. The University of Windsor has the responsibility to provide an education to our students for career opportunities, offering unique and relevant courses.

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

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

The curriculum is designed to provide students with opportunities to demonstrate awareness of the significant impact that animals have for humans and the environment by creating a program which promotes effective collaborations for this unique, growing and necessary area. Currently, it will be taught using standard, face-to-face in-class delivery. The program has been structured to meet timelines that will allow students to complete the certificate within a timely manner. New courses developed in the past several years will allow students to explore human-animal interactions and provide them with learning opportunities. They include, but are not limited to, the following:

[9] http://www.isaz.net/isaz/career-opportunities/

51-160. Animals and Humans in Society
51-200. The Paw & the Pen: Animals in Literature
51-260. Animals for Sport and Entertainment
51-261. Animals and the Law
51-360. Special Topics in Anthrozoology
51-310. The Canine Impact: Exploring the Dog-Human Relationship
51-498. Anthrozoology Capstone **(New course)**

Students are expected to complete 8 courses for the certificate, as well as complete their major area course requirements for their degree program. The program is delivered through standard course delivery. However, one significant aspect of the program is that the final capstone course allows students to individualize their program based on disciplinary interest. Students may opt for comprehensive writing projects to prepare them for continued work in their major area of interest, or they may have the opportunity to participate in meaningful applied practice related to careers of interest (animal welfare, veterinary school, fundraising, environmental professions, *etc*.). This applied practice for their final capstone course aligns with the University's Strategic Mandate Agreement's goal of increasing engagement in High-Impact Practices (HIPs) for fourth-year students. The final capstone course is available after students have completed the previous coursework for this certificate program. Such a course ensures that this particular program contributes to our institution's commitment in supporting innovative teaching and learning by including regional partners into educational environments so that students can apply educational experiences to actual environments. Moreover, this final course and the other aspects of the program, reflect many recommendations of the Premier's Highly Skilled Workforce Expert Panel (June 2016) which emphasizes the shared responsibility of educators, employers, and government to creating an educated and skilled labour market in Ontario.

A certificate in Anthrozoology will encourage students to explore alternative and unique employment opportunities. For instance, the Windsor Humane Society—the director of which has written a letter of support for this program—is currently advertising for a clinic manager[10] and a student holding a certificate in Anthrozoology will have an added and desired skill-set for this position. For its part, the University of Windsor will be assisting students in exploring alternative pathways for careers by helping student shift their focus from traditional skills and careers.

B.3 Program Name and Degree Designation/Nomenclature (QAF Section 2.1.1; MINISTRY section 1)

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

Anthrozoology is a widely accepted academic term for the study of human-animal interactions.

B.4 DEMAND FOR THE NEW PROGRAM

B.4.1 Student and Market Demand (MINISTRY section 5)

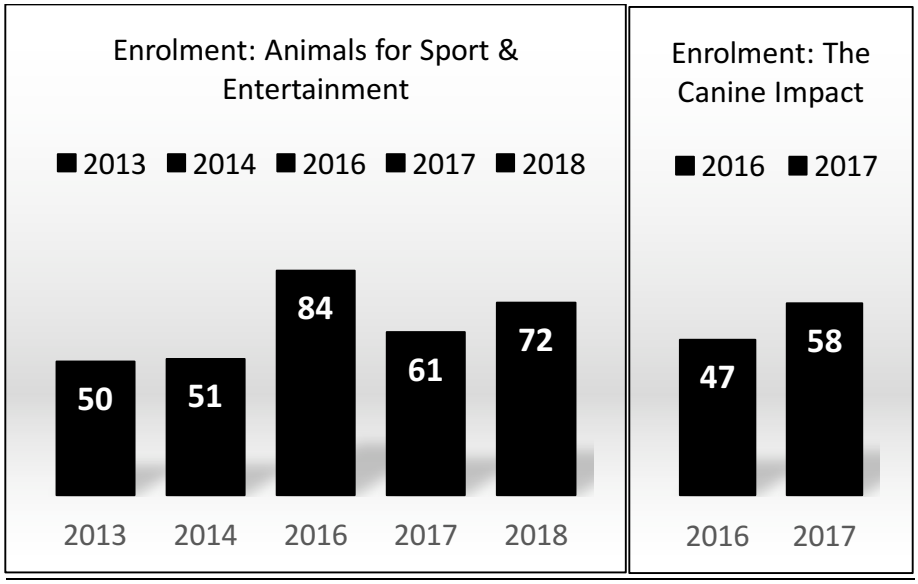
Describe the tools and methodology used to conduct the market assessment. *Provide quantitative evidence of student and market demand both within and outside the local region (e.g., responses/statistics from surveys, etc.).*

STUDENT DEMAND

Course Enrolment History:
The growing demand of the two introductory courses (see B1) generated an interest in offering additional courses, which have been developed and offered consistently in the past 4 years. Students continue to express great interest

[10] http://windsorhumane.org/about-us/jobs/clinic-manager-job-posting/

in this area of study, as evidenced by the growing enrolment in these classes. For instance, "The Canine Impact," which is also an Anthrozoology course and has been offered twice, also had an increase in enrolment (see below). Several other courses which comprise the program (but were not created specifically for the program) also show steady enrolment. These enrolments are a very positive indicator for the strength of the proposed program.

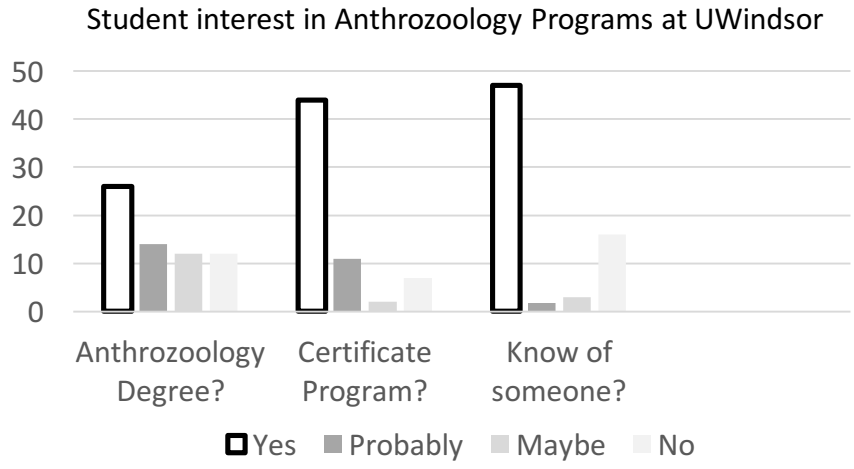


Student Interest

A group of students (n=64) were informally surveyed using Blackboard. Current and past students were asked specifically about their interest in Anthrozoology programs. They were also given the opportunity to make comments, which appear below the graph included below. They were asked the following questions:

1. should such a program be offered at the University of Windsor would they major in anthrozoology (yes, probably, maybe, no);
2. or do a certificate in anthrozoology (yes, probably, maybe, no); and
3. They were also asked if they knew of anyone who was interested in studying anthrozoology.

The following graph summarizes their responses. They were also given the opportunity to provide additional comments, which are provided below the graph.



Students' Additional Comments

- *Absolutely love anthrozoology! It would be incredible to have this as a major at the university. This education is just as necessary as any science or math course.*

- I am in my second Anthrozoology course at the University of Windsor and enjoy it. I am close to completing my major and would love to be able to minor in Anthrozoology. I believe these courses are important because we are constantly interacting with animals. I believe the more we know about human-animal interaction, the better chance we have to make a difference in the world.

- *I think if Anthrozoology were to become a degree or a certificate program, I do believe A LOT of people would interested in the program. The courses are great! Humans and Animals in Society is a great entry course for people to really get know and understand what Anthrozoology is about and to see if the field of study is for them.*

- I have only completed one anthrozoology course and found that it was very informative.

- *I think a lot of students would choose courses like animals and humans in society as electives if there were more of them.*

- If I am being honest, I felt like the course should be more challenging. Not harder/time consuming but just more challenging so it is taken seriously. I think those interested in becoming a vet would take the certificate program, but I am not sure about the degree program. It would be beneficial if the degree program could be done as a double major with biology, or history even. I think the program does bring out a lot of awareness about factory farming, I really enjoyed learning about that, and I think people should be more aware about where our meat comes from and how the animals are treated. My favourite part about the class was the teacher for sure. She did not push being a vegetarian on anyone nor did she tolerate the super-vegans in our class, and was respectful of everyone's opinions and habits. Another idea would be an aspect of the program being about how to get involved / what organizations people can join to take care of animals / stop factory farming. I am not a vegetarian at all, but if stopping factory farming meant giving up chicken, then I would not have to think twice about it. Anyway, I think if you can make it a degree program you should, as long as it can relate to other degree programs (double major), or you have a lot of information about how to make a career out of it.

- *The more selection of courses available, the better. If people are also interested that interest may grow and people may choose to switch programs.*

- Just from the few anthrozoology I have taken this for in my undergraduate degree, I have learned so much that I find myself applying to everyday life and would love the opportunity to future generations to explore this topic more deeply, as I didn't have the chance to and I feel there is so much potential and knowledge in this field!

- *I have taken 2 courses in Anthrozoology and found them both fascinating.*

- I'm in my fourth year and I would love to minor in anthrozoology but I don't have enough electives to take left. Maybe make it clear to first year students what requirements they would need to meet in order to do a minor

- *Make them more approachable, not viewed as some foreign program that no one would like to experiment with.*

- I've loved every course I've taken and would love for it to become a major as I think it's very important to understand all the animal-human relationships taught within the courses

Market Demand: Unique Opportunity

As letters of support for this program indicate, the Windsor-Essex County Society and the Detroit Zoological Society (Detroit Zoo) are extremely enthusiastic about such a program, and indicate their interests in developing a partnership with University of Windsor and students. Of particular note is that the Detroit Zoo has recently announced a multi-million dollar Great Lakes Nature Center[11], dedicated to species of the Great Lakes. At a March 1, 2018 informal meeting between Detroit Zoo Direct Ron Kagan, University of Windsor deans Chris Houser and Marcello Guariani, and Prof. Beth Daly, there was an optimistic discussion regarding the potential partnerships between University of Windsor students and the Detroit Zoo.

Another specific area which warrants (underscores) the need for, and interest in, Anthrozoology programs is the steadily increasing rise in veterinary medicine applicants, a trend in both the USA[12] and in Canada, and a number of University of Windsor students enrolled in Anthrozoology classes indicate their interest in pursuing veterinary medicine. The competitive admission standards of veterinary schools provide a number of opportunities for the University of Windsor to attract an untapped market of students to an undergraduate Anthrozoology program. First, it serves as preparation for Science students who intend to apply to veterinary school, as a certificate in Anthrozoology would be an ideal complement to their major degree. Second, for students who are interested in careers related to animals, it offers an alternative to veterinary school. Third, as noted above, this would be a terrific certificate for individuals who are perhaps deterred by the competitive admission process of veterinary schools, or who do not have the average to meet the admission criteria, they have another option, and can study anthrozoology with not only a science degree, but also arts, humanities, and social science. Given the recent announcement[13] of the shortage of veterinarians in Ontario, this is an obvious incentive for students.

Moreover, there is a strong "relationship" between veterinary medicine and anthrozoology, with the latter not requiring an academic background in applied medicine. In fact, many anthrozoology centres are housed within veterinary schools. Some of these include:

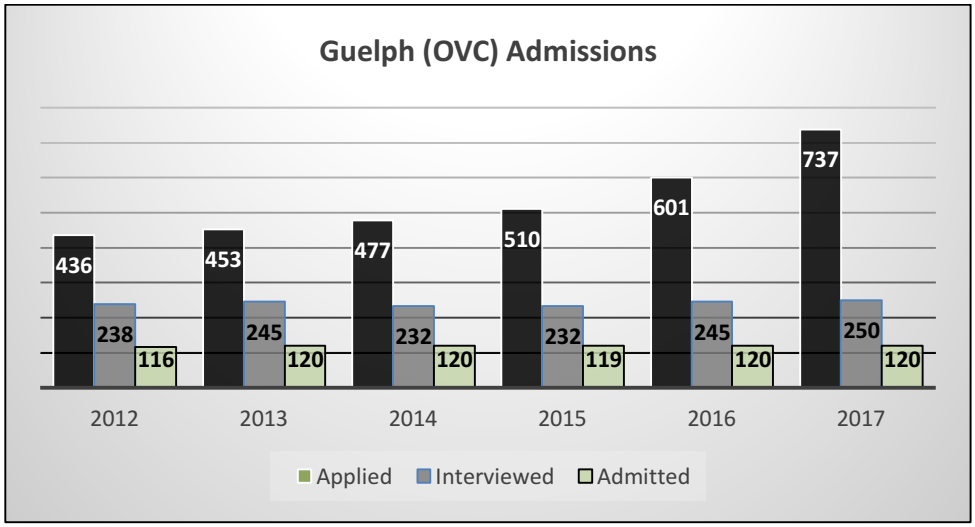
- The Center for the Human Animal Bond[14], College of Veterinary Medicine, Purdue University
- The Center for Interaction of Animals & Society[15], School of Veterinary Medicine, University of Pennsylvania
- Research Center for Human-Animal Interaction, School of Nursing/College of Veterinary Medicine, University of Missouri[16]

Furthermore, a number of prominent anthrozoologists are affiliated with veterinary schools, although they are not practicing veterinarians. Two founders of the International Society of Anthrozoology (ISAZ), Dr. John Bradshaw[17] and Dr. James Serpell[18], both enjoy academic appointments at veterinary schools, but are not veterinarians. These affiliations emphasize not only the value that veterinary schools place on anthrozoology, but the increasing recognition of anthrozoology as a field within the professional world.

Most Ontarians and eastern Canadians are eligible for only two veterinary schools in Canada[19] : Ontario Veterinary College (OVC) at University of Guelph, and Atlantic Veterinary College (AVC) at University of Prince Edward Island.

[11] https://www.freep.com/story/news/local/michigan/macomb/2018/02/13/detroit-zoo-macomb-county-nature/331632002/
[12] See: http://www.aavmc.org/Students-Applicants-and-Advisors/Veterinary-Medical-College-Application-Service.aspx and http://todaysveterinarybusiness.com/vet-school-applications-rise-2017/
[13] https://www.guelphtoday.com/columns/urban-cowboy-with-owen-roberts/ontario-pet-owners-and-farmers-face-veterinarian-shortage-794726
[14] https://www.vet.purdue.edu/chab/about.php
[15] http://www.vet.upenn.edu/research/centers-initiatives/center/center-for-interaction-of-animals-society
[16] http://rechai.missouri.edu/
[17] http://www.bris.ac.uk/vetscience/people/88445/index.html
[18] http://www.vet.upenn.edu/people/faculty-clinician-search/JAMESSERPELL
[19] University of Montreal's veterinary school is entirely French-speaking; U of Alberta accepts only Alberta residents; and Saskatoon accepts only Canadians from western provinces.

Both are extremely competitive. AVC admits only about 60 students each year[20] whereas OVC admits approximately 200, even though, as the following chart illustrates, application numbers have dramatically risen since 2012[21].



As such, a certificate program in Anthrozoology may well "fill a gap" for individuals who are deterred from applying to veterinary school, who are not offered admission, or those who may be interested in working in an animal-related field other than applied medicine.

Support from Professionals

Feedback was sought from Anthrozoology researchers and career professionals. See **Appendix A** for supporting letters.

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

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

Given the current enrolment in courses (noted in graphs above), this is most likely to appeal to Canadian/Ontario students. However, as the program becomes more visible, and gains popularity among undergraduates, and since it is available to all undergraduates, this demographic could change.

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

Provide details on projected enrolments in the following tables.

For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning component.

Projected enrolment levels for the first five years of operation. (If the program is in operation, use actual and projected data.)	First Year of Operation	Second Year of Operation	Third Year of Operation	Fourth Year of Operation	Fifth Year of Operation (Steady-state enrolment overall)
In the regular program (non-co-op)	35	35	35	35	35

[20] http://all-veterinary-schools.com/veterinary-schools/atlantic-veterinary-college/
[21] http://www.ovc.uoguelph.ca/recruitment/en/applyingtodvm/selectionprocess.asp

In the co-op/experiential learning stream (if applicable)	N/A	N/A	N/A	N/A	N/A
For co-op option: projected number of international students enrolled in the co-op stream	N/A	N/A	N/A	N/A	N/A

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

B.4.3 Collaborative Program (QAF section 1.6)

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

N/A

B.4.4 Societal Need (Ministry section 6)

Describe the tools and methodology used to assess societal need.

Elaborate on the
1) dimensions of (e.g., socio-cultural, economic, scientific, or technological),
2) geographic scope of (e.g., local, regional, provincial, or national), and
3) anticipated duration of, and trends in,
societal need for graduates of the new program

Evidence of societal need for the program will typically include a review of relevant industry and provincial survey and statistical data, as well as a review of the proposed program by relevant experts in the field.

Areas of human-animal interactions dominate everyday life: the first words children speak, across languages, are animal names[22]; 61% of Canadians[23], and 68% of Americans, have companion animals[24]; 700 million people visit zoos each year[25]; a rise in global population and meat consumption has a detrimental effect on the environment, and on human health[26]. These are just some of the ways that animals play a role in human society, but it is clear that the expansion of the interest in companion animals and global animal issues has spread into a sociological phenomenon. Given the ubiquitous nature of the human-animal relationships, engrained within the global social spectrum, it is surprising that there exist so few academic opportunities, outside of the Sciences, in which students have the opportunity to study these relationships.

[22] Baby's First 10 Words. (2008). *Developmental Psychology, 44*(4), 929-938
[23] http://www.gfk.com/insights/press-release/61-of-canadians-own-a-pet-gfk-survey/
[24] https://www.iii.org/fact-statistic/facts-statistics-pet-statistics
[25] Gusset, M., & Dick, G. (2011). The global reach of zoos and aquariums in visitor numbers and conservation expenditures. *Zoo Biology, 30*(5), 566-569.
[26] Vranken, L., Avermaete, T., Petalios, D., & Mathijs, E. (2014). Curbing global meat consumption: Emerging evidence of a second nutrition transition. *Environmental Science and Policy, 39*.

Much anthrozoology research highlights the important social issues that depend on an understanding of human-animal interactions, and thus, reflect the value for graduates who have studied anthrozoology. A sample of some of this research includes the following studies:

- the "desirable effect" that prison dog-training programs (has/have) for incarcerated persons[27];
- animal welfare;
- health and ethical issues related to eating animals[28];
- societal effects of animals, such as feral cats' destruction of wildlife[29], and the impact of spay-neuter programs on communities[30];
- ethical issues regarding zoos[31];
- the environmental impact of factory farming[32] and access to food in developing countries[33]; and
- other crucially important topics that impact local and global environments, personal philosophies, animal welfare, mental and physical health, and social policy.

One particularly large area of growth has been in health environments. Many therapeutic settings now incorporate animals into their applied programs. Employees in these professions may have education in psychology, social work, education, nursing, *etc*., but lack an anthrozoological background. One example of this research trend is in the area of therapeutic programs in which treatments for veterans and other individuals with post-traumatic stress disorder (PTSD) include dogs and horses, as indicated by numerous media reports and recent research[34]. Another area explores the impact that animals have for many people with autism[35]. There is also much interest and controversy related to the legal and ethical issues of emotional support, therapy, and service animals for individuals with mental health illnesses[36].

Many individuals working in the aforementioned areas have limited knowledge of animals in general, but also lack understanding of the important emotional, psychological, and physical role that animals have for humans and society. A Certificate in Anthrozoology is an ideal program to address this gap and ensure that graduates are better prepared to work in these professional environments. Universities have an obligation to educate students so that they are prepared for sustainable opportunities in a changing world, which means adjusting learning outcomes and offering innovative and relevant programs.

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[27] Cooke, B. J., & Farrington, D. P. (2016). The effectiveness of dog-training programs in prison. *The Prison Journal, 96*(6), 854-876.

[28] Hoffman, S. R., Stallings, S. F., Bessinger, R. C., & Brooks, G. T. (2013). Differences between health and ethical vegetarians. Strength of conviction, nutrition knowledge, dietary restriction, and duration of adherence. *Appetite, 65*, 139-144; Marsh, K., Zeuschner, C., & Saunders, A. (2012). Health implications of a vegetarian diet: A review. *American Journal of Lifestyle Medicine, 6*(3), 250-267.

[29] Loss, S. R., Will, T., & Marra, P. P. (2013). The impact of free-ranging domestic cats on wildlife of the United States. *4*, 1396; Gramza, A., Teel, T., VandeWoude, S., & Crooks, K. (2016). Understanding public perceptions of risk regarding outdoor pet cats to inform conservation action. *Conservation Biology, 30*(2), 276-286.

[30] Dolan, E. D., Weiss, E., & Slater, M. R. (2017). Welfare Impacts of Spay/Neuter-Focused Outreach on Companion Animals in New York City Public Housing. *Journal of Applied Animal Welfare Science, 20*(3), 257-272.

[31] Roe, K., McConney, A., & Mansfield, C. F. (2014). The Role of Zoos in Modern Society; A Comparison of Zoos' Reported Priorities and What Visitors Believe They Should Be. *Anthrozoos: A Multidisciplinary Journal of The Interactions of People & Animals, 27*(4), 529-541.

[32] Nierenberg, D. (2003). Factory farming in the developing world. *World Watch, 16*(3), 10-19.

[33] Stoll-Kleemann, S., & Schmidt, U. J. (2017). Reducing meat consumption in developed and transition countries to counter climate change and biodiversity loss: a review of influence factors. *Regional Environmental Change, 17*(5), 1261-1277.

[34] O'Haire, M. E., & Rodriguez, K. (2018). Preliminary efficacy of service dogs as a complementary treatment for posttraumatic stress disorder in military members and veterans. *Journal of Consulting and Clinical Psychology, 86*(2), 179-188.

[35] Grandin, T., Fine, A. H., O'Haire, M. E., Carlisle, G., & Bowers, C. M. (2015). Chapter 16 - The Roles of Animals for Individuals with Autism Spectrum Disorder *Handbook on Animal-Assisted Therapy (Fourth Edition)* (pp. 225-236). San Diego: Academic Press; O'Haire, M. E. (2017). Research on animal-assisted intervention and autism spectrum disorder, 2012–2015. *Applied Developmental Science, 21*(3), 200-216.

[36] Kogan, L. R., Schaefer, K., Erdman, P., & Schoenfeld-Tacher, R. (2016). University Counseling Centers' Perceptions and Experiences Pertaining to Emotional Support Animals. *Journal of College Student Psychotherapy, 30*(4), 268-283; Altschuler, E. L. (2018). Animal-Assisted Therapy for Post-traumatic Stress Disorder: Lessons from "Case Reports" in Media Stories. *Military Medicine, 183*(1-2), 11-13.

B.4.4.1 Societal Need – Letters, Surveys, Statistics

• *The development of this proposal included consideration of comments or letters solicited from potential employers regarding the need for graduates of the proposed program within their organization and field of endeavour.*	*Yes*	
• *The development of this proposal included consideration of comments or letters solicited from relevant professional societies or associations about the need for graduates of the proposed program.*	*Yes*	
• *The development of this proposal included a review of industry employment surveys for evidence of societal need (indicating numbers of positions in the field, numbers of anticipated new positions in the field, number of positions in the field current being advertised, etc.)?*		*No, explain below* [A]
• *The development of this proposal included a review of statistical evidence of the number of Ontario students leaving the province to study the field elsewhere in Canada or abroad?*		*No, explain below* [B]
If yes, append letters, survey or statistics to proposal. See Appendix A		
If no, explain: Because this is a certificate program, not a degree program, there was no formal comprehensive market study conducted. However: [A] There is a substantive rationale that makes the case for a societal need for such a program; [B] There is no inclusion of the number of Ontario students leaving the province to study Anthrozoology elsewhere. However, that there are no similar programs in Canada, but there are graduate programs in the US and Europe, is indicative of the uniqueness of this program.		

B.4.5 Duplication (Ministry section 7)

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

One of the most attractive features to an Anthrozoology certificate at the University of Windsor is that there are no similar undergraduate – or graduate – programs in Anthrozoology in Canada. In Ontario, the Sociology department at Brock University offers a concentration in Sociology in Critical Animal Studies (CAS), but this is significantly different from Anthrozoology. CAS has an extremely specialized focus, as it engenders advocacy by narrowly examining "the role and treatment of animals in society," and specifically, addressing "inequality related to speciesism, with emphasis on the field of animal justice." While the treatment of animals and advocacy is a component, Anthrozoology, by its very definition ("the study of human-animal interactions") offers an expansive and non-judgemental study of these relationships, from multiple objective and scientific perspectives, as opposed to an engrained and ideological viewpoint. A certificate in Anthrozoology will offer a unique and innovative opportunity to students and give the University of Windsor the unique opportunity of being the only Canadian university that is addressing this gap and preparing our students for the changing career environment that, as noted throughout this proposal, often includes an understanding of human-animal relationships.

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

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

Duplication does not need to be justified as there are no similar programs available in Ontario or Canada.

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

B.5 RESOURCES

B.5.1 Resources Available

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

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

The proposed certificate is cost-neutral. The courses are already part of regular offering of courses, as are most of the courses contributed by FAHSS. Any new course in FAHSS will be taught on load by existing faculty. As such, there will be no new costs incurred in the offering of this certificate. A means by which costs have been controlled is the staged development process in which the program was implemented. New courses were added in response to student need and demand.

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

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

Faculty Name and Rank (alphabetical)	**Graduate Faculty member (for graduate programs only)**	**Program Affiliation: indicate faculty affiliation to the EXISTING program(s)**	**Program Affiliation: indicate faculty affiliation to the NEW program**
Category 1*:* Tenured Professors teaching exclusively in the AAU offering the program			
Dr. Beth Daly		Education	FAHSS
Prof. Kate Parr (Philosophy)		FAHSS	
Dr. Stephen Pender (English)		FAHSS	
Dr. Katherine Quinsey (English)		FAHSS	
Category 2: Tenure-track Professors teaching exclusively in this AAU			
…			
Category 3: Ancillary Academic Staff such as Learning Specialists Positions			
…			
Category 4: Limited-term Appointments teaching exclusively in this AAU			
…			
Category 5: Tenure or tenure-track or LTA professors involved in teaching and/or supervision in other AAUs, in addition to being a member of this AAU			
…			

Category 6: Sessionals and other non-tenure track faculty			
Jerry Simonelli (Law)			
Rochelle Stevenson (Graduate Student, Sociology)			
Category 7: Others			
…			

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

Assess faculty expertise available and actively committed to the new program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in the proposed program, and of the appropriateness of this collective faculty expertise to contribute substantially to the proposed program.

Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/clinical expertise needed to:

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

Append curricula vitae – see Appendix A. CVs are not required for undergraduate diploma or certificate proposals.

The current faculty who have been teaching these courses have fostered an expertise in the nascent field of Anthrozoology, through research, professional backgrounds, and further fostered by their enthusiasm and commitment in developing courses in this area. Because this growing specialty has been largely supported by research initiatives, which support curriculum choices, faculty who have thus far been dedicated to teaching such courses have begun to foster an intellectual climate which will help to grow interest and develop further courses in this area.

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

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

All courses listed have regularly been offered. One course (Animals and the Law) has typically been taught by sessional instructors, and there has been no problem filling this position with qualified professionals.

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

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

N/A

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

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

N/A

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

Provide evidence that there are adequate resources available and committed to the proposed 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*

There are currently sufficient resources in order to sustain the program and the quality of scholarship for undergraduate students.

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

Describe the proposed program's reliance 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 program relies on existing faculty.

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

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

The program will be delivered with existing faculty, therefore there will be no new resource implications applicable here.

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

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

N/A

B.5.1.5a 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 proposed program.*

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

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

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

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

C. Program Details

C.1 Admission Requirements (QAF section 2.1.2)

Describe

- *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.*

Applicants must be registered undergraduate students in any undergraduate program in all faculties. Admission is therefore dependent on the admission requirements of the individual students' programs of study, as outlined in university policy here.

A minimum average of 70% is required for students registered in the Certificate program courses.

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

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

The proposed certificate requirements are commensurate to the requirements of individuals' chosen majors.

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

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

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

The Anthrozoology Certificate will normally involve 3-4 years of study consisting of traditional class work, including the 4 required courses, and 4 additional courses from a list of 10 courses. Completion of the final course is required for this certificate.

Degree requirements:

Total courses: 8

(a) 51-160. Animals and Humans in Society
51-260. Animals for Sport & Entertainment
51-261. Animals and the Law
51-498. Anthrozoology Capstone

(b) Four courses from:
51-360. Special Topics in Anthrozoology
51-310. The Canine Impact: Exploring the Dog-Human Relationship
34-329. Animals & Ethics 45-365. Green Criminology
46-355. Comparative Psychology
48-365. Green Criminology

51-200. The Paw & the Pen: Animals in Literature
55-210. Ethology
55-323. Animal Behaviour
55-360. Ornithology
55-426. Animal Communication

**There may be other courses offered on campus that may be taken as part of this program, depending on available and/or individual major.*

Courses used to calculate the major average are: N/A

Description of thesis option (if applicable): N/A

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

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

C.3.1.1 Normal Duration for Completion

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

The certificate must be completed within the normal course of obtaining a 4-year degree.

C.3.1.2 Program Research Requirements

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

N/A

C.3.1.3 Fields in a Graduate Program (optional)

Where fields are contemplated, provide the following information:
The master's program comprises the following fields: ...[list, as applicable]
The PhD program comprises the following fields: ...[list, as applicable]

N/A

C.3.2 For All Program Proposals

C.3.2.1 Standing Required for Continuation in Program

Minimum average requirements for continuation in the program
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify standing required for continuation in the experiential learning option or co-op option of the program, where applicable.

The standing requirement for continuation in the Certificate program is 70%.

C.3.2.2 Standing Required for Graduation

Minimum average requirement to graduate in the program
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify standing required for graduation in the experiential learning option or co-op option of the program, where applicable.

The standing requirement for graduation in the Certificate program is 70%.

C.3.2.3 Suggested Program Sequencing

Provide suggested program sequencing for each year of the program, ensuring that all pre-requisites are met in the sequencing.

Where applicable, provide work/study/placement sequencing for each year of the experiential learning/co-op version of the program. Please ensure that all pre-requisites are met in the sequencing.

For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

The suggested program sequencing demonstrates taking the 4 required courses within the first two years of the program to ensure all required courses have been taken, followed by the 4 remaining optional courses in the final years of the program. Below is an example of a **recommended** course sequence:

1st year: 51-160. Animals and Humans in Society

2nd year: 51-260. Animals for Sport & Entertainment
51-261. Animals and the Law
One additional course

3rd year: 51-310. The Canine Impact: Exploring the Dog-Human Relationship
34-329. Animals & Ethics
One additional course

4th year: 51-498. Anthrozoology Capstone
This is the final course, and students can enrol after 7 other courses are completed.

C.4 LEARNING OUTCOMES (Degree Level Expectations) (QAF section 2.1.1, 2.1.3, and 2.1.6)

COMPLETE THIS TABLE FOR UNDERGRADUATE PROGRAMS

PROGRAM DEVELOPMENT COMMITTEE
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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).

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
A. Articulate, and elaborate on the different historical and contemporary roles and paradoxical relationships that non-human animals ("animals") have in that human world; Summarize and explain many current issues and debates regarding interests, rights, welfare, and concepts in human-animal relationships. Compare and contrast competing theories and arguments relevant to Anthrozoology from a range of disciplinary perspectives, including, but not limited to, biological, legal, health, historical, political, psychological, and social.	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. Critically examine historical and contemporary issues in anthrozoological research by presenting facts, proposing hypotheses, and evaluating perspectives, both written and orally. Analyze and synthesize various media forms (text, video, audio, etc.) and anthrozoological sources (veterinary schools, academic institutions, animal welfare organizations, etc.) Summarize the different types of relationships (that humans have with animals as a function of different	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 Knowledge

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
social environments, such as socio-economic status, culture, religion, ethnicity, etc.		
C. Engage in moral, philosophical, and scientific debates in anthrozoology, in a coherent manner.	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
D. Formulate thoughtful and reasoned responses to mainstream, controversial, and unique issues in anthrozoology, orally and in writing.	D. literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
E. Analyze philosophical and practical differences that exist between animals and humans as a result of different contexts, such as religion, culture, gender, demographics, Respectfully listen, consider, and entertain varying perspectives and viewpoints. Evaluate scientific facts and philosophical arguments relevant to anthrozoological human-animal relationships.	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
F. Articulate and express disagreement regarding others' opinions in a respectful, thoughtful manner; Summarize and advance coherent positions within anthrozoology, using facts and evidence to support them.	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity
G. Identify means of respectfully advancing specific viewpoints in spite of unique views and differences, depending on context.	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
H. Recognize and compare species and taxon, and give meaningful consideration to the impact that physical appearance has on welfare, resource access, and existence.	H. creativity and aesthetic appreciation	2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
I. Justify the value of anthrozoology to the living environment. Recognize the societal benefits that the study and consideration of human-animal relationships has for greater society.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

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

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

Students will demonstrate their knowledge of the learning outcomes through various teaching and evaluation methods, such as written examinations (mid-term and final), writing assignments, class participation and discussion, student presentations, group participation and peer assessments, all of which reflect—though are not necessarily comprehensive fulfillments of—the detailed Learning Outcomes.

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

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

N/A

C.4.3 Mode of Delivery (QAF section 2.1.5)

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

Face-to-face delivery will facilitate discussion and active engagement in the program courses. The final capstone course is required. It will be the final course, and students can enrol after 7 other courses are completed. It will provide the opportunity to generate knowledge what has been learned throughout the previous courses, and demonstrate the application of many relevant skills (see *Learning Outcomes).*

C.5 Student Workload

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

Expected Workload per 3.0 Course Credit/Week	**Average Time *per week* the Student is Expected to Devote to Each Component Over the Course of the Program**
Lectures	Each course is 3 hours/week.
Tutorials	
Practical experience	

Service or experiential learning	
Independent study	Directed Readings – 3-6 hours per week.
Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.)	3-6 hours per week
Studying for tests/examinations	2 hours when applicable
Other: *[specify]*	
Compare the student workload for this program with other similar programs in the AAU: comparable	

D. MONITORING AND EVALUATION (QAF section 2.1.6)

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

Students will receive ongoing feedback throughout the program. They will receive feedback with each of the required courses they complete. It is appropriate at this level that students will be evaluated through examinations, written work, and engagement in group discussions. The coursework, as indicated in the learning outcomes, will require students to critically analyze and discuss literature, engage in class discussion, complete written assignments, and successfully work with classmates.

