

**University of Waterloo**  
**SENATE**  
**Notice of Meeting**

**Date:** Monday 20 January 2020

**Time:** 3:30 p.m.

**Place:** Needles Hall, room 3407

<b>OPEN SESSION</b>		
3:30	<b><u>Consent Agenda</u></b> <b>Motion:</b> To approve or receive for information by consent items 1-5 below.	
	1. Minutes of the 18 November 2019 Meeting	Decision
	2. Reports from Committees and Councils	
	a. Graduate & Research Council	Information
	b. Undergraduate Council	Decision/Information
	3. Report of the President	
	a. Recognition and Commendation	Information
	4. Reports from the Faculties	Information
	5. Committee Appointments	Decision
	<b><u>Regular Agenda</u></b>	
3:35	6. Business Arising from the Minutes	Information
3:40	7. Presentation – Marios Ioannidis, Professor, Chemical Engineering	Information
	8. Reports from Committees and Councils	
3:50	a. Joint Report – Graduate & Research Council and Undergraduate Council	Decision
4:00	b. Graduate & Research Council	Decision
4:10	c. Undergraduate Council	Decision
4:20	9. Report of the President	Information
4:30	10. Q&A Period with the President	Information
4:35	11. Report of the Vice-President, Academic & Provost	Information
4:45	12. Report of the Vice-President, Research & International	Information
4:50	13. Other Business	
<b>CONFIDENTIAL SESSION</b>		
4:55	14. Minutes of the 18 November 2019 Meeting	Decision
5:00	15. Business Arising from the Minutes	
5:05	16. Other Business	

**University of Waterloo**  
**SENATE**  
**Minutes of the 18 November 2019 Meeting**

**Present:** Jean Andrey, Michael Balogh, Sandra Banks, Lisa Bauer-Leahy, Kankar Bhattacharya, Anne Bordeleau, Carmen Bruni, Kofi Campbell, Jeff Casello, David Clausi, Tara Collington, Joan Coutu, Eric Croiset, Alexandria De Sousa, Shannon Dea, Peter Deadman, Charmaine Dean, David DeVidi, Mathieu Doucet, Fraser Easton, Lynette Eulette, Paul Fieguth, Wendy Fletcher, George Freeman, Mark Giesbrecht, Julia Goyal, David Ha, John Haddock, Feridun Hamdullahpur (chair), Dennis Huber, Natalie Hutchings, Martin Karsten, Veronica Kitchen\*\*, Scott Kline, Karen Jack (secretary), Alex Lee, Robert Lemieux, Lili Liu, Kesen Ma, Ellen MacEachen, Katie Misener\*\*, Zoran Miskovic, Barb Moffatt, Rick Myers, Cathy Newell Kelly, Linda Ogechi Iheme\*\*, Troy Osborne, David Perrin, Bill Power, William Pristanski\*\*, James Rush, Max Salman, Naima Samuel, Beth Sandore Namachchivaya, Mark Seasons, Marcus Shantz, Joanne Shoveller, Jason Small, Richard Staines, Pearl Sullivan, Susan Tighe, Hamid Tizhoosh, Bruno Tremblay, Vivek Unnithan, Cristina Vanin, Maya Venters, Johanna Wandel, Stephen Watt, En-Hui Yang

**Guests:** Bruce Campbell, Aldo Caputo, Donna Ellis, Matthew Grant, Ross Johnston, Andrea Kelman, Derek Madge, Nick Manning, Norah McRae, Diana Parry, Alice Raynard, Chris Read, Ian Rowlands, Emily Schroeder, Allan Starr, Kerry Stryker

**Absent:** Sheila Ager\*, Dominic Barton\*, Chris Bauch\*, Michael Beauchemin\*, Ashreena Bhangu, Claudio Canizares\*, Fred Cheresinski\*, Cindy Forbes\*, Shikha Gandhi, Robert Gorbet\*, Kelly Grindrod\*, Craig Hardiman, Sabrina Khandakar\*, Teferi Mergo, Ian Milligan\*, Erin O'Connell\*, Neil Randall\*, Siva Sivoththaman\*, Bryan Tolson\*, Nancy Worth\*, June Xu

\*regrets

\*\*joined by telephone

**OPEN SESSION**

**Consent Agenda**

Senate heard a motion to approve or receive for information the items on the consent agenda.

Casello and Dea.

**1. MINUTES OF THE 21 OCTOBER 2019 MEETING**

Senate approved the minutes of the meeting.

**2. REPORTS FROM COMMITTEES AND COUNCILS**

**Graduate & Research Council.** Senate received the report for information.

**Undergraduate Council**

**Faculty of Environment, Audit Status**

Senate heard a motion to approve the removal of a restriction in the audit status regulation, effective 1 September 2020.

**Faculty of Mathematics, BCS and BMath Combinations and Co-op Regulations**

Senate heard a motion to approve the following changes to the plan combination and co-op regulations, effective 1 September 2020.

The remaining items were received for information.

**3. REPORT OF THE PRESIDENT**

**Recognition and Commendation.** Senate received the report for information.

**4. REPORTS FROM THE FACULTIES**

Senate received the reports for information.

**5. REPORT OF THE COU ACADEMIC COLLEAGUE**

Senate received the report for information.

**6. COMMITTEE APPOINTMENTS**

Senate approved the following committee/council appointments:

**Undergraduate Council:**

- Jeremy Pittman (School of Planning) as the faculty representative from the Faculty of Environment, replacing Clare Mitchell, term 1 January 2020 to 30 April 2020.
- Veronica Austen (English language and literature) as the member of faculty from the federated university, replacing Alysia Kolentsis, term 1 January 2020 to 30 April 2020.

**Distinguished Teacher Awards Committee:**

- Firas Mansour (physics and astronomy) as faculty representative, term ending 31 December 2021.
- Wei-Chau Xie (civil and environmental engineering) as faculty representative, term ending 31 December 2021.

The question was called, and the motion carried unanimously.

**Regular Agenda**

**7. BUSINESS ARISING FROM THE MINUTES**

There was no business arising from the minutes.

**8. RESEARCH PRESENTATION – CHARMAINE DEAN, VICE-PRESIDENT, RESEARCH AND INTERNATIONAL**

Dean addressed Senate re: “Research, innovation and commercialization at Waterloo”. Speaking to her presentation, she advised re: key areas of focus; areas of excellence; 2019 inductees to the Royal Society of Canada and past fellows; recent awards; the distribution of sponsored research funding; NSERC, SSHRC and CIHR funding; trends relating to health technology; industry funding; corporate research activity; start-up and innovation initiatives; the Research Equity, Diversity and Inclusion Council; international partnerships and top themes. Dean concluded her remarks with a focus on a staff member’s involvement with a research commercialization venture which has promise to improve water purification, energy storage, corrosion prevention, sensing, and smart packaging techniques which has attracted national, and may soon attract international attention in the water treatment field. She noted that this is an excellent example of the ways the University can facilitate research commercialization, no matter its source.

In discussion: clarifications re: industry funding amounts, matching opportunities, and research partnerships; opportunities on the industry partnership front; potential discussions with faculty primarily engaged in teaching activities; ways to enable Waterloo faculty engagement with health-related funding sources; recognition of the importance of graduate students in the success in the research realm.

**9. REPORTS FROM COMMITTEES AND COUNCILS**

**Executive Committee.** Senate heard a motion to approve the proposed bylaw changes at second reading.

Small and Easton. Carried unanimously.

**Graduate & Research Council**

**Program Change, Faculty of Engineering**

Senate heard a motion to approve a milestone name change from “Graduate Studies Practicum” to “Master’s Project” within the Conrad School of Business and Entrepreneurship’s Master of Business, Entrepreneurship and Technology (MBET), effective 1 January 2020, as presented at Attachment 1.

Casello and Salman. Carried unanimously.

**Program Change, Faculty of Engineering**

Senate heard a motion to approve the removing of the Graduate Diploma (GDIP) in Management Sciences by the department of Electrical and Computer Engineering (ECE), effective 1 January 2020, as presented at Attachment 2.