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

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

Course specific examinations, research papers/presentations are processes through which students will demonstrate their ability to apply the knowledge as outlined in the course and program learning outcomes and be consistent with degree level expectations. Students will be provided with a grade that reflects achievement on each assessment with written feedback supporting the grade assigned. Coursework, final course, papers, exams will be specifically evaluated to the learning outcomes.

E. EXPERIENTIAL LEARNING/CO-OP COMPONENT ONLY (Senate Co-op Policy)

[Complete this section ONLY if the proposed program includes an experiential learning or co-op component involving paid or unpaid placements.]

N/A

DETROIT ZOOLOGICAL SOCIETY®

DETROIT ZOO ◆ BELLE ISLE NATURE CENTER

February 22, 2018

Dear Dr. Daly,

I am writing to express my support for the creation of the undergraduate Anthrozoology certificate program at the University of Windsor. As the Director of Animal Welfare for the Detroit Zoological Society, with oversight of the Center for Zoo and Aquarium Animal Welfare and Ethics, I am keenly aware of the need for zoos and aquariums to better understand how animals are faring in captivity, and how the animals in zoos and aquariums are perceived by people who do (and don't) visit them. Anthrozoology is a branch of learning aimed at gaining that understanding.

Anthrozoology is a multidisciplinary field and provides a solid academic foundation for studies looking at interactions between humans and non-human animals. In zoos and aquariums particularly, the impact of human-animal interactions, specifically keeper-animal relationships and visitor effects on animal well-being, is an area of research gaining in importance. Anthrozoology students conducting research or joining zoological or animal advocacy organizations after graduation will be well equipped to immediately contribute to this important body of knowledge.

This is great preparation for individuals looking to contribute to zoo and aquarium animal welfare. How humans relate to non-human animals is central to the future of zoos, and those trained in the field of Anthrozoology will be uniquely prepared to help shape that path.

Sincerely,

Stephanie Allard, Ph.D.
Director of Animal Welfare

WINDSOR/ESSEX COUNTY HUMANE SOCIETY
We speak for those who cannot speak for themselves.

1375 Provincial Road
Windsor, ON N8W 5V8
Phone: 519 - 966 - 5751
Fax: 519 - 966 - 1848
info@windsorhumane.org

February 16, 2018

To Whom It May Concern:

I am pleased to offer my support to the University of Windsor's Anthrozoology certificate program. Completion of the program would be a tremendous asset for potential future employees of the Windsor/ Essex County Humane Society. Frequently young people will ask me for advice on educational programs to pursue if they are interested in a career in animal welfare and protection. Currently, there aren't really any suitable options available to them, especially locally.

A certificate in Anthrozoology would provide students with a deep understanding of how humans and animals interact in society, and how those interactions could be improved. I can't think of a better educational background for an individual interested in animal welfare. By offering this program in Canada, we would be able to keep students who are passionate about animals in Canada, rather than seeing them pursue international options because none are available here. As an example, I was discussing this program recently with one of our shelter managers. She noted that she had been seeking a program like this to continue her education, but the only option she was able to find was in the United States.

Please don't hesitate to contact me at 519-966-5751, ext 14 or by email at melanie@windsorhumane.org if you have any questions.

Sincerely,

Melanie Coulter, LL.B., J.D., M.Sc.
Executive Director

DETROIT ZOOLOGICAL SOCIETY®

DETROIT ZOO ◆ BELLE ISLE NATURE CENTER

February 19, 2018

Dear Dr. Daly,

As Executive Director and CEO of the Detroit Zoological Society (DZS), I am deeply committed to creating and supporting opportunities that will advance greater understanding of the impacts of humans on other animals and our planet. The growing field of Anthrozoology is centered on the study of the many varied and complex human attitudes toward nonhuman animals, and is uniquely positioned to align with, and help further, the work of organizations committed to animal welfare and conservation. I enthusiastically support the University of Windsor's undergraduate Anthrozoology certificate program.

The University of Windsor's Anthrozoology program is also ideally suited to allow students opportunities to learn (and apply learning) at the different campuses operated by the Detroit Zoological Society – the Detroit Zoo, the Belle Isle Nature Center and the Great Lakes Nature Center (under development). Students gaining experience in Anthrozoology can contribute to many aspects of the important work of the DZS, as well as other organizations concerned with the well-being of animals.

The values of human-animal studies mirror our mission and our work, which deepens the impact of a strong partnership between the University of Windsor's Anthrozoology program and the DZS. We believe that we have a responsibility to better understand and enhance the ways in which we inform and enhance human attitudes, knowledge, and behavior, so that we can ensure we are effective environmental stewards and animal advocates.

DZS strongly supports your consideration of creating and undergraduate Anthrozoology certificate.

Best regards,

Ron L Kagan

Ron L. Kagan
Executive Director/CEO

8450 W. 10 MILE ROAD ◆ ROYAL OAK, MI 48067 ◆ (248) 541-5717 ◆ FAX (248) 541-2489

Celebrating and Saving Wildlife

University of Windsor
Senate

5.5.2.1 **Anthrozoology - New Course Proposal**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course addition be made:*
51-498. Anthrozoology Capstone

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- This course is a key feature of the proposed new Certificate in Anthrozoology.
- The proposed changes have been approved by the FAHSS Coordinating Council, the Provost and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.2.1

University of Windsor
Senate

5..5.3: **Certificate in Sport Media, Communication and Social Issues – New Certificate Proposal**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the Certificate in Sport Media, Communication and Social Issues be approved.*

**Subject to approval of expenditures required.*

Rationale/Approval:

- The proposal has been approved by the Faculty of Human Kinetics Council, the Provost and the Program Developemnt Committee.
- *See attached.*

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

1. New Program Steering Committee/Provost Approval to Develop New Program Proposal

Prior to completing this form, proposers MUST complete a "New Program Notice of Intent Form" and obtain APPROVAL to proceed from the New Program Steering Committee and the Provost.

Date of New Program Steering Committee/Provost approval to proceed with development of the new program proposal:	April 11, 2018

A. Basic Program Information

Faculty(ies)	Human Kinetics
Department(s)/School(s)	Kinesiology
Name of Program as it Will Appear on the Diploma (*e.g.*, Bachelor of Arts Honours Psychology with thesis) *[Please note that, for general degrees, the discipline is not included on diplomas.]*	Certificate in Sport Media, Communication and Social Issues
Proposed Year of Offering* [Fall, Winter, Spring]: **(subject to timely and clear submission)*	Fall 2018
Mode of Delivery:	Regular on-campus/Full-time
Planned steady-state Student Enrolment (per section B.4.2)	10 to 20
Normal Duration for Completion:	This certificate is designed to be delivered within the traditional Fall/Winter academic terms (8 months total).
Will the program run on a cost-recovery basis?	Yes

B. Overall Program Plan

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

Please provide a brief statement about the direction, relevance and importance of the new program.

Describe the overall aim and intended impact of the proposed new program.

Describe the consistency of the proposed new program with the institution's mission, goals and objectives as defined in its strategic plan. (to view the strategic plan go to: www.uwindsor.ca/president)

The Certificate in Sport Media, Communication and Social Issues is a 1-year certificate program comprised of 8 courses, intended to attract international students from Beijing Sport University (BSU), China, through a newly established MOU.

This certificate has been developed for BSU students to better understand the intersection between sport and media, in its many forms, as well as learn about the communication aspect that is central to sport organizations, and the social issues that shape the context of sport.

This proposed certificate program addresses several of the strategic priorities outlined in the University of Windsor's Strategic Mandate Agreement (2017-2020). Section 6.0 of the SMA, *Enrolment Strategy and Program Direction*, identifies program areas of strength (p. 30). This proposed certificate address points 2 (Creative Arts and Media) and

3 (Education in a Global Context) of that list since the proposed certificate has a partial media-focus and involves education in a global context because of the international students involved in this initiative. The proposed certificate also connects to point 4 of the areas of expansion (Creative Arts and Digital Media). As well, this proposed certificate is aligned with the International Enrolment Strategy and Collaboration initiative (p.30-32) of Section 6.0 and will facilitate international enrolment opportunities and, potentially, further faculty exchange initiatives.

Item 7.0 of the SMA (2017-20), *Institutional Collaborations and Partnerships*, addresses international enrolment strategy and collaboration. Based on discussions with Beijing Sport University, this proposed initiative has the ability to recruit high-level students from their institution for study at UWindsor in an ongoing capacity. It can also lead to potential exchanges of faculty and students. On that level, Dr. Scott Martyn and Dr. Craig Greenham have pre-existing relationships with Beijing Sport University, having taught there and been involved with knowledge mobilization. There is potential for greater exchange with this initiative.

Finally, this proposed certificate program is also aligned with section 1.0, *Student Experience*. The ability to integrate domestic and international students within the same learning environment will provide an educational enrichment opportunity for both parties.

This certificate will be based on an 8-course structure with 2 compulsory courses and 6 courses selected from the optional offerings (more information can be found in C.2).

B.2 Program Content (QAF Section 2.1.4)

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

At present, there are no comparable certificates being offered so there are no core accreditation requirements that need to be met. The instructors involved in the program are research-active in their fields of expertise and are well-positioned to deliver course material on the newest innovations in their respective areas.

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

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

The proposed certificate provides international students with an offering of sport media and communication-based education along with the social perspectives, contexts and analyses to allow them to have a deeper comprehension of the key concepts vital to understanding the sporting landscape. The courses in the proposed certificate represent a blend not offered at other universities and colleges, where the focus might be on sport media OR sport communications OR social issues pertaining to sport. This combined initiative will provide international learners with a more integrative/holistic education than provided elsewhere. Beyond that, there is no certificate in existence in Ontario with these objectives that is designed for international learners.

B.3 Program Name and Degree Designation/Nomenclature (QAF Section 2.1.1; MINISTRY section 1)

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

The common themes of the course offerings for the proposed certificate is sport media, communications and social issues. These blended offerings support the certificate's name. The program name is also consistent with the aims and objectives of BSU.

B.4 DEMAND FOR THE NEW PROGRAM

B.4.1 Student and Market Demand (MINISTRY section 5)

Describe the tools and methodology used to conduct the market assessment.

Provide quantitative evidence of student and market demand both within and outside the local region (e.g., responses/statistics from surveys, etc.).

This proposed certificate was designed in response to an invitation made by BSU. In the past, Dr. Craig Greenham and Dr. Scott Martyn of the University of Windsor's Department of Kinesiology have travelled to BSU to instruct courses in areas of expertise (Greenham – sport journalism/media; Martyn Olympics/sport organizations). From these pre-existing relationships and in concert with an institutional emphasis for international education at BSU, this initiative was created. BSU has demonstrated eagerness toward this certificate program and have maintained an openness to an expanded format (2+2 or 1+3).

Aside from the formal request made by Beijing Sport University, this certificate follows a larger trend for globalized education. A recent report in *University World News* (08 December 2017) titled, "Why China Wants a 'Western-Style' Liberal Arts Degree" explains the continued emphasis that the Chinese place on obtaining an education in the area(s) of focus in this proposed certificate. In the article, the motivations for an education in the liberal arts, humanities and social sciences is described as important to understanding the increasingly international context of practically every sector: "The country recognises that it will need at least a small number of graduates for a globalised world in which an understanding of the Western way of thinking will be relevant and important in employment situations."

The report's author argued that the modern era has only increased the importance of understanding media and social issues through sociocultural discovery. It quoted Yong Zhao, a distinguished professor at the University of Kansas' department of education, "The general consensus is that valuable skills and abilities in the 'age of smart machines' are those that cannot be replaced by machines, no matter how intelligent machines may become." The report's author argues that in-demand from the types of courses our proposed certificate will offer include the often-cited skills of creativity, adaptability, collaboration, communication, critical thinking, entrepreneurialism, and cultural intelligence.

Because this certificate is in response to an international invitation that has indicated a resource of students, no provincial survey or data set seems necessary.

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

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

100% international – sourced from Beijing Sport University. However, admission to the Certificate may be opened to other international or domestic students in the future.

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

Provide details on projected enrolments in the following tables.

For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning component.

Projected enrolment levels for the first five years of operation. (If the program is in operation, use actual and projected data.)	First Year of Operation	Second Year of Operation	Third Year of Operation	Fourth Year of Operation	Fifth Year of Operation (Steady-state enrolment overall)
In the regular program (non-co-op)	10	10	15	20	20
In the co-op/experiential learning stream (if applicable)	N/A				

For co-op option: projected number of international students enrolled in the co-op stream	N/A				

Annual projected student intake into the first year of the program: *(this may differ from the "first year of operation" projected enrolments which could include anticipated enrolments from students transferring into the second, third, or fourth year of the program)*	Indications from strategic conversations from BSU suggest 10-20.
Annual projected student intake into the first year of the co-op/experiential learning version of the program: *(this may differ from the "first year of operation" projected enrolments which could include anticipated enrolments from students transferring into the second, third, or fourth year of the program)*	N/A

B.4.3 Collaborative Program (QAF section 1.6)

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

All courses in this certificate program are offered by the Department of Kinesiology.

B.4.4 Societal Need (Ministry section 6)

Describe the tools and methodology used to assess societal need.

Elaborate on the
1) dimensions of (e.g., socio-cultural, economic, scientific, or technological),
2) geographic scope of (e.g., local, regional, provincial, or national), and
3) anticipated duration of, and trends in,
societal need for graduates of the new program

Evidence of societal need for the program will typically include a review of relevant industry and provincial survey and statistical data, as well as a review of the proposed program by relevant experts in the field.

As mentioned in B.4.1., this proposed certificate is being created in response to an expression of interest from Beijing Sport University (BSU). The reasons for the appeal of this program from BSU's perspective are also listed above. Because this certificate is in response to an international invitation that has indicated a resource of students, no provincial survey or data set seems necessary.

B.4.4.1 Societal Need – Letters, Surveys, Statistics

• *The development of this proposal included consideration of comments or letters solicited from potential employers regarding the need for graduates of the proposed program within their organization and field of endeavour.*	___*Yes*	_X_ *No, explain below*
• *The development of this proposal included consideration of comments or letters solicited from relevant professional societies or associations about the need for graduates of the proposed program.*	___*Yes*	_X_ *No, explain below*
• *The development of this proposal included a review of industry employment surveys for evidence of societal need (indicating numbers of positions in the field, numbers of anticipated new positions in the field, number of positions in the field current being advertised, etc.)?*	___*Yes*	__X_ *No, explain below*

• *The development of this proposal included a review of statistical evidence of the number of Ontario students leaving the province to study the field elsewhere in Canada or abroad?*	*___Yes*	*_X__ No, explain below*
If yes, append letters, survey or statistics to proposal.		
If no, explain: This certificate has been designed specifically for BSU students based on its expression of interest. There is no relevance for local/provincial students.		

B.4.5 Duplication (Ministry section 7)

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

There is a uniqueness to this program because of its integrative and holistic perspective, as well as its base of students being BSU internationals.

Ryerson University has launched a new sport media initiative in recent years, as has Centennial College that focuses on sports broadcasting. These programs provide the tactical skills of sport journalism but do not provide the in-depth social issues education that allows students to understand the deeper meanings in sport and how it intersects with society.

St. Clair College has a 2-year journalism diploma but does not offer a program of this scope. It is not duplication for this certificate. Michigan State University offers four sport journalism courses in its College of Communication Arts and Sciences and is not a duplicate or competitor to this proposed certificate.

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

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

This certificate is in response to an expression of interest from Beijing Sport University.

B.5 RESOURCES

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

B.5.1 Resources Available

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

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

The courses for the certificate are regularly offered by Kinesiology faculty or "special topics" courses (course code 07-95-489). The BSU students will be integrated into typical University of Windsor classrooms. The faculty have expertise in the subjects that are central to this certificate program and the Sport Management program that will provide course instruction for this certificate program has received acclaim in international rankings (at the graduate level). The Department of Kinesiology has an undergraduate coordinator and a fully staffed front office complement.

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

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

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

Faculty Name and Rank (alphabetical)	Graduate Faculty member (for graduate programs only)	Program Affiliation: indicate faculty affiliation to the EXISTING program(s)	Program Affiliation: indicate faculty affiliation to the NEW program
Category 1*:* Tenured Professors teaching exclusively in the AAU offering the program			
Dr. Todd Loughead – Professor		BHK, MHK, PhD	Instructor 07-95-433
Dr. Scott Martyn – Professor		BHK, MHK, PhD	Instructor 07-95-340, 240
Dr. Victoria Paraschak – Professor		BHK, MHK, PhD	Instructor 07-95-473, 230
Category 2: Tenure-track Professors teaching exclusively in this AAU			
Dr. Sarah Gee – Assistant Professor		BHK, MHK, PhD	Instructor 07-95-456, 489, 405
Dr. Craig Greenham – Assistant professor		BHK, MHK, PhD	Instructor 07-95-459, 440, 457, 489
Dr. Patti Millar – Assistant Professor		BHK, MHK, PhD	Instructor 07-95-452
Category 3: Ancillary Academic Staff such as Learning Specialists Positions			
…			
Category 4: Limited-term Appointments teaching exclusively in this AAU			
…			
Category 5: Tenure or tenure-track or LTA professors involved in teaching and/or supervision in other AAUs, in addition to being a member of this AAU			
...			
Category 6: Sessionals and other non-tenure track faculty			
Dr. Rebecca Stewart – sessional		BHK	Instructor 07-95-455
Category 7: Others			
…			

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

Assess faculty expertise available and actively committed to the new program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in the proposed program, and of the appropriateness of this collective faculty expertise to contribute substantially to the proposed program.

Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/clinical expertise needed to:

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

Append curricula vitae – see Appendix A. CVs are not required for undergraduate diploma or certificate proposals.

The Department of Kinesiology provides all courses listed in the program. The faculty have expertise (academic and, in some cases, industry) in the subjects that are central to this certificate program and the Sport Management program that will provide course instruction for this certificate program has received acclaim in international rankings (graduate level), and the faculty have research published in leading national and international journals.

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

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

All courses listed in the certificate program have a regular offering (annual, biennial, and in rare cases triennial) by the department. Full-time faculty do the vast majority of teaching for the certificate-related courses. Occasionally sessional instructors are required to teach courses – particularly in the event of sabbatical or other forms of leave (*e.g.,* parental).

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

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

Not applicable.

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

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

Not applicable.

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

Provide evidence that there are adequate resources available and committed to the proposed 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*

It is important to acknowledge that international students, particularly those coming from non-English speaking countries, require additional support to succeed. The University of Windsor has an International Student Centre (ISC) that offers "soft landing programs" for international students as well as a host of other pre-arrival, on-arrival and post-arrival services. ISC also provides a wide-range of other support that includes:

Health Insurance

-OHIP equivalent for International Students is called UHIP through Greenshield

-Assistance with filling out claims and adding spouses/children to coverage

Other Supports

-Tax clinics, SIN Clinics, Referrals to Community Legal Aid, Emergency Loans (if they meet qualifications)

Hosted Activities

-Canada Party

-Christmas Party

-Host for the Holidays Programming for Thanksgiving and Christmas (International Students are matched with a local family to have a Thanksgiving/Christmas meal)

Transition Support for Students

-Orientation/Softlanding program for all incoming international students

-ISC Nursing Students - 4th Year Nursing students do an internship at the ISC to promote health related matters

-The Keep.meSAFE App: Student Support Program tailored to provide 24/7 support by licensed and trained counsellors who can provide advice on: adapting to new cultures; success in studies; relationships with family and friends; everyday issues while studying abroad; stress, anxiety, loneliness, and more.

- Workshops about dating, relationships, sexuality, consent, staying safe.

Academic

Dr. Denis Tetreault serves as an academic advisor at the ISC.

Leddy Library offers a Writing Support Desk and its information will be provided to students.

Beyond what is offered at the University level, the Department of Kinesiology offers a KinOne program that is designed to integrate and familiarize new students with the Department. Customarily, this service is provided to first-year students, incoming from high school, but there is potential that the program, in its current form or slightly adapted, could offer benefits to an incoming international cohort.

As well, the Department will seek to provide additional GA support and mentorship for extra in-class support that these international students will require to be successful in the proposed certificate program. This additional support could be delivered in the form of tutorials and other class-related assistance. If enrolment is deemed robust enough to warrant it and once the needs of the international students are identified, a part-time student support staff will be hired (see B.5.1.3 through B.5.1.5). The Department of Kinesiology has a strong reputation for supporting students in all of its programs. This support will naturally be extended to the students in the proposed certificate program.

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

Describe the proposed program's reliance on existing resources from <u>other</u> campus units, including for example:

- *existing courses,*
- *equipment or facilities outside the proposer's control,*
- *external resources requiring maintenance or upgrading using external resources*

Provide relevant details.

The program relies on Kinesiology courses and therefore does not rely on other academic units.

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

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

The program relies on internal resources and relies largely on the existing complement. Increased enrolment might reveal the need for additional academic resources (*e.g.,* extra courses or enhanced student support – see BB.5.1.5a below). It is not the expectation of the Department at this time that additional faculty will need to be hired for this initiative. There is an expectation that additional funding to provide extra GA support for the international students will be made. It is also anticipated, with enrolment growth as well as more clearly identified needs, that a student support staff will be hired at 24 hours/wk for approximately 35 weeks of the year.

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

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

No streamlining or deletion of programs/courses will occur as a result of this proposed certificate.

B.5.1.5a 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 proposed program.*

Faculty:	0
Staff:	1 student support staff (part-time), anticipated to being in Year 2 when the needs of the international students becomes more clearly known.
GA/TAs:	1 GA (140 hrs) at the beginning, moving to 2 as the program attracts more students

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

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

Library Resources and Services:	No change
Teaching and Learning Support:	No change
Student Support Services:	No change
Space and Facilities:	No change
Equipment (and Maintenance):	No change

C. Program Details

C.1 Admission Requirements (QAF section 2.1.2)

Describe

- *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.*

Consistent with the University of Windsor's international admission policy for international students speaking foreign languages, IELTS 6.5 (or equivalent), with no band less than 6.0, and students of good standing at Beijing Sport University, as identified by the University of Windsor on an annual basis, can be admitted.

Incoming BSU students will have completed three years of education at that institution before admission into the proposed certificate program at the University of Windsor. BSU students will be sourced from its School of International Sport Organizations (Foreign Languages). As such, many of these students will have received English-language instruction prior to their experience at UWindsor.

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

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

The proposed requirements are comparable to admission standards across the university. The course offerings should be accessible to international students based on the English-language proficiency attained prior to enrolment in the certificate program. An overarching intended learning outcome of the program is to cover material appropriate for the understanding sport media, communications and social issues. This will be attained by the end of the program.

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

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

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

Total courses: 8

Degree requirements:
A) 07-95-456 and 07-95-459
B) 6 courses from: 07-95-230; 07-95-240; 07-95-340; 07-95-405; 07-95-433; 07-95-451; 07-95-452; 07-95-455; 07-95-457; 07-95-473; 07-95-489

There is no sequential order (more information can be found in C.3.2.3). Each year the courses being offered will be advertised so the students coming for that specific year will be aware of the offerings provided in the rotation.

****The calendar descriptions for the above courses will be revised to clearly state that the courses are open to students in the Certificate program.****

Courses used to calculate the major average are: No major average calculated. A cumulative average will be calculated.

Description of thesis option (if applicable): Not applicable

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]***:** Not applicable

Explain how credit will be awarded for the experiential learning component (length of component, credit weighting, etc.): Not applicable

Guidelines for experiential learning/co-op work term reports: Not applicable

General length of experiential learning/co-op work term: Not applicable

Is the completion of the experiential learning/co-op component a requirement of the program? Not applicable

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

C.3.1.1 Normal Duration for Completion

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

Not applicable.

C.3.1.2 Program Research Requirements

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

Not applicable.

C.3.1.3 Fields in a Graduate Program (optional)

Where fields are contemplated, provide the following information:
The master's program comprises the following fields: ...[list, as applicable]
The PhD program comprises the following fields: ...[list, as applicable]

Not applicable.

C.3.2 For All Program Proposals

C.3.2.1 Standing Required for Continuation in Program

Minimum average requirements for continuation in the program
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify standing required for continuation in the experiential learning option or co-op option of the program, where applicable.

Cumulative average requirement of 60%.

C.3.2.2 Standing Required for Graduation

Minimum average requirement to graduate in the program
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify standing required for graduation in the experiential learning option or co-op option of the program, where applicable.

Cumulative average requirement of 60%.

C.3.2.3 Suggested Program Sequencing

Provide suggested program sequencing for each year of the program, ensuring that all pre-requisites are met in the sequencing.

Where applicable, provide work/study/placement sequencing for each year of the experiential learning/co-op version of the program. Please ensure that all pre-requisites are met in the sequencing.

For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

This certificate requires two compulsory courses (07-95-459 Sport Media AND 07-95-456 Sport Communication). The upcoming academic year (2018-19) offers 07-95-456 in the Fall Term and 07-95-459 in the Winter Term. While the core courses will be offered in sequential semesters for 2018-19, this practice is not deemed mandatory as there is no pre-requisite relationship between the two offerings. That both courses are offered, regardless of order, is deemed the essential criteria. Students also have the ability to customize the rest of their certificate by choosing 6 other courses from those that pertain to the certificate. Students will normally be enrolled in four courses per term. Circumstances can permit a 5-course term.

C.4 LEARNING OUTCOMES (Degree Level Expectations) (QAF section 2.1.1, 2.1.3, and 2.1.6)

COMPLETE THIS TABLE FOR UNDERGRADUATE PROGRAMS

In the following table, provide the specific learning outcomes (degree level expectations) that constitute the overall goals of the Combined program or Concurrent offering (i.e., the intended skills and qualities of graduates of this program). Link each learning outcome to the Characteristics of a University of Windsor Graduate" by listing them in the appropriate rows.

A learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate. All University of Windsor programs should produce graduates able to demonstrate each of the nine characteristics. Program design must demonstrate how students acquire all these characteristics. All individual courses should contribute to the development of one or more of these traits: a program in its entirety must demonstrate how students meet all of these outcomes through the complete program of coursework.

Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes (degree level expectations).

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

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

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
A. apply key concepts related to practice, theory and analysis of sport media, communications and social issues.	A. the acquisition, application and integration of knowledge	1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge
B. locate and synthesize relevant literature in order to draw and justify conclusions about key issues in sport	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 Knowledge
C. utilize academic knowledge and critical thinking skills to analyze problems within the fields of sport media, sport communication and social issues. assess best practices and identify industry issues and trends (past, present and future) in the sports media and communications sector.	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
D. interpret quantitative and qualitative data to solve questions related to the functioning of sport-related organizations employ communications strategies with a demonstration of different tactical and theoretical approaches, and undertake social issues analysis.	D. literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
E. recognize how dimensions of class, race, gender, bias, governance etc relate to issues of ethical media behaviour and a responsible fourth estate.	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
F. convey sport media, communications and social issues concepts, methods and research effectively, in both oral and written formats	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity
G. work successfully and respectfully with peers, university personnel and community organizations, both independently and in groups.	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
H. create media pieces on current topics central to sport media	H. creativity and aesthetic appreciation	2. Knowledge of Methodologies 3. Application of Knowledge

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
		6. Autonomy and Professional Capacity
I. explain how sport media and communication evolves with different social and economic forces. identify relevant academic and non-academic sources to remain current with research and popular trends in sport media, communication and social issues.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

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

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

The certificate's compulsory and optional courses are designed to provide students with the content and comprehension necessary to have an enhanced ability to create, analyze and apply theoretical and practical knowledge pertaining to sport media, communication and social issues.

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

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

Not applicable.

C.4.3 Mode of Delivery (QAF section 2.1.5)

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

The courses are face-to-face offerings and will be largely lecture-based. Beyond the standard lecture scenario, embedded in courses are discussion opportunities commonly found in seminars or tutorials. Those in-person discussions will be generated by readings, videos, current events or other sources key to the courses. The modes of delivery will provide our students with a variety of learning experiences and the course-based aspect of the certificate ensures a timely completion.

As stated in B.5.1.1. through B.5.1.5., there is a willingness to provide additional support to assist these international students with their studies. This provision of tutorials and mentorship, for example, could be invaluable to incoming students from China.

C.5 Student Workload

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

Expected Workload per 3.0 Course Credit/Week	**Average Time *per week* the Student is Expected to Devote to Each Component Over the Course of the Program**
Lectures	3
Tutorials	
Practical experience	
Service or experiential learning	
Independent study	2
Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.)	1.5
Studying for tests/examinations	1.5
Other: *[specify]*	

Compare the student workload for this program with other similar programs in the AAU:
The anticipated course structure is four courses per term for two terms. Eight hours per week is a reasonable workload for an undergraduate kinesiology student. At this rate, students' normal workload is 32 hours per week (based on the four courses per term). This workload is similar (domestic students usually take a 5-course term) to the expectations already in place for undergraduate students in the Department of Kinesiology.

D. MONITORING AND EVALUATION (QAF section 2.1.6)

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

The performance and success of students will be gauged through a combination of quizzes, mid-term exams, final exams, debates, class participation/engagement, social media and internet-based assignments, journalistic pieces, case studies, group and individual projects, simulations, papers and essays. This list is suggestive and not exhaustive as the department offers a host of varied assignments and graded-exercises.

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

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

Student success is of paramount importance to the Department of Kinesiology. The department will track the progress of the certificate students in accordance with quality assurance and to ensure the entry standards are consistent with credentials required for success in this proposed certificate. The department plans to collect data via surveys with students that have completed the program in terms of student satisfaction, career prospects/objectives and will make the appropriate adjustments to ensure the optimal delivery of the certificate.

E. EXPERIENTIAL LEARNING/CO-OP COMPONENT ONLY (Senate Co-op Policy)

[Complete this section ONLY if the proposed program includes an experiential learning or co-op component involving paid or unpaid placements.]

E.1 Experiential Learning Component and Nature of Experience

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

Not applicable.

E.2 Knowledge and Skills Brought to the Workplace

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

Not applicable.

E.3 Evidence of Availability of Placements

Provide evidence of the availability of an adequate number of positions of good quality both inside and outside the Windsor area (including names and contact information of potential employers, written statements or surveys from potential employers; and employer feedback concerning the hiring of graduates). Provide a summary of the types of positions that would be suitable at each level of work-term. How will these placements/opportunities be developed? [NB: For co-op programs, the majority of Ontario placements should qualify for the Co-op Education tax credit. See Policy on Co-op Programs for more details.]

Not applicable

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

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

Not applicable

E.5 Fees Associated with Experiential Learning Component

Provide information on the fees associated with the experiential learning component, if applicable.

NB: all proposed fees must be approved as part of the University's operating budget, via the Ancillary Fee Committee.

Not applicable

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

Please obtain signatures for the following statement.

Not applicable

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

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

Not applicable.

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A
APPENDIX A

FACULTY CURRICULA VITAE
(not required for undergraduate diploma or certificate proposals)

[Append curricula vitae of all faculty members in the AAU offering the program as well as from faculty members from other AAUs who are core to the delivery of the program. Faculty CVs should be in a standardized format - contact the Quality Assurance office for instructions about how to obtain properly formatted CVs from the UWindsor eCV system. Other standardized formats are acceptable as well, such as that used by one of the Tri-Councils]

University of Windsor
Senate

5.5.4: **Bachelor of Engineering Technology (Mechatronics Stream) – Major Program Change**

Item for: **Approval**

Forwarded by: Program Development Committee

MOTION: That the Mechatronics Stream in the Bachelor of Engineering Technology be approved.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed program has been approved by the Faculty of Engineering Coordinating Council, the Provost and the Program Development Committee.
- *See attached.*

PROGRAM DEVELOPMENT COMMITTEE
MAJOR PROGRAM CHANGES
FORM B

A. Basic Program Information

Faculty(ies)	Faculty of Engineering
Department(s)/School(s)	Faculty of Engineering
Name of Program as it Will Appear on the Diploma (*e.g.*, Bachelor of Arts Honours Psychology with thesis)	Bachelor of Engineering Technology, Mechatronics Stream
Proposed Year of Offering* [Fall, Winter, Spring]: **(subject to timely and clear submission)*	Fall 2018
Mode of Delivery:	On Campus
Planned steady-state Student Enrolment (per section B.4.2)	30 per year
Normal Duration for Completion:	Minimum 12 – 16 months, depending on the option
Will the program run on a cost-recovery basis?	No

B. Major Program Changes - Overall Plan

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

Please provide a rationale for the proposed change, including a brief statement about the direction, relevance and importance of the revised program.

Describe the overall aim and intended impact of the revised program.

Describe the consistency of the revised program with the institution's mission, goals and objectives as defined in its strategic plan. (to view the strategic plan go to: www.uwindsor.ca/president)

The Bachelor of Engineering Technology approved by the Senate in April 2010 (revised May 2018) is a Degree Completion Program which applies to the target groups meeting the qualifications listed below.

Applicants are eligible if they*:

a) possess an Advanced Diploma in Technology from Ontario CAATs (or an equivalent Canadian or International Institution)
b) possess an Engineering degree from a Canadian university (or an equivalent recognized International Institution)
c) possess an University degree in a scientific or technical subject from a Canadian university (or an equivalent international institution)
d) have completed the equivalent of three years of an engineering degree from a recognized international institution.

*Admission to the Bachelor of Engineering Technology Program (General Stream) also may be extended to students with a two-year Engineering Technology Diploma or Certificate from a Canadian College (CAAT or equivalent) and relevant work experience based on space availability in the program. Additional coursework may be required to ensure equivalency to the three-year diploma program as evaluated by the Office of Admissions and Faculty of Engineering.

And meet the following minimum average requirement:

1. For Canadian Colleges (CAAT or equivalent), Graduating Cumulative Average of 70%.
2. For international colleges (equivalent to CAAT's advanced diploma), Graduating Cumulative Average of 80% and minimum English language requirement as per University policy
3. For Canadian University degree holders who are seeking technology designation, 70%.

4. For international university degree holders who are seeking technology designation, 80% and minimum English language requirement as per University policy.
5. For individuals who have completed the equivalent of three years of an engineering degree from a recognized international institution, cumulative average of 80%, or first-class honour, or equivalent; and minimum English language requirements as per University policy.

Remark 1:
Students applying to Bachelor of Engineering Technology (Mechanical) must have received an advanced diploma in Mechanical Engineering Technology (or equivalent as stated in 1 and 2 above).
Students applying to Bachelor of Engineering Technology (Civil) must have received an advanced diploma in Civil Engineering Technology (or equivalent as stated in 1 and 2 above).

Remark 2:
Students, who received a four-year degree in a technical subject in Science, if admitted into BEngTech program, may be asked to take additional courses beyond the minimum requirements, and up to four courses in their original degree can be counting towards the BEngTech program, if appropriate.

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

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

Bachelor of Engineering Technology - Mechatronics Stream:
Mechatronics Engineering integrates the principles of mechanical, computer, electrical, and controls engineering into a unified discipline while keeping the core engineering education. Current mechanical systems are either controlled by the microcontrollers, or their intelligence is enhanced by the embedded sensors and electronic circuits. Examples of mechatronic systems range from simple household devices such as microwaves to industrial CNC Machines, robots, Magnetic Resonance Image (MRI) and X -Ray machines, aircraft and ship steering controllers, automobile power steering and engine controllers, telescopes and the International Space Station. Mechatronics engineers are trained to work as engineers with rich mechanical, electronics, instrumentation and real time software engineering skills which are in high demand in industry.

In response, the engineering program at Windsor has developed a 4-semester program based on the Bachelor of Engineering Technology program, but with a specific stream focussed on mechatronics engineering. Students in the Mechatronics Stream are required to take 15 courses focused in mechatronics engineering. Particular emphasis is placed on key areas of the discipline: measurements systems, control theory and applications, automation, mechanical fundamentals, robotics and intelligent manufacturing. The program is delivered in four consecutive semesters. Table 1 provides a semester view of the program; Table 2 provides a key-area view.

Table 1. Mechatronics Stream Curriculum by Semester

Semester 1 – Fall	**Semester 2 – Winter**
85-330, Applied Engineering Mathematics 88-410, Directed studies I (Engineering Project Mgmt) 92-412, Mechatronics 85-350, Signals and Systems Analysis	85-313, Engineering Economics 92-321, Control Theory 92-324, Engineering Measurements 88-449, Sensor and Vision Systems
Semester 3 – Summer	**Semester 4 – Fall**
85-460, Introduction to Robotics 88-410, Directed Studies II (Industrial Control Systems) 85-340, Mechatronic System Design and Project 85-440, Energy Conversion Systems	85-480, Capstone Mechatronics 85-450, Artificial Intelligence and Machine Learning 85-430, Intelligent and Digital Manufacturing

Table 2. Mechatronics Stream by Key Areas

Field	Courses
General Engineering	85-330, Applied Engineering Mathematics 88-410, Directed studies I (Engineering Project Management) 85-313, Engineering Economics 92-324, Engineering Measurements
Mechatronics	92-412, Mechatronics 85-350, Signals and Systems Analysis 92-321, Control Theory 92-324, Engineering Measurements 88-449, Sensor and Vision Systems 85-460, Introduction to Robotics 88-410, Directed Studies II (Industrial Control Systems) 85-340, Mechatronic System Design and Project 85-480, Capstone Mechatronics 85-450, Artificial Intelligence and Machine Learning 85-430, Intelligent and Digital Manufacturing
Control Systems	85-350, Signals and Systems Analysis 92-321, Control Theory 92-324, Engineering Measurements 88-449, Sensor and Vision Systems 85-460, Introduction to Robotics 88-410, Directed Studies II (Industrial Control Systems) 85-340, Mechatronic System Design and Project 85-450, Artificial Intelligence and Machine Learning
Industrial Automation	92-412, Mechatronics 92-321, Control Theory 92-324, Engineering Measurements 88-449, Sensor and Vision Systems 85-460, Introduction to Robotics 88-410, Directed Studies II (Industrial Control Systems) 85-340, Mechatronic System Design and Project(85-3xx) 85,440, Energy Conversion Systems 85-480, Capstone Mechatronics 85-450, Artificial Intelligence and Machine Learning 85-430, Intelligent and Digital Manufacturing

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

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

There are only two programs in Ontario which provide a seamless integration of college graduates (Advanced Diplomas in Technology) into a university education. These two programs are the BEngTech at Windsor and BTech at McMaster. The original BEngTech approved by the Senate in April 2010 is of a general nature and caters to all advanced diploma holders; it will be maintained in its current form. However, the provincial and national needs for Mechatronics Engineering and the local industry demands for this field of engineering, have provided the opportunity for Windsor to develop focused version of the BEngTech in Mechatronics area. If launched, this will be one of only two Ontario programs of this type targeting college graduates in the indicated subjects.

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The Bachelor of Technology at McMaster has four options, listed below:
BTech in Civil Engineering Infrastructure Technology
BTech in Computing and Information Technology
BTech in Energy Engineering technologies
BTech in Manufacturing Engineering Technology
BTech in Mechatronics Engineering Technology

The McMaster program is backend-loaded; *i.e.,* upon the completion of BTech at McMaster, the students also receive an Advanced Diploma in Technology from Mohawk College.

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

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

At the moment, there are three pathways to complete the Bachelor of Engineering Technology. Depending on the pathway selected, the name of the degree appears as:
Bachelor of Engineering Technology
Bachelor of Engineering Technology (Mechanical Stream)
Bachelor of Engineering Technology (Civil Stream)

The name of the degree for the new stream appears as: Bachelor of Engineering Technology (Mechatronics Stream)

B.4 DEMAND FOR THE MODIFIED PROGRAM

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

Describe the tools and methodology used to conduct the market assessment in support of the proposed program revisions.

Provide Quantitative evidence of student and market demand for the revisions to the program, both within and outside the local region (e.g., responses/statistics from surveys, etc.).

These changes will only make the program more attractive to college graduates. There is no negative impact on the market demand.

At the moment we have a huge demand and supports from the local industries. We managed to enrol 31 students for Winter 2018 through the General Stream. The supporting letters from industries attached to the proposal indicates a market demand for such a Mechatronics program.

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

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

Currently, all the students enrolled in or who have graduated from the program are domestic. The broadening of the admission requirements will give us flexibility in developing articulation agreements with international engineering programs (3+1 arrangement) in the future. Hopefully, this will result in a 70% domestic and 30% international student body.

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

Provide details on projected enrolments for the revised program in the following tables.

For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning component.

Projected enrolment levels for the first five years of operation of the revised program. (If the program is in operation, use actual and projected data.)	First Year of Operation	Second Year of Operation	Third Year of Operation	Fourth Year of Operation	Fifth Year of Operation (Steady-state enrolment overall)
Bachelor of Engineering Technology (Mechatronics)	30	30	30	30	30
In the co-op/experiential learning stream (if applicable)	N/A				
For co-op options: projected number of international students enrolled in the co-op stream	N/A				

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

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

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

Not applicable.

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

Describe the tools and methodology used to assess societal need.

Elaborate on the
1) dimensions of (e.g., socio-cultural, economic, scientific, or technological),
2) geographic scope of (e.g., local, regional, provincial, or national), and
3) anticipated duration of, and trends in,
societal need for graduates of the modified program

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

The Bachelor of Engineering Technology provides a seamless integration for CAAT three-year technology graduates into the university educational system and a pathway to enhance their educational qualifications. This approach will

enable those wishing to pursue a PEng (or licence to practice designation) to take courses from an accredited engineering program and thereby may enable them to gain appropriate exemptions from the full suite of CEQB technical examinations normally required by licensing authorities such as the PEO. The program is launched to comply with the Rae report (report of the former Premier); *i.e.* 3 semesters at University after 3 years at College.

B.4.5 Duplication (Ministry section 7)

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

There is no direct duplication of programs with other institutions. The only Ontario University that offers programs along this line is McMaster University. They offer a degree named Bachelor of Technology, with the following concentrations:
BTech in Civil Engineering Infrastructure Technology
BTech in Computing and Information Technology
BTech in Energy Engineering technologies
BTech in Manufacturing Engineering Technology

The McMaster program is backend-loaded; *i.e.,* upon the completion of BTech at McMaster, the students also receive an Advanced Diploma in Technology from Mohawk College.

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

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

Not applicable.

B.5 RESOURCES

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

B.5.1 Resources Available

As long as the total enrolment in the BEngTech program (the general, Civil, and Mechanical) does not exceed 50 students, the faculty will not need additional resources to deliver program. We currently have the capacity to service this size enrolment. No new resources are required.

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

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

Instructors teaching in the Faculty of Engineering are already available to deliver courses which will further develop the background of potential students to a level at which a university degree type of qualification is appropriate.

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

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

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Faculty Name and Rank (alphabetical)	Graduate Faculty member (for graduate programs only)	Program Affiliation: indicate faculty affiliation to the EXISTING program(s)	Program Affiliation: indicate faculty affiliation to the REVISED program
Category 1*:* Tenured Professors teaching exclusively in the AAU offering the program			
Category 2: Tenure-track Professors teaching exclusively in this AAU			
Dr. Mohammed Jalal Ahamed		MAME/ENG	
Dr. Beth-Anne Schuelke-Leech		MAME/ENG	
Category 3: Ancillary Academic Staff such as Learning Specialists Positions			
Mr. Ali AbdulHussein		MEM/ENG & Business	
Dr. Rashid Rashidzadeh		ECE/ENG	
Dr. Roozbeh Razavi-Far		OOD/ENG	
Category 4: Limited-term Appointments teaching exclusively in this AAU			
Dr. Shahpour Alirezaee		ECE	
New Positions (2) - Industrial Automation & Mechatronic Systems		ECE	
New Position - Industrial & Manufacturing Systems		MAME	
Category 5: Tenure or tenure-track or LTA professors involved in teaching and/or supervision in other AAUs, in addition to being a member of this AAU			
Category 6: Sessional and other non-tenure track faculty			
Dr. Arash Ahmadi		ECE/ENG	
Dr. Luay Taha		ECE/ENG	
Category 7: Others			

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

Assess faculty expertise available and actively committed to supporting the revised program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in the revised program, and of the appropriateness of this collective faculty expertise to contribute substantially to the revised program.

Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/clinical expertise needed to:

- *sustain the program*

- *promote innovation, and*
- *foster an appropriate intellectual climate.*

The courses taken by the BEngTech students are the regular engineering courses currently being offered in the Faculty of Engineering. These faculty members are all qualified to offer the program as they already are delivering an accredited engineering program through the Bachelor of Applied Science.

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

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

The delivery of the revised BEngTech program has no particular reliance on adjuncts, limited-term, and sessional instructors.

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

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

N/A

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

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

N/A

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

Provide evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities, including for example:

- *staff support,*
- *library,*
- *teaching and learning support,*
- *student support services,*
- *space,*
- *equipment,*
- *facilities*
- *GA/TA*

The Faculty of Engineering has been mandated to increase enrolment by recruiting an additional 400 students into its programs within the next four years. With the completion of the Lumley Centre for Engineering Innovation, sufficient space/resources are available to meet this target. The anticipated enrolment in the revised BEngTech program is a complementary activity to meet the above goal. No additional resources, such as library, space, equipment, and GA/TA resources are being sought.

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

Describe the reliance of the proposed program revisions on existing resources from <u>other</u> campus units, including for example:

- *existing courses,*
- *equipment or facilities outside the proposer's control,*
- *external resources requiring maintenance or upgrading using external resources*

Provide relevant details.

N/A

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

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

None, based on the projected enrolment for the proposed BEngTech program.

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

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

N/A

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

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

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

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

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

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

C. Program Details

C.1 Admission Requirements (QAF section 2.1.2)

Describe new or changes to

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

Applicants are eligible if they*:

a) possess an Advanced Diploma in Technology from Ontario CAATs (or an equivalent Canadian or International Institution)
b) possess an Engineering degree from a Canadian university (or an equivalent recognized International Institution)

c) possess an University degree in a scientific or technical subject from a Canadian university (or an equivalent international institution)
d) have completed the equivalent of three years of an engineering degree from a recognized international institution.

*Admission to the Bachelor of Engineering Technology Program (General Stream) also may be extended to students with a two-year Engineering Technology Diploma or Certificate from a Canadian College (CAAT or equivalent) and relevant work experience based on space availability in the program. Additional coursework may be required to ensure equivalency to the three-year diploma program as evaluated by the Office of Admissions and Faculty of Engineering.

And meet the following minimum average requirement:

1. For Canadian Colleges (CAAT or equivalent), Graduating Cumulative Average of 70%.
2. For international colleges (equivalent to CAAT's advanced diploma), Graduating Cumulative Average of 80% and minimum English language requirement as per University policy
3. For Canadian University degree holders who are seeking technology designation, 70%.
4. For international university degree holders who are seeking technology designation, 80% and minimum English language requirement as per University policy.
5. For individuals who have completed the equivalent of three years of an engineering degree from a recognized international institution, cumulative average of 80%, or first-class honour, or equivalent; and minimum English language requirements as per University policy.

Remark 1:
Students applying to Bachelor of Engineering Technology (Mechanical) must have received an advanced diploma in Mechanical Engineering Technology (or equivalent as stated in 1 and 2 above).
Students applying to Bachelor of Engineering Technology (Civil) must have received an advanced diploma in Civil Engineering Technology (or equivalent as stated in 1 and 2 above).

Remark 2:
Students, who received a four-year degree in a technical subject in Science, if admitted into BEngTech program, may be asked to take additional courses beyond the minimum requirements, and up to four courses in their original degree can be counting towards the BEngTech program, if appropriate.

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

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

The Bachelor of Engineering Technology program provides a seamless integration of college graduates with Advanced Diplomas in Technology into the University of Windsor. The proposed concentrations in Civil and Mechanical areas will greatly enhance the currently offered General BEngTech. We are one of only two universities in Ontario (and one of three in Canada) which offer such a pathway to college diploma graduates.

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

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

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

Identify in BOLD and STRIKETHROUGH the changes to program requirements.

Total courses: 15 courses

Degree requirements:
85-313. Engineering Economics
85-330. Applied Engineering Mathematics
85-340. Mechatronic System Design and Project
85-350. Signals and Systems Analysis
85-430. Intelligent and Digital Manufacturing
85-440. Energy Conversion Systems
85-450. Artificial Intelligence and Machine Learning
85-460. Introduction to Robotics
85-480. Capstone Mechatronics
88-410. Directed studies I (Engineering Project Management)
88-410. Directed Studies I (Industrial Control Systems)
88-449. Sensor and Vision Systems
92-321. Control Theory
92-324. Engineering Measurements
92-412. Mechatronics

See C.3.2.3 for suggested sequencing for working professionals.

Courses used to calculate the major average are: N/A

Description of thesis option (if applicable): N/A

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

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

C.3.1.1 Normal Duration for Completion

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

N/A

C.3.1.2 Program Research Requirements

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

N/A

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

Where fields are contemplated, provide the following information:
The master's program comprises the following fields: ...[list, as applicable]
The PhD program comprises the following fields: ...[list, as applicable]

N/A

C.3.2 For All Program Proposals

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

Minimum average requirements for continuation in the program.
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify new or changes to standing required for continuation in the experiential learning option or co-op option of the revised program, where applicable.

The same regulations for the current Bachelor of Engineering Technology apply.
In order to graduate, the student must be in good standing.
The standing required for continuation in the BEngTech program is 60% cumulative average (no major average) which will be the same for the Mechatronics stream.

C.3.2.2 New or Changes to Standing Required for Graduation

Minimum average requirement to graduate in the program.
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify new or changes to standing required for graduation in the experiential learning option or co-op option of the revised program, where applicable.

The standing required for graduation from the BEngTech program is 60% cumulative average (no major average) which will be the same for the Mechatronics stream.

C.3.2.3 New or Changes to Suggested Program Sequencing

Provide suggested program sequencing for each year of the revised program, ensuring that all pre-requisites are met in the sequencing.

Where applicable, provide work/study/placement sequencing for each year of the experiential learning/co-op version of the revised program. Please ensure that all pre-requisites are met in the sequencing.

For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

The BEngTech (Mechatronics Stream) can be completed in 3 semesters at 5 courses a semester.

Suggested Program Sequencing for Working Professionals

Fall Courses (Semester 1)
85-330. Applied Engineering Mathematics
88-410. Directed studies I (Engineering Project Management)

92-412. Mechatronics
85-350. Signals and Systems Analysis

Winter Courses (Semester 2)
85-313. Engineering Economics
92-321. Control Theory
92-324. Engineering Measurements
88-449. Sensor and Vision Systems

Summer Courses (Semester 3)
85-460. Introduction to Robotics
88-410. Directed Studies I (Industrial Control Systems)
85-340. Mechatronic System Design and Project
85-440. Energy Conversion Systems

Fall Courses (Semester 4)
85-480. Capstone Mechatronics
85-450. Artificial Intelligence and Machine Learning
85-430. Intelligent and Digital Manufacturing

C.4 NEW OR CHANGES TO LEARNING OUTCOMES (Degree Level Expectations)(QAF section 2.1.1, 2.1.3, and 2.1.6)

COMPLETE THIS TABLE FOR UNDERGRADUATE PROGRAMS

In the following table, provide the specific learning outcomes (degree level expectations) that constitute the overall goals of the Combined program or Concurrent offering (i.e., the intended skills and qualities of graduates of this program). Link each learning outcome to the Characteristics of a University of Windsor Graduate" by listing them in the appropriate rows.

A learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate. All University of Windsor programs should produce graduates able to demonstrate each of the nine characteristics. Program design must demonstrate how students acquire all these characteristics. All individual courses should contribute to the development of one or more of these traits: a program in its entirety must demonstrate how students meet all of these outcomes through the complete program of coursework.

Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes (degree level expectations).

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

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

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Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
Appropriately incorporate economics and management, and business practices, such as project, risk, and change management, into the practice of engineering, while dealing with their associated limitations/constraints.	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
Search (research) background information required to complete engineering projects.	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 Knowledge
Design solutions for complex, open-ended engineering problems; Design systems, components, or processes that meet specified needs with appropriate attention to the assessment of health and safety risks, legislative/regulatory standards, cultural, societal, economic, and environmental considerations	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
Demonstrate literacy and numeracy skills of critical evaluation, summary, explanation, and/or usage of written and numerical information by working through engineering projects.	D. literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
Outline the roles and responsibilities of the professional engineer in society, especially the primary role of protection of the public and the public interest.	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
Communicate effectively about complex engineering activities within the professional and with society at large, including an ability to write effective reports and design documentation, make effective presentations, and to give and effectively respond to clear instructions	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity
Work independently and as a member and/or leader in diverse teams and in multi-disciplinary settings	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
Design solutions for complex, open-ended engineering problems.	H. creativity and aesthetic appreciation	2. Knowledge of Methodologies 3. Application of Knowledge

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
		6. Autonomy and Professional Capacity
Exhibit characteristics of life-long learning, such as independently gathering, evaluating, and synthesizing information and identifying any deficiencies or gaps in knowledge.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

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

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

The proposed changes do not alter the learning outcomes of the program.

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

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

N/A

C.4.3 Mode of Delivery (QAF section 2.1.5)

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

Due to accreditation factors, online delivery is not applicable. All courses involved in this program are on-campus.

C.5 Student Workload

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

Expected Workload per 3.0 Course Credit/Week	**Average Time *per week* the Student is Expected to Devote to Each Component Over the Course of the Program**
Lectures	Three hours
Tutorials	Two hours
Practical experience	
Service or experiential learning	Two hours
Independent study	Two hours
Reading and work for assessment, including meeting classmates for group work/project assignments	Two hours

(essays, papers, projects, laboratory work, etc.)	
Studying for tests/examinations	Three hours
Other: *[specify]*	
Compare the student workload for this program with other similar programs in the AAU: The workload is consistent with the other BEngTech streams.	

D. MONITORING AND EVALUATION (QAF section 2.1.6)

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

The learning outcomes have not changed.

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

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

The learning outcomes have not changed.

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

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

E.1 Experiential Learning Component and Nature of Experience

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

N/A

E.2 Knowledge and Skills Brought to the Workplace

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

N/A

E.3 Evidence of Availability of Placements

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

Provide a summary of the types of positions that would be suitable at each level of work-term.

How will these placements/opportunities be developed?

[NB: For co-op programs, the majority of Ontario placements should qualify for the Co-op Education tax credit. See Policy on Co-op Programs for more details.]

N/A

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

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

N/A

PROGRAM DEVELOPMENT COMMITTEE
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E.5 Fees Associated with Experiential Learning Component

Provide information on the fees associated with the new or revised experiential learning component, if applicable.

NB: all proposed fees must be approved as part of the University's operating budget, via the Ancillary Fee Committee.

N/A

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

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

N/A

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

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

N/A

Level One Robotics and Controls, inc.

October 16, 2017

To Whom It May Concern:

This letter is regarding the importance of Bachelor of Engineering Technology - Mechatronics program at the University of Windsor.

Level One Robotics and Controls, Inc., is an engineering service provider specialized in automation process and assembly. Level One believes that a Mechatronics program would be a huge benefit for industries to use this type of program. With the focus of control and automation, this would provide an advantage to the city of Windsor and all automation suppliers.

As a corporation, we are willing to encourage my employees and the related industrial or manufacturing partners to enroll in this program.

Sincerely,

Milan Gasko
President
Level One Robotics and Controls Inc.

AUTOMATION FOR THE PLANET

Level One Robotics and Controls, Inc.
2525 Howard Avenue
Windsor, ON N8X 3W1 Canada
Ph 519.419.1111
Fax 866.662.4010
www.leveloneinc.com

ZION ROBOTICS & CONTROLS, LLC
924 N Blacks Corners Road, • Imlay City, MI • 48444
Phone: (810) 721-7101
Fax: (810) 721-7102
kngoodreau@zion-rc.com

ZION ROBOTICS & CONTROLS, INC
1861 Ambassador Dr. • Windsor, ON • N9C4B5
Phone: (226) 344-2970
Fax: (519) 962-6845
melachkar@zion-rc.com

Date: April 7th, 2018

To Whom It May Concern:

This letter is regarding the Bachelor of Engineering Technology - Mechatronics program at the University of Windsor.

We firmly believe at Zion Robotics & Controls Inc. that a program specifically catering to the automation sector here in Windsor would be a huge benefit. This type of program and specific content, to our industry, would provide an advantage to the city of Windsor and all automation suppliers. This type of course content embodies Windsor for its current concentration in the manufacturing and automation sector. Windsor has always been a pioneer in the manufacturing/automation sector with its main workforce concentrated in the automotive field.

As a corporation, I am willing to enroll and register any and all of my qualified employees into this type of program understanding. The fundamental value that the University of Windsor degree will add to their knowledge and capabilities in this field are well worth the investment. This type of program will benefit any employee and employer who is considering building its current workforce with the knowledge required to succeed in today's growing and diversified business.

We would be hopeful that this type of program would be open for enrollment here at the University of Windsor and available in the near future.

Sincerely,

Michael Elachkar,
Director of New Business

Zion Robotics & Controls Inc.
Cell 226-344-2970
Office 519-962-5868
Email: melachkar@zion-rc.com

VALIANT TMS

Date: October 13, 2017

Mr. Cam DiMario
Valiant Machine and Tool
6161 Tecumseh Rd E
Windsor, ON N8T 1E7

To Whom It May Concern:

I am writing on behalf of Valiant machine and tool regarding the need for a Robot and PLC program specifically geared towards the automotive industry.

A Mecatronics Robot/PLC program as an option in the course curriculum would be highly advantageous to Windsor and its automotive students with an interest in robotics. This would enable all of your students, Valiant employees and its suppliers a detailed knowledge of current practice in the field. Windsor is on the forefront of technology and the core competency of this progressive movement necessitates the need for such a degree. Valiant machine and tool employees, the auto industry and its suppliers would benefit from equipping its workforce with the skills required for the jobs of today. Plenty of options exist for transition into the workforce locally as well as abroad since the information is transferable. The need for skilled, and highly knowledgeable employees within Valiant alone is on the rise.

We look forward to having enrollment opportunities for our current and future employees.

Sincerely,

Valiant Machine & Tool
Cell 519-796-8294
Office 519-974-5280
Email: Cam.dimario@valiantmachine.com

Cam DiMario,
Manager, Robotics,PLC,Install & Launch

GRG America
GLOBAL RETOOL GROUP

April 4th, 2018

To whom it may concern

The intent of this letter is to express the need and interest of the Bachelor of Engineering Technology - Mechatronics program at the University of Windsor.

GLOBAL RETOOL GROUP GmbH is a worldwide renowned turn-key supplier and systems integrator. Our group is the leading supplier for retooling, retrofitting, overhauling and service for machine tools of any OEM manufacture, primarily focusing on the automotive sector.

Across the globe we are approx. 600-800 employees and our team are growing exponentially. Our North American operations established in 2011 with partnered locations in the US, Canada and Mexico requires us to be on the forefront in retooling machines. This demand for retools requires a huge contribution in reverse engineering in areas of Controls, Robotics, Electrical and Mechanical which demands for knowledgeable and specialized people. This type of expertise and skill set are usually only found in persons with several years of experience in this forever growing automotive market, but a program specifically catering to the automation sector here in Windsor would be a huge benefit as this would start the learning process at a greater success rate.

The market is in desperate need for this type of program, its specialized content would provide an advantage to the city of Windsor and for all machine automation suppliers. Windsor has lost this type of expertise and knowledge for today's demanding market, a course offered by the University of Windsor and its amazing engineering faculty with specific concentration in content would greatly help the automotive supplier sector.

Global Retool Group is very interested in working with common suppliers to achieve one goal, to educate people with the right tools for this ever-changing demand in the automotive market. We firmly believe that the fundamental value that the University of Windsor degree would enhance current experience and knowledge in this field. We strongly believe it is worth the investment and time from both automotive suppliers and the University of Windsor.

A geared program from the University of Windsor with any employee and or employer who is considering building its current workforce with the knowledge required to succeed in today's growing and diversified business.

We trust that this type of program would be open for enrollment at the U of W and available soon.

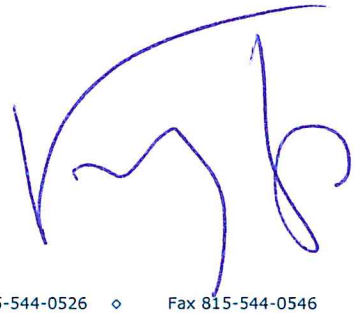
Sincerely,

Vincenzo Longo

Vice Present of Operation GRG America

(313.398.4871)

vlongo@grg-america.com



Detroit Diesel Corporation
13400 Outer Drive, West
Detroit, Michigan 48239-4001
Telephone: 313-592-5005

February 16th, 2018

To Whom It May Concern:
This letter is regarding the importance of Bachelor of Engineering Technology – Mechatronics program at University of Windsor.

As a manager in our Manufacturing Engineering group, I am always looking for innovative people and companies to work with. As our products change to support our changing market, we look for the best processes to make our products. Robotics continue to be more cost effective and reliable, making them a very viable option for a multitude of tasks. As such, the use of robots within our facility continues to increase. We integrate these into assembly and machining systems, which leads to further integration with PLCs, MES and visualization systems. In the future, Industry 4.0, Big Data and Data Lakes will increase the need for information from our production equipment and control systems.

To facilitate this data and integration, our people will need a more in depth understanding of the control systems without losing the knowledge of the mechanics of a robot or machine. In my opinion, a good understanding of the complete system is a great advantage for our daily business. This leads me to investigate programs at universities, which can foster and supply this knowledge. People developing and supporting the equipment with a more in-depth knowledge of the overall system, will help keep my equipment downtime low and my output high. This starts at a knowledgeable machine suppler for robust design and continues to my staff being able to find issues and resolve them as soon as possible. A Mechatronics program would be a great foundation for new people to fill a needed knowledge in the real world of automotive systems. With a background that crosses over between the electrical and mechanical engineering disciplines, a person is much better suited to support our core business of buying efficient equipment and keeping them running.

As a hiring manager, a person that has been through a program that better supports my core business would be the most valuable to me. I encourage you to bridge the electrical and mechanical world with the Mechatronics program to bring more value to the industry.

Bruce W. Baker
Manufacturing Engineering Manager
Detroit Diesel Corporation

University of Windsor
Senate

5.5.4.1: **Bachelor of Engineering Technology – New Course Proposals**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course addition be made:*

85-330. Applied Engineering Mathematics
85-430. Intelligent and Digital Manufacturing
85-340. Mechatronic System Design and Project
85-440. Energy Conversion Systems
85-450. Artificial Intelligence and Machine Learning
85-350. Signals and Systems Analysis
85-460. Introduction to Robotics
85-480. Capstone Mechatronics

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The BEngTech Mechatronics stream and new course proposals have been approved by the Faculty of Engineering Coordinating Council, the Provost and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.4.1 .

University of Windsor
Senate

5.5.5: **Master of Education (Online) - Major Program Change**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the online Master of Education (Curriculum Studies Concentration or Educational Administration Concentration) be approved for launch Fall 2019.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed program has been approved by the Faculty of Education, the Faculty of Graduate Studies Council, the Provost and the Program Development Committee.
- *See attached.*

PROGRAM DEVELOPMENT COMMITTEE
MAJOR PROGRAM CHANGES
FORM B

A. Basic Program Information

Faculty(ies)	Education
Department(s)/School(s)	Education
Name of Program as it Will Appear on the Diploma (*e.g.*, Bachelor of Arts Honours Psychology with thesis) *[Please note that, for general degrees, the discipline is not included on diplomas.]*	Master of Education
Proposed Year of Offering* [Fall, Winter, Spring]: **(subject to timely and clear submission)*	Fall 2019
Mode of Delivery:	Online format
Planned steady-state Student Enrolment (per section B.4.2)	76
Normal Duration for Completion:	Full time four semesters; part time 10 semesters
Will the program run on a cost-recovery basis?	

B. Major Program Changes - Overall Plan

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

Please provide a rationale for the proposed change, including a brief statement about the direction, relevance and importance of the revised program.

Describe the overall aim and intended impact of the revised program.

Describe the consistency of the revised program with the institution's mission, goals and objectives as defined in its strategic plan. (to view the strategic plan go to: www.uwindsor.ca/president)

This program is being proposed in order to make the Faculty of Education MEd available online to students who for a variety of reasons may not be able to physically attend face to face classes on Campus. The 'Online MEd' will be particularly relevant to two groups of potential students: those who are unable to fit attendance in regular classes into their schedule because of work or life commitments; those who do not live geographically close to campus. This group could include students from the Windsor/Essex region, from across Canada, or from a variety of international locations.

The overall aim of the program is similar to that of the existing MEd offerings. The intended impact is to engage a larger and more diverse group of students in these programs.

The consistency of the revised plan with the institution's mission, goals and objectives as defined in its strategic plan is similar to that of the currently existing completion streams of the MEd. In addition, the revised program is closely aligned with at least the two following areas of strength as outlined in the Strategic Mandate Agreement (2014-2017)

2. Teaching and Learning: The revised program will capture institutional strength in program delivery, methods that expand learning options for students, and improve the learning experience and career preparedness by offering the MEd program via online learning technology to a larger and potentially more diverse audience.

3. Student Population: The revised program will improve access of the MEd for underrepresented groups such as aboriginal students and students with disabilities. As previously noted, the improved access proposed for the revised program may additionally be attractive to international students and mature students.

PROGRAM DEVELOPMENT COMMITTEE
MAJOR PROGRAM CHANGES
FORM B

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

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

The proposed revisions do not involve revised curriculum.

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

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

At the U of W, currently the MEd is offered in a face to face format, with the exception of one or two specific courses that individual professors have occasionally offered online. Across Ontario there are 12 Faculties of Education: Seven of these offer online MEd programs. Of the programs (four) for which we were able to find enrolment numbers, the average online enrolment was 188. The proposed U of W program is innovative in that, with the exception of the University of Ottawa online MA in Education, it is the only program that allows students to maintain the option to step outside the online program after they have completed all or a portion of the required coursework if they decide that they would like to use a Thesis or Major Research Paper completion stream. Also, students in the online program will be able to maintain their 'Online Student' status (which gives them guaranteed registration in the prescribed online courses offered each semester) while taking up to two non-online courses. This combination of flexibility in completion stream and delivery mode allows students a graduate experience that is both feasible from a faculty administration perspective, and is responsive to the evolving needs of students.

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

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

There is no proposed name change or degree designation. Program content and usage in the discipline will be similar to existing programs.

B.4 DEMAND FOR THE MODIFIED PROGRAM

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

Describe the tools and methodology used to conduct the market assessment in support of the proposed program revisions.

Provide Quantitative evidence of student and market demand for the revisions to the program, both within and outside the local region (e.g., responses/statistics from surveys, etc.).

An online survey questionnaire was distributed to all Masters students currently in our programs, both International and Domestic. The questionnaire asked students to identify the degree to which they would have been interested in pursuing their graduate studies online, and whether they believed they would have taken advantage of the flexibilities offered in the online program. They were also asked to identify the approximate number of people they know who might be interested in pursuing an online MEd.

Summary of survey responses:
- Forty-nine responses for a response rate of approximately 45%.
- 58% from Canadian students and 42% from International students (Chinese 33%, Pakistan 4%, Saudi Arabia 2%, Other 2%)
- 51% say they would likely or very likely have registered in an online program had it been available.
- 49% say they would likely or very likely have completed the entire program online
- 37% (18 individuals) estimate that less than 25% of those they know that might be interested in an MEd would be interested in an online MEd. 22% (11 individuals) estimate 25%-49% would be interested. 29% (14 individuals) estimate 50-57%. 12% (6 individuals) estimate more than 75%.

- In simpler terms, 48 respondents estimate that they know between 143 and 257 (Q6 option 4 capped at 15) potential MEd applicants that might be interested in an online MEd).
- 63% believe that an Online option would make the MEd more accessible

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

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

It is expected that 50% of students will be domestic, and 50% international. Students would likely be drawn from the BEd program.

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

Provide details on projected enrolments for the revised program in the following tables.

For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning component.