Casello and Sullivan. Carried unanimously.

**Undergraduate Council**

**Faculty of Engineering; Architectural, Civil, Environmental and Geological Engineering**

Senate heard a motion to approve the creation of new specializations in architectural, civil, environmental, and geological engineering, effective 1 September 2020.

DeVidi and Fieguth. Carried unanimously.

**Faculty of Environment, Geography and Environmental Management: Aviation Specialization**

Senate heard a motion to approve the creation of a new aviation specialization, effective 1 September 2020.

DeVidi and Andrey. Carried unanimously.

**Faculty of Engineering; Mathematics Option, Water Resources Option, Computer Engineering Option**

Senate heard a motion to approve the inactivation of these options, effective 1 September 2020.

DeVidi and Freeman. Carried unanimously.

**University Committee on Student Appeals**

In response to a question, Casello advised that the increase in numbers of certain offences is due likely to greater awareness of these matters. Senate then received the report for information.

**10. REPORT OF THE PRESIDENT**

Hamdullahpur updated members on: last week’s town hall and its record attendance; recent government relations activities; his receipt of a report from the President’s Advisory Committee on Environmental Sustainability; an update on the coming capital fundraising campaign; efforts by the University to bring students in Hong Kong back to campus, and a commitment to accommodate their academic obligations; the pending economic impact report.

**11. Q&A PERIOD WITH THE PRESIDENT**

There were no questions.

**12. REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST**

There was no report.

**13. REPORT OF THE VICE-PRESIDENT, RESEARCH AND INTERNATIONAL**

There was no report.

**14. OTHER BUSINESS**

There was no other business.

Senate convened in confidential session.

25 November 2019

Karen Jack  
University Secretary

**CONFIDENTIAL SESSION**

The confidential minutes have been removed.

The confidential minutes have been removed.

**University of Waterloo**  
**SENATE GRADUATE & RESEARCH COUNCIL**  
**Report to Senate**  
**20 January 2020**

Senate Graduate & Research Council met on 9 December 2019 and agreed to forward the following items to Senate for approval or information as part of the consent agenda.

Further details are available at: <https://uwaterloo.ca/secretariat/committees-and-councils/senate-graduate-research-council>

## **FOR INFORMATION**

### **CURRICULAR SUBMISSIONS**

On behalf of Senate, council approved new courses, course revisions, course inactivations, minor program revisions for Conrad Grebel University College (theological studies), Faculty of Engineering (management sciences; civil and environmental engineering), Faculty of Environment (geography and environmental management; environment, enterprise and development; planning), Faculty of Mathematics (applied mathematics; masters in mathematics for teachers; statistics and actuarial science).

### **GRADUATE AWARDS**

On behalf of Senate, council approved the Statistics, Actuarial Science and Finance (SASF) Conference Presentation Award (operating) and the Catherine and Feridun Hamdullahpur Graduate Scholarship (endowment).

### **ACADEMIC PROGRAM REVIEW REPORTS**

On behalf of Senate, council approved:

- Two-Year Progress Report – Joint Graduate Program in Geography (MA, MES, MSc, PhD), as presented at Attachment 1.
- Two-Year Progress Report – Civil and Environmental Engineering (MSc/PhD), as presented at Attachment 2.
- Two-Year Progress Report – Statistics & Actuarial Science and Quantitative Finance (MActSc, MMath and PhD in Actuarial Science, PhD in Statistics-Biostatistics, MMath and PhD in Statistics, MQF in Quantitative Finance), as presented at Attachment 3.

### **RESEARCH CENTRES AND INSTITUTES**

On behalf of Senate, council approved amendments to the constitution of the Centre for Bioengineering and Biotechnology (CBB) compliant with Policy 44.

### **UNIVERSITY RESEARCH**

On behalf of Senate, council approved membership renewal of the graduate student representative for the Human Research Ethics Committee.

/kw     Jeff Casello  
Associate Vice-President, Graduate Studies and  
Postdoctoral Affairs

Charmaine Dean  
Vice President, Research & International





# Two-Year Progress Report

## Joint Graduate Program in Geography (MA, MES, MSc, PhD)

### June 2019

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#### **Background**

The review of the Waterloo-Laurier Graduate Program in Geography (W-LGPIG) between the University of Waterloo (UW) and Wilfrid Laurier University (WLU) assessed the Masters and Doctoral programs on March 19-20<sup>th</sup>, 2015. The two other course-based / major research paper programs, the Masters of Tourism and Masters of Climate Change, were reviewed under a separate review and do not fall under this report.

One site visit day was held at Waterloo, the other at Wilfrid Laurier University. The visit entailed interviews with various administrators of the Programs at both universities. In addition, several sessions were conducted with the faculty and students of the programs being reviewed along with visits of the main map library and the Geography and Environmental Management (GEM) facilities.

The resulting report from the examiners was completed on March 29<sup>th</sup>, 2015. A written response to the reviewers' recommendations was submitted to the University on June 4<sup>th</sup>, 2015, by the Chair, Professor Peter Deadman.

The following section provides updates on the recommendations made by the reviewers. Each recommendation is followed by the Department's initial response (June 4<sup>th</sup>, 2015) followed by an update on progress of implementation as of June 2018.

#### **Responses to the Reviewers' Recommendations**

**Recommendation 1:** The quality and positioning of this program relative to others in Canada and internationally is poorly advertised and marketed, and therefore it operates in relative obscurity. The websites of both Departments and the joint program would benefit from investments to get the story out. It is unlikely that the expertise or resources to achieve this can be found within the units. We suggest that responsibility for program marketing and promotion be assigned

elsewhere at UW and WLU, and that the unit then receive training in how to capitalize on social media and other methods to keep redesigned web-presences up-to-date and dynamic.

**Response:** We agree with this recommendation. The Program Committee for the W-LGPIG will undertake to develop a better marketing strategy for this program, with the goal of raising the program's overall profile in Canada. This graduate marketing strategy will be coordinated with current and future undergraduate marketing activities. In particular, we will endeavor to enhance our program website. We will be seeking assistance and resources from both UW and WLU to develop, implement, and maintain this enhanced marketing and promotion program.

**Progress on Implementation:** Marketing and recruitment at the graduate level continues to be a challenging topic when competition for Environment and Geography students is robust between units at UW and across Canadian university geography departments. A strategy for marketing across the two university Geography departments (UW and WLU) is also challenging given the different institutional pressures and policies at each. Nevertheless, GEM recruitment into our graduate programs continues well into the thematic research groups. Data on admission to the graduate programs, from 2014-15 to 2017-18 is presented below.

#### Graduate Recruitment

	MSc/MES	PhD
2014-2015	32	13
2015-2016	35	22
2016-2017	30	9
2017-2018	38	14

These recruitment totals reflect the strengths of our active research areas (geomatics, hydrology, climate change, human and economic geography and resource management) and the impact that our researchers have across their research networks. Our on-campus identity is also strengthened through our active involvement in the Collaborative Water Program. More formally, the Faculty of Environment has recently hired a graduate recruitment specialist as a new position and we expect that marketing and advertising the UW side of the program will benefit from this new position. This specialist has already assisted with an annual faculty-wide graduate recruitment event (e.g. Fall 2018) and is finalizing recruitment materials for all UW GEM programs including website optimization

for and the development of a mailing list of prospective students. Through a curriculum review that is seeking to improve clarity of taught programming, we also expect to be able to influence the marketing of the program strategy to benefit our recruitment needs.

**Status:** In Progress.

**Recommendation 2:** Both Departments are encouraged to develop ways to identify and stay engaged with their graduate student alumni to track their careers and successes. This information can then become part of a revised web presence.

**Response:** We agree with this recommendation. The Program Committee will work with the alumni affairs offices at both UW and WLU to review the current status of our alumni tracking and outreach activities. Information gained from these outreach activities will be used to both enhance our marketing efforts and to address issues in the delivery of the program.

**Progress on Implementation:** This effort is ongoing. The graduate administrators have been asked to track our alumni after they have completed their graduate degrees. This depends on faculty members keeping them informed, but we are attempting to add this to our tracking activities. One way of achieving this is to use LinkedIn (social media) as a way of encouraging our students to remain in touch and we have been experimenting with this at both the undergraduate and graduate levels and plan to develop a strategy for our graduate students. We have also decided to ask advisors to send an exit survey (see recommendation 3) to students who graduated from our programs within the last 5 years. Questions will be added to this survey asking about their careers and successes. Although not included in this report, the Master of Climate Change (MCC) program has been using LinkedIn to keep in touch with its expanding cohort of MCC alumni, and this is beginning to pay dividends in the form of new internship and employment opportunities for current MCC students. This is a model for the Departments are considering while developing a strategy to use LinkedIn to keep in contact with alumni.

**Status:** in progress/ongoing.

**Recommendation 3:** All graduating graduate students should receive an exit interview with a neutral party so that the program can receive ongoing feedback on the student's experience with the overall program, their supervisor, and supervisory committee.

**Response:** We agree with this recommendation. The Program Committee will develop a list of questions to guide these semi-structured exit interviews. Exit interviews will be administered by the graduate officers at UW and WLU, through a confidential process. Feedback from these exit interviews will be reviewed annually.

**Progress on Implementation:** After consideration, we have decided to implement a voluntary online exit survey for all graduating students. An invitation to complete this survey is included with the “next steps to graduation” communication following a successful defence. We decided against an in-person exit interview, mainly for logistical reasons, as we felt it would be challenging to schedule a mutually convenient time for a student who is graduating (and may be leaving Waterloo, etc.) and an independent/neutral person to conduct the interview. For these reasons, it was felt that an online exit survey would be likely to yield a higher response rate, and provide a less intimidating venue for students to provide their honest feedback. The exit online interview was started in Fall 2018.

**Status:** completed.

**Recommendation 4:** The numbers and specificity of graduate courses currently offered in the program's curriculum could be simplified and generalized to accommodate flexibility and realism. Courses that have not been offered for several years should be removed, particularly in instances where the faculty member who initiated the course has left the university. The program should explore more generalized "umbrella" course titles within cognate areas that can then be "customized" with sub titles to reflect any one specific offering. Courses offered in any one year should be advertised and, if at all possible, courses offered for the following year should also be agreed upon and advertised so that there is an honest contract between entering students and the program.

**Response:** We agree with this recommendation. The Program Committee will undertake a curriculum review with a view to streamlining graduate course offerings and eliminating older courses that can no longer be offered. This curriculum review will be undertaken in coordination with our responses to recommendations 5 and 6.

**Progress on Implementation:** The W-LGPIG Program Committee initiated a comprehensive curriculum review in the 2017-18 academic year. This is ongoing but a key all-hands meeting was convened on 12 June 2019. The strategy adopted is to use the program committee to

scope the broad nature of changes required and then to consult widely with the faculty membership of the Joint Program in both institutions. Reducing the number of courses, especially those electives that have not been offered for some years, is a priority. The Curriculum Review Committee is also examining the four research seminar courses: GEOG 600 (Seminar in Spatial Data Handling); GEOG 620 (Seminar in Human Geography); GEOG 640 (Seminar in Physical Geography); and GEOG 660 (Perspectives in Resource and Environmental Management). The Committee is recommending that these courses are re-scoped to become "key concepts" in contemporary Earth system science, human geography, geomatics and resource management. The Committee will also recommend that a set of eight or nine courses in research theory, methods and design be offered each year for each theme area (Earth System Science, Geomatics, Resource Management and Human Geography). The current course GEOG 691, which is taken by all graduate students (PhD and Masters), will likely be redesigned to cover the professionalism in research at the Masters and PhD levels separately while still providing a forum for all students across both programs (UW and WLU) to socialize and build a strong student body.

It is anticipated that these changes will be implemented for the Fall 2020 intake.

**Status:** in progress

**Recommendation 5:** The number of required courses (five) is high for typical equivalent Masters programs of this type across Canada and we suggest that the possibility of reducing this by one course be considered. Courses that are cross-listed and/or offered by academic units other than the two Departments participating in the joint program should be clearly identified as such, with an explicit pointer that students must check the availability of these courses during their degree.

**Response:** We are taking this recommendation under advisement. We are currently (at WLU) undertaking a detailed review of the course requirements for research masters programs across Canada. This information will inform a broader discussion regarding the appropriateness of the current course requirements and the possible revision of these requirements.

**Progress on Implementation:** A recent scan of geography programs in the U15 group of Universities in Canada, for which geography is offered as a Masters degree, indicates an average of 4.2 courses. Five programs require 5 courses, four programs require 4 courses, one program requires 2 courses and the remainder require 3 courses. The W-LGPIG

requires five courses which is at the upper end, but is not unusual. Despite these numbers, the Curriculum Review Committee is concerned primarily with the training of graduate research students and is approaching the question of the number of required courses and course content from the point of view of what are the key research skills that a geography graduate research student should master in their field by the time they complete their research thesis. Nevertheless, at the recent all-hands curriculum review meeting (June 2019) there was strong and vocal support for reducing the required number of courses, and the curriculum review committee has listened to this feedback, and has started the process of implementing a reduction to 4 required courses, plus a mandatory thesis proposal milestone.

**Status:** In progress

**Recommendation 6:** The learning outcomes, design and delivery of GEOG 691 should be revisited. We encourage that this process be externally facilitated through one of the two universities "Learning and Teaching Centres", and that the process include input from past students who have taken this course. Given relatively high enrolment numbers for this type of course (often over 50), the option to divide the course into two - one specific to Masters students, the other specific to doctoral students - should be considered. Separation of the two groups would also serve to establish a sense of community amongst the PhD student cohort across the program that appears to be missing at present. As starting discussion points for redesign of GEOG 691 we offer exploration of what may be simply "busy work assignments" vs. assignments that will help the students "advance in their program of study", what aspects of professional development the course may wish to cover (e.g. writing proposals and grants, strategies for publishing, producing conference posters and presentations, preparation of teaching dossiers, project management, ethics, ... ), what the most effective ways are to teach these professional development skills, and how the course may facilitate community building across the graduate body, and between graduate students and faculty. The question of whether the course should remain Pass/Fail or be graded could also be revisited. Finally, thought could be given to how the course could be adjusted on an annual basis to reflect the research interests of that year's cohort.

**Response:** We agree with this recommendation. As part of the broader curriculum review undertaken in response to recommendation 4, we will undertake a review of the delivery of GEOG 691.

**Progress on Implementation:** The W-LGPIG Program Committee initiated a comprehensive curriculum review in the 2017-18 academic year, which is ongoing. One of the tasks is to re-assess GEOG691 and in the light of the response to Recommendation 4, the Committee is exploring the development of GEOG691 into a professional skills development course and potentially a seminar series that draws in expert researchers at other institutions to provide insight into leading edge themes in geography from across the broader discipline. At and following the recent June 2019 retreat, it has been decided to split 691 into 700 (Masters) and 800 (PhD), with a focus on professional skills development and training (proposal-writing, presenting contemporary discipline-specific thinking and ideas) that are most appropriate for Master's and PhD students. The research seminar series will also be developed as part of this effort. This action is in development and is planned for implementation in Fall 2020. This effort will also address Recommendation # 7.

**Status:** In Progress.

**Recommendation 7:** We would like to encourage the establishment of a weekly or bi-weekly seminar series across the entire program. We understand that such series exist within individual fields within the program but feel that a pan-program series would assist in promoting a greater sense of community amongst students in the program as well as raising awareness of the diversity, breadth and excitement of the discipline.

**Response:** We agree with this recommendation. The department chairs at WLU and UW will coordinate to organize a pilot seminar series for the 2015-16 academic year. The initial response to this series will inform the continued development of a regular seminar series. Responsibility: Department Chairs and staff from both WLU and UW.