Projected enrolment levels for the first five years of operation of the revised program. *(If the program is in operation, use actual and projected data.)*	First Year of Operation	Second Year of Operation	Third Year of Operation	Fourth Year of Operation	Fifth Year of Operation (Steady-state enrolment overall)
In the regular program (non-co-op)	20	51	71	76	76
In the co-op/experiential learning stream (if applicable)	n/a				
For co-op options: projected number of international students enrolled in the co-op stream	n/a				

Annual projected student intake into the first year of the revised program: *(this may differ from the "first year of operation" projected enrolments which could include anticipated enrolments from students transferring into the second, third, or fourth year of the program)*	*30*
Annual projected student intake into the first year of the co-op/experiential learning version of the revised program: *(this may differ from the "first year of operation" projected enrolments which could include anticipated enrolments from students transferring into the second, third, or fourth year of the program)*	n/a

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

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

N/A

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

Describe the tools and methodology used to assess societal need.

Elaborate on the

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

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

In order to assess societal need, a questionnaire was distributed electronically, using Survey Monkey, to all students in the existing MEd programs. They were asked "Do you believe that an Online MEd would have a socio-cultural or economic impact in your home region?" and "Please describe the social, cultural, economic, or other circumstances in which an applicant might be most likely to consider an Online MEd."

The responses received from these questions supported the increased reach and social, cultural, and economic impact that the revised program (online version of the existing MEd) would have both locally and globally. Again, it is noted that there are no new directions or changes in the fields within the degree.

Forty-nine students responded to the first question. Twenty-seven percent indicated that they believed that an online MEd program could have a socio-cultural or economic impact on their home region. Interestingly, 47% indicated that they were unsure in this regard. Only 27% gave a negative response.

In response to the second question, twenty students pointed out positive factors that related to societal needs, pertaining to issues such as accessibility, affordability, diversity, cultural accommodation, and geography. From a socio-cultural perspective, the potential for improved 'in class' opportunities this would provide for international EFL/ESL students was noted. During asynchronous learning, EFL/ESL students would have more time to formulate and present coherent answers than they would normally have in a face-to-face learning situation. In such situations, native English speakers often speak first and more frequently, crowding out the voices of EFL/ESL students (Zhou, Liu, Rideout, 2017). In this regard, one student stated: "Sometimes domestic and international cohorts are at odds in terms of their level of comfort in speaking out in class; however, the online model provides an equitable platform for developing informed conversation." Another student stated: "Online community can mimic classroom conversation with the added benefit of allowing students a chance to sustain their opinions by referencing class material."

Further in relation to the socio-cultural impact, and also bearing the potential global and geographic impact of the program in mind, one student stated: "The Online MEd cohorts could be incredibly diverse, especially if international students were eligible to enroll. This could be an excellent opportunity to understand education from a global perspective..." Specifically with reference to geographic impact, one student stated: "...if I had been given the chance to do it online and move back to Toronto I probably would have done that at the time. Considering I did not want to teach for a board in [W]indsor, it would have allowed me to start applying for jobs or working supply here in Toronto..."

A number of students referenced the potential economic benefit of an online MEd. One student stated: "It may also attract individuals living in more rural areas that might not be able to relocate to attend classes, but find a more economical alternative through online education." Another stated: "Time and places are flexible and living expenses and transportation fees are saved." A third student stated: "The online program will allow diverse buy-in for students without regular transportation or for whom transportation may be an issue; Internet access may still be a small barrier, though it is less distance to cover [to] travel to a library for Internet access than traverse the city to attend regular classes, in the evening, at the Faculty of Education. "

Considering the potential international economic impact, one student stated: "Pakistan is apparently weak but its mas[s]es have more money than its government. [W]hereby applicant[s] can apply if only they are given chance [at] a quality education. Most of Pakistanis turn to England due to its quality of education." Another student stated:

"...they will save a lot of money such as living expenses. Most Chinese students would like it because it is convenient for them to apply for and study."

Social needs would be met as well. One student stated: "If a potential student is raising kids at home, the online option may be a better fit for their social needs." Another student stated: "Social: Online community can mimic classroom conversation with the added benefit of allowing students a chance to sustain their opinions by referencing class material. In-class conversation might be more organic, but a lot less specific." A third student identified a social phenomenon, and perhaps a trend that the proposed program supports: "An online masters program in education could attract a diverse group of individuals. In particular, mid-career adults wanting to upgrade their credentials. Individuals who are not able to (due to time constraints, family obligations, work commitments) travel to school to attend a class(es)." This student also addressed the potential geographic and economic benefits of the proposed program: "It may also attract individuals living in more rural areas that might not be able to relocate to attend classes, but find a more economical alternative through online education."

B.4.5 Duplication (Ministry section 7)

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

Ontario Universities

Immediately following is a summary of the online MEd programs offered in Ontario. Full details for each program are available in an attachment to this document. (Appendix B)

1. Ontario Schools offering online MEd
a. 7 online M Ed programs available
i. Fully online (Students can do all courses and complete the program online): Queen's, UOIT, Western, OISE, Ottawa, Lakehead, Nipissing.
b. Not offering Online MEd in any form: Windsor, Brock, Trent, Laurier, York
c. Not offering MEd in any form: Waterloo, Ryerson, McMaster, Guelph, Algoma, Laurentian, Carleton

2. Duration: 12 months to 4 years

3. Full/Part time:
a. 2 part-time only
b. 2 Full or part-time
c. 3 Full or flex-time

4. Prescribed courses:
a. 2 fully prescribed
b. 1 somewhat prescribed
c. 3 no restrictions (all or almost all courses offered by the faculty are online)
d. UOIT only offers online courses for their MEd

5. Instructors: mix of full-time and sessional

6. Number of students in programs (This information was very difficult to ascertain – best estimate here):
a. Queens 300
b. UOIT 155
c. Nipissing 180 total in MEd programs
d. Western 200 ? (20 per cohort/10 cohorts ?)

e. OISE ?
f. Ottawa ?
g. Lakehead 120 total in MEd programs

7. Transfer in and out of online program, or between concentrations within program:
a. 1 fully transferable
b. 4 appear to be non-transferable
c. 2 allow transfer of up to two courses.

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

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

Although it is difficult to identify the exact structure and format of similar programs as identified above, it appears that for the most part, the existing programs are limited in their ability to facilitate students' evolving needs and to offer a full range of program concentrations and completion options. A distinct feature of the proposed program is that students will be able to exercise a large degree of flexibility with regard to fulfilling their changing educational requirements, to virtually the same degree that they would be able to if they were participating in the more traditional face-to-face MEd programs currently offered at the Faculty of Education. As long as they adhere to existing program guidelines that apply to our current graduate programs, they will be able to switch from one concentration to another, complete up to two courses in a face-to-face manner, participate on a part-time or full-time basis, and change to the face-to-face program at any point prior to the start of the associated research projects if they wish to switch from a course-based completion stream to a major research paper or thesis stream.

B.5 RESOURCES

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

B.5.1 Resources Available

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

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

Following is a list of 'currently available and actively committed' faculty members. T = Teaching, S = Supervision, A = Administrative
Professor
Larry Glassford TS
Elizabeth Starr TS
Benedicta Egbo TS
Dragana Martinovic TS
Shi Jing Xu TS
Zuochen Zhang TS
Guoqaing Zhou TS
Ken Montgomery AS

Associate Professor
Geri Salinitri AS
Andrew AllenTS

Clinton Beckford TS
Finney Cherian TS
Yvette Daniel TS
Terry Sefton TS
Darren Stanley TS
Susan Holloway TS
Christopher Greig TS
Glenn Rideout AS
Cam Cobb TS

Assistant Professor
Bonnie Stewart (Online Pedagogy and Workplace Learning, July 1, 2018)

Limited Term Appointment
Christine Vanderkooy TS

Adjunct Associate Professor
Erika Kustra S

Support Staff
Mandy Turkalj

Each of these individuals (with the exception of Support Staff) is available to teach in the MEd programs that we currently offer. There is no increase in workload with regard to supervision in the proposed program, since if students stay in the Online MEd, they will complete via the Final Project Seminar, the final 'capstone' course. Direct supervision of students is not required in this regard. As identified in the program description above (B.2.1), it is likely that some students will switch from the Online MEd program to complete either a major paper or a thesis. In those cases, supervision will be required, but that supervision will be for students who are in the face-to-face MEd, and will not be a resource for which this proposed program will be responsible.

The administrative work load will be shared by the Associate Dean, Graduate Studies and Research, and the program secretary. Since this initiative involves the presentation of an already existing program via a different modality, the admissions, registration, and related tasks will be parallel to tasks already being completed, so although the volume of that work will increase, the creation of new work routines and procedures should be minimal.

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

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

Faculty Name and Rank (alphabetical)	**Graduate Faculty member (for graduate programs only)**	**Program Affiliation: indicate faculty affiliation to the EXISTING program(s)**	**Program Affiliation: indicate faculty affiliation to the REVISED program**
Category 1*:* Tenured Professors teaching exclusively in the AAU offering the program			
Andrew Allen – Associate Professor	X	X	X
Clinton Beckford - Professor	X	X	X

Finney Cherian – Associate Professor	X	X	X
Cam Cobb – Associate Professor	X	X	X
Yvette Daniel – Associate Professor	X	X	X
Beth Daly – Associate Professor			
Benedicta Egbo - Professor	X	X	X
Larry Glassford - Professor	X	X	X
Christopher Greig – Associate Professor	X	X	X
Susan Holloway – Associate Professor	X	X	X
Dragana Martinovic - Professor	X	X	X
Ken Montgomery - Professor	X	X	X
Glenn Rideout – Associate Professor	X	X	X
Geri Salinitri – Associate Professor	X	X	X
Terry Sefton – Associate Professor	X	X	X
Darren Stanley – Associate Professor	X	X	X
Elizabeth Starr - Professor	X	X	X
Christine Vanderkooy – Associate Professor	X	X	X
Shi Jing Xu - Professor	X	X	X
Zuochen Zhang - Professor	X	X	X
Guoqaing Zhou - Professor	X	X	
Category 2: Tenure-track Professors teaching exclusively in this AAU			
Bonnie Stewart – Assistant Professor		X	X
Category 3: Ancillary Academic Staff such as Learning Specialists Positions			
…			
Category 4: Limited-term Appointments teaching exclusively in this AAU			
…			
Category 5: Tenure or tenure-track or LTA professors involved in teaching and/or supervision in other AAUs, in addition to being a member of this AAU			
Beth Daly Chris Greig	X	X	X
Category 6: Sessionals and other non-tenure track faculty			
Atinuke Adeyeme		X	X
John Cuzzocrea		X	X
Anoop Gupta		X	X
Clara Howitt		X	X
Barb Pollard		X	X
Danielle Sirek		X	X
Sirous Tabrizi		X	X
Venus Olla		X	X
Category 7: Others			
…			

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

Assess faculty expertise available and actively committed to supporting the revised program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in the revised program, and of the appropriateness of this collective faculty expertise to contribute substantially to the revised program.

Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/clinical expertise needed to:

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

As above in B.5.1.1a. The proposed program does not require qualifications or collective faculty expertise beyond what is already available to support the existing MEd programs.

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

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

It is anticipated that additional sessional faculty will be required to deliver additional sections of courses that are already being offered in the existing MEd programs. Faculty of Education (Graduate programs) has a comprehensive list of sessional faculty who are available to teach any of the courses offered in the proposed program, as required.

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

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

The proposed program will not require faculty to take on additional supervisory load, since students in this program will complete in the course-based stream, which does not require direct supervision. It is likely that some students will switch from the Online MEd program to complete either a major paper or a thesis. In those cases, supervision will be required, but that supervision will be for students who are then in the face-to-face MEd, and will not be a resource that this proposed program will be responsible to provide.

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

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

Financial assistance is normally provided to graduate students from (a) external awards and scholarship (SSHRC, OGS), (b) U of W entrance scholarships for qualifying students, (c) Graduate Assistantships, and (d) Faculty of Education and University bursaries and awards. These funds will be equally available to qualifying students of the proposed program. It is anticipated that a large number of students admitted to the proposed program will not be physically on campus, and will therefore be less likely to apply and qualify for Graduate Assistantships.

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

Provide evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities, including for example:

- *staff support, library, teaching and learning support, student support services, space, equipment, facilities, GA/TA*

The same resources will be available to students of the proposed program as are available to the existing MEd programs. The demand for such resources may be less for such students since they will all be in the course-based programs, and many will not be physically present on campus. This may minimize the requirement for space and physical facilities such as graduate lounge and study space. The demand for additional resources will be directly

related to increased enrolment in the MEd, which in this case will be based on the success of the proposed program. The proposed program simply makes the existing MEd more accessible via a different delivery modality.

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

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

No resources from other campus units will be required in relation to existing courses, with the possible exception of the Office of Open Learning (OOL). It is anticipated that support may be required from OOL in relation to assisting course instructors in the establishment of the courses they will be teaching in the proposed program in an online format. As with all resources employed in the delivery of all of the Faculty's graduate programs, it is anticipated that online resources will need to be maintained and upgraded from time to time.

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

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

This proposed program is supported by a 2011 SPF grant. There are no other anticipated new resources required.

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

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

Several opportunities exist for cost savings in relation to the inclusion of the proposed online MEd in the existing MEd program. It is anticipated that some courses that are currently offered in the existing MEd programs, and that are not fully subscribed, may have a larger number of students as a result of the online offering. That is, as such courses are offered in the proposed online format, students who would have otherwise been taking courses in the current MEd programs would now register for these courses in the online program since they would have been offered there in any case as part of the proposed program. This potentially means that in some cases, where the proposed program and the existing program are offering the same courses concurrently, and they are not fully subscribed in either program, then such courses could be offered only in the online format with a larger enrolment. This would not be an increased cost to the proposed program since the course would have been offered in any case, but would potentially be a cost saving in that this course would be available to students in the existing MEd programs as an online course and would then not need to be staffed by the regular programs.

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

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

Faculty:	It is not anticipated that there would be a requirement for new faculty. The proposed program would be offering the same courses as the existing MEd programs, but in a different format (online)
Staff:	It is not anticipated that there will be an initial requirement for new staff resources. This program will be managed through the Office of the Associate Dean, Graduate Studies and Research, Faculty of Education. Routines, policies, and procedure have been established for program management, and many of these routines will now be applied to the proposed program. It is anticipated that as the

	program becomes established, and as students exercise their options regarding switching between programs, that some additional secretarial support may be required.
GA/TAs:	As noted in B.5.1.1e, it is anticipated that a large number of students admitted to the proposed program will not be physically on campus, and will therefore be less likely to apply for and qualify for Graduate Assistantships. Consequently, no increase in required GA resources is anticipated

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

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

Library Resources and Services:	Other than as would be required by increased student enrolment in the MEd programs in general, no additional Library resource and service needs are anticipated
Teaching and Learning Support:	Other than as would be required by increased student enrolment in the MEd programs in general, no additional teaching and Learning support needs are anticipated
Student Support Services:	Other than as would be required by increased student enrolment in the MEd programs in general, no additional Student support service needs are anticipated
Space and Facilities:	Since students who are enrolled in the proposed online MED will usually be accessing their courses and faculty support remotely, no additional space and facilities needs are anticipated
Equipment (and Maintenance):	Students will be expected to provide their own computer hardware, usually in the form of a desktop or laptop computer, on which they will download the host software (Blackboard Collaborate). The Faculty has already provided appropriate computer hardware to tenure stream faculty who will be teaching courses in the proposed program. Sessional instructors who are hired to teach in the program will be expected to provide their own computer equipment. As a result, no additional equipment or maintenance will be required beyond that which might normally occur as a result of growth in the MEd program generally.

C. Program Details

C.1 Admission Requirements (QAF section 2.1.2)

Describe new or changes to

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

There are no new admissions requirements or changes as they pertain to program-specific admission requirements, selection criteria, credit transfer, arrangements for exemptions or special entry, and alternative admission requirements, if any, for admission into the program.

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

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

The admissions requirements will be the same for the proposed program since all courses in the proposed program are also in the existing MEd program and the learning outcomes for these courses and this proposed program are the same as those for the regular MEd program.

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

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

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

Identify in BOLD and STRIKETHROUGH the changes to program requirements.

Total courses: 10 (online)

Degree requirements: unchanged for current MEd.
Students who wish to remain in the proposed program to completion will be in the Course Based completion stream. All student in this stream are required to complete 10 courses. As in the already existing MEd program, students will be required to take Research in Education (05-80-527), Statistics in Education (05-80-510) or Qualitative Methods in Educational Research (05-80-530), and Theories of Educational Administration (05-80-529) or Fundamentals of Curriculum Theory and Development (05-80-524), as determined by which concentration (Educational Administration - EA, Curriculum Studies - CS) students choose to pursue. All students must complete their program by taking the Final Project Seminar (05-80-795). Students may choose from designated lists of optional courses to complete the requirement of 10 courses.

Wording in bold will be added to the Graduate calendar:
1) Candidates for the Master of Education degree will pursue studies in the following areas of concentration:
(a) Curriculum Studies (CS);
(b) Educational Administration (EA);
(c) Second Language Acquisition, Culture, and Society (SLACS).

An online MEd is available for candidates wishing to pursue the course-based Curriculum Studies or Education Administration Concentrations.
[…]

Candidates in the course-based stream are required to successfully complete:

(a) three compulsory courses: […].
(b) one […];
(c) For CS and EA candidates six additional courses, at least four of which must be chosen from the courses listed for the area of concentration. […]

An online MEd is available for candidates wishing to pursue the course-based Curriculum Studies or Education Administration Concentrations. Candidates in the online MEd may switch between these two concentrations,

complete up to two courses in a face-to-face manner, participate on a part-time or full-time basis, and change to the face-to-face program at any point prior to the start of the associated research projects if they wish to switch from the course-based completion stream to a major research paper or thesis stream.

Courses used to calculate the major average are:
All courses are included in the calculation of degree averages.

Description of thesis option (if applicable):
Student who wish to pursue the Thesis completion stream may do so by ceasing to be an 'Online Student'. This means that they, in the same manner followed by other Thesis students in the MEd degree program, would reach an agreement with a Graduate Faculty Status faculty member with regard to supervision of the student's thesis. If students request to make this change at the completion of their six required courses, then the next course for which they must register will be the Thesis Proposal (05-80-794). At this point, students continue their MEd outside the parameters of the proposed program. In some cases, students may have reached an agreement with a potential Thesis Supervisor prior to finishing their required six courses. In such cases, students may register for the Thesis Proposal concurrent with no more than one other course, as long as that course in not a mandatory course, and that it is the last of the required six courses. No formal change documents are required when a student moves to the Thesis completion stream, since the proposed program is housed within the already existing MEd structure at the Faculty of Education

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]***:**

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

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

C.3.1.1 Normal Duration for Completion

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

N/A

C.3.1.2 Program Research Requirements

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

N/A

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

Where fields are contemplated, provide the following information:
The master's program comprises the following fields: ...[list, as applicable]

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

N/A

C.3.2 For All Program Proposals

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

Minimum average requirements for continuation in the program.
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify new or changes to standing required for continuation in the experiential learning option or co-op option of the revised program, where applicable.

In addition to meeting the course requirements described in C.2 (credit is granted for courses in which students achieve a grade of 70% or higher), students must maintain a program average of 70% for continuation in the program.

C.3.2.2 New or Changes to Standing Required for Graduation

Minimum average requirement to graduate in the program.
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify new or changes to standing required for graduation in the experiential learning option or co-op option of the revised program, where applicable.

The minimum average requirement to graduate in the program is 70%.

C.3.2.3 New or Changes to Suggested Program Sequencing

Provide suggested program sequencing for each year of the revised program, ensuring that all pre-requisites are met in the sequencing.

Where applicable, provide work/study/placement sequencing for each year of the experiential learning/co-op version of the revised program. Please ensure that all pre-requisites are met in the sequencing.

For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

Suggested program sequencing for the proposed program would be similar to that for each of the concentrations in the International cohort MEd and consistent with the pathway that course-based students would follow in the regular MEd. Sample sequencing follows for each concentration:

Curriculum Studies Concentration

Semester 1

80-515. Comparative and International Education
80-551. Information and Communication Technologies
80-524. Curriculum Theory and Development

Semester 2

80-527. Research in Education
80-565. Sociological Aspects of Education
80-530. Qualitative Methods in Educational Research

Semester 3
80-535. Organizational Behavior in Education Institutions
80-536. Introduction to Educational Policy Analysis
80-556. Approaches to Literacy Development

Semester 4
80-795. Final Project Seminar

Educational Administration Concentration
Semester 1
80-515. Comparative and International Education
80-551. Information and Communication Technologies
80-529. Theories of Educational Administration

Semester 2
80-527. Research in Education
80-565. Sociological Aspects of Education
80-510. Statistics in Education

Semester 3
80-535. Organizational Behavior in Education Institutions
80-536. Introduction to Educational Policy Analysis
80-556. Approaches to Literacy Development

Semester 4
80-795. Final Project Seminar

C.4 NEW OR CHANGES TO LEARNING OUTCOMES (Degree Level Expectations)(QAF section 2.1.1, 2.1.3, and 2.1.6)

COMPLETE THIS TABLE FOR GRADUATE 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.*

Note: There are no new or changed learning outcomes for the proposed program. The proposed program is simply a new delivery modality for two of the three Concentrations of the existing program, and as such, the learning outcomes (Degree level expectations) are the same within the new delivery modality. Bearing this in mind, the Program Learning Outcomes (Degree Level Expectations) for each of the two MEd concentrations that will be part of the proposed program are listed here.

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**OCGS-approved Graduate Degree Level Expectations**
A. CURRICULUM STUDIES (CS) CONCENTRATION - appraise, design and judge structures of curricula - identify, describe, formulate and interrogate approaches to curriculum design EDUCATIONAL ADMINISTRATION (EA) CONCENTRATION - identify, describe, judge and analyze organizational structures and leadership styles - explain and examine the role of an administrator	A. 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
B. EA and CS - choose and apply appropriate research methodologies - recognize and use appropriate methods in the evaluation of research problems describe sampling techniques, create and use appropriate survey instruments, collect data, and analyze data using appropriate statistical tools	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
C. EA and CS - recognize assumptions or presuppositions in any given source of information - draw together disparate claims to arrive at well-reasoned and well-supported inferences - interpret, analyze, and evaluate evidence, statements, and questions - construct well-supported, clearly articulated, and sustained arguments - apply higher order thinking skills	C. critical thinking and problem-solving skills	1. Depth and Breadth of Knowledge 2. Research and Scholarship 3. Level of Application of Knowledge 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge

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Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* <u>At the end of this program, the successful student will know and be able to:</u>	**Characteristics of a University of Windsor Graduate** <u>A UWindsor graduate will have the ability to demonstrate:</u>	**OCGS-approved Graduate Degree Level Expectations**
D. EA and CS - explore current research (for example, knowledge of mathematics for teaching, knowing the possible range of student responses to problems, error analysis) - use appropriate print and information and communication technology to support reading skills	D. literacy and numeracy skills	2. Research and Scholarship 5. Level of Communication Skills
E. EA and CS - express with collegiality respect for others and their ideas and beliefs in ways that contribute to the learning of all	E. responsible behaviour to self, others and society	4. Professional Capacity/Autonomy 6. Awareness of Limits
F. EA and CS - recognize and respect diverse perspectives different from one's own - examine one's own biases in light of increasingly more diverse cultural peoples - present work, orally and in written form, that is appropriate to the field that includes a diverse audience SLACS - Utilize techniques of enhancing one's interpersonal and intercultural communications skills in research and pedagogical practice.	F. interpersonal and communications skills	5. Level of Communication Skills
G. EA and CS - apply strategies for effective group work demonstrate leadership skills as evidenced by cooperating, listening, and participating in groups	G. teamwork, and personal and group leadership skills	4. Professional Capacity/Autonomy 5. Level of Communication Skills
H. EA and CS - discuss, analyze, and formulate new ideas	H. creativity and aesthetic appreciation	2. Research and Scholarship 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
I. EA	I. the ability and desire for continuous learning	4. Professional Capacity/autonomy

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**OCGS-approved Graduate Degree Level Expectations**
- participate in and to contribute to group discussions and on-going self-reflections		

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

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

The only change for the proposed program is that the specified learning outcomes are now likely to be met by a larger and more diverse group of students, since the proposed program uses a different (online) modality to make the MEd program more accessible to students who may not otherwise find the current face-to-face delivery modality convenient in relation to their current needs and availability.

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

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

N/A

C.4.3 Mode of Delivery (QAF section 2.1.5)

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

There are no new or revised program learning outcomes. The proposed program is, in fact, a new proposed mode of delivery for an existing program. As such, through the use of the University of Windsor's Blackboard Collaborate learning management system, each of the program learning outcomes will be met.

C.5 Student Workload

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

Expected Workload per 3.0 Course Credit/Week	**Average Time *per week* the Student is Expected to Devote to Each Component Over the Course of the Program**
Lectures	Three hours. 'Lectures', including all in-class engagement, may be synchronous, asynchronous or both but should not exceed three hours
Tutorials	0-1 hours
Practical experience	0 hours
Service or experiential learning	0 hours
Independent study	5 hours

Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.)	3 hours
Studying for tests/examinations	1 hour
Other: *[specify]*	
Compare the student workload for this program with other similar programs in the AAU: There is no difference between the workload for students in the proposed program and the workload for those in the other MEd programs	

D. MONITORING AND EVALUATION (QAF section 2.1.6)

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

There are no new or revised intended learning outcomes and degree level expectations. The methods used in assessing student achievement in relation to the existing MEd programs will be the same ones used for the proposed program. In this regard, it is important that the both instructors and students become familiar with the full range of capacities for demonstrations of learning, so that assessment of these demonstrations are equally valued and available within the proposed program as they are within the existing programs.

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

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

There are no new or revised learning outcomes and degree level expectations.

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

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

E.1 Experiential Learning Component and Nature of Experience

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

N/A

E.2 Knowledge and Skills Brought to the Workplace

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

N/A

E.3 Evidence of Availability of Placements

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

Provide a summary of the types of positions that would be suitable at each level of work-term.

How will these placements/opportunities be developed?

[NB: For co-op programs, the majority of Ontario placements should qualify for the Co-op Education tax credit. See Policy on Co-op Programs for more details.]

N/A

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

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

N/A

E.5 Fees Associated with Experiential Learning Component

Provide information on the fees associated with the new or revised experiential learning component, if applicable.

NB: all proposed fees must be approved as part of the University's operating budget, via the Ancillary Fee Committee.

N/A

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

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

N/A

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

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

N/A

University of Windsor
Senate

5.5.6: **Internship Option for Chemistry and Biochemistry Programs - Major Program Change**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the Internship Option for Chemistry and Biochemistry undergraduate programs be approved.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed program has been approved by the Department of Chemistry and Biochemistry, the Faculty of Science Coordinating Council, the Provost and the Program Development Committee.
- The Office of Experiential Learning has been consulted and is in support of this program.
- *See attached.*

PROGRAM DEVELOPMENT COMMITTEE
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A. Basic Program Information

Faculty(ies)	Faculty of Science
Department(s)/School(s)	Chemistry and Biochemistry
Name of Program as it Will Appear on the Diploma (*e.g.*, Bachelor of Arts Honours Psychology with thesis)	"with Internship" will accompany the degree name on the parchment. E.g, Bachelor of Science Honours Chemistry with Internship, Bachelor of Science Honours Biochemistry with Internship, Bachelor of Science Honours Chemistry and Physics with Internship, *etc*.
Proposed Year of Offering* [Fall, Winter, Spring]: **(subject to timely and clear submission)*	Fall 2018
Mode of Delivery:	External internship and work placements
Planned steady-state Student Enrolment (per section B.4.2)	35
Normal Duration for Completion:	5 years
Will the program run on a cost-recovery basis?	No

B. Major Program Changes - Overall Plan

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

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

The Honours program with Internship is intended to give students an opportunity to get hands-on experience in a real work environment. In collaboration with the Co-operative Education & Workplace Partnerships office, we will provide students with Chemistry and Biochemistry related work placements for 8, 12 or 16 months. In keeping with the priorities of the University of Windsor strategic plan we have designed this stream to ensure an exceptional and supportive undergraduate experience that emphasizes independent learning, interdisciplinary opportunities, flexibility in degree completion pathways, and successful integration to the job market after graduation.

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

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

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

The proposed curriculum introduces a flexible work placement of 8, 12 or 16 months, depending on the company's requirements. The placement year will be integrated between the third and fourth year of the Honours degree program. Therefore, it allows students to complete their first three years of the degree while developing soft skills that are crucial for being successful in the job market. Additionally, the faculty in Chemistry and Biochemistry will work closely with the Co-op & Workplace Partnerships team to vet potential work placements to ensure the work integrated learning opportunity is relevant and meaningful to the field.

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

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

Internship students will participate in a mandatory job-readiness program (non-credit) offered by the Office of Co-operative Education and Workplace Partnerships. "*Transform –Becoming a Professional with Purpose*" is a new modular job readiness program that prepares students for their work terms while building soft skills and professional development during their work placement(s).

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

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

Adding "with Internship" to the degree parchment will clearly put the emphasis on the work-integrated learning component and differentiate the stream with the other current degree possibilities in the Department of Chemistry and Biochemistry.

B.4 DEMAND FOR THE MODIFIED PROGRAM

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

Describe the tools and methodology used to conduct the market assessment in support of the proposed program revisions.

Provide Quantitative evidence of student and market demand for the revisions to the program, both within and outside the local region (e.g., responses/statistics from surveys, etc.).

Based on our experience with student requests for specific types of programs, the student demand for co-op and internship programs has been increasing over the past decade, primarily relating to student objectives of getting hands-on industrial experience and be more competitive for the job market upon graduation. We have seen a doubling of student registration in biology and Biochemistry programs over the last decade, which is a significant indication in demand in these areas. Moreover, we've seen many new start-up companies appear in Canada with expertise in biochemical and chemical sciences. Having a complete year of placement in industry will, undoubtedly, provide our students with a competitive edge after graduation and raise the profile of our programs and institution.

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

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

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

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

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

Provide details on projected enrolments for the revised program in the following tables.

For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning component.

Projected enrolment levels for the first five years of operation of the revised program. *(If the program is in operation, use actual and projected data.)*	First Year of Operation	Second Year of Operation	Third Year of Operation	Fourth Year of Operation	Fifth Year of Operation (Steady-state enrolment overall)
In the regular program (non-co-op)	XX	XX	XX	XX	XX
In the co-op/experiential learning stream (if applicable)	10	15	20	25	35
For co-op options: projected number of international students enrolled in the co-op stream	0	0	1	1	2

Annual projected student intake into the first year of the revised program: *(this may differ from the "first year of operation" projected enrolments which could include anticipated enrolments from students transferring into the second, third, or fourth year of the program)*	*10*
Annual projected student intake into the first year of the co-op/experiential learning version of the revised program: *(this may differ from the "first year of operation" projected enrolments which could include anticipated enrolments from students transferring into the second, third, or fourth year of the program)*	*10*

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

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

N/A

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

Describe the tools and methodology used to assess societal need.
Elaborate on the
1) dimensions of (e.g., socio-cultural, economic, scientific, or technological),
2) geographic scope of (e.g., local, regional, provincial, or national), and
3) anticipated duration of, and trends in,
societal need for graduates of the modified program
Provide evidence that the proposed program revisions respond to societal need for graduates of the revised program and/or changes in the field, including sources of data and expert input or feedback collected to support this change in direction.

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

Well-designed work-integrated learning programs benefits students, the university, and the host institution/employer, and the community. Students benefit by gaining practical experience, skill/professional development, networking, career exploration, enhanced transition into the workplace, future career success, personal

growth, and a greater awareness of self. Placement opportunities provide students with a unique learning environment to reinforce theory and concepts learnt within a traditional academic setting.

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

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

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

B.4.5 Duplication (Ministry section 7)

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

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

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

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

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

A distinguishable feature of this new internship compared to other more established co-op and/or internship programs in Ontario is that students will have three years of study completed prior to commencing their internship, quickly adding more value to the employer in the way of a technical skill set and maturity; whereas, in other programs students typically start out in a junior placement in the Summer of their second year. The extended length of the placements (8 to 16 months) is advantageous comparatively as well so that the employer gets a strong return on their investment.

B.5 RESOURCES

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

B.5.1 Resources Available

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

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

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

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

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

Faculty Name and Rank (alphabetical)	Graduate Faculty member (for graduate programs only)	Program Affiliation: indicate faculty affiliation to the EXISTING program(s)	Program Affiliation: indicate faculty affiliation to the REVISED program
Category 1*:* Tenured Professors teaching exclusively in the AAU offering the program			
Ananvoranich, Sirinart, Associate Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Carmichael, Tricia Breen, Full Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Dutton, Philip, Associate Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Eichhorn, Holger, Associate Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Gauld, James, Associate Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Green, James, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Johnson, Samuel, Associate Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Lee, Lana, Associate Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Loeb, Stephen, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
MacDonald, Charles, Professor (Head, Chemistry & Biochemistry)		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*

Marquardt, Drew, Assistant Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Mutus, Bulent, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Pandey, Siyaram, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Rawson, Jeremy, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Rondeau-Gagné, Simon, Assistant Professor		*Chemistry and Biochemistry*	*Chemistry and Biochemistry*
Schurko, Robert, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Taylor, Keith, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Trant, John, Assistant Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Vacratsis, Panayotis, Associate Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*
Wang, Jichang, Professor		*Chemistry & Biochemistry*	*Chemistry & Biochemistry*

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

Assess faculty expertise available and actively committed to supporting the revised program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in the revised program, and of the appropriateness of this collective faculty expertise to contribute substantially to the revised program.

Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/clinical expertise needed to:

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

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

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

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

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

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

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

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

N/A

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

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

N/A

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

Provide evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities, including for example:

- *staff support, library, teaching and learning support, student support services, space, equipment, facilities, GA/TA*

Faculty and staff resources are already committed to the delivery of the current honours programs. This program with internship will require resources that will be provided by the Co-operative Education & Workplace Partnerships office. The current faculty in Chemistry and Biochemistry will contribute to the program by serving as coordinators/contact resources.

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

Describe the reliance of the proposed program revisions on existing resources from <u>other</u> campus units, including for example:

- *existing courses, equipment or facilities outside the proposer's control,external resources requiring maintenance or upgrading using external resources. Provide relevant details.*

N/A

<u>B.5.1.3 Anticipated New Resources</u> (QAF sections 2.1.7, 2.1.8 and 2.1.9; Ministry section 4)

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

N/A

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

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

N/A

<u>B.5.1.5 Additional Resources Required – Resources Requested</u> (QAF section 2.1.7 and 2.1.9)

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

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

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

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

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

C. Program Details

C.1 Admission Requirements (QAF section 2.1.2)

Describe new or changes to

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

Student will be invited to apply for the internship stream at the beginning of Year 3. They will be required to apply online and, in some cases, may be interviewed as part of admission. Minimum admission average is 70% for major average, 65% for cumulative average and not more than one course below 50% after completion of four terms of study. Students below the minimum may be considered if they have extensive relevant work experience and/or a strong personal interview on a case-by-case basis.

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

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

Admission requirements to the Chemistry and Biochemistry programs are unchanged. See C.1

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

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

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

Identify in BOLD and STRIKETHROUGH the changes to program requirements.

Total courses: 40 + 2-4 internship courses

Degree requirements: 2-4 internship courses** over and above 40 course degrees in Honours Chemistry, Honours Biochemistry, or Honours Chemistry and Physics

** 59-398 Internship I, 59-498 Internship II (2 – 4 placements; min. Fall & Winter term). (includes Transform modules (job readiness and professional development (non-credit));

Courses used to calculate the major average are: unchanged.

Description of thesis option (if applicable): N/A

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]***:**

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

Withdrawal from the Co-op/Internship program will be granted on an exceptional basis only, as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate Co-op/Internship program without further Co-op/Internship fee payment implications is by the 1st Friday of classes after their first Co-op/Internship work term. Students who withdraw from their internship at any other time will be liable for paying the Co-op/Internship fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted an internship employment offer (either by ranking a position in the main round of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the Co-op/Internship program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the Co-op/Internship program and will result in a failing grade on his/her transcript for that work term (barring exceptional circumstances such as, unexpected medical issue).

Chemistry and Biochemistry internship students will be registered in a work term course for each four-month term of their placement. This course will be evaluated on a pass-fail basis. In order to receive a passing grade, students must:

- Submit learning objectives at the beginning of each of the 4-month work terms (at least 2 work terms are required for the internship).
- Receive a satisfactory mid work term assessment from supervisor
- Submit and receive a passing grade on a work term report (guidelines prepared by faculty and report evaluated by faculty)
- Complete and receive a satisfactory post work term presentation (if applicable)
- Receive a satisfactory final work term performance evaluation by employer

Explain how credit will be awarded for the experiential learning component (length of component, credit weighting, etc.):
Each work term will appear on the student's transcript as a pass/fail. Work terms can be repeated for credit up-to 2 times (i.e., Fall & Winter). Subsequent terms will be for no credit.

Transform Modules (Job-readiness & Professional Development) are requirements incorporated into the internship component of the program.

Guidelines for experiential learning/co-op work term reports:
A reflective report at the end of each of the 4-month terms will be requested from students during their placement year.

General length of experiential learning/co-op work term:
Minimum of two four-month work terms required to qualify for 'with internship' designation to a maximum of four four-month work terms (totaling 16 months).

Each work term has to be a minimum of 12 weeks at 35 hours a week (420 hours) or more ideally 16 weeks at 35 to 40 hrs/week.

Is the completion of the experiential learning/co-op component a requirement of the program?
Yes. However, students who are unable to complete the mandatory work-integrated learning placements may return to the general degree program (without internship).

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

C.3.1.1 Normal Duration for Completion

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

N/A

C.3.1.2 Program Research Requirements

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

N/A

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

Where fields are contemplated, provide the following information:
The master's program comprises the following fields: ...[list, as applicable]
The PhD program comprises the following fields: ...[list, as applicable]

N/A

C.3.2 For All Program Proposals

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

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

70% for major average, 65% for cumulative average, and not more than one course below 50% after completion of four terms of study.

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

C.3.2.2 New or Changes to Standing Required for Graduation

Minimum average requirement to graduate in the program.
Must conform to the regulations for standing required for continuation in the program described in the undergraduate and graduate web calendars [www.uwindsor.ca/calendars].

Specify new or changes to standing required for graduation in the experiential learning option or co-op option of the revised program, where applicable.

70% for major average, 65% for cumulative average, and not more than one course below 50% after completion of four terms of study.

C.3.2.3 New or Changes to Suggested Program Sequencing

Provide suggested program sequencing for each year of the revised program, ensuring that all pre-requisites are met in the sequencing.

Where applicable, provide work/study/placement sequencing for each year of the experiential learning/co-op version of the revised program. Please ensure that all pre-requisites are met in the sequencing.

For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

8-month* internship (only allowed from Fall term to end of Winter term)

Year of Study	Fall Semester	Winter Semester	Summer Semester
Year 1	Study	Study	Off
Year 2	Study	Study	Off
Year 3	Study *(Admissions/* Transform *Module 1 Job Readiness Program)*	Study (Transform *Module 2 Job Readiness / Compete for Jobs)*	Off
Gap Year	***59-398*** Internship I *Placement Transform Module 3*	***59-398*** Internship I *Placement Transform Module* 4	Off
Year 4	Study *(Transform Module 5 – Reflection (report due)*	Study	Done

**8 month placements are available to Chemistry and Biochemistry students if the placement runs from Fall to the end of Winter*

12-month internship

Year of Study	Fall Semester	Winter Semester	Summer Semester
Year 1	Study	Study	Off
Year 2	Study	Study	Off
Year 3	Study *(Admissions/ Transform Module 1 Job Readiness Program)*	Study (Transform *Module 2 Job Readiness / Compete for Jobs)*	***03-03-398*** Placement Transform Module 3 or Off
Gap Year	***59-398*** Internship I *Transform Module 4*	***59-498*** Internship II *Transform Module 5*	

Year 4	Study *Transform Module 6 – Reflection* *(report due)*	Study	Done

16-month internship

Year of Study	Fall Semester	Winter Semester	Summer Semester
Year 1	Study	Study	Off
Year 2	Study	Study	Off
Year 3	Study *(Admissions/ Transform Module 1 Job Readiness Program)*	Study (Transform *Module 2 Job Readiness / Compete for Jobs)*	***59-398*** Internship I Placement Transform Module 3 (PD)
Gap Year	***59-398*** Internship I *Transform Module 4*	***59-498*** Internship II *Transform Module 5*	***59-498*** Internship II *Transform Module 6*
Year 4	Study *(Reflection) (report due)*	Study	Done

03-398 – Students will be enrolled in this course while on work term and will receive an IP from term to term in their first eight months that they are actively taking part in the internship
03-498 – Students will be enrolled in this course while on their final one or two work terms and will receive an IP from term to term where they are actively taking part in the internship

C.4 NEW OR CHANGES TO LEARNING OUTCOMES (Degree Level Expectations)(QAF section 2.1.1, 2.1.3, and 2.1.6)

COMPLETE THIS TABLE FOR UNDERGRADUATE PROGRAMS

In the following table, provide the specific learning outcomes (degree level expectations) that constitute the overall goals of the Combined program or Concurrent offering (i.e., the intended skills and qualities of graduates of this program). Link each learning outcome to the Characteristics of a University of Windsor Graduate" by listing them in the appropriate rows.

A learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate. All University of Windsor programs should produce graduates able to demonstrate each of the nine characteristics. Program design must demonstrate how students acquire all these characteristics. All individual courses should contribute to the development of one or more of these traits: a program in its entirety must demonstrate how students meet all of these outcomes through the complete program of coursework.

Proposers are strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes (degree level expectations).

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

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

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In addition to the learning outcomes for Honours Chemistry, Honours Biochemistry, Honours Chemistry and Physics, successful students in the Internship Option will attain the following learning outcomes.

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
A. - Apply theoretical principles and concepts to solve chemical and biochemical problems (also relevant to C)	A. the acquisition, application and integration of knowledge	1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge
B. - Collect, read, analyze, synthesize and evaluate relevant scientific literature to address a specific industry-relevant problem -Demonstrate workplace professional and employment readiness knowledge and skills (also relevant to F and G)	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 Knowledge
C. - Formulate and test hypotheses. - Critically analyze an industry-relevant topic and provide a justification for this analysis.	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
D. Outcomes related to communication or data analysis (B, E and I) are directly applicable to D	D. literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
E. - Explain basic Biochemistry and chemistry technical methodology, use of common (bio)chemical lab equipment, and safe laboratory practice - Follow the rules of academic integrity in reporting and handling of data. - Describe workplace culture and identify factors that facilitate productive research -Contribute productively to group dynamics	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
F. - Effectively reflect on industry experience to identify areas of personal opportunity and growth in the (bio)chemical industry	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**COU-approved Undergraduate Degree Level Expectations**
G. - Contribute constructively and cooperatively to team work activities	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
H. - Effectively present data graphically or visually and apply to relevant methodologies and hypotheses	H. creativity and aesthetic appreciation	2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity
I. Articulate academic and career goals as well as career strengths, weaknesses and preferences.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

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

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

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

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

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

The experiential piece of the Chemistry and Biochemistry degree programs will help reinforce learning occurring in the classroom by create opportunities for students to be exposed to the practical applications of theory and concepts learned. During and after a work term, students are required to reflect on their experience and, when returning to their studies in fourth year, will have a set of experiences and practical concepts they can integrate back into their classroom learning.

C.4.3 Mode of Delivery (QAF section 2.1.5)

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

Placements – Off-campus

C.5 Student Workload

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

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

D. MONITORING AND EVALUATION (QAF section 2.1.6)

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

Work placements are monitored by the Co-op & Workplace Partnerships office which facilitates students engaging in the placement, reflecting on the experience, identification of new learning and development, and active experimentation of new skills and abilities. Final reflective assessments are evaluated for student achievement of learning outcomes by assigned faculty from the Department of Chemistry and Biochemistry.

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

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

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

Students must:

- Submit learning objectives at the beginning of each of the 4-month work terms (at least 2 work terms are required for the internship).
- Receive a satisfactory mid work term assessment from supervisor
- Submit and receive a passing grade on a work term report (guidelines prepared by faculty and report evaluated by faculty)
- Complete and receive a satisfactory post work term presentation (if applicable)
- Receive a satisfactory final work term performance evaluation by employer

PROGRAM DEVELOPMENT COMMITTEE
MAJOR PROGRAM CHANGES
FORM B

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

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

E.1 Experiential Learning Component and Nature of Experience

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

Internship:

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

E.2 Knowledge and Skills Brought to the Workplace

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

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

E.3 Evidence of Availability of Placements

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

Provide a summary of the types of positions that would be suitable at each level of work-term.

How will these placements/opportunities be developed?

[NB: For co-op programs, the majority of Ontario placements should qualify for the Co-op Education tax credit. See Policy on Co-op Programs for more details.]

Preliminary opportunity development has been undertaken by the Co-operative Education and Workplace Partnerships office, including labour market review, identification of existing employers, associations, and funding streams (*i.e.,* SWIP, Mitacs, *etc*.).

The employer engagement and relationship management teams strongly believe that a suitable number of high quality placements can be developed to support the program. The Co-operative Education and Workplace Partnerships office will have responsibility for placement opportunity development with support from the Department of Chemistry and Biochemistry.

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

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

Placements are supervised by both the University (via Co-operative Education and Workplace Partnerships) and the Employer.

In the workplace, supervision is provided by an identified manager, supervisor, or peer who is responsible for:

- assisting the intern in establishing learning objectives;
- advising, mentoring, instructing, guiding, and refering the intern to other appropriate resources;
- confirming the intern's understanding and ability to use the knowledge and skills;
- reinforcing learning through recognition and feedback;
- periodically evaluating the intern.

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

E.5 Fees Associated with Experiential Learning Component

Provide information on the fees associated with the new or revised experiential learning component, if applicable.

NB: all proposed fees must be approved as part of the University's operating budget, via the Ancillary Fee Committee.

Students will be assessed internship fees upon acceptance and start of Transform (job readiness and professional development) programming. Internship fees continue to be assessed in all terms where the student is registered in either Transform or an internship placement.

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

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

Before a determination can be made regarding the feasibility of a co-op program, there must be a clear indication of support for the program from the AAU. Support implies that the area will provide ongoing departmental funding to establish a co-op faculty representative who will liaise with the Centre for Career Education in the operation of the program and that the area will ensure that an adequate number of faculty members in the AAU or program contribute to the co-operative education program by grading work-term reports, attending and evaluating work-term presentations, assisting in the job development process, establishing a departmental co-op committee as appropriate,

etc. (see Policy on Co-op Programs, Summary of AAU/Faculty Member Involvement in a Co-operative Education Program, for more on the role of the AAU and faculty members). This commitment must be agreed to by the AAU Council at a meeting at which the development or modification of a co-op program was considered and approved.

*Signed agreement by the AAU Head, acting as chair of the AAU Council, that AAU members support the development of the co-op program.**

Signature of AAU Head*:_____Charles Macdonald_____
[Electronic approval by way of UWin email shall also constitute a signature.]

Signature of Executive Director of the Co-op, Career and Employment Services:___Chris Busch_____
[Electronic approval by way of UWin email shall also constitute a signature.]

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

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

Does the proposal:

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

Will the program:

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

University of Windsor
Senate

*5.5.6.1 **Chemistry and Biochemistry – New Course Proposals**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course additions be made:*
59-398. Internship Work Term I
59-498. Internship Work Term II

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The proposal has been approved by the Department of Chemistry and Biochemistry, the Faculty of Science Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.6.1.

University of Windsor
Senate

*5.5.7a: **Bachelor of Commerce (Honours Business Administration and Mathematics with/without thesis) (Specialization in Finance) (Specialization in Supply Chain and Business Analytics)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the Bachelor of Commerce (Honours Business Administration and Mathematics) with or without thesis, Bachelor of Commerce (Honours Business Administration and Mathematics) specialization in Finance with or without thesis, and Bachelor of Commerce (Honours Business Administration and Mathematics) with specialization in Supply Chain and Business Analytics with or without thesis be approved.*

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The proposed changes have been approved the Odette School of Business Council, the Department of Mathematics and Statistics Council, and the Faculty of Science Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.7.

University of Windsor
Senate

*5.5.7b: **Electrical and Computer Engineering – Minor Program Change**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the degree requirements for BASc Electrical Engineering be changed according to the program/course change forms.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed changes have been approved the Faculty of Engineering Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.8.

University of Windsor
Senate

*5.5.7c: **Electrical and Computer Engineering – New Course Proposal**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course additions be made:*
88-220. Circuit Analysis

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The proposal has been approved by the Faculty of Engineering Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.8.1.

University of Windsor
Senate

*5.5.7d: **Computer Science (Combined Honours Programs) – Minor Program Changes**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the degree requirements for the Computer Science Honours Combined programs be changed according to the program/course change forms.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed changes have been approved the Departmental Council, the Faculty of Science Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.9.

University of Windsor
Senate

*5.5.7e**:** **Physics (Combined Honours Programs) – Minor Program Changes**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the degree requirements for the Physics Honours Combined programs be changed according to the program/course change forms.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed changes have been approved by the Department of Physics Council, the Faculty of Science Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5. 10.

University of Windsor
Senate

*5.5.7f: **Master of Arts in Philosophy – Minor Program Changes**

Item For: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the admission and degree requirements for Master of Arts in Philosophy be changed according to the program/course change forms.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed changes have been approved the Department of Philosophy, the FAHSS Coordinating Council, the Faculty of Graduate Studies Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.11.

University of Windsor
Senate

*5.5.7g: **Master of Engineering Management – Minor Program Changes**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the degree requirements for Master of Engineering Management be changed according to the program/course change forms.*

**Subject to approval of the expenditures required.*

Rationale/Approvals

- The proposed changes have been approved the Odette School of Business Council, the Faculty of Engineering Coordinating Council, the Faculty of Graduate Studies Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.12 .

University of Windsor
Senate

*5.5.7h: **Science – New Course Proposal**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course addition be made:*
03-375/SCI 3750. Cancer Undergraduate Research Education (CURE)

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The proposal has been approved by the Faculty of Science Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.13.

University of Windsor
Senate

*5.5.7i: **Argumentation Studies – New Course Proposal**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course addition be made:*
79-798. Dissertation Research

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The proposal has been approved by the Faculty of Arts, Humanites and Social Sciences Coordinating Council, the Faculty of Graduate Studies Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.14.

University of Windsor
Senate

*5.5.7j: **Languages, Literatures and Culture – New Course Proposals**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course additions be made:*
11-350. Ancient Impacts on the Modern World
21-112/FREN-1120. Intensive French for Beginners
21-113/REN-1130. Intensive Preparatory French: Intermediate Level

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The proposal has been approved by the Department of Languages, Literatures and Cultures Council, the Faculty of Arts, Humanities and Social Sciences Coordinating Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.15.

University of Windsor
Senate

*5.5.7k: **Mathematics and Statistics (Graduate) – New Course Proposals**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course additions be made:*
62-522. Introduction to Field Theory
62-582. Portfolio Optimization

**Subject to approval of the expenditures required.*

Rationale/Approvals:

- The proposal has been approved by the Department of Mathematics and Statistics Council, the Faculty of Science Coordinating Council, the Faculty of Graduate Studies Council and the Program Development Committee.
- Supporting documentation on the proposed changes can be accessed by contacting the University Secretariat at ext. 3317, or through the May 15, 2018 Combined Program Development Committee PDF file posted on the PDC website. To access this particular item go to 5.16.

University of Windsor
Senate

*5.5.8a: **Master of Human Kinetics (Applied Human Performance) – Program Learning Outcomes**

Item for: **Information**

Forwarded by: **Program Development Committee**

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**OCGS-approved Graduate Degree Level Expectations**
A. identify, evaluate and apply relevant concepts, theories, and methodologies to Applied Human Performance issues	A. 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
B. synthesize academic research findings to identify gaps in relevant literature design and conduct original, theoretically-sound research to address problems facing industry practitioners apply appropriate lab- or community-based research methods to collect data and analyze results	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
C. evaluate the implications and impact of relevant research findings on the well-being of individuals and communities report and discuss the limitations associated with existing and proposed research	C. critical thinking and problem-solving skills	1. Depth and Breadth of Knowledge 2. Research and Scholarship 3. Level of Application of Knowledge 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
D. select and apply appropriate statistical analysis techniques as required by the research design develop or assist in the development and presentation of scholarly research	D. literacy and numeracy skills	2. Research and Scholarship 5. Level of Communication Skills

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* <u>At the end of this program, the successful student will know and be able to:</u>	**Characteristics of a University of Windsor Graduate** <u>A UWindsor graduate will have the ability to demonstrate:</u>	**OCGS-approved Graduate Degree Level Expectations**
E. identify and adhere to the University of Windsor REB, TCPS2 and academic integrity standards when conducting scholarly, professional and/or research work	E. responsible behaviour to self, others and society	4. Professional Capacity/Autonomy 6. Awareness of Limits of Knowledge
F. communicate research results clearly and accurately to appropriate stakeholders in both oral and written formats	F. interpersonal and communications skills	5. Level of Communication Skills
G. work successfully and respectfully with peers, university personnel and community organizations, both independently and as a team member or leader	G. teamwork, and personal and group leadership skills	4. Professional Capacity/Autonomy 5. Level of Communication Skills
H. devise and/or apply innovative solutions to complex Applied Human Performance issues in the lab or community	H. creativity and aesthetic appreciation	2. Research and Scholarship 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
I. identify and interpret relevant academic and non-academic sources to remain current with research and popular trends in Applied Human Performance	I. the ability and desire for continuous learning	4. Professional Capacity/autonomy

University of Windsor
Senate

*5.5.8b: **Master of Human Kinetics – (Sport Management) – Program Learning Outcomes**

Item for: **Information**

Forwarded by: **Program Development Committee**

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**OCGS-approved Graduate Degree Level Expectations**
A. identify, evaluate and apply relevant concepts, theories, and methodologies to Sport Management issues	A. 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
B. synthesize academic research findings to identify gaps in relevant literature design and conduct original, theoretically-sound research to address problems facing industry practitioners apply appropriate field- or community-based research methods to collect data and analyze results	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
C. evaluate the implications and impact of relevant research findings on organizational practices and effectiveness report and discuss the limitations associated with existing and proposed research	C. critical thinking and problem-solving skills	1. Depth and Breadth of Knowledge 2. Research and Scholarship 3. Level of Application of Knowledge 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
D. select and apply appropriate statistical analysis techniques as required by the research design develop or assist in the development and presentation of scholarly research	D. literacy and numeracy skills	2. Research and Scholarship 5. Level of Communication Skills

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A UWindsor graduate will have the ability to demonstrate:	**OCGS-approved Graduate Degree Level Expectations**
E. identify and adhere to the University of Windsor REB, TCPS2 and academic integrity standards when conducting scholarly, professional and/or research work	E. responsible behaviour to self, others and society	4. Professional Capacity/Autonomy 6. Awareness of Limits of Knowledge
F. communicate research results clearly and accurately to appropriate stakeholders in both oral and written formats	F. interpersonal and communications skills	5. Level of Communication Skills
G. work successfully and respectfully with peers, university personnel and community organizations, both independently and as a team member or leader	G. teamwork, and personal and group leadership skills	4. Professional Capacity/Autonomy 5. Level of Communication Skills
H. devise and/or apply innovative solutions to complex Sport Management issues in the field or community	H. creativity and aesthetic appreciation	2. Research and Scholarship 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
I. identify and interpret relevant academic and non-academic sources to remain current with research and popular trends in Sport Management	I. the ability and desire for continuous learning	4. Professional Capacity/autonomy

University of Windsor
Senate

*5.5.8c: **PhD in Kinesiology – Learning Outcomes**

Item for: **Information**

Forwarded by: **Program Development Committee**

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* <u>At the end of this program, the successful student will know and be able to:</u>	**Characteristics of a University of Windsor Graduate** <u>A UWindsor graduate will have the ability to demonstrate:</u>	**OCGS-approved Graduate Degree Level Expectations**
A. synthesize and articulate detailed knowledge of relevant research areas	A. 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
B. conceptualize, design, conduct and produce original research that contributes to the knowledge base in Kinesiology evaluate research findings and their respective implications within a multidisciplinary, Kinesiology context	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
C. analyze and assess appropriate Kinesiology theories, lab-, field-, and/or community-based methodologies and their respective limitations from a multidisciplinary perspective examine and evaluate the role of Kinesiology research in shaping program and policy frameworks within the broader community	C. critical thinking and problem-solving skills	1. Depth and Breadth of Knowledge 2. Research and Scholarship 3. Level of Application of Knowledge 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
D. select and apply appropriate analysis and modelling techniques as required by the research design	D. literacy and numeracy skills	2. Research and Scholarship 5. Level of Communication Skills
E. identify and adhere to the University of Windsor REB, TCPS2 and academic integrity standards when conducting scholarly, professional and/or research work	E. responsible behaviour to self, others and society	4. Professional Capacity/Autonomy 6. Awareness of Limits of Knowledge

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* <u>At the end of this program, the successful student will know and be able to:</u>	**Characteristics of a University of Windsor Graduate** <u>A UWindsor graduate will have the ability to demonstrate:</u>	**OCGS-approved Graduate Degree Level Expectations**
F. present and publish high-quality Kinesiology research utilizing appropriate oral and written formats formulate and engage in relevant knowledge translation activities with community stakeholders develop and demonstrate teaching and learning practices	F. interpersonal and communications skills	5. Level of Communication Skills
G. collaborate respectfully and successfully as a member or leader on multidisciplinary teams, working to achieve the completion of professional and research plans	G. teamwork, and personal and group leadership skills	4. Professional Capacity/Autonomy 5. Level of Communication Skills
H. identify and recommend innovative solutions to address complex Kinesiology issues	H. creativity and aesthetic appreciation	2. Research and Scholarship 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
I. evaluate relevant academic and non-academic sources to remain current with research and popular trends in Kinesiology establish a sustainable program of future research	I. the ability and desire for continuous learning	4. Professional Capacity/autonomy

University of Windsor
Senate

*5.5.8d: **Philosophy (Undergraduate) – Course Learning Outcomes**

Item for: **Information**

Forwarded by: **Program Development Committee**

This package contains course Learning outcomes for:
34-110. Introduction to Western Philosophy
34-112. Philosophy and Human Nature
34-129. Contemporary Moral Issues
34-130. Philosophy and Popular Culture
34-160. Reasoning Skills
34-162. Logic and Argumentation
34-221. Introduction to Ethics
34-226. Law, Punishment and Morality
34-227. Environmental Ethics
34-240. Philosophy of Religion
34-243. Aesthetics
34-252. Existentialism
34-253. Mind, Action, and Personal Identity
34-255. Knowledge, Science, and Society
34-257. Philosophy of Science
34-260. Informal Logic: Fallacy
34-261. Informal Logic: Argumentation
34-262. Symbolic Logic
34-266. Reasoning about Weird Things
34-273. Ancient Greek Philosophy
34-329. Animals and Ethics
34-342. Philosophy of Education
34-355. Post-structuralist Theory
34-359. Women, Knowledge and Reality
34-360. Argumentation Theory
34-370. Philosophy of the Enlightenment
34-376. Kant
34-378. Nineteenth Century Philosophy
34-470. Recent German Philosophy
34-471. Recent French Philosophy
34-472. Analytic Philosophy
34-473. Pragmatist Philosophy

COURSE NUMBER AND TITLE: 34-110. Introduction to Western Philosophy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify some of the major figures and themes in the Western philosophical tradition and/or discuss and explain some of the key concepts and themes in the Western philosophical tradition.	A. the acquisition, application and integration of knowledge
B. Restate, summarize and compare key ideas and elements of philosophical work. Use bibliographical and footnoting features correctly. Formulate theses and consider both supporting arguments and critical objections.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments and search for their underlying assumptions	C. critical thinking and problem-solving skills
D. Compose philosophical interpretations of texts.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Discuss, philosophically, ideas presented by others and oneself. Charitably interpret the proposals of other discussants.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I. Pursue studies in Philosophy.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-112. Philosophy and Human Nature

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify some of the major figures and themes in philosophizing about human nature. Discuss and explain some of the different conceptions of human nature.	A. the acquisition, application and integration of knowledge
B. Restate and summarize key ideas and elements of philosophical work pertaining to theories of human nature.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments. Distinguish different kinds of relevant claims	C. critical thinking and problem-solving skills
D. Interpret philosophical texts. Compose philosophical interpretation of texts. Expose important assumptions of philosophical arguments.	D. literacy and numeracy skills

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
E.	E. responsible behaviour to self, others and society
F. Listen actively to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself. Charitably interpret the proposals of other discussants.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I. Pursue studies in Philosophy.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-129. Contemporary Moral Issues

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify moral issues and considerations that make them moral issues as distinct from legal or prudential issues.	A. the acquisition, application and integration of knowledge
B. Restate and summarize key ideas and elements of philosophical work pertaining to ethics.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments regarding moral issues with special attention to the assumptions underlying them.	C. critical thinking and problem-solving skills
D. Prepare and systematically discuss reasoned positions in practical or applied ethics.	D. literacy and numeracy skills
E. Employ ethical principles to assess the role that actions play in living well, and to make thoughtful decisions when faced with moral problems	E. responsible behaviour to self, others and society
F. Listen actively to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself. Interpret opposing views charitably.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I. Pursue studies in Philosophy.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-130 Philosophy and Popular Culture

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify some major philosophical issues and themes in popular culture, and explain why those themes are considered philosophical.	A. the acquisition, application and integration of knowledge
B. Restate and summarize key ideas and elements of philosophical issues in popular culture with attention to how they are connected to the larger body of philosophical work	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments. Uncover hidden assumptions in arguments.	C. critical thinking and problem-solving skills
D. Interpret texts with philosophical content. Compose philosophical interpretations of texts.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Listen actively to ideas presented by others. Discuss philosophically ideas presented by others and oneself, and interpret the views of others charitably.	F. interpersonal and communications skills
G. The course may afford the opportunity for group discussions.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-160. Reasoning Skills

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify the components of arguments in passages containing reasoning. Be able to evaluate instances of strong and weak reasoning and justify their judgments. The skills acquired in this course readily transfer to other courses in the humanities and sciences.	A. the acquisition, application and integration of knowledge
B. Employ strategies for improving weak reasoning, and be able to revise and improve arguments in response to just criticisms. Diagram arguments showing the support relations between premises and conclusions. Systematically critique arguments.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Distinguish and appraise various examples of reasoning. Special attention is given to definitions and the use of language in reasoning. Use arguments to constructively solve problems. Willingness to change own positon in light of good arguments.	C. critical thinking and problem-solving skills
D. Prepare and formulate well-reasoned passages.	D. literacy and numeracy skills

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
E.	E. responsible behaviour to self, others and society
F. Clearly employ the strengths and weaknesses of reasoned discussion. Charitably interpret alternative points of view	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I. Pursue studies in logic and argumentation.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-162. Logic and Argumentation

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Use basic logical techniques for evaluating arguments in both the arts and sciences; identify and employ extra-logical skills in the analysis, development and use of argumentation, and apply these skills in other university level courses. Explain the main points of comparison between argumentation in the sciences and in the humanities.	A. the acquisition, application and integration of knowledge
B. Employ strategies for improving weak reasoning. Determine what will be relevant evidence. Understand the context of the argumentation and how to frame it for success.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Distinguish and appraise various examples of reasoning, using logical principles and principles of communication. Special attention is given to definitions and language use.	C. critical thinking and problem-solving skills
D. Facility with presenting arguments both diagrammatically and in prose.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Clearly employ the strengths and weaknesses of reasoned discussion. Charitably interpret dissenting opinions.	F. interpersonal and communications skills
G. Group projects are often included on topics of the students interest.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I. Pursue studies in logic and argumentation.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-221. Introduction to Ethics

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Distinguish features that various theories take to be common questions in ethics. Compare and contrast the basic theoretical components of ethical theories. Distinguish normative and descriptive components of ethical arguments.	A. the acquisition, application and integration of knowledge
B. Restate and summarize key ideas and elements of a philosophical work pertaining to ethics. Define key components of ethical theories.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments made in the context of discussing moral issues. Contrast different ethical approaches to important ethical problems.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions in philosophical ethics.	D. literacy and numeracy skills
E. Employ ethical principles to assess the role that actions play in living well.	E. responsible behaviour to self, others and society
F. Charitably interpret ideas presented by others and acknowledge the merits of the ideas.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I. Pursue more advanced study in ethics and political theory.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-226. Law, Punishment and Morality

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Compare and contrast some of the different approaches to (a) ethics and (b) the philosophy of law.	A. the acquisition, application and integration of knowledge
B. Define key components of ethical theories and philosophies of law.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different legal philosophies to important legal problems. Distinguish moral, legal and prudential considerations	C. critical thinking and problem-solving skills
D.	D. literacy and numeracy skills

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
E. Employ ideas from ethical and legal philosophy to reflect on the organization of the community or state and its possible improvement, and the role of the individual in that organization and its improvement.	E. responsible behaviour to self, others and society
F.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-227. Environmental Ethics

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Compares and contrasts some of the different approaches to our understanding of our natural environment and our relationship to it; Distinguish obligations to other persons from obligations to the environment. Distinguish rights and utilitarian moral theories in so far as they are used to consider problems arising	A. the acquisition, application and integration of knowledge
B. Define key components of theories in environmental ethics. Distinguish scientific statements and ethical principles; work with models of human and environmental interaction.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply theories in environmental ethics to important problems.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions in environmental ethics.	D. literacy and numeracy skills
E. Employ ideas from ethical theories to reflect on and improve our interaction with the environment and how to improve it.	E. responsible behaviour to self, others and society
F. Charitable interpretation of dissenting points of view	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-228. Technology, Human Values and the Environment

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different approaches to the philosophy of technology, and understand how technology affects us and how our use of technology affects our social and natural environment.	A. the acquisition, application and integration of knowledge
B. Define key components of positions in the philosophy of technology. Retrieving and sorting relevant information for dealing with problems arising in connection with the use of technology.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Appraise some of the impacts of technology, including its transformative potential, its potential to improve the quality of life, and its potential to lessen the quality of life.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on issues pertaining to technology and human values.	D. literacy and numeracy skills
E. Employ ideas from the philosophy of technology to reflect on the role technology plays in our lives and take responsibility for which technologies to use and how to use them.	E. responsible behaviour to self, others and society
F.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-240. Philosophy of Religion

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different approaches to the philosophy of religion. Comprehend the main arguments for God's existence, and discuss the obstacles to religion such as the problem of evil.	A. the acquisition, application and integration of knowledge
B. Define key components in theories of the philosophy of religion.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Appraise some of the impacts of ideas in the philosophy of religion, including their potential to improve the quality of life, and their potential to lessen the quality of life.	C. critical thinking and problem-solving skills

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
D. Prepare and discuss reasoned positions in the philosophy of religion.	D. literacy and numeracy skills
E. Employ ideas from the philosophy of religion to reflect on the role that religion plays in our lives.	E. responsible behaviour to self, others and society
F. Charitably interpret other points of view within one religion, and from other religions.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-243. Aesthetics

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify some of the major figures, themes, and approaches in philosophical reflection on aesthetics. Discuss some of the key concepts, themes and approaches to philosophical reflection on aesthetics.	A. the acquisition, application and integration of knowledge
B. Restate and summarize key ideas and elements of philosophical work on aesthetics.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments.	C. critical thinking and problem-solving skills
D. Interpret philosophical texts. (also relevant to C) Compose philosophical interpretations of texts. (also relevant to H)	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Charitably discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H. Recognize the contribution of philosophical content or themes in artistic work.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-252. Existentialism

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify some of the major figures, themes, and approaches in philosophical reflection on existentialism. Discuss some of the key concepts, themes and approaches to philosophical reflection on existentialism.	A. the acquisition, application and integration of knowledge
B. Restate and summarize key ideas and elements of philosophical work on existentialism.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments.	C. critical thinking and problem-solving skills
D. Interpret philosophical texts. Compose philosophical interpretations of texts.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Listen actively to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-253. Mind, Action, and Personal Identity

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different approaches to the mind and its relationship with the body, especially the theories that underlie our belief that the same person can persist through time	A. the acquisition, application and integration of knowledge
B. Use thought experiments to test metaphysical theses about personal identity.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different theories of personal identity to important problems associated with the mind.	C. critical thinking and problem-solving skills

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
D. Prepare and discuss reasoned positions in the philosophy of mind.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Discuss, philosophically and charitably ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-255. Knowledge, Science, and Society