**Progress on Implementation:** See response to Recommendation 6 above.

**Status:** In progress.

**Recommendation 8:** The stated timeline and deadline for the comprehensive examination should be aligned with the current reality (completion within the second year and by the end of the sixth term in the program). The evaluative pieces of the comprehensive examination should match clearly stated purposes and learning objectives and as much as possible facilitate delivering components of the doctoral theses (i.e. literature review, theoretical context, relevance to the discipline, statement of research problem to be advanced).

**Response:** We do not agree that adjustments should be made to the comprehensive exam schedule. Currently, our UW GEM doctoral program guidelines state that comprehensives "will normally be completed by the end of the fourth term of registration in the doctoral program"(usually during the fall term of the second year in the program).

Most students successfully complete the comprehensive exam in the 4th term, or early in the 5th term (if there are scheduling issues). We believe this timing should be maintained to ensure that students move on to their thesis research in a timely manner. Delaying the timing of the comprehensive exam would unnecessarily slow students' progress through the PhD program, and may lead to increased numbers of students who are beyond the fourth year of their guaranteed minimum funding. We will review the current structure of the evaluative pieces of the comprehensive exam with respect to stated desired learning outcomes.

**Progress on Implementation:** No further action is deemed necessary at this time. However, the University has embarked on developing and implementing a University-wide policy on comprehensive examination procedures, including timelines. This has been ratified and is now adopted for the Joint Program for students enrolled after May 2019. Our WLU Partners have also adopted the UW guidelines, for consistency.

**Status:** Completed

**Recommendation 9:** The opportunities to prepare for a career that includes teaching, including advancing an understanding of delivery of pedagogy and developing teaching skills, should be made more explicit for PhD students. The possibility of incorporated this as requirements for completion of the doctoral degree should be considered.

**Response:** PhD students are currently made aware of resources on the two campuses to assist them in the development of their teaching skills. We can examine efforts to reinforce the availability and awareness of these resources (e.g., via GEOG 691). We will explore the possibility of incorporating teaching skills into the requirements for the degree. However, adding the requirement that a PhD student teach a class will not be possible or advisable, for a variety of reasons.

**Progress on Implementation:** This issue is addressed in the newly identified GEOG 800 course which will focus on professional skills development for PhD students. As part of the research culture at UW, sessional opportunities are increasingly available to our PhD



students (post comprehensive examination) and those who are considering careers as teachers are encouraged to explore sessional opportunities as they arise. We also know anecdotally that some of our doctoral students secure teaching opportunities on other campuses in Southern Ontario. For students interested in developing their teaching skills, access to resources at the [Centre for Teaching Excellence](#) is available for both in-classroom teaching and online teaching. It is also recognized that not all PhD students seek a career that involves teaching. Given that many seek professional research careers rather than a traditional track into the professoriate, we do not mandate the training of teaching skills for these researchers.

**Status:** Ongoing.

**Recommendation 10:** The potential for developing a course-based Masters degree in Geomatics should be explored. There looks to be support for this amongst the Geomatics faculty and it would be consistent with the desire on the part of UW to increase the number of professional Masters programs.

**Response:** UW has discussed the possibility of creating a course-based masters in Geomatics before. This will be discussed again.

**Progress on Implementation:** We agree that this could be an excellent possibility to explore and continue to monitor this potential opportunity. However, the Department is not yet in a position to deliver such a program at the graduate level without substantial resourcing of new hires. Currently, there is a mismatch between our undergraduate majors who enter into our existing programs and our teaching complement in the geomatics sub-discipline. Approximately one half to two thirds of our undergraduate majors enroll in the Geomatics plan while only about one quarter of our faculty teaching complement is in the field of pure geomatics. The capacity to offer a Masters in Geomatics at this stage, therefore, is not evident unless the Department's human resources are dramatically reconfigured.

**Status:** Ongoing monitoring.

**Recommendation 11:** That the impact not replacing vacated faculty positions on each of: 1} the joint graduate degree under review, 2} each Department's undergraduate programs, and 3} other graduate program initiatives the two Departments are involved in, be given very careful consideration when it comes to reallocating or investing new resources in the Faculty. More

specifically, we recommend that close consideration be given to a replacement tenure-track position at WLU in the Environment and Resources Management field not only to ensure coverage of critical needs in the undergraduate curriculum, but also to regain capacity to offer graduate courses and to supervise students in this field in the program. We understand that the strategic need for this position is recognized by the Administration at the highest level.

**Response:** We agree with this recommendation.

**Progress on Implementation:** The specific recommendation to our sister department at WLU is noted. More generally, at UW, recent hires have been made in Geography and Aviation (one at Associate Professor), glaciology (one at Assistant Professor and successful CRC-II), and economic geography (two at Assistant Professor).

**Status:** Completed

**Recommendation 12:** It was brought to our attention by the students that there may not exist equal ease of access to facilities at the “other” university. The problem may arise in part from lack of awareness by all students of how access may be secured, in part from lack of awareness on behalf of the UW and WLU administrative structures as to why equal access is important given the nature of this joint-program. We recommend that W-LGPIG investigate and negotiate the resolution to issues of unequal access.

**Response:** We are aware of historic complaints regarding access to resources. It should be pointed out that access to academic resources is equal for students from both campuses. Students from WLU and UW have the same access to wireless internet, the library, lab, online learning resources, and iThenticate (through UW). The only difference, when it comes to access, is in the “social” resources (e.g. athletics, bus pass etc). These services are part of student fees and specific to each campus. We understand that WLU provides more access in this area. For example, UW students may use the WLU athletic facilities, but WLU students may not use those at UW. However, this is not a W-LGPIG issue and beyond the control of our academic units.

**Progress on Implementation:** As per our initial response, we recognize this issue and that it is a function of the different administration of the two institutions. We have been able to improve the timely access of WLU students to UW academic resources which has been an ongoing issue but this has been resolved.

**Status:** Completed.

June 2019

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## Updated Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	The quality and positioning of this program relative to others in Canada and internationally is poorly advertised and marketed. We suggest that responsibility for program marketing and promotion be assigned elsewhere at UW and WLU, and that the unit then receive training in how to capitalize on social media and other methods to keep redesigned web-presences up-to-date and dynamic.	Continued formal recruitment through researchers' networks. Recruitment should be developed through UW Faculty of Environment recruitment (marketing and advertising) specialist. Coordinate materials from the joint W-LGPIG Committee to this person. Website maintenance will continue to be a priority and responsibility of Joint Program Director (WLU/UW) and administrative assistant.	Chair, Associate Chair, Graduate Studies W-LGPIG Committee.	Improvements are in progress and should be completed in 2020. The longer term recruitment strategy will take time to develop.
2.	Program needs to remain engaged with graduate student alumni to track their careers and successes (can be used for marketing etc).	Graduate Administrator asked to track alumni careers post completion. Development of a LinkedIn group for graduate alumni.	Chair, Associate Chair, Graduate Studies, Administrative support staff for graduate program.	Implementation in 2019-20 academic year. In progress.
3.	Graduating students should receive an exit interview from neutral party to provide ongoing feedback on student experience of overall program, supervisor and supervisory committee.	Implementation executed in 2018-19 academic year. Online exit interviews for newly completing students. Also, faculty advisers asked to contact recently completed students (<5years)	Program Director and / or Associate Chair (UW/WLU) depending on enrolment status (at WLU or UW) of the student.	Deployed and in use 2018-19.