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different approaches to knowledge issues in society and scientific communities.	A. the acquisition, application and integration of knowledge
B. Define key components of different philosophical positions on scientific and social knowledge.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical ideas to issues of knowledge in society and scientific communities.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on issues of knowledge in society and scientific communities.	D. literacy and numeracy skills
E. Employ ideas from the theory of knowledge to reflect on the role of gender, race, class, and culture in science and society.	E. responsible behaviour to self, others and society
F. Discuss, philosophically and charitably ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-257. Philosophy of Science

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some different philosophies of science, including the role of evidence, hypotheses, experimentation, and social forces.	A. the acquisition, application and integration of knowledge
B. Define key components of the philosophy of science.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical ideas to important problems associated with the philosophy of science.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions in the philosophy of science.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Discuss, philosophically and charitably ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-260. Informal Logic: Fallacy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify the components of arguments and reasoning. Recognize instances of strong and weak reasoning. Identify particular fallacies and different kinds of fallacies.	A. the acquisition, application and integration of knowledge
B. Employ strategies for recognizing and evaluating fallacies.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Distinguish and appraise various examples of fallacious reasoning. Analyze and evaluate different examples of argumentative passages containing fallacies.	C. critical thinking and problem-solving skills
D. Prepare and formulate passages where improved reasoning replaces fallacies	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
F. Clearly evaluate the strengths and weaknesses of reasoned discussion. Be charitable in the interpretation of discourse that may contain fallacies.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-261 Informal Logic: Argumentation

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify the components of arguments and reasoning. Identify particular argument types and evaluate them by one of the methods of informal logic.	A. the acquisition, application and integration of knowledge
B. Employ strategies for constructing argumentation.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Distinguish and appraise various types of arguments. Analyze and evaluate different argument types in extended passages.	C. critical thinking and problem-solving skills
D. Prepare and formulate an extended piece of argumentation.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Clearly but charitably evaluate the strengths and weaknesses of reasoned discussion.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-262. Symbolic Logic

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. State arguments in a formal language, and evaluate them by one or more of the methods of formal logic; explain the role of formal logic in analytical philosophy.	B. the acquisition, application and integration of knowledge
B. Define key terms in symbolic logic and distinguish and explain different proof procedures.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Give the logical forms of natural language sentences and arguments	C. critical thinking and problem-solving skills
D. Write formal proofs of arguments stated in logical notations.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Clearly evaluate the strengths and weaknesses of reasoned discussion.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-266. Reasoning About Weird Things

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify the claims in arguments and reasoned passages involving extraordinary claims.	A. the acquisition, application and integration of knowledge
B. Employ strategies for evaluating extraordinary claims and reasoning.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Distinguish and appraise various examples of weird reasoning. Analyze and evaluate different examples of argumentative passages containing weird reasoning.	C. critical thinking and problem-solving skills
D. Prepare and formulate passages of improved reasoning.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
F. Clearly evaluate the strengths and weaknesses of reasoned discussion.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-273. Ancient Greek Philosophy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify some of the major figures and themes in the Greek philosophical tradition. Discuss and explain some of the key concepts and themes in the Greek philosophical tradition.	A. the acquisition, application and integration of knowledge
B. Restate and summarize key ideas and elements of Greek philosophical works.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Restate and appraise philosophical arguments.	C. critical thinking and problem-solving skills
D. Interpret philosophical texts. Compose philosophical interpretations of texts.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F. Listen charitably to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-329. Animals and Ethics

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different philosophical views about our relationship to animals and the relation of these views to the evaluation of moral principles and ethical theories.	A. the acquisition, application and integration of knowledge
B. Define key components of different philosophical views about our relationship to animals and the relation of these views to the evaluation of moral principles and ethical theories.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical positions to specific issues in animal ethics.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on the philosophical issues associated with animals and ethics.	D. literacy and numeracy skills
E. Employ ideas from the philosophical works to reflect on our relationship to animals.	E. responsible behaviour to self, others and society
F. Listen charitably to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-342 Philosophy of Education

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different philosophical theories about the nature, goals and values of education.	A. the acquisition, application and integration of knowledge
B. Define key components of different philosophical views on the nature, goals and values of education.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical positions to specific issues in the philosophy of education.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on the philosophical issues associated with the nature, goals and values of education.	D. literacy and numeracy skills
E. Employ ideas from philosophical literature to reflect on the goals and values of education.	E. responsible behaviour to self, others and society

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
F. Listen to ideas presented by others. Discuss, philosophically and charitably ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-355. Post-Structuralist Theory

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different philosophical theories associated with post-structuralism.	A. the acquisition, application and integration of knowledge
B. Define key components of different philosophical views associated with post-structuralism.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical positions to specific issues in post-structuralist philosophy.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on the philosophical issues associated with post-structuralism.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of post-structuralist thought.	E. responsible behaviour to self, others and society
F. Listen to ideas presented by others and charitably discuss philosophical ideas presented by others.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-359. Women, Knowledge and Reality

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different feminist theories about knowledge and reality.	A. the acquisition, application and integration of knowledge
B. Define key components of different feminist theories about knowledge and reality.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical positions to specific issues in feminist philosophy about knowledge and reality, including uncovering unstated assumptions of dominant theories.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on the philosophical issues associated with feminist theories about knowledge and reality.	D. literacy and numeracy skills
E. Employ ideas from the material discussed to reflect on the nature of knowledge and reality from feminist perspectives.	E. responsible behaviour to self, others and society
F. Listen charitably to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-360. Argumentation Theory

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different theories about the nature of argumentation.	A. the acquisition, application and integration of knowledge
B. Define key components of different views on the nature of argumentation.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical positions to specific issues in the philosophy of argument.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on the issues associated with the nature of argumentation.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of argumentation and its uses.	E. responsible behaviour to self, others and society

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
F. Listen charitably to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-370. Philosophy of the Enlightenment

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the different theoretical perspectives in the Enlightenment.	A. the acquisition, application and integration of knowledge
B. Define key components of different views on the nature of Philosophy of the Enlightenment.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different philosophical positions to specific issues in the Philosophy of the Enlightenment.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on the philosophical issues associated with the Philosophy of the Enlightenment.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of the Enlightenment.	E. responsible behaviour to self, others and society
F. Listen charitably to ideas presented by others. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-376. Kant

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the important concepts in the philosophy of Kant.	A. the acquisition, application and integration of knowledge
B. Define key components of Kantian philosophy.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different critical positions to specific issues in the philosophy of Kant.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on Kantian thought.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of Kant's philosophy and its importance.	E. responsible behaviour to self, others and society
F. Discuss, philosophically, and listen charitably to ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-378. Nineteenth Century Philosophy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the important concepts in nineteenth century philosophy.	A. the acquisition, application and integration of knowledge
B. Define key components of nineteenth century philosophy.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different critical positions to specific issues in nineteenth century philosophy.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on nineteenth century philosophy.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of nineteenth century philosophy.	E. responsible behaviour to self, others and society

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
F. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-470. Recent German Philosophy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the important concepts in recent German philosophy.	A. the acquisition, application and integration of knowledge
B. Define key components of recent German philosophy.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different critical positions to specific issues in recent German philosophy.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on recent German philosophy.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of recent German philosophy.	E. responsible behaviour to self, others and society
F. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-471. Recent French Philosophy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the important concepts in recent French philosophy.	A. the acquisition, application and integration of knowledge
B. Define key components of recent French philosophy.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different critical positions to specific issues in recent French philosophy.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on recent French philosophy.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of recent French philosophy.	E. responsible behaviour to self, others and society
F. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-472. Analytic Philosophy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the important concepts in analytic philosophy; and appreciate role of arguments in defending a philosophical position.	A. the acquisition, application and integration of knowledge
B. Define key components of analytic philosophy, including the role of logic and the significance of language; review philosophically problems methodically.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Critically assess arguments made by analytical philosophers	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on analytic philosophy.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of analytic philosophy.	E. responsible behaviour to self, others and society

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
F. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-473. Pragmatist Philosophy

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the important concepts in pragmatist philosophy.	A. the acquisition, application and integration of knowledge
B. Define key components of pragmatist philosophy, especially meaning, truth and action.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different critical positions to specific issues in pragmatist philosophy.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on pragmatist philosophy.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of pragmatist philosophy.	E. responsible behaviour to self, others and society
F. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

COURSE NUMBER AND TITLE: 34-491. Honours Seminar

Learning Outcomes *This is a sentence completion exercise.* At the end of this course, the successful student will know and be able to:	**Characteristics of a University of Windsor Graduate** A U of Windsor graduate will have the ability to demonstrate:
A. Identify and distinguish some of the important concepts in a given area of philosophy.	A. the acquisition, application and integration of knowledge
B. Define key components of a given area of philosophy.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Apply different critical positions to a given area of philosophy.	C. critical thinking and problem-solving skills
D. Prepare and discuss reasoned positions on a given area of philosophy.	D. literacy and numeracy skills
E. Employ ideas from philosophical works to reflect on the nature of a given area of philosophy.	E. responsible behaviour to self, others and society
F. Discuss, philosophically, ideas presented by others and oneself.	F. interpersonal and communications skills
G.	G. teamwork, and personal and group leadership skills
H.	H. creativity and aesthetic appreciation
I.	I. the ability and desire for continuous learning

University of Windsor
Senate

*5.6.1: **Academic Integrity Annual Report (2016-2017)**
(including Thirteenth Annual Student Academic Misconduct Report)

Item for: **Information**

Forwarded by: **Academic Policy Committee**

1. Executive Summary

A. Introduction

This is the thirteenth annual student discipline report, prepared by the Academic Integrity and Student Conduct Officer according to cases that fall within the office's mandate. The report is to inform the University community about Bylaw 31 student academic misconduct cases in the 2016/17 academic year, to compare the results with the data from the previous two years and to help identify trends or new developments.

This report is part of University of Windsor's efforts to reinforce its commitment to learning and discovery and a place that encourages, values and expects high ethical standards and academic integrity from its members.

B. Goals and Objectives of Reporting Year

In line with the University of Windsor's Strategic Plan, listed below are the goals and objectives of the Academic Integrity Office for the reporting year.

1. ***Provide an exceptional undergraduate experience***:
   - Implement strategies to educate our students, faculty members and staff member about academic integrity (AI) issues and possible violations. The constant and transparent concern of the University regarding academic integrity in all of its dimensions certainly resonates with students and their families, making their experience in Windsor unique and rewarding.
   - Foster engagement of the University of Windsor community in activities that promote academic integrity.
   - Facilitate and/or support community efforts in order to uphold academic integrity values/principles.
   - Establish a systematic approach to support prevention of any activity or conduct that falls below the level of integrity expected of all students.
   - Encourage and increase the participation of our students in activities or programs related to AI.
     - *Ambassadors for Academic Integrity*: undergraduate and graduate students volunteer to help promote integrity at orientations and student events

2. ***Pursue strengths in research and graduate education***:
   - Develop initiatives targeted at graduate students and graduate faculty to prevent AI violations, such as orientation sessions in several graduate programs focused on research ethics, plagiarism and falsified data.

3. ***Recruit and retain the best faculty and staff***:
   - Reinforce the importance of AI to new and current faculty and staff through constant dialog, in class educational activities and development of information materials.

4. ***Engage and build the Windsor and Essex County community through partnerships***:
   - Posters and website.

5. ***Promote international engagement***:
   - Educate international students about AI values and potential key differences between Canada and their home country.
   - Encourage academic engagement of international students and facilitate their transition to the University of Windsor.

C. Successes
   - **Ambassadors of Academic Integrity** – student volunteers promote academic integrity values of honesty, trust, respect, responsibility, and fairness. They participate in roundtable discussions by providing ideas, suggestions, and feedback.
     The Ambassadors also participate in AIO educational and social initiatives in promoting academic integrity to students, faculty, and staff, examples: Adrenalin Rush Event, International Student Orientation, and University's Open House, increasing the AIO visibility and showing the University's concern and commitment to academic integrity as part of students' academic experience.

D. Challenges
   - It is always a challenge to reach all students, but efforts continue through presentations, ambassadors, *etc*.
   - With only one staff member, the Academic Integrity and Student Conduct Officer, the office is under-resourced.

2. Report

A. Area's Goals and Objectives and the University's Strategic Plan

The University of Windsor must have an environment in which academic integrity and honesty is upheld in order to achieve the highest possible standards in teaching, learning, and research. Without it, the value of our degree is diminished, which impacts all those who have earned their degree – past, present, and future. The AIO's objective is to maintain the value of the University's degree by encouraging our faculty, staff, and students to uphold academic integrity and apply honesty in all their endeavours.

B. Future Actions/Initiatives
   - Increase direct communication between the AIO and faculty members and develop a consistent relationship with faculty members.
   - Strengthen our relationship with students by developing new programs to integrate them into the mission of creating a community of integrity.
   - Develop a new Poster on Academic Integrity by Fall 2018.
   - Revamp the Website on Academic Integrity by Fall 2018.

C. Recommendations for Senate consideration (if any)
None.

See attached Thirteenth Annual Student Academic Misconduct Report

Thirteenth Annual Student Academic Misconduct Report

INTRODUCTION

The report is to inform the University community about Bylaw 31 student academic misconduct cases in the 2016/17 academic year, to compare the results with the data from the previous two years and to help identify trends or new developments.

This report is part of University of Windsor's efforts to reinforce its commitment to learning and discovery and a place that encourages, values and expects from its members high ethical standards and academic integrity.

EXECUTIVE SUMMARY

The University saw a small reduction of academic interity complaints in 2016-17 down by by 17 from the previous year. Considering the number of students at the University this change is statistically unremarkable. In relation to the high of 194 complaints in 2013-14 it would seem that there has been a recent ongoing decline to the number of complaints year over year.

2016/17: 76 academic integrity complaints
2015/16: 93 academic integrity complaints

Complaints dismissed by Associate Deans:
2016/17: 11 complaints filed that were dismissed
2015/16: 9 complaints filed that were dismissed

With respect to the academic misconduct complaints processed in 2016/2017:

- 85.5% (65 cases) found responsible for the misconduct

- 67.7% (44/65 cases) - Plagiarism (in assignments) continues to be the most prevalent integrity violation

- 10.8% (7/65 cases) - Violating Exam/Test Rules (including possession of unauthorized aid) was the second highest violation

- Mark reduction (ranging from a % amount reduction on the evaluation, to a zero on the assignment or exam; to a zero in the course) was imposed in 48 of the integrity violations, followed by 30 letters of apology/reflection, 19 admonitions, and 6 censures (for durations ranging from 6 months to graduation), 1 educational assignment, and 1 suspension (for 3 years). Decisions often combines two or more sanctions.

- 83.1% (54/65) of offences by domestic students; 16.9% (11/65) offenses by international students. The offenses most frequently engaged in by domestic students are plagiarism (40/54), violating exam/test rules (4/54), and exam cheating 4/54). The offenses most frequently engaged in by international students are plagiarism (4/11) and violating exam/test rules (3/11).

- 67.7% (44/65) of integrity violations involved males
- 30.8% (20/65) of integrity violations involved females
- No gender identified in 1 case
    - Females engaged mostly in plagiarism (12) and academic forgery or fraud (4)
    - Males engaged mostly in plagiarism (32) and violation of exam/test rules (7)

- 1 case was appealed, and a hearing held before the Discipline Appeal Committee.

Definitions

1. Academic Misconduct means any action taken by a student that gives the student an unearned advantage in matters affecting his/her academic standing. For professional programs, all actions that result in a breach of the rules of conduct as set out by the professional bodies and adopted in whole or in substance by the relevant professional program as part of its code of conduct shall also be considered acts of academic misconduct.

2. Multiple: Two or more complaints of academic misconduct against one student.

Notes

1. The AIO report includes all Faculties except the Faculty of Law. Cases in the Faculty of Law are dealt with internally within that Faculty, with the exception of appeals to the Discipline Appeal Committee.
2. For comparison purposes, in each of the tables in the Summary of Data section that follows (with the exception of the table immediately below), totals for at least the previous two academic years are provided. The balance of the tables in the other sections that provide more detailed data includes only a comparison with the previous academic year.
3. On March 13, 2015, Bylaw 31 was substantially changed to focus on academic misconduct matters and giving the Associate Deans the authority to investigate and adjudicate such complaints, with the assistance of the Academic Integrity Office, as needed.

SUMMARY OF DATA

1. Total Academic Integrity Investigations

2016/17	2015/16	2014/15	2013/14	2012/13
76	93	135	194	119

2. Results of all Investigations

	2016/17 (76 cases)	2015/16 (93 cases)	2014/15 (135 cases)
Student responsible	65	84	99% (133 cases)
Dismissed/Insufficient evidence	11	9	1% (2 cases)
Stayed	-	-	-

3. Type of Offence

Plagiarism comprised the majority of findings of academic misconduct: 67.7% (44/65). This is a decrease from last year in which plagiarism comprised 46.4% (38/84) of complaints.

In 2016/17, plagiarism was followed by:

- Violating Exam/Test Rules (including possession of unauthorized aid) 10.8% (7 cases)
- Exam cheating 6.2% (4 cases)
- Academic forgery or fraud 6.2% (4 cases)

The remaining complaints (9.2% or 6 cases) covered unauthorized collaboration, furnishing false information, impersonation, and exam/test tampering and resubmitting.

4. Informal vs. Formal Resolution

	2016/17	2015/16	2014/15
Complaints heard by University-level Committee*	1.5% (1 case)	7.1% (6 cases)	2.2% (3 cases)
Percentage of cases before University-level Committee settling before a hearing, including mediated settlements	0.0% (0 case)	33.3% (2 cases)	33% (1 case)
Percentage of cases before University-level Committee requiring a hearing	1.5% (1 case)	66.6%(4 cases)	67% (2 cases)

*Prior to March 2015, a Judicial Panel would hear cases requiring what was then referred to as "formal resolution" with appeals to the Discipline Appeal Committee. Under the new Bylaw, cases are heard by the Discipline Appeal Committee.

5. Sanctions

	2016/17	2015/16	2014/15
Mark Reduction	73.8%(48 cases)	78.6%(66 cases)	45.9%(62 cases)
Admonition	29.2%(19 cases)	34.5%(29 cases)	27.4%(37 cases)
Letter of apology/reflection	46.2%(30 cases)	25.8%(24 cases)	(not in last report)
Censure	9.2%(6 cases)	23.8%(20 cases)	19.3%(27 cases)
No sanction due to insufficient evidence	-	-	2.9%(4 cases)
Other	1.5%(1 case)	1.2%(1 case)	5.9%(8 cases)
Suspension	1.5%(1 case)	-	1.4%(2 cases)
Denial of Registration	-	1.2%(1 case)	-
Dismissed Cases	14.5%(11/76 files)	9.6%(9 cases)	-

6. Gender

	2016/17	2015/16	2014/15
Males	67.7% (44 cases)	62.3% (58 cases)	51.8% (70 cases)
Females	30.8% (20 cases)	33.3% (31 cases)	46.7% (63 cases)
No Gender Recorded	1.5% (1 case)	4.3% (4 cases)	1.5% (2 cases)

7. Repeat Offender

Of the 65 cases where there was a finding of academic misconduct, 4.6% (3/65 cases) were repeat offenders; a decrease of 6 cases compared to the previous year. Plagiarism accounted for 2 out of the 3 repeat offender cases, and academic forgery or fraud for the 3rd case.

8. Domestic/International

Note: For comparison, 2015/16 data is in parentheses. Data is presented by the semester due to variations in enrollment. Complaints that were dismissed are included in the numbers.

	Fall 2016			Winter 2017			I/S 2017		
	Domestic	Int'l	Total	Domestic	Int'l	Total	Domestic	Int'l	Total
No. of complaints received against students that were resolved by semester	**22** (27)	**2** (11)	**24** (38)	**5** (22)	**28** (14)	**33** (36)	**4** (12)	**4** (7)	**8** (19)

9. Summary of Awareness Activities

Following are details of the Academic Integrity Office (AIO) current awareness campaign, ongoing projects, and educational initiatives:

Awareness campaign: Posters, brochures, distribution of print and online resources

Educational initiatives: Providing academic integrity presentations in many program orientations, including The Centre for Executive and Professional Education, International Students' Centre, Graduate Studies

DETAILED REPORT

Summary by Offence and Sanction Imposed – Academic

In the cases reported in the next table more than one sanction was sometimes applied. Under Bylaw 31 professors assign an "Incomplete" in the cases of alleged academic misconduct and in certain cases the grade is later adjusted in accordance with the sanction (if any) once the complaint is processed. Thus, where a student is found responsible for academic misconduct, a grade penalty is often imposed on the academic evaluation in question, in addition to an admonition, letter of apology/reflection, censure, suspension, as the case may be. Other combinations also occur. The possible varieties of outcomes make presenting this data in an easy-to-digest table format somewhat challenging.

Type of Offence	Admonition	Mark Reduction	Repeat Work for Assessment	Censure	Mark Reduction (Zero in Course)	Suspension	Letter of Apology/Reflection	Educational Assignment	Dismissed	Totals (2016/17)	Totals (2015/16)
Plagiarism	11	33			2		16		10	72	61
Unauthorized Collaboration	2	1					3			6	6
Academic forgery or fraud		3				1	3			7	7
Cheating in a clicker exercise											5
Exam/test cheating		4		2			1			7	50
Exam/test tampering and resubmitting		1								1	
Violating exam/test rules (including possession of an unauthorized aid)	6	3		1			6			16	26
Impersonation	2	2					2			6	1
Furnishing False Information				1			1	1	1	4	
Totals (2016/17)	21	47		4	2	1	32	1	11	119	
Totals (2015/16)	29	66	2	20	5	1	24		9		156

2. Appeals of Associate Dean Decisions to the Discipline Appeal Committee

Type of Offence	Hearing	Settlement Agreement	Withdrawn by Appellant	Total Cases (2016/17)	Total Cases (2015/16)
Plagiarism				44*	38
Unauthorized Collaboration				1 (+2 cases reported under plagiarism)	2
Academic forgery or fraud				4	3
Cheating in a clicker exercise					4
Exam cheating				4	23
Violating exam/test rules (including possession of unauthorized aid)	1			7	14
Exam/test tampering and resubmitting				1	
Impersonation				2	
Furnishing False Information				2	
Totals (2016/17)	1			65	
Totals (2015/16)	4	2	3		84

*in two cases, the allegation of misconduct was for plagiarism and unauthorized collaboration.

3. Summary by Gender and Repeat Offender – Academic

Type of Offence	Male	Female	Gender Not Recorded	First Offender	Repeat Offender	Totals (2016/17)	Totals (2015/16)
Plagiarism	32	12		42	2	**44**	38
Unauthorized Collaboration	(2 recorded under plagiarism)	1		1		**1**	2
Academic forgery or fraud		4		3	1	**4**	3
Cheating in a clicker exercise							4
Exam cheating	2	2		4		**4**	23
Exam/test tampering and resubmitting			**1**	1		**1**	
Violating exam/test rules (including possession of unauthorized aid)	7			7		**7**	14
Impersonation	2			2		**2**	
Furnishing False Information	1	1		2		**2**	
Totals (2016/17)	**44**^	**20**∓	**1**	**62**	**3**	**65**	
Totals (2015/16)	54**	26∓	4	75	9		84

*in two cases, the allegation of misconduct was for plagiarism and unauthorized collaboration.

** plus 4 cases that were dismissed

^ plus 5 cases that were dismissed

∓ plus 5 cases that were dismissed

University of Windsor
Senate

5.7.1: **Research Ethics Board – Report 2015-2017**

Item for: **Information**

Forwarded by: **Senate Governance Committee**

**see attached*

University of Windsor

UNIVERSITY OF WINDSOR
RESEARCH ETHICS BOARD

Report for
July 1, 2015 – December 30, 2017

INTRODUCTION

The University of Windsor Research Ethics Board (REB) operates in accordance with the *Tri-Council Policy Statement 2 (2014).* The Board is responsible for reviewing the ethical acceptability of all research involving humans conducted within the jurisdiction of the University of Windsor or under its auspices. This includes research conducted by faculty, staff, students, and other affiliates regardless of where the research takes place (TCPS2, 6.1). Research requiring REB review includes projects involving human participants or human biological materials derived from living or deceased individuals (TCPS2, 2.1).

The Office of Research Ethics

The Office of Research Ethics is directed by the Chair of the Research Ethics Board and staffed by the Research Ethics Coordinator. The office is responsible for overseeing all activities of the REB including: developing policies and procedures for operational and committee functions; scheduling and managing protocol reviews; communicating with researchers on REB decisions; documentation and record-keeping; and protocol monitoring. The office is also responsible for providing education to the University of Windsor community on research ethics, providing phone and walk-in consultations, conducting workshops and presentations, providing resources on research ethics and staying current on local, national and international issues on research ethics.

Research Ethics Board and Review Committees

Protocol reviews are conducted under the TCPS2 guidance of proportionate review (TCPS2, 1C, 2.9, 6.12). The Chair of the REB determines the level of review and assigns protocols to review committees. Protocols considered *more than minimal risk* are reviewed by the Full Research Ethics Board which meets monthly. Protocols determined to be *minimal risk* are reviewed by the Delegated Review Committee which is comprised of four Full Board members who are specifically assigned as delegated reviewers. The Delegated Review Committee meets once a week during the academic year and bi-weekly over the summer, unless the number of protocol submissions require additional meetings. Protocols involving secondary use of data, administrative research, protocols cleared by another REB, and other minimal-risk applications are executively reviewed by the Chair, or the Chair and a second REB member. The REB Chair facilitates all review committees unless delegated to another member as needed. Please see Appendix A for a structural overview of the REB protocol flow and committees.

Relationship to the University

Per the requirements of the TCPS2, the REB operates independently and at arms-length from the University (TCPS2, 6.2). REB communication with researchers and records are confidential and accessible only to REB members on a need-to-know basis. The REB meets regularly with the Vice President, Research and Innovation and reports to the Senate on its operations.

REB MEMBERSHIP

The REB depends upon service commitments from faculty, students, and community members to conduct its work. The TCPS2 requires that the REB be comprised of faculty members with expertise in relevant research disciplines, fields, and methodologies representative of the types of research reviewed by the REB (TCPS2, 6.4). Additional members required by the TCPS2 are: one member knowledgeable in ethics; one member knowledgeable in law; students and members from the community who are not associated with the University (TCPS2, 6.4 a-d). Full Board members serve three-year terms which are renewable. Full Board REB members do not receive any compensation and provide approximately 10-12 hours per month in service. The Delegated Review Committee is comprised of four Full Board members who serve one-year terms on the Delegated Committee, which is renewable. Delegated review members receive compensation in the form of workload relief or research grants and provide 8-12 hours per week in service.

University of Windsor REB Membership 2015—2017

Dr. Suzanne McMurphy
Chair, July 1, 2016-current
Vice Chair 2014-2015
Delegated Reviewer 2010-2014
Full Board member, Soc/Anthro/Crim 2009-2016

Dr. Alan Scoboria
Chair 2014-June 30, 2016
Delegated Reviewer 2011-2014

Mr. Theimann Ackerson
Community Representative 2011-current

Prof. Reem Bahdi
Delegated Reviewer 2017-current
Full Board member, Law 2016-current

Dr. Pierre Boulos
Advisor, Education and Internationalization 2015-current
Full Board member, Ethicist 2015-current
Chair 2009-2015

Dr. Nicole Freeman
Medical Consultant 2015-current

Dr. Glynis George
Full Board member, Soc/Anthro/Crim 2017-current

Dr. Laurie Freeman-Gibb
Full Board member, Nursing 2014-current

Mr. James Jeannette
Community Representative, 2014-2018

Dr. Dusty Johnstone
Full Board member, Women & Gender Studies 2014-2017
Graduate Student Representative 2013-2014

Dr. Jane Ku
Full Board member, Soc/Anthro/Crim, 2014-2016

Dr. Calvin Langton
Full Board member, Psychology 2017- current

Dr. Saverpierre Maggio
Windsor Regional Hospital Representative 2017-current

Dr. Scott Martyn
Vice Chair 2014-current
Delegated Reviewer 2012-2014
Full Board member, Human Kinetics 2009-current

Dr. Rosanne Menna
Full Board member, Psychology 2017-current

Dr. Siyaram Pandey
Full Board member, Chemistry and Bio-Chemistry 2014-current

Dr. Kathy Pfaff
Vice-Chair 2015-2016
Delegated Reviewer 2017-current
Full Board member, Nursing 2014-current

Mr. Travis Reitsma
Graduate Student Representative, Soc/Anthro/Crim, 2017-current

Dr. Maureen Sterling
Full Board member, Business 2009-current

Ms. Rochelle Stevenson
Graduate Student Representative, Soc/Anthro/Crim, 2014-current

Ms. Cheryl Taggart
Community Representative, 2016-current

Prof. Kristen Thomasen
Full Board member 2016-current
Legal Representative 2016-current

Ethics Coordinator

Ms. Sarah Braganza 2010-current

The Ethics Coordinator provides administrative assistance to the Office of the REB. She is the initial contact for researchers who call, drop-in, or e-mail the REB. She prepares REB files for the Chair and committee review, takes minutes at all REB meetings, sends communications to researchers and committee members, manages protocol files, on-line record-keeping and all data entry as well as provides support for the initiatives of the Chair and REB as described in this report.

Undergraduate and Practicum REB Delegated Committees

Departments which have undergraduate thesis requirements, practicum or internship-based research projects can create internal Research Ethics Committees which review and approve protocols that are *minimal risk* and are not associated with funding. These Committees are delegated under the authority of the University REB and report annually to the REB Chair on their review activity.

Applied Social Psychology Research Ethics Committee
Members: Dr. Charlene Senn, Dr. Ken Cramer, Dr. Greg Chung-Yan, and Dr. Denis Jackson.

Business Research Ethics Committee
Members: Dr. Maureen Sterling, Dr. Bill Wellington & Dr. Gokul Bhandari

Drama Research Ethics Committee
Members: Prof. Tina Pugliese, Michael Keating & Gail Murray

History Research Ethics Committee
Members: Dr. Christina Burr

Human Kinetics Research Ethics Committee
Members: Dr. Sean Horton, Dr. Nadia Azar, Dr. Nancy McNevin, and Dr. Jess Dixon

Law Research Ethics Committee
Members: Prof. F. Herlehy, Prof. R. Moon, Prof. N. Semple, and Prof. L. Wilson

Psychology Research Ethics Committee
Members: Dr. Jill Singleton-Jackson, Dr. Laszlo Erdodi, Dr. Calvin Langston, Ms. Joan Craig & Ms. Chantal Boucher

Social Work Research Ethics Committee
Members: Dr. Connie Kvarfodt, Dr. Thecla Damianakis, Dr. Elizabeth Donnelly, Dr. Deborah Hernandez-Jozefowicz, Dr. Dana Levin, and Ms. Mary Medcalf

Sociology, Anthropology and Criminology
Members: Dr. Ruth Mann, Dr. Bob Arnold & Dr. Cheran Rudhramoorthy

Visual Arts Research Ethics Committee
Members: Prof. Michael Keating

Women's & Gender Studies Research Ethics Committee
Members: Dr. Dusty Johnstone, Dr. Danielle Price & Dr. Pauline Phipps, Dr. Charlene Senn, Dr. Betty Barrett, Dr. Cara Fabre and Ms. Lacy Carty

SPECIAL ADVISORS TO THE REB

Beginning in 2017, the REB invited individuals with specific expertise to act as expert advisors to the REB. These expert advisors assist the REB in determining research ethics issues in specialized topic areas, provide guidance on policy issues as well as consult with individual researchers referred through the REB. The following individuals have agreed to act as specialized resource experts to the REB.

Special Advisors to the Board 2017-current

Clinical Research
Dr. Maher El-Masri
School of Nursing

Data Management
Ms. Kristi Thompson
Leddy Library

Education and Local School Boards
Dr. Geri Salinitri
Faculty of Education

Human Biological Materials
Dr. John Hudson
Dr. Phil Karpowicz
Biology

Medical Devices
Dr. Roman Maev
Mr. Bartosz Slak
Physics & Diagnostic Imaging Centre

Online Research
Dr. Sarah Woodruff
Kinesiology

Research Involving the First Nations, Inuit and Métis Peoples of Canada
Dr. Harvey McCue
Dr. Brent Angell
School of Social Work
Mr. Russell Nahdee
Aboriginal Education Centre

Research Using Deception
Dr. Josée Jarry
Psychology

REB PROTOCOL REVIEW ACTIVITY July 1, 2015—December 30, 2017

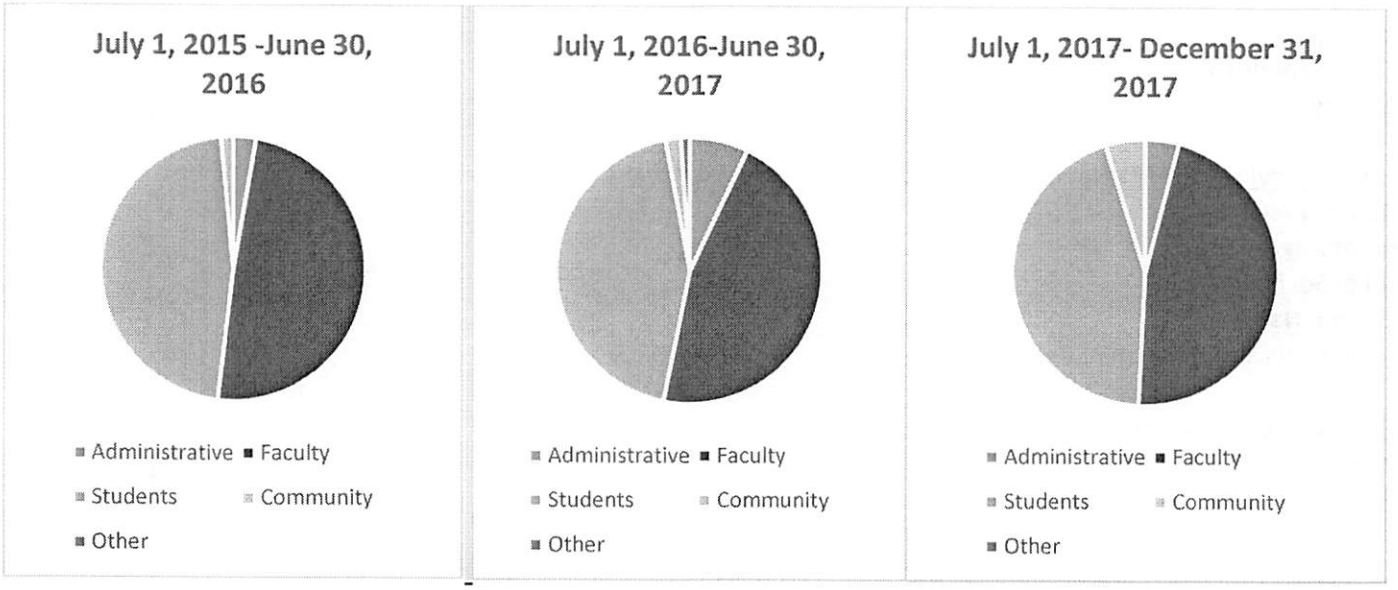
Protocol reviews and monitoring are the activities of the REB which require the most amount of member labour. Each new file submitted to the REB requires approximately 10-20 hours from point of submission to clearance. This includes: initial processing for file completeness and assessment of readiness for review; assignment to committee; committee members' individual time to review the protocol; time in committee review; sending comments and communicating with researchers; reviewing researchers' response to comments and protocol modifications; data entry and file processing. Pre-submission consultations with researchers can vary from several minutes to several hours depending upon the complexity of the protocol. Please refer to Appendix A for a flowchart of the review structure and processes of the REB.

New Applications by Level of Review

July 1, 2015-June 30, 2016 (12 mos)		July 1, 2016-June 30, 2017 (12 mos)		July 1, 2017-Dec 30, 2017 (6 mos)	
Full Board	8	Full Board	3	Full Board	2
Delegated	154	Delegated	135	Delegated	68
Executive	92	Executive	131	Executive	54
Total	**254**	**Total**	**269**	**Total**	**124**

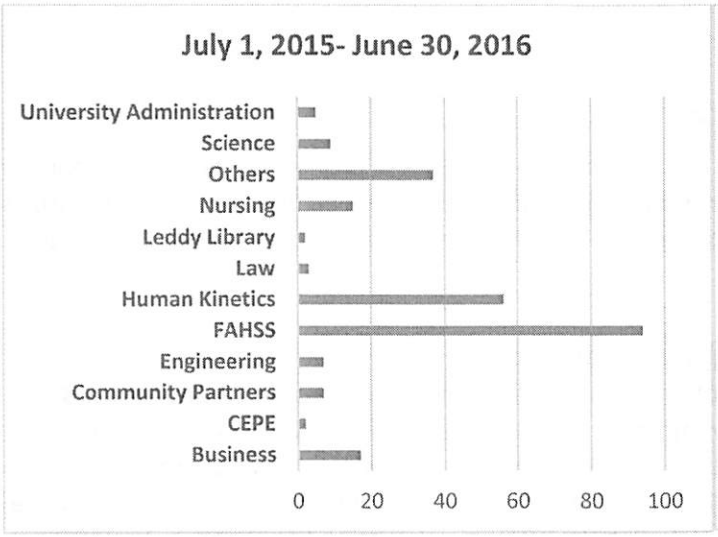
New Applications by Principle Investigator Type

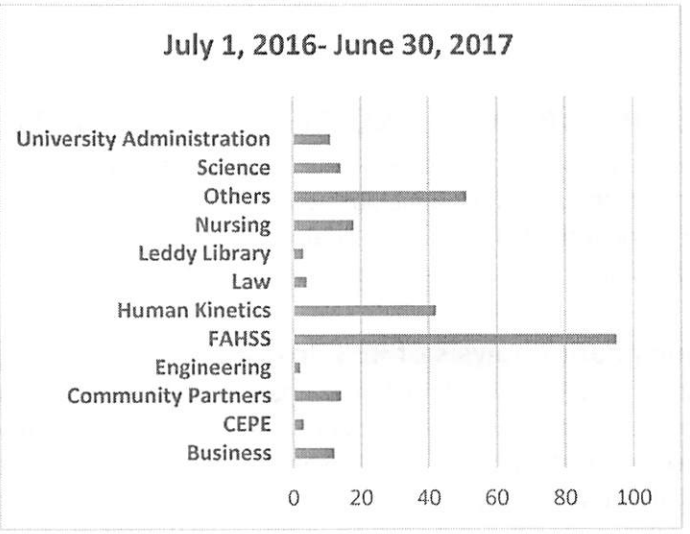
July 1, 2015-June 30, 2016 (12 mos)		July 1, 2016-June 30, 2017 (12 mos)		July 1, 2017-Dec 30, 2017 (6 mos)	
Administrative	7	Administrative	19	Administrative	5
Faculty	125	Faculty	124	Faculty	58
Students	118	Students	118	Students	55
Community	4	Community	5	Community	6
Other		Other	3	Other	
Total	**254**	**Total**	**269**	**Total**	**124**

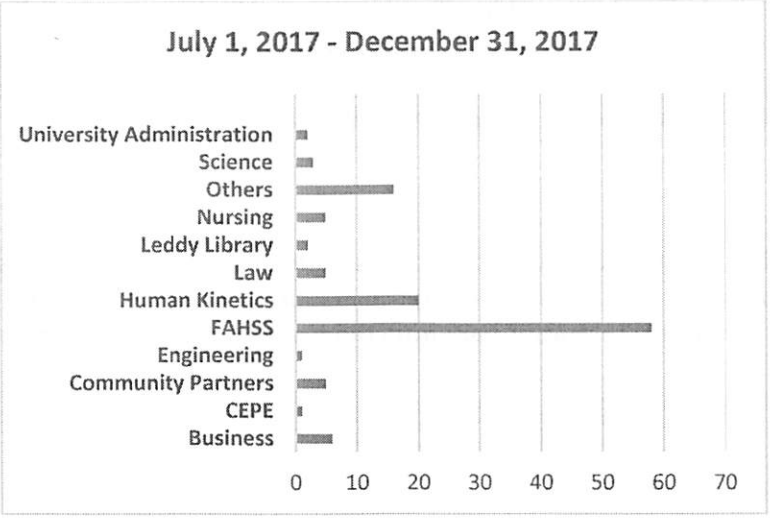


New Applications by Faculty Unit

July 1, 2015-June 30, 2016 (12 mos)		July 1, 2016-June 30, 2017 (12 mos)		July 1, 2017-Dec 30, 2017 (6 mos)	
Business	17	Business	12	Business	6
CEPE	2	CEPE	3	CEPE	1
Community Partners	7	Community Partners	14	Community Partners	5
Engineering	7	Engineering	2	Engineering	1
FAHSS	94	FAHSS	95	FAHSS	58
Human Kinetics	56	Human Kinetics	42	Human Kinetics	20
Law	3	Law	4	Law	5
Leddy Library	2	Leddy Library	3	Leddy Library	2
Nursing	15	Nursing	18	Nursing	5
Others	37	Others	51	Others	16
Science	9	Science	14	Science	3
University Administration	5	University Administration	11	University Administration	2
Total	**254**	**Total**	**269**	**Total**	**124**







Post Clearance Review Activity

After protocols are cleared, four additional areas of protocol activity are monitored by the REB. These include: requests to revise an existing protocol; unanticipated or adverse events; annual progress reports, and final reports. Post clearance request to revise reviews can require one to several hours each of the REB's time depending upon the number and complexity of the requests. Unanticipated and adverse events are rare, but when they do occur they often require several hours for the REB and researcher communication and meetings, REB communication with participants, file documentation and clearance. Progress reports and final reports require less time as these tend to be straightforward descriptions of project process or conclusion.

July 1, 2015-June 30, 2016 (12 mos)		July 1, 2016-June 30, 2017 (12 mos)		July 1, 2017-Dec 30, 2017 (6 mos)	
Files closed	157	Files closed	95	Files closed	37
Final & Progress Reports	227	Final & Progress Reports	251	Final & Progress Reports	140
Requests to revise	188	Requests to revise	201	Requests to revise	55
Unanticipated/Adverse Events	12	Unanticipated/Adverse Events	22	Unanticipated/Adverse Events	4
Consultations	72	Consultations	80	Consultations	70

*** Files with revisions; the total number of submissions for revision is higher.**

REB INITIATIVES AND ACCOMPLISHMENTS

In addition to protocol reviews, the Office of Research Ethics engages in other activities in promoting the ethical conduct of research. Appendix B includes the latest annual report from the Chair of the REB to the Full Board which summarizes the work of the Office and the goals of the Chair for the following year. Results from five of the major initiatives included in the Chair's annual report are summarized below.

Benchmark Analysis of REB Protocol Review Timing and Work Flow

In 2017, the REB Chair initiated an analysis of the REB protocol review process, timing of protocol review events and points of contact with researchers to identify areas of improvement for the REB. The REB hired Rochelle Stevenson, Ph.D. candidate in Soc/Anth/Crim and student representative on the REB, to gather information on all protocol file activity from January 1, 2015-December 30, 2016. Ms. Stevenson presented her results to the REB in February 2018. The report provided the first analysis of the work flow of the REB including timing from submission to clearance, timing between events, types of researcher contact and identified target areas for improvement. The results from this project were very beneficial for evaluating the performance of the REB and so will remain a consistent activity funded through the REB budget as a cost for on-going performance assessment and as baseline measures for evaluating the impact of policy and procedural initiatives. A summary is included here; the full slide presentation to the REB is included in Appendix C.

<u>Major findings</u>

On average, the REB clears files within 35 days of receipt of the protocol; 50% of files are cleared within 30 days. Once the REB has reviewed a file, the time from review to clearance is approximately 20 days. This includes sending reviewer comments to the researchers, receiving responses back from the researchers and reviewing these responses and providing final clearance.

	2015 (241 files) n=days			2016 (254 files) n=days	
	Mean	Median		Mean	Median
Received to clear	37.7	30		36.7	30
Review to clear	28.5	21		28.0	19.5
Q25		6.75			6
Q75		42			34
Review to Conditional Clear	42.8	39		38.8	15.5
n (% of N)	12 (5%)			24 (9.5%)	
Review to Full Clear	27.6	20		26.6	20
N (% of N)	182 (75.5%)			192 (75.6%)	

Effectiveness of protocol review changes

When the new Chair of the REB started July 1, 2016, she revised several protocol review procedures. To assess the impact of these modified procedures, Ms. Stevenson compared data before and after July 1, 2016. The analyses demonstrated that the new procedures had a positive effect on time from review to clearance. In some cases, the time for review was reduced in half and some review processes were completed within one day or the same day as submission. For example, review to clearance for executive reviews reduced to 8 days on average, with 50% of files being cleared within a day.

	2016 Before July 1 (139 files) n=days				2016 After July 1 (110 files) n=days		
	Mean	Median	Std.Dev		Mean	Median	Std. Dev.
Review to Clear - REB Time	15.38	11	19.97		9.75	7	9.9
EXECUTIVE REB Time	19.3	4.5	43.45		8.28	1	15.66
DELEGATED REB Time	39.08	23	50.53		29.51	23	24.65
Requests to Revise	0.75	0	1.32		0.59	0	1.83
n (% of N)	121 (87.1%)				107 (97.3%)		
Time to Clear	4.73	2	9.75		1.75	1.3	1.89

Please see Appendix C for the full presentation of review times, protocols by faculty, and other review information from the benchmark study.

Community Collaborations

Hôtel Dieu-Grace Health Care

The University of Windsor continues to operate as the REB for Hôtel Dieu-Grace Health Care providing protocol reviews and monitoring of research under the auspices of the hospital. Between 2015-2017, the REB reviewed seven protocols and currently has three open files.

Reciprocity with Windsor Regional Hospital (WRH)

To support the increasing research collaboration between the University of Windsor and WRH, the REB now accepts applications on WRH protocol application forms and assists university researchers in preparing their files to submit to WRH REB. The new REB website (described below) contains the documents necessary for application to WRH REB and the process of application. The Chair also sits as a non-voting member of the WRH REB.

Windsor Essex County Heath Unit (WECHU)

In September 2016, the Windsor Essex County Health Unit approached the REB to contract for ethics review for all research conducted within the WECHU. To date the REB has reviewed nine protocols for WECHU, as well as provided training and consultation for the staff on research ethics issues.

Designated Portal for Research Summaries for Participants

The TCPS2 outlines the ethical responsibility for researchers to inform participants of the results of research in which they have engaged (TCPS2, 4.7). To assist researchers in complying with the TCPS2, in 2017, the REB collaborated with Leddy Library to create a website connected with Scholar's Portal where researchers could upload research summaries for participants. The REB Chair and David Johnstone from the library worked closely to design and implement a site that would be easy for participants to navigate while also protecting the copyright and publication protection for researchers. Feedback on this new platform has been very positive from both researchers and research participants. This new site can be found at: https://scholar.uwindsor.ca/research-result-summaries/ and can also be accessed from the REB website: http://www.uwindsor.ca/research-ethics-board/308/research-participant

Enhanced REB Website

In 2017, the REB contracted with Alicia Higginson of Office of Open Learning to assist the REB in enhancing its website for improved usability, properties for universal design, and increased resource and information access. The Public Affairs office provided additional assistance in the final REB website design and content. Along with the necessary information on REB processes, deadlines, and application forms, the REB now includes resources on current issues in research ethics, scholarly publications on research ethics as well as links to international review policies.

Research Ethics Education

To provide education for REB members as well as preparation for clinical trials certification, the REB became a member of Network to Networks (N2), a national alliance which supports collaboration across provinces in clinical research. One of the benefits of membership is access to the Canadian Collaborative Institutional Training Initiative (CITI) which includes on-line training for US and Canadian researchers in clinical trials management, relevant legislation and regulation for clinical research in US, Canada and Europe as well as ethics review guidelines for clinical trials. Through the REB's membership in N2, the research community can complete these courses for free which would normally cost $600-$800 per course. These courses are available to faculty, staff, and students. The REB has created a combination of courses so that certificates of completion can be awarded.

The Chair of the REB, REB members, and Special Advisor to the REB also provide course presentations on research ethics, workshops for faculty and students on specialized topics in research ethics, and participates in scholarly conferences on research ethics.

LOOKING FORWARD 2018-2019

The REB has four main goals for the upcoming academic year listed below together with corresponding objectives:

Pursue clinical trials certification through Clinical Trials Ontario
--Finalize membership and US registration of a new Biomedical Full Board for clinical trials protocol reviews
--Provide training to new Biomedical Board on clinical trials review
--Inform research community on clinical trials opportunities and resources in collaboration with researchers

Increase communication and engagement with research community on research ethics and REB
--Develop and post formal policies and procedures from Office of Research Ethics
--Continue evaluation of REB processes and areas for improvement in protocol timing and quality of reviews
--Conduct an evaluation of the REB from perspective of researchers
--Create a mechanism for on-going researcher feedback to the REB

Explore reciprocal research approval for national and international research collaborations
--Develop policy and procedures on multi-jurisdictional research
--Explore reciprocity for collaborative research in US and Internationally

Expansion of educational resources and leadership in research ethics
--Pursue research opportunities on research ethics issues with students and faculty
--Expand education on research ethics issues for international students
--Participate in international projects on research ethics and ethical review procedures
--REB Chair to complete ethics leadership certificate through Carleton University

On behalf of the University of Windsor Research Ethics Board, this report is respectfully submitted.

Suzanne McMurphy, Chair

REB WORKFLOW AND METRICS for BENCHMARKS

Consultations
Chair, Coordinator, Delegated and Full Board members

Exemptions
Chair determines exemption according to TCPS2 2.2, 2.3, 2.5

PROTOCOL SUBMITTED

Pre-Check
Coordinator Reviews Protocol to ensure all documents

Missing Protocol Documents
Coordinator contacts PI to obtain missing documents, other review items.

Pre-Review Consultations
Chair, Coordinator, REB members consults with PI
Protocol returned to PI for Modifications

Schedule for Review
Scheduled for Proportional Review

Workshops and Scholarship
University of Windsor community, Windsor community, medical community, academic community

Chair
Daily

Protocol modifications and final clearance

Executive reviews
Administrative reviews
Secondary use of data
Requests from external researchers
Multi-jurisdictional research

Chair
As needed
Chair + 1 Board Member

Special expertise reviews
Requests from external researchers

Delegated Board
Weekly
Chair + 2 Board Members

Reviews all minimal risk protocols

Full Board
(Socio-Behavioral)
Monthly
Chair + Full Board Members

Reviews more than minimal risk or speciality protocols

Provides policy direction and planning for REB

NEW Full Board
(Biomedical)
As needed
Chair + Speciality Board Members

Review clinical trials, medical research, and genetic and other human tissue research

Provides policy direction and planning for REB

Metrics

# of workshops, educational events
# of pre-review consultations
# of post-review communications

Time from protocol submission to review
Time from review to minutes sent to PI
Time from minutes sent to PI response
Time from PI response to clearance letter

Number of hours for review per protocol
Number of hours in meeting per type of committee

POST CLEARANCE

Chair
Daily
Protocol Modifications
Requests to Revise
Serious and Adverse Events
Unanticipated Events

Coordinator
Daily
Progress Reports
Final Reports
ERSO reporting

APPENDIX B

Chair's Report to the Research Ethics Board
Suzanne McMurphy

ACCOMPLISHMENTS: July 1, 2016- June 30, 2017

The following accomplishments are those over and above our daily file processing, protocol reviews, communications with researchers, clearing protocols, requests to revise and closing files. The Office also answers questions daily by phone and e-mail daily and frequently meets with researchers, students for consultation on protocol applications and on-going studies, adverse events, etc. The office is open daily for walk-in consultations and inquiries.

Improving REB Structure and Procedures

Benchmarking study
To identify benchmarks for measuring time between events and developing benchmarks, Rochelle Stevenson conducted a 2 year retrospective file audit of all files—closed and active. We measured time from all event points from initial application to final clearance, post-clearance events and closure. Rochelle is still analyzing the data and will give a presentation to the Full Board, anticipated in February 2018.

Current file audit: In preparation for applying for CTO certification, we conducted an audit of all open files to ensure all documents were available and files were complete, TCPS2 certificate were available and other necessary requirements were met. The audit was completed in April 2017. We currently have approximately 1,000 open active files.

Clinical Trials Ontario: (CTO): We are working toward achieving certification as an REB that can participate in CTO stream clinical trials in Ontario. This will allow our researchers to apply to our Board for clinical trials, as well as other researchers looking for a Board with a speciality or oversight capacity for their clinical trial. Currently there are 14 Boards certified in Ontario.

Computer safety: Three rounds of viruses hit the REB last year. In July 2016, we found multiple viruses on the REB computers that had most likely been circulating since the Spring 2016. We were infected again in Fall 2016 and Spring 2017. To provide greater protection of our computers, we purchased a stronger virus protection program than that offered by the university—called *E-Set*—recommended by IT. This virus protection covers Sarah and my desktops, laptops, and cell phones.

Coordinator job description and level: Sarah and I updated the job description for the Coordinator's position and requested a job assessment which resulted in a 4-level increase.

Expert advisors and panels: Individuals with specific expertise have been recruited to provide expert advice to the REB to support the REB's capacity to respond to current research ethics issues. These experts will be listed on the website and available to researchers and REB members.

Health and Safety: We have developed a policy to outline the alignment between Health and Safety certificate requirements and REB clearance. The Health and Safety officer—Sherry Menard—will be appointed to the REB Full Board and review protocols containing elements covered under health and safety regulations. She will advise the Board on whether the elements listed in relevant protocols are sufficient. This policy will be outlined under our new internal guidelines #902.

Policy development: We have initiated three sets of policy developments:
First, we have updated our *University of Windsor Guidelines for Research with Human Participants* to bring us into compliance with the new TCPS2, 2014. These will be submitted to University of Windsor Senate in 2018.

Second, we are developing our internal working policies and procedures for our day-to-day review and internal processes in preparation for certification with CTO.

Third, we are developing policies and procedures specific to our work with external community partners that will assist with CTO certification and streamline application review processes for our researchers.

Registrations: We have secured our REB as a US registered IRB with the Office of Human Research Protection—University of Windsor ORG #7990/ IRB1: #9591, expires 09/2020. Our Federal-wide Assurance number expires next year, 2018. We have both numbers on file if any faculty require these numbers for a collaboration with a US researcher or US funding agency.

Increasing communication and support for researchers

Invite PIs to Board meetings: We now extend an invitation to Principal Investigators to briefly present their protocols and answer questions when we review their files with the Full Board. We will also call PIs during Delegated Review meetings, if we have questions that they can answer to assist our review.

New forms: We have modified our main Faculty/Staff/Student form which will be available on our new website. We have updated the Request to Revise form to include monitoring information. We created a form to request opening a closed file, and request an executive review of a file.

REB summary site with Leddy Library: To facilitate the summary of research results for participants and support our researchers to comply with the TCPS2 guidelines on feedback for participants, we are working with Leddy Library to create a site where researchers can upload summaries of their projects. This site will be both copyright protected as well as be easily accessible for participants.

Website: We have created a new website with a simplified landing page and updated information. Alicia Higgison from the Office of Open Learning was hired to create the main platform and Sarah has been working to update the information on the website. PAC will provide the final programming.

Strengthening engagement with external partners

REB of Record for Windsor Essex Community Organizations: We have contracts as the Research Ethics Board of record for the following organizations: Hotel-Dieu Grace Hospital, Windsor-Essex County Health Unit; Cardiac Care Centre. We are also the Appeals Board for Lambton College.

Windsor Regional Hospital: We now accept Windsor Regional's protocol review forms for our own reviews and provide feedback in consultation with Windsor Regional. The intent is to prepare the file through our review and communication with researchers and thus expedite the review process with Windsor Regional.

ON-GOING for 2016-2017:

Complete internal operating procedures and policies: In preparation for a pre-certification visit from Clinical Trial Ontario (CTO) we must document all our internal working procedures and post them on our website.

Ethics mailbox and calendar: We continue to have difficulties with the Outlook calendar and the Ethics mailbox. Messages are delayed either in 'drafts' or in 'outbox' and some are lost. We also have had difficulty scheduling re-occurring meetings and re-scheduling meetings. We are working with IT to address the problems.

Hotel Dieu contract: We are continuing our contract with Hotel Dieu as their board of record for research ethics reviews. We are currently developing processes and procedures for clinical trials and other research being conducted on-site at the Hospital.

Re-negotiating all University of Windsor departmental and specialized REC contracts: Revising the contracts and including their association with the main REB as well as conducting a file review will assist in preparation for the Tri-Council monitoring visit and strengthen our relationship with Departments.

Schulich Medical School: We are exploring the options of becoming the Board of Record for all researchers associated with the medical school located at the University of Windsor.

Training for Board members: We have N2 clinical trials education and on-line certification available for Board members. These trainings will also be available for free for the University of Windsor community and our institutional partners.

GOALS FOR 2017-2018

Creation of a new Clinical Health committee or Biomedical Board: To support the increase in clinical trials and biomedical research as well as preparation for clinical trials certification, a new review committee is being explored.

CTO certification: We are preparing for a pre-audit to occur in early 2018.

IRB Administrator Certification: Suzanne and Sarah will seek US IRB Administrator certification after January 2018. This will improve our knowledge of the new Federal Regulations (45 CFR 46) that will go into effect January 2018 and assist us in supporting researchers conducting studies and seeking IRB approval in the US.

First Nations and OCAP certification: We have recently become aware of guidelines and a certification process for conducting research with First Nations communities. We will explore these guidelines and determine their implication for the REB protocol reviews and possibly researcher certification.

REB BENCHMARKING ANALYSIS

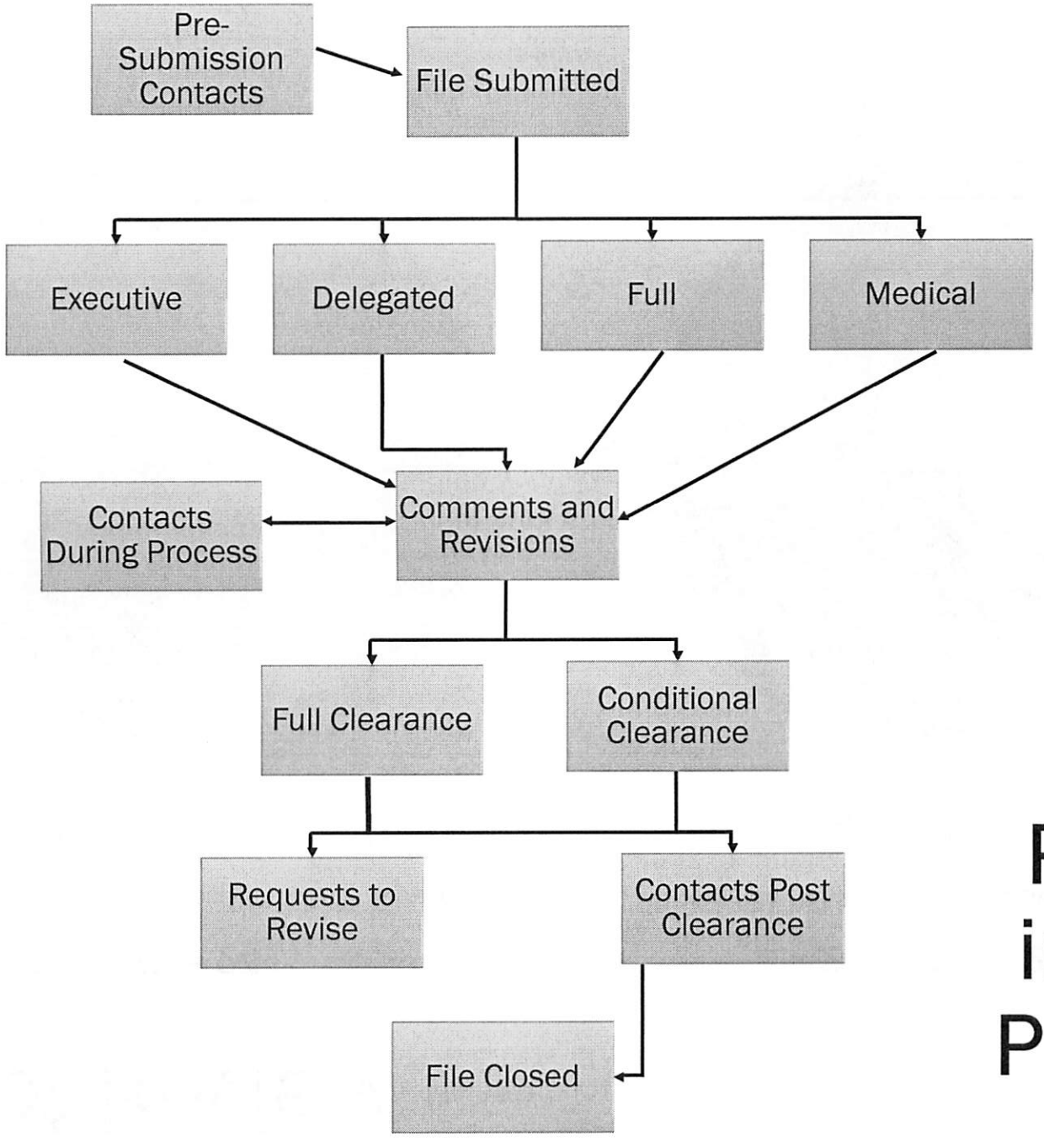
Rochelle Stevenson, MA
Suzanne McMurphy, REB Chair
February 6, 2018.

Context

- Years Covered: 2015 and 2016
- Time points of various points of contact throughout the process from pre-submission of application to final report

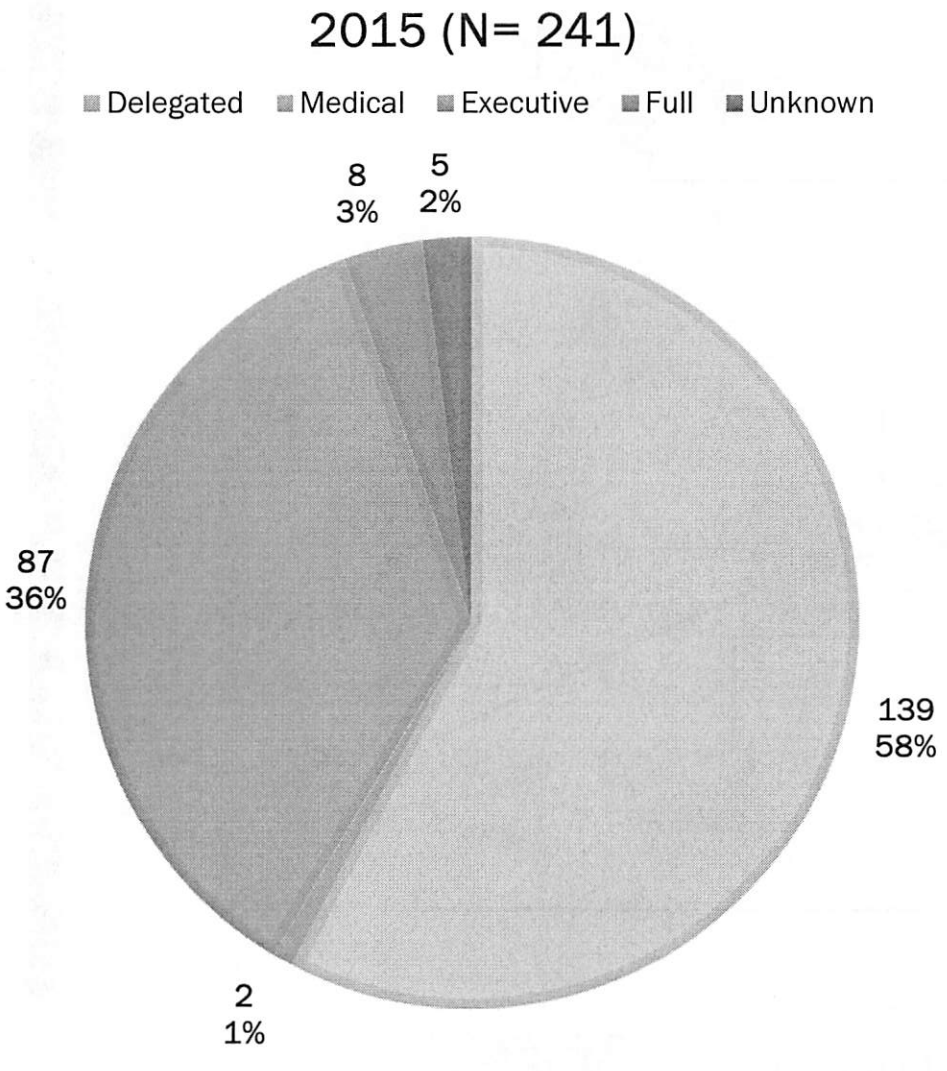
Goals:

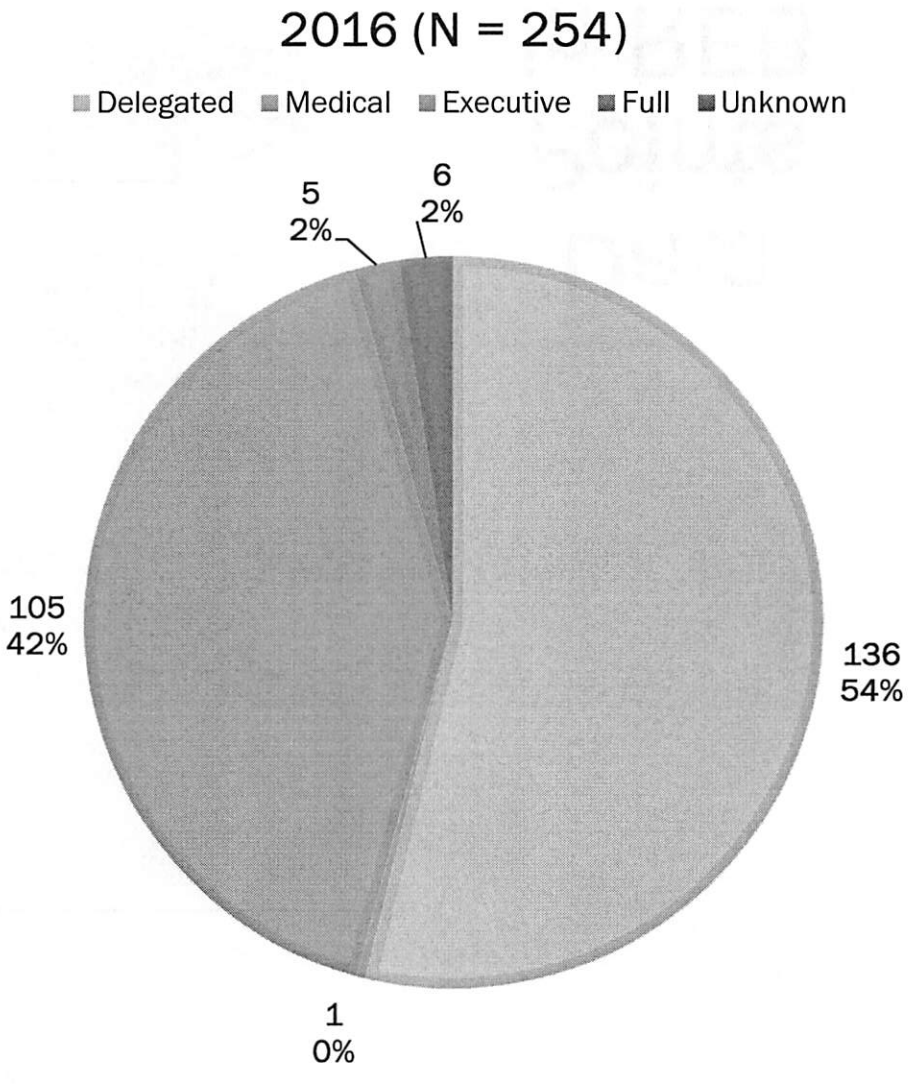
- To evaluate the REB process;
- To establish benchmark times for key decisions; and
- To attempt to more accurately portray the amount of labour and time involved in each file and across the REB process.