4.	Streamlining of the number of course offerings and development of "umbrella" courses in specific thematic areas and in research design. Ensuring predictability of courses from one year to the next.	A full curriculum review was initiated in 2017-18 academic year to scope the curriculum structure and develop a more robust form with respect to core courses and electives. Following an all-hands meeting (June 2019), recommendations are being prepared for approval by relevant committees at UW and WLU. Each year, a predictable set of key concepts, methods and professional skills training courses will be provided. Planned implementation Fall 2020.	Initially in development with the Committee of the Waterloo-Laurier Graduate Program in Geography. Responsibility for implementation: Chairs (UW/WLU)	In Progress
5.	The number of required courses (five) is high for typical equivalent Masters programs of this type across Canada. It is suggested that the course number be reduced by one. Courses that are cross listed and/or offered by academic units other than the two Departments participating in the joint program should be clearly identified as such, with an explicit pointer that students must check the availability of these courses during their degree.	The range of the required number of courses for Masters students across U15 Geography programs is between two and five. W-LGPIG is not unusual in its requirement of five. However, structural content changes may result in students taking a minimum of 4 graded courses plus. At the June 2019 meeting, there was agreement that 4 required courses, plus a mandatory thesis proposal milestone is a desirable load for our students.	Committee of the W-LGPIG tasked with curriculum review. Responsibility for implementation: Chairs (UW/WLU) and Associate Chairs (UW/WLU).	In progress

6.	Redevelopment of GEOG 691 to be more specific in its aims and objectives.	This course will be revised as a part of the wider curriculum review and in reference to Recommendation 4. Also, this revision is in reference to Recommendation 7. Specific changes: split into GEOG700 (Masters and GEOG800 (PhD) as professional skills training courses.	Committee of the W-LGPIG tasked with curriculum review. Recommendations being prepared for approval by the program committee and UW and WLU Geography Departments. Responsibility for implementation: Chairs (UW/WLU)	In progress
7.	Develop and establish a weekly or bi-weekly seminar series across the entire program.	This is being explored within the context of the re-developed GEOG 691 as GEOG700 and GEOG800.	Committee of the W-LGPIG tasked with curriculum review. Responsibility for implementation: Chairs (UW/WLU)	In progress
8.	Realignment of the timeline and deadline for the comprehensive examination (completion within the second year and by the end of the sixth term in the program).	The current timelines and deadlines are designed to encourage student passage through the graduate programs in a timely manner. Delaying the timing of the comprehensive exam would unnecessarily slow students' progress through the PhD program. New UW directives have superseded any program-level requirements	Responsibility for implementation: UW GPSA	Completed
9.	The opportunities to prepare for a career that includes teaching, including advancing an understanding of delivery of pedagogy and	PhD students present in courses and at research conferences. Many PhD students do not seek formal	Chair, Associate Chair, Graduate Studies, Graduate Advisor	\

	developing teaching skills, should be made more explicit for PhD students.	teaching positions but research lab positions so this is not needed. For those who seek teaching positions, sessional opportunities are increasingly available and access to CTE resources is encouraged. Two new courses in professional skills development for Masters (GEOG700) and PhD (GEOG800) will satisfy this recommendation.		
10.	The potential for developing a course-based Masters degree in Geomatics should be explored.	The Department agrees with this recommendation but recognizes that with current resourcing it will be difficult to deliver without human resource addition and/or reconfiguration. Given the bench-strength in this area, ongoing monitoring of real opportunities will continue.	Chair, Associate Chair, Graduate Studies	Ongoing monitoring
11.	Replacement of vacated faculty positions is essential. Recommend that chose consideration be given to a replacement tenure-track position at WLU in the Environment and Resources Management.	At UW, recent new complement hires have been made in glaciology (1), geography and aviation (1) and economic geography (2). We recognize the necessity to replace hires in cognate fields and to grow incrementally whenever possible.	Chair	N/A
12.	Perhaps students may not experience equal ease of access to facilities at the “other” university	Historically, issues have arisen. Academic issues have been dealt with - we have a streamlined	Chair of the W-LGPIG, Chairs and Associate Chairs, Graduate Studies.	Completed

		<p>process now to give WLU students access to appropriate UW academic resources.</p> <p>Social resource access is largely a function of the differences between the two institutions.</p>		
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The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.





Date of next program review

2021-2022

Date

Signatures of Approval:

Chair/Director

Date 13 July, 2018

*Richard Pridemore Kelly*

AFIW Administrative Dean/Head (For AFIW programs only)

Date

*Jan Aubrey*

*Sep 26 / 18*

Faculty Dean

Date

Associate Vice-President, Academic  
(For undergraduate and augmented programs)

Date

*Jeffrey M. Cauley*

May 21, 2019

Associate Vice-President, Graduate Studies and Postdoctoral Affairs  
(For graduate and augmented programs)

Date

## **Checklist for SUC/SGRC Reviewer Feedback**

### **Quality Assurance Office**

**Two-Year Progress Report: Joint Graduate Program in Geography Two-Year Progress Report**

**Name of Reviewer: Mike Szarka**

**Date: 10/30/2019**

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#### **Does the Two-Year Progress Report:**

- |  |  |                                    |
|--|--|------------------------------------|
| 1. Clearly describe progress achieved on the various action items in the implementation plan?  | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 2. Explain convincingly any circumstances that would have altered the original implementation plan?  | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 3. For items that are behind schedule, propose an amended implementation schedule that is reasonable and credible?   | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 4. Address significant developments or initiatives that have arisen since the program review process, or that were not contemplated by the program review process? | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |

#### **General Comments**

**The department appears to have done a very thorough and thoughtful job in considering implementing the recommendations that are most applicable.**



# Two Year Progress Report Civil and Environmental Engineering (MSc/PhD) September 2017; revised October 2019

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## **Background**

The Department of Civil and Environmental Engineering offers graduate and undergraduate degrees in Civil Engineering and is one of the largest Civil and Environmental Engineering departments in the country. The last review of the graduate programs was completed in April 2015 by the reviewers Drs. Lye and Yanful and by the internal reviewer Dr. Liston. The report was generally quite positive, with the reviewers stating "Reviewers were of the opinion that the UW CEE graduate program is very strong and comparable to civil engineering programs at other top Canadian universities."

The report identified a number of issues and recommendations. The Department responded to the issues and has been working towards addressing the recommendations by the reviewers as described in the following sections.

## **Progress on Implementation Plan**

### **Recommendations**

1. There should be a clearer written policy in the calendar regarding minimum passing grades in engineering and course failures. The minimum passing grade in a graduate engineering course is not mentioned in the calendar. It is, however, mentioned that an overall average mark of 70% is required for progression.

#### **Status: Complete**

**Details:** The Website of the CEE Department has been significantly improved since the last review; in agreement with the changes in the website of the faculty of engineering. The minimum mark required to satisfy a course requirement has been included in the MENG description, and it will be updated for the other programs in the next set of modifications to the calendar approved by the Department and in the process for approval from the Senate. The website has been updated with the link to the Graduate Calendar for consistency (<https://uwaterloo.ca/graduate-studies-academic-calendar/general-information-and-regulations/grades-and-grading>).

2. CEE should encourage and monitor the participation of CEE students in the new MASc and PhD Collaborative Water Program. Students should not miss this unique opportunity.

#### **Status: Ongoing**

**Details:** The Department is encouraging the participation of CEE students in the new MASc and PhD Collaborative Water Program in all the graduate studies information sessions. The participation of graduate students in these programs is monitored by the Graduate Coordinator as the information is required for the allocation of scholarships specific for these programs.

3. Inequalities in the quality of graduate student office space should be addressed. The plan to renovate current inadequate and dated offices being used by GEO graduate students is commendable and should be implemented.

**Status:** In progress

**Details:** The CEE Department has been working on a significant space renovation plan coordinated by the Chair and the Space Committee. Practically all student offices have been renovated. The Geotechnical engineering (GEO) graduate students have been relocated since the beginning of the Spring 2017 term while the main renovations of the final office space are completed. A \$30,000 renovation of the offices of GEO students has been completed.

4. The 4 FTE faculty complement for the GEO group is the minimum and that UWaterloo should do all it can to increase or at least maintain this number. This should be considered mission critical.

**Status:** Completed

**Details:** The CEE Department approved a new position for the Geotechnical group. The DACA Geo made a recommendation, and the selected candidate was hired effective January 2018.