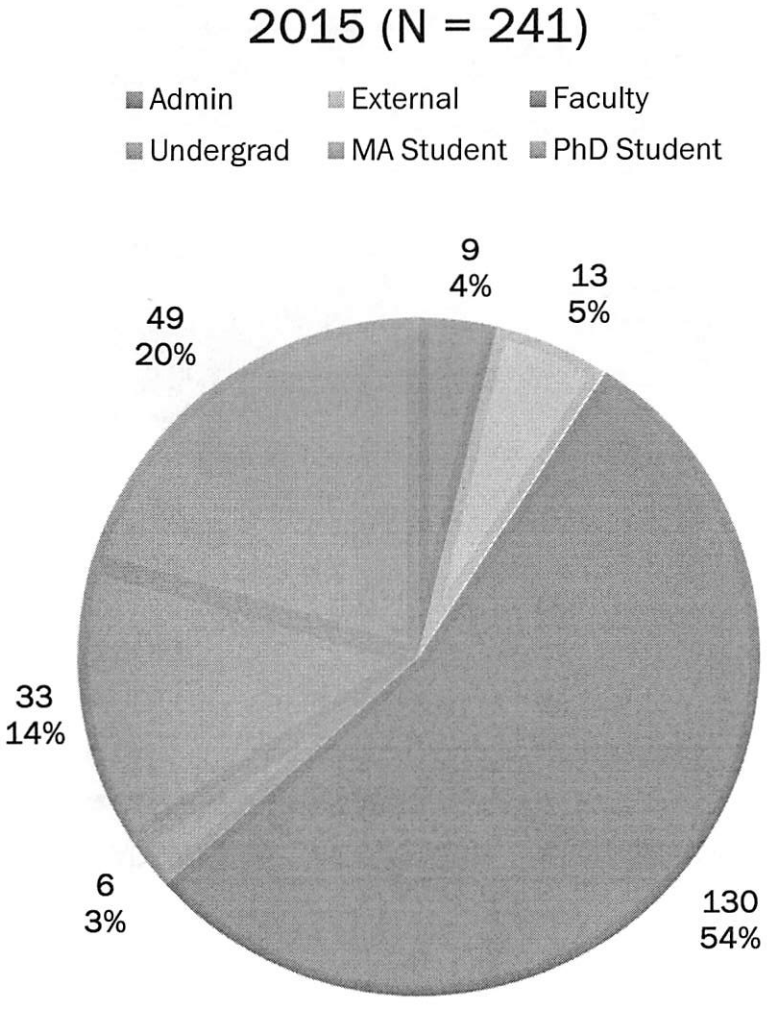
Data Points in REB Process

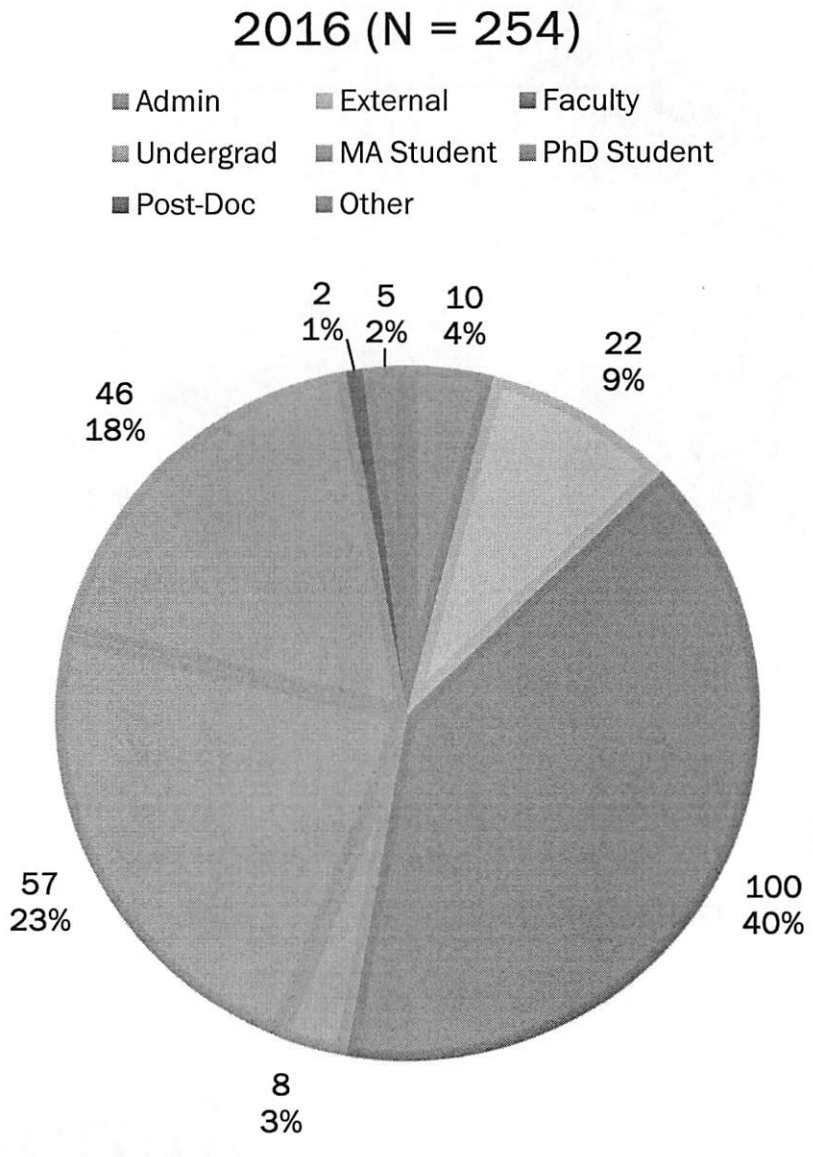
Type of Review



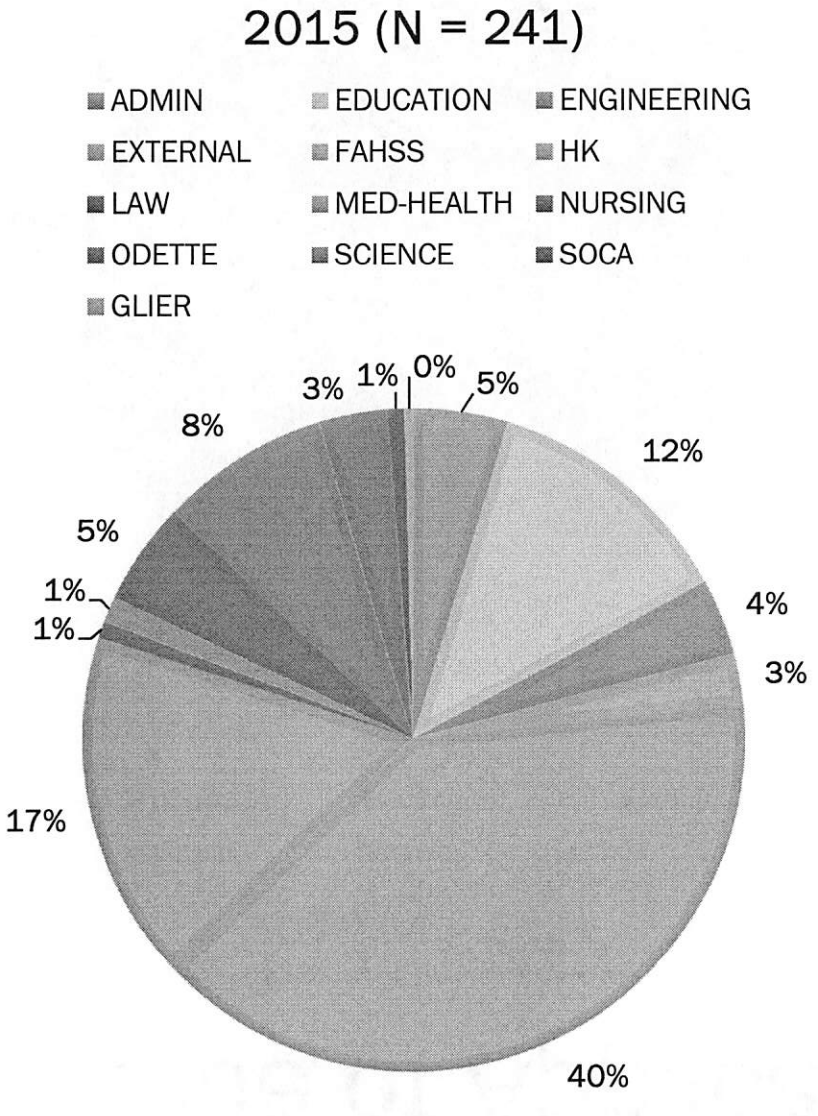


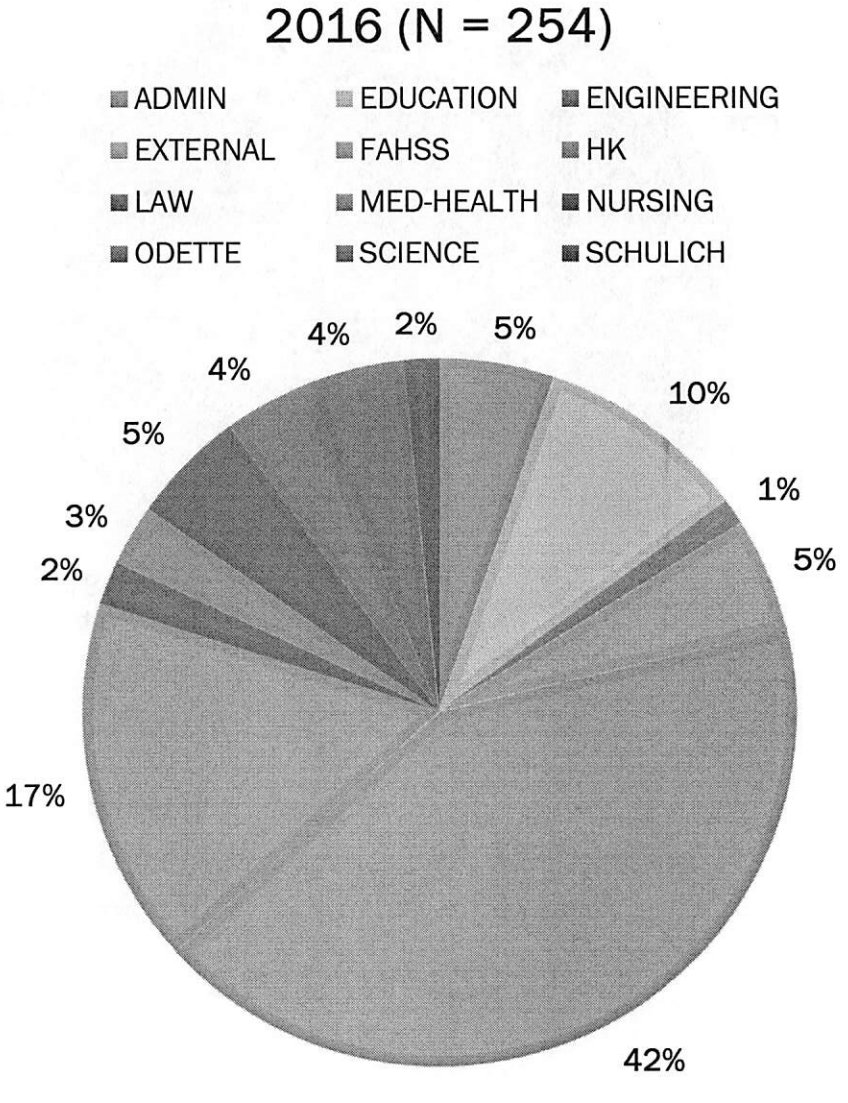
Type of Applicant



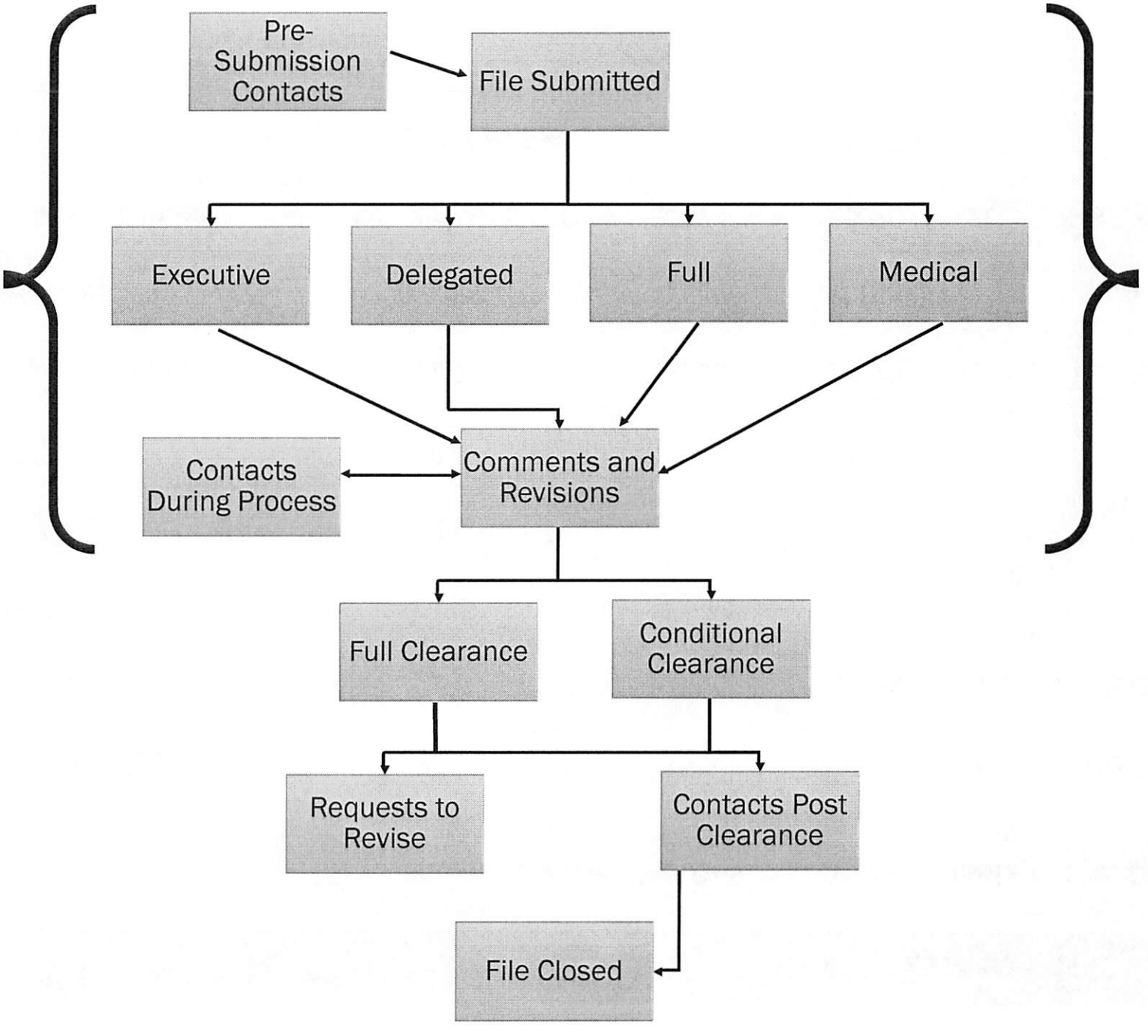


Department or Faculty



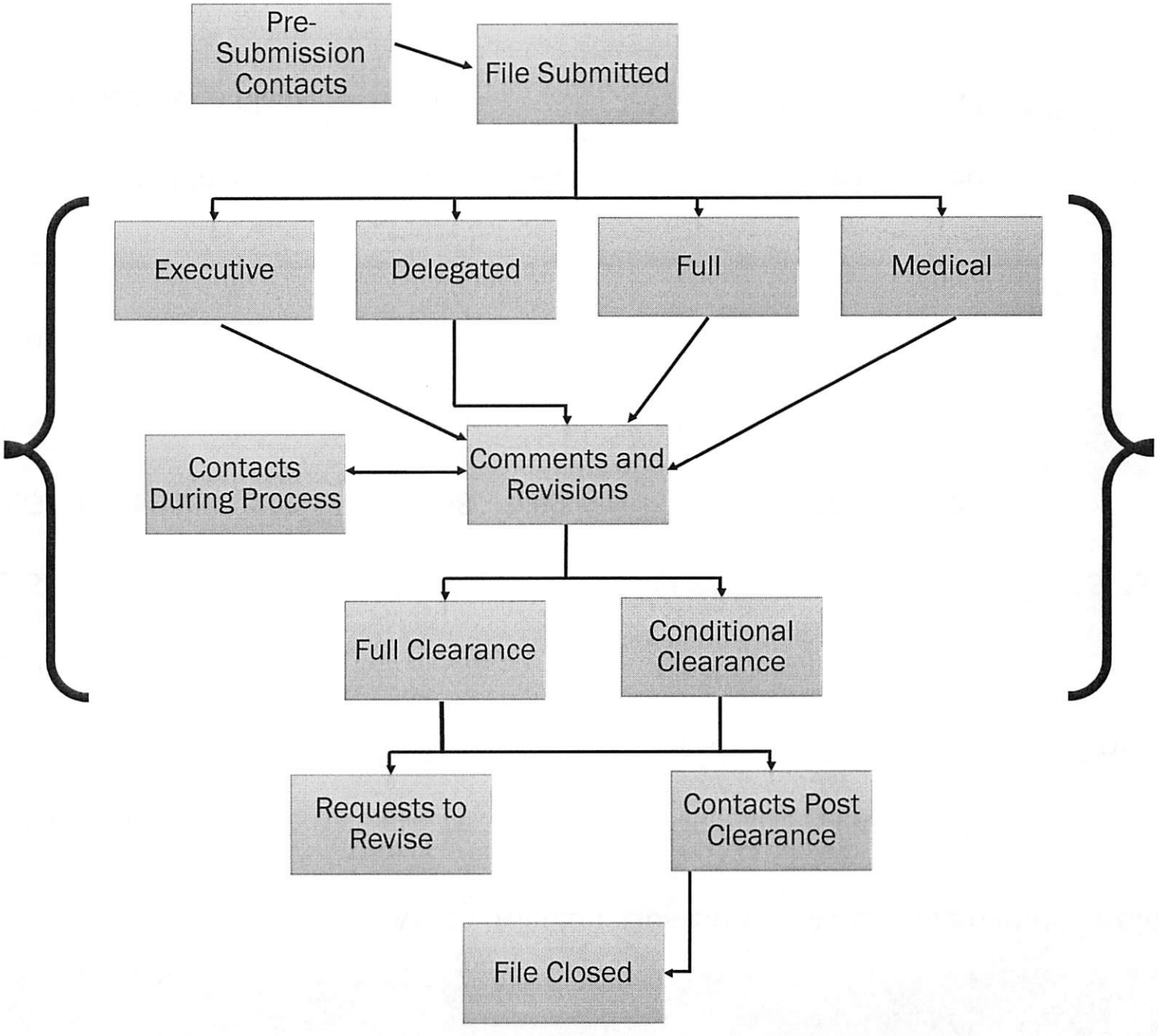


	2015 (N = 241)				2016 (N = 254)		
	Mean	Median	Std.Dev		Mean	Median	Std. Dev.
Received to Clear	37.7	30	35.3		36.68	30	40.26
Review to Clear	28.5	21	30.64		27.94	19.5	39.8
Q25	6.75				6		
Q50	21				19.5		
Q75	42				34		
Review to Conditional Clear	42.75	39	26.33		38.79	15.5	55.53
n (% of N)	12 (5%)				24 (9.5%)		
Review to Full Clear	27.56	20	30.74		26.58	20	37.36
n (% of N)	182 (75.5%)				192 (75.6%)		


Pre-Submission Contacts
File Submitted
Executive
Delegated
Full
Medical
Contacts During Process
Comments and Revisions
Full Clearance
Conditional Clearance
Requests to Revise
Contacts Post Clearance
File Closed

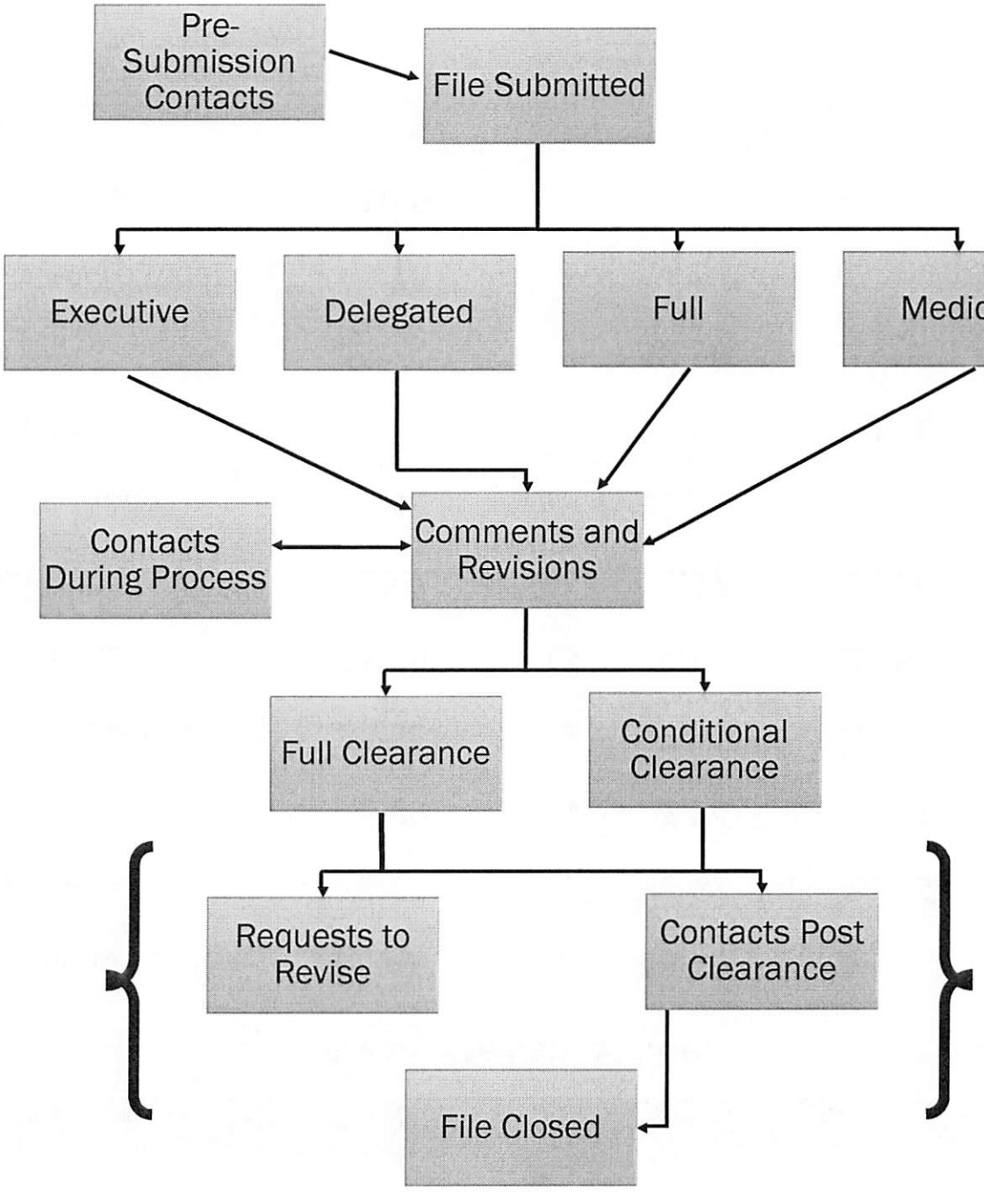
	2015 (N = 241)			2016 (N = 254)		
	Mean	Median	Std.Dev	Mean	Median	Std. Dev.
Pre-Submission Contacts	2.1	2	1.14	1.77	1	1.16
n (% of N)	21 (8.7%)			39 (15.4%)		
Received to Review	8.77	8	6.12	9.6	8	8.47
Executive	4.53	3	4.7	4.98	3	7.68
Delegated	10.27	8	4.88	12.6	10	7.3
Full	16.38	14.5	7.86	18.5	15	12.37
Medical	36			17		
Review to 1st Comments	6.13	6	5.92	7.33	6	8.2
Contacts During Process	2.16	2	2.07	2.15	1	1.91
n (% of N)	62 (25.7%)			101 (39.8%)		

	2015 (N = 241)				2016 (N = 254)		
	Mean	**Median**	**Quartiles**		**Mean**	**Median**	**Quartiles**
Received to Review	8.77	8			9.6	8	
Executive	4.53	3			4.98	3	
Q25			1				1
Q50			3				3
Q75			6				6
Delegated	10.27	8			12.6	10	
Q25			8				8
Q50			8				10
Q75			12				14.5
Full	16.38	14.5			18.5	15	
Medical	36				17		


Pre-Submission Contacts
File Submitted
Executive
Delegated
Full
Medical
Contacts During Process
Comments and Revisions
Full Clearance
Conditional Clearance
Requests to Revise
Contacts Post Clearance
File Closed

	2015 (N = 241)			2016 (N = 254)		
	Mean	Median	Quartiles	Mean	Median	Quartiles
EXECUTIVE Review to Clear	11.79	2		14.46	2	
Q25			0			0
Q50			2			2
Q75			11.75			15.75
DELEGATED Review to Clear	36.58	29		34.91	23	
Q25			17			15
Q50			29			23
Q75			48			36
FULL Review to Clear	42	49		61	50	
MEDICAL Review to Clear	16				34	

	2015 (N = 241)			2016 (N = 254)		
	Mean	Median	Std.Dev	Mean	Median	Std. Dev.
EXECUTIVE Review to Clear	11.79	2	28.13	14.46	2	34.43
Researcher Time	15.56	6	31.61	16.53	3	38.75
REB Time	6.89	4	7.74	5.67	3	9.24
DELEGATED Review to Clear	36.58	29	28.91	34.91	23	40.91
Researcher Time	25.15	13	48.1	22.66	11.5	42.45
REB Time	15.7	13	11.17	14.76	11	17.85
FULL Review to Clear	42	49	22.42	61	50	35.02
Researcher Time	26.37	23.5	20.91	33.8	21	28.92
REB Time	12.71	9	12.99	27.2	32	11.82
MEDICAL Review to Clear	16				34	
Researcher Time	10.5				13	
REB Time	3				21	


Pre-Submission Contacts
File Submitted
Executive
Delegated
Full
Medical
Contacts During Process
Comments and Revisions
Full Clearance
Conditional Clearance
Requests to Revise
Contacts Post Clearance
File Closed

	2015				2016		
	Mean	Median	Std.Dev		Mean	Median	Std. Dev.
Requests to Revise	0.6	0	1.18		0.67	0	1.58
n (% of N)	217 (90%)				230 (90.6%)		
Time to Clear	4.48	1.7	6.53		3.88	1.4	8.3
Contacts Post Clearance	3.01	2	2.91		2.17	1	2.1
n (% of N)	135 (56%)				126 (49.6%)		

	2016 Before July 1 (n = 139)			2016 After July 1 (n = 110)		
	Mean	**Median**	**Quartiles**	**Mean**	**Median**	**Quartiles**
Review to 1st Comments	7.85	6		6.63	5	
Review to Clear	32.7	20.5		21.64	17	
Executive Review to Clear	19.3	4.5		8.28	1	
n (% of N)	57 (41%)			48 (43.6%)		
Q25			0			0
Q50			4.5			1
Q75			20			6.5
Delegated Review to Clear	39.09	23		29.51	23	
n (% of N)	75 (54%)			60 (54.5%)		
Q25			15			16
Q50			23			23
Q75			37			36

	2016 Before July 1 (n = 139)			2016 After July 1 (n = 110)		
	Mean	**Median**	**Std.Dev**	**Mean**	**Median**	**Std. Dev.**
Review to Clear - REB Time	15.38	11	19.97	9.75	7	9.9
EXECUTIVE REB Time	19.3	4.5	43.45	8.28	1	15.66
DELEGATED REB Time	39.08	23	50.53	29.51	23	24.65
Requests to Revise	0.75	0	1.32	0.59	0	1.83
n (% of N)	121 (87.1%)			107 (97.3%)		
Time to Clear	4.73	2	9.75	1.75	1.3	1.89

University of Windsor
Senate

*5.7.2: **Senate Standing Committee – Membership**

Item for: **Approval**

Forwarded by: **Senate Governance Committee**

MOTION: That Senate approve the Senate Standing Committees membership for 2018-2019.

**see attached*

Program Development Committee		
Member	**Term**	**Notations**
Provost and Vice President, Academic (Acting) (or designate) Prof. Jeffrey Berryman	Ex-officio	
Dean of Graduate Studies (or designate) Dr. Patricia Weir	Ex-officio	
Vice-Provost, Teaching and Learning (or designate) Dr. Erika Kustra (designate)	Ex-officio	
Faculty of Business Administration		
Dr. Maureen Sterling (S-2020)	2017-2019	
Faculty of Education		
Dr. Beth Daly (S-2020)	2017-2019	
Faculty of Engineering		
Dr. Randy Bowers	2017-2019	
Faculty of Human Kinetics		
Dr. Krista Chandler	2018-2020	
Faculty of Law		
Dr. Muharem Kianieff	2018-2020	
Faculty of Nursing		
Dr. Jamie Crawley	2018-2020	
Faculty of Science		
Dr. Jeremy Rawson	2017-2019	
Dr. Nurlan Turdaliev (S-2019)	2017-2019	
Faculty of Arts Humanities & Social Sciences (at least one from Social Science & one from Arts)		
Arts/Humanities – Dr. Jeremy Worth	2017-2019	
Social Sciences – Dr. John Sutcliffe	2018-2020	
Social Sciences – Dr. Greg Chung-Yan (S-2019) **Chair**	2017-2019	
Librarian Representative		
Mr. Pascal Calarco	2018-2019	
Student Representation (1 year terms) Five students (including at least one graduate, one part-time undergraduate, two full-time undergraduates) Deehanna Cober (UWSA), Zeina Merheb, (UWSA), TBA (GSS), Diana Marion (OPUS), TBA Additional		

***At least three members must be elected members of Senate.**

Academic Policy Committee		
Member	**Term**	**Notations**
Associate Vice President Academic (Acting) (or designate) Dr. Cheryl Collier	Ex-officio	
Vice-Provost, Teaching and Learning (or designate) Dr. Erika Kustra (designate)	Ex-officio	
Faculty of Business Administration		
Dr. Fazle Baki (S-2020)	2017-2019	
Faculty of Education		
Dr. Terry Sefton	2018-2020	
Faculty of Graduate Studies		
Dr. Dan Mennill	2017-2019	
Faculty of Engineering		
Dr. Jill Urbanic	2018-2020	
Faculty of Law		
Prof. Sujith Xavier	2018-2019	
Faculty of Human Kinetics		
Dr. Scott Martyn (S-2019)	2017-2019	
Faculty of Nursing		
Dr. Susan Fox	2018-2020	
Faculty of Science		
Dr. James Gauld (S-2019)	2018-2020	
Faculty of Arts, Humanities & Social Sciences (One from Social Science & one from Arts/Humanities)		
Arts/Humanities – Dr. Antonio Rossini (S-2019) **Chair**	2017-2019	
Social Sciences – Dr. Wansoo Park	2018-2020	
Librarian Representative		
Mr. Scott Cowan	2017-2019	
Student Representation (1 year terms) Four students (including one graduate, one part-time undergraduate, two full-time undergraduates). Yasin Avici (UWSA), Lena Sleiman (UWSA), TBA (GSS), Aftab Anwer (OPUS)		

***At least three members must be elected members of Senate.**

Senate Student Caucus		
Member	**Term**	**Notations**
Associate Vice-President, Student Experience Mr. Ryan Flannagan	Ex-officio	
Director, Campus Services Ms. Anna Kirby	Ex-officio	
Faculty of Business Administration		
Dr. Bharat Maheshwari	2018-2020	
Faculty of Education		
Dr. Geri Salinitri	2017-2019	
Faculty of Engineering		
Dr. Jennifer Johrendt	2018-2020	
Faculty of Law		
Prof. Claire Mumme (S-2020)	2018-2019	
Faculty of Human Kinetics		
Dr. Sean Horton	2017-2019	
Faculty of Nursing		
Dr. Kathy Pfaff	2017-2019	
Faculty of Science		
Dr. Shashi Jasra (S-2019)	2018-2020	
Faculty of Arts, Humanities & Social Sciences		
Arts/Social Sciences/Humanities– Dr. Katherine Quinsey (S-2020) **Chair**	2018-2020	
Librarian Representative		
Ms. Sharon Munro	2018-2020	
Student Representation (1 Year Terms) Eleven Students (2 graduate students, 2 part-time undergraduate, 4 full-time undergraduate, 1 international, 1 residence student, 1 student at large) (1 student from this group would be elected co-chair) TBA (GSS), TBA (GSS), Bernard Doctor (OPUS), Chris Baillargeon (OPUS), Deehanna Cober (UWSA), Lena Sleiman (UWSA), Zeina Merheb (UWSA), TBA (UWSA), TBA (International), TBA (Residence), TBA (Student At-Large)		

***At least three members must be elected members of Senate.**

Senate Governance Committee		
Member	**Term**	**Notations**
President (Chair) (Interim) Dr. Douglas Kneale	Ex-officio	
Provost and Vice President, Academic (Acting) (or designate) Prof. Jeff Berryman	Ex-officio	
Faculty of Business Administration		
Dr. Mitch Fields (S-Ex-officio)	2017-2019	
Faculty of Education		
Dr. Darren Stanley (S-2019)	2018-2020	
Faculty of Engineering		
Dr. Majid Ahmadi (S-2020)	2018-2020	
Faculty of Law		
Dr. Pascale Chapdelaine	2018-2020	
Faculty of Human Kinetics		
Dr. Michael Khan (S-Ex-officio)	2017-2019	
Faculty of Nursing		
Dr. Linda Patrick (S-Ex-officio)	2018-2020	
Faculty of Science		
Dr. Rick Caron(S-2019)	2018-2020	
Faculty of Graduate Studies		
Dr. Jill Crossman	2018-2020	
Faculty of Arts, Humanities & Social Sciences		
Arts/Humanities – Dr. Miriam Wright	2018-2020	
Social Sciences – Dr. Danielle Soulliere	2018-2020	
Librarian Representative		
Mr. Pascal Calarco (S-ex-officio)	2017-2019	
Student Representation (all vacant 1 year terms) Five student Senate members (including at least one graduate, one part-time undergraduate, two full-time undergraduates). Abrahim Abduelmula (UWSA), Serdar Ismail (UWSA), TBA (GSS), Ed King (OPUS).		

***At least half must be elected members of Senate.**