5. More graduate courses in the GEO area should be offered on a regular basis.

**Status:** Completed

**Details:** As per the previous recommendation, the new faculty member started in January 2018. Thus, the number of graduate courses will be improved on regular basis. The new faculty member has added a new graduate course.

6. The funding level for international MASc students should be increased so that sufficient funds are available for living expenses after the payment of fees.

**Status:** In progress

**Details:** The minimum funding for MASc students have been increased by the Faculty. While the faculties and GSPA decided to reallocate a portion of the IMSA to support domestic incentives, a new award, IMAE, was put in place to support International Master's students. The Department is currently discussing alternatives to increase the funding for all graduate students. The Department has approved the creation of specializations for the MENG program to increase the number of students. A percentage of the tuition is transferred to the department. Hence, it is

expected that the increased enrollment in the MENG program will create additional revenue to improve the graduate program not only by increasing the number of graduate courses offered per year, but also by providing better financial support to Canadians, Permanent Residents and international students in the form of teaching assistantships. The department presented a proposal for the new specializations. However, final approval has been delayed by the new definitions of specializations from GSPA and the adoption of additional restrictions by the Faculty of Engineering. The increase of GRS funding is still in progress at the Faculty level.

7. To encourage conference attendance and participation by graduate students, travel support should be increased. The Department, faculty, Graduate Student Association and the University could share this increase.

**Status:** In progress

**Details:** The Graduate Studies Committee is currently recommending to the Department the use of the graduate fund, which is provided by the Faculty and the University, to enhance the graduate experience in the CEE. One of the current proposals to the Department is to use part of the graduate fund to support graduate students attending technical conferences. The allocation of travel awards (e.g. \$300 for matching GSPA travel awards; expected 5 awards per year) is currently under discussion, with the hope to match funds for travel starting in early 2020. The data collection to determine the number of students attending conferences is in progress.

**Explain any circumstances that have altered the original implementation plan:**

The CEE Department has been going through many challenges since the graduate review: selection of a new Chair, implementation of the new resource allocation model, hiring of seventeen new faculty members, massive space renovations, and the approval of the new Architectural Engineering Program. These activities have slowed down the implementation of the recommendations from the reviewers. The effects of these circumstances are expected to be reduced or eliminated in 2020.

**Address any significant developments or initiatives that have arisen since the program review process, or that were not contemplated during the review:**

The creation of the new Architectural Engineering Program will require an enormous amount of time from all the faculty and staff of the Department. This development will use a significant amount of resources for the hiring of new faculty and staff members and the construction of new design studios. The Architectural Engineering program has been approved and ten new faculty members will be added progressively to the CEE department. Six of these positions have been filled to date: 2 faculty and 1 lecturer were hired in 2018, 1 lecturer was hired in 2019, and 2 additional faculty have been hired to start in 2020. Three of these positions have been filled already (two faculty, one lecture); two of them started in Spring 2018. Two more position out of the ten have been filled in 2019 (one faculty, one lecture). This new faculty complement will add new graduate courses to our program over the next few years.

**Updated Implementation Plan:**

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	The minimum passing grade for graduate courses	Approval of changes by the Department and GSO.	Associate Chair Grad Studies and Grad Coordinator	Complete - Nov. 2017
2.	Participation of student in the MASc and PhD collaborative Water Program	Encourage participation during graduate studies information sessions. Monitoring of participation by the Graduate Coordinator.	Dept. Chair and Grad Coordinator	Ongoing
3.	Inequalities in the quality of graduate student office space	Completion of renovations.	Dept. Chair and Space Committee.	Complete - Dec. 2017
4.	Faculty complement for the GEO.	New faculty position	Dept. Chair and DACA Chair.	In Progress
5.	Graduate courses in the GEO	New faculty position	Dept. Chair and DACA Chair	In Progress
6.	Funding level for international MASc	New Faculty regulations. New Department scholarships	Associate Dean. Dept. Chair. Grad Chair.	In Progress
7.	Conference attendance	New travel support	Dept. Chair. Grad Chair.	In Progress

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.



Date of next program review:

July 2021

Date

Signatures of Approval:

Carl Haas

Oct 7, 2019.

Chair/Director

Date

Pearl Sullivan

NOV 8, 2019

Faculty or Administrative Dean

Date

Associate Vice-President, Academic  
(For undergraduate and augmented programs)

Date

Jeff Casello

Associate Vice-President, Graduate Studies  
(For Graduate and augment programs)

Date



Date of next program review:

July 2021

Date

**Signatures of Approval:**

Carl Haas

Chair/Director

Dec. 9, 2019

Date

Pearl Sullivan

Faculty or Administrative Dean

Date

Associate Vice-President, Academic

(For undergraduate and augmented programs)

Date

Jeff Casello

Associate Vice-President, Graduate Studies  
(For Graduate and augment programs)

Dec 9, 2019

Date



## **Checklist for SUC/SGRC Reviewer Feedback**

### **Quality Assurance Office**

**Two-Year Progress Report: Civil and Environmental Engineering**

**Name of Reviewer: Elizabeth Nilsen**

**Date: 11/1/2019**

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#### **Does the Two-Year Progress Report:**

- |  |  |                                    |
|--|--|------------------------------------|
| 1. Clearly describe progress achieved on the various action items in the implementation plan?  | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 2. Explain convincingly any circumstances that would have altered the original implementation plan?  | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 3. For items that are behind schedule, propose an amended implementation schedule that is reasonable and credible?   | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 4. Address significant developments or initiatives that have arisen since the program review process, or that were not contemplated by the program review process? | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |

#### **General Comments**

**The CEE department seems to be working towards addressing the reviewers' recommendations – in particular new faculty hires address a number of issues. Though, as is stated, various activities have slowed the implementation (e.g, new Chair, renovations, new program), etc.**



June 5, 2018

**To: Quality Assurance Office**

The Faculty of Mathematics endorses the May 2018, Two-Year Progress Report, Statistics & Actuarial Science and Quantitative Finance (MActSc, MMath and PhD in Actuarial Science, PhD in Statistics-Biostatistics, MMath and PhD in Statistics, MQF in Quantitative Finance).

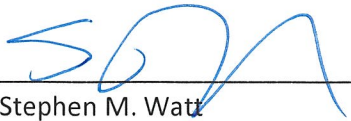
Significant progress has been made to implement the recommendations of the reviewers, with many of the recommendations now completed.

In particular, the department has now -

- implemented exit surveys for all of its finishing graduate students (recommendation 1).
- implemented a more rigorous screening process for incoming graduate students to assess their communication skills (recommendation 2).
- implemented better communication with graduate students about the TA expectations (recommendation 4).
- implemented a mentorship program for sessional instructors and new faculty (recommendations 5 and 6).
- taken steps to diversify their international student population (recommendation 8).
- become more involved with CANSSI (recommendation 9).

Recommendation 3, to provide internships for graduate students, was deemed to be infeasible, as mentioned in the initial response to the reviewers' recommendations. As such, no action has been taken on it.

Recommendation 7, to foster innovation in the classroom is already started. This project will always be ongoing as the department strives to always improve upon itself.

  
 \_\_\_\_\_  
 Stephen M. Watt  
 Dean, Faculty of Mathematics



# Two-Year Progress Report

## Statistics & Actuarial Science and Quantitative Finance, (MActSc, MMath and PhD in Actuarial Science, PhD in Statistics-Biostatistics, MMath and PhD in Statistics, MQF in Quantitative Finance)

### November 2018, updated May 2019

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#### **Background:**

The most recent graduate programs review for the Department of Statistics and Actuarial Science took place in 2016. The self-study was submitted January 20, 2016 and the site visit occurred April 14-15, 2016. The review team's report was received on May 19, 2016, and the program's response and implementation plan were submitted on June 6, 2016. The Dean of Mathematics indicated his endorsement of the plan on January 4, 2018. The Final Assessment Report was approved at Senate Graduate and Research Council on September 10, 2018 and at Senate on October 15, 2018.

The program reviewers were very positive about the programs. We repeat two quotes from the program reviewers' report below.

*"This department is the best in Canada for both, training in statistics and in actuarial sciences."*

*"It is fair to say that this department has a truly outstanding track record for graduate student supervision."*

#### **Progress on Implementation Plan:**

Below we list all the reviewers' recommendations and our progress on implementation.

#### **Recommendations**

1. *An exit survey to get students' feedbacks on the program they had just completed. For the professional programs (MQF and MActSc) this is implemented informally as alumni are involved in training and in mentoring the students. It might be useful in the other programs, especially the MMath programs.*

**Status: Completed**

**Details:** The Department implemented an exit survey for all finishing graduate students. It was first used in Fall 2016 and is now conducted at the end of each term for all graduating students. In 2018 we sent the survey to 74 students and received ratings/comments from 18 students (response rate ~ 25%). All students gave the program an overall rating of either excellent or good (second highest rating).

2. *A more rigorous evaluation of the students who are candidates for the PhD program could be envisaged. This could be done by conducting a phone interview with top candidates. This would help to ascertain their communication skills; it could also provide an opportunity to promote Waterloo programs to outstanding students.*

**Status: Completed**

**Details:** All PhD students are screened by the Associate Chair for Graduate Studies based on their written applications. Information about the PhD candidates who pass this screening is posted for all faculty members to see and review. PhD students are then only admitted on the recommendation of a supervisor. As part of this process, potential supervisors are strongly encouraged to conduct a phone interview of the candidates and the Department feels that they are already meeting this recommendation.

3. *An internship in a neighboring insurance company would benefit the students in this program. This program is already highly structured and, in informal discussions, many obstacles to the implementation of this proposal were mentioned.*

**Status: Incomplete (not feasible)**

**Details:** The Department has been considering, for a while, adding an internship to the MActSc program. This suggestion was also made by the program's advisory board consisting of industry partners. The difficulty lies in implementing the internship as the program is very demanding, with five courses per term and adding an internship parallel with an existing academic term is not feasible from a time commitment perspective. Adding an internship after two terms would result in some logistical difficulties as there would be a double cohort present on campus at the same. Additionally, since the program is designed to take strong students with little or no actuarial science background, the Department feels that they require all three academic terms to learn the background and skills needed to work in the insurance industry at the level desired by the Department. Adding one at the end is a possibility but current graduates secure employment within a few months of graduation and adding an internship at the end would not be that useful.

4. *Teaching assistantships (TAs) are a way to fund students who are then expected to fulfill their duties diligently. TA evaluations could be improved and their results should be communicated to the TAs. Clear messages need to be sent to TAs whose work is below expectations. The Department has a TA award; the selection criteria for this award should be communicated to the graduate students. Some students believe there is lack of transparency in the selection process.*

**Status: Completed/In progress**

**Details:** The Department assembled an ad hoc committee consisting of faculty, lecturers, a graduate student and an undergraduate student to consider this issue and the roles and expectations of TAs more generally. The ad hoc committee provided a report in Fall 2016. Our newly hired instruction support staff member now provides better communication of expectations to TAs. In addition, instructors have been asked to provide timely feedback as necessary throughout the term and to flag exceptional (both good and bad) performance to the graduate officer at the end of each term. The Department is still in the process of working through a TA agreement that would detail individual TA tasks, expected time commitments, financial support and conditions of continuation. This has not been implemented to date due to revisions to Policy 30 (Employment of Graduate Student Teaching Assistants), which are close to completion.

5. *Sessional lecturers, especially those teaching for the first time, should have a faculty mentor. The mentor could help with the content of the course material and the exams. In large courses involving TAs, the mentor could also be involved in TA supervision. Both sessional lecturers and TAs are graduate students; it might therefore be difficult for a sessional lecturer to reprimand TAs whose work is not adequate. The mentor could help with TA supervision.*

**Status: Completed**

**Details:** The Department implemented this recommendation starting in Fall 2016. We have a faculty teaching mentor who matches experienced instructors with anyone teaching a particular course for the first time. Documentation on teaching issues that are normally provided to new faculty hires are now also provided to new sessional instructors.

6. *Mentoring is important to facilitate the integration of new faculty and to introduce them to the Waterloo tradition. This may be best accomplished by pairing them with an experienced faculty for a joint task force, say the teaching or a two-sections service course. Their integration might be facilitated by having them involved with academic committees managing the programs of the Department. They might also be given the opportunity to present their research results in a Departmental seminar, without the stress of a job interview.*

**Status: Completed**

**Details:** The Department has a formal mentoring program for new faculty.. Each new faculty member is assigned a mentor who is a more senior member of the Department, usually active in a similar research area and from a similar background (e.g. both the mentor and the mentee originate from China). Both individuals are provided with resource material that describes the mentoring process. New faculty are usually the junior partner in teaching a multiple section course in their first few terms in Waterloo. Young (pre-tenure) faculty are also assigned carefully selected service duties to help them acclimatize to the processes in the department, faculty and university. In addition, all young faculty are encouraged to give another research seminar in the regular Department seminar series or the graduate students' seminar series. We formally asked for feedback from both mentors and mentees in May 2019. We received overwhelmingly positive feedback from 8 mentees and 2 mentors. One suggestion for improvement, that we plan to adopt, is to extend the mentoring program to also include lecturers.

7. *How to define a good lecturer is not easy. They might be interested in pedagogical innovations and their implementation in the classroom. If this is so they should be given opportunities to foster their pedagogical skills and to implement innovations in the classroom, in agreement with the objectives of the program managing the course.*

**Status: Ongoing**

**Details:** The Faculty of Mathematics has been proactive in addressing the needs of the growing number of teaching faculty. A faculty ad hoc committee addressed the questions of lecturer titles, expectations, promotion requirements/rules, etc. The committee developed some faculty guidelines. However, these suggestions are not official policy, since policy changes must come from the University upper administration. Inside the Department, we have some budget allocated to financially support lecturers who wish to attend teaching related conferences to present ideas and/or workshop for continuing education. The Math Faculty also has a Teaching Fellow, selected from among the regular faculty members, whose role is to encourage innovation, celebrate excellent teaching and work one-on-one with anyone in need of improvement. The Teaching Fellow organizes many events throughout the year to highlight teaching and encourage a sharing of experiences and best practices. This includes, for example, a session every fall term where some strong experienced instructors give a sample lecture and all new instructors give short mock lectures and are given feedback.

8. *We were impressed by the diversity of graduate students. We met students from at least five different countries, including China. For the time being, lack of diversification does not seem to be an issue for the Department. Aiming for quality and putting in place rigorous mechanisms for the selection of graduate students, regardless of the country of origin, is the way to go.*

**Status: Completed**

**Details:** The Department will continue to admit best students who apply to their graduate programs, but is nonetheless committed to making Waterloo a more attractive destination for students from non-traditional countries.

9. *The new Canadian Statistical Science Institute (CANSSI) offers many opportunities for International collaborations and for networking. The Department could explore ways of becoming involved with CANSSI. It is three years old and between 6 and 9 collaborative research teams have been funded by this new program. For the time being, Waterloo involvement appears to be limited.*

**Status: Complete**

**Details:** Department members have been involved with a number of CANSSI-sponsored activities (though not the collaborative research teams) including hosting a number of CANSSI-supported conferences and workshops recently. We tried unsuccessfully to convince CANSSI to select Waterloo as its permanent home. Nonetheless, we as a Department plan to engage with CANSSI initiatives fully in the future.

**Address any significant developments or initiatives that have arisen since the program review process, or that were not contemplated during the review:**

n/a

**Report on anything else you believe is appropriate to bring to Senate concerning this program:**

n/a



Updated Implementation Plan:

	Recommendations	Proposed Follow-up	Responsibility for Leading and Resourcing (if applicable) Follow-up	Timeline for addressing Recommendation
1.	Exit survey of graduate students	Implement proposal for all MMath graduates	Carlos Mendes	Complete (started Fall 2016)
2.	Phone interviews of possible PhD students	Already done for the most part, will strongly encourage potential supervisors to do this	Paul Marriott (as associate chair graduate studies)	Complete
3.	Internship in MActSc programs	Not feasible at this time	n/a	n/a
4.	Improve communication of expectations to teaching assistants	Implement recommendation	Paul Marriott (as associate chair graduate studies)	Complete - evaluations started Fall 2016
5.	Teaching mentors for new sessional instructors	Implement recommendation	Diana Skrzydlo (as department Faculty Mentor + Development Coordinator)	Complete - started Spring 2016
6.	Enhanced mentoring of new faculty	Already in place	n/a	Complete
7.	Lecturer engagement	Partial in place already	Stefan Steiner (as department chair)	In progress and ongoing - Informal guidelines implemented Winter 2017
8.	Strategic graduate student recruitment	Continue to admit the best students available	Paul Marriott (as associate chair graduate studies)	Complete and ongoing.
9.	Improve connections with CANSSI	Encourage all faculty members to engage with CANSSI activities as makes sense for them	All faculty members	Complete and ongoing.

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.

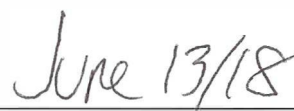




Date of next program review: \_\_\_\_\_  
Date

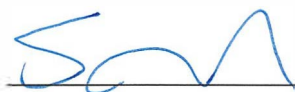
Signatures of Approval:

  
Chair/Director

  
Date

AFIW Administrative Dean/Head (For AFIW programs only)

Date



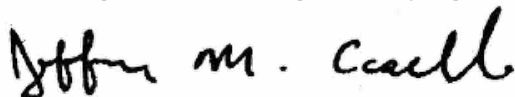


Faculty Dean

Date

Associate Vice-President, Academic  
(For undergraduate and augmented programs)

Date



March 21, 2019

Associate Vice-President, Graduate Studies and Postdoctoral Affairs  
(For graduate and augmented programs)

Date

## **Checklist for SUC/SGRC Reviewer Feedback**

### **Quality Assurance Office**

**Two-Year Progress Report: Statistics & Actuarial Science and Quantitative Finance**

**Name of Reviewer: Shawn Wettig, Associate Dean of Science, Graduate Studies**

**Date: 11/18/2019**

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#### **Does the Two-Year Progress Report:**

- |  |  |                                    |
|--|--|------------------------------------|
| 1. Clearly describe progress achieved on the various action items in the implementation plan?  | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 2. Explain convincingly any circumstances that would have altered the original implementation plan?  | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 3. For items that are behind schedule, propose an amended implementation schedule that is reasonable and credible?   | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| 4. Address significant developments or initiatives that have arisen since the program review process, or that were not contemplated by the program review process? | <input checked="" type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |

#### **General Comments**

**The department has or is addressing all recommendations provided by the review with the exception of the recommendation regarding internships. The justification for not implementing this recommendation is well justified and reasonable.**

**University of Waterloo**  
**SENATE UNDERGRADUATE COUNCIL**  
**Report to Senate**  
**20 January 2020**

Senate Undergraduate Council met on 12 November 2019 and 10 December 2019 and agreed to forward the following items to Senate. Council recommends that these items be included for information or approval, as noted, in the consent agenda.

Further details are available at: [uwaterloo.ca/secretariat/committees-and-councils/senate-undergraduate-council](http://uwaterloo.ca/secretariat/committees-and-councils/senate-undergraduate-council)

**FOR APPROVAL**

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**ACADEMIC PLAN CHANGES**

**Faculty of Arts**  
**Communication Arts**

1. **Motion:** That Senate approve the following name changes, effective 1 September 2021:

Three-Year General Speech Communication	Three-Year General Communication Studies
Four-Year General Speech Communication	Four-Year General Communication Studies
Honours Speech Communication	Honours Communication Studies
Speech Communication Minor	Communication Studies Minor

**Background and Rationale:** The change responds to requests in our previous program review seven years ago to rename the plan for greater alignment between plan goals and its public facing name. Within Canada there are few to no programs named Speech Communication. Even within the US context, where the name Speech Communication has wider use, the majority of Speech Communication programs have changed their name to language that is more reflective of current understandings of communication as a scholarly discipline. We recognize how the current name of Speech Communication does not fully communicate the program's focus and that is not legible to undergraduates. This change comes out of a sustained conversation within the Speech Communication unit over the 2017-2018 and 2018-2019 academic years, resulting in a unit vote in Spring 2019 to change our program name to Communication Studies. All existing Speech Communication students who are still enrolled by the time the plan title change goes into effect will be moved into the new plan and will graduate with a Bachelor of Arts in Communication Studies. The last opportunity to graduate with a major in Speech Communication will be the Fall 2021 convocation.

**Faculty of Arts**  
**History**

2. **Motion:** That Senate approve the name change, Applied History Specialization to Digital and Public History Specialization, effective 1 September 2021.

### Background and Rationale

The proposed change will align the plan title with common terminology in the field. The term "Public History" is used more frequently in graduate programs and professional positions (i.e. job ads) in Canada. For example, see the Canadian Heritage Information Network job board.

- Highlights the digital aspects of the program and distinguishes it from other public history courses/programs. This includes our digital history courses and courses that emphasize digital humanities and coding for historians. Most students in the HIST 302 incorporate some form of digital work into their final projects: video, mapping, website, digital timelines, 3D printing, blogs, oral histories, animations etc.
- Students seem to link the term "applied" with the "applied" stream in high-school – in which courses have been categorized into "applied" (i.e., non-university stream) and "academic" streams. The department voted unanimously to support the change.

### Faculty of Science

#### Three-Year General Science – Online

3. **Motion:** Effective 1 September 2019, Senate approve the closure of applications to the online only completion of the Three-Year General Science program, until such a time as the Faculty develops a more robust set of Science courses to allow the degree to be completed entirely online at Waterloo.

**Background and Rationale:** With the approval of the Science Administrative Committee, the Faculty of Science is closing applications to online only completion of the Three-Year General Science program, until such a time as the Faculty develops a more robust set of Science courses to allow the degree to be completed entirely online at Waterloo. The Faculty of Science currently has insufficient online courses to allow the program to be completed online at Waterloo (at least 1.5 Science units must be completed at other institutions). Ending applications to this academic plan via online only study will not affect applications to the program, via part-time on-campus study.

The program itself is not being inactivated; therefore, no changes to Science Calendar pages are required, with the exception of removing advising notes specific to online students (Additional Program Condition #8 on the following Calendar page: <http://ugradcalendar.uwaterloo.ca/page/SCi-General-Science5>, and Note #7 on the following Calendar page: <http://ugradcalendar.uwaterloo.ca/page/SCI-Degree-Requirements-Communication-Requirement>) for the 2020-2021 Calendar. Application to the part-time on-campus Three-Year General Science program is still possible. Students can also complete the degree after obtaining a failed standing from a Science honours BSc academic plan. Reference to the option of completing the Three-Year General Science program entirely online will need to be removed from a Centre for Extended Learning Calendar page (<http://ugradcalendar.uwaterloo.ca/page/uWaterloo-Centre-for-Extended-Learning>) in the 2020-2021 Calendar.

### PLAN INACTIVATIONS

#### Faculty of Science

##### Honours Co-operative Biotechnology/Economics

4. **Motion:** That Senate approve the inactivation of the Honours Co-operative Biotechnology/Economics, effective 1 September 2021.

**Background and Rationale:** See current calendar text: <http://ugradcalendar.uwaterloo.ca/page/SCI-Honours-Co-operative-Biotechnology-Economics1>.

This small enrolment (<25) plan was introduced in the fall of 1999. Enrolment has decreased to an average of 14 students per year since 2010. Admissions requires a mid-80s average and continuation in the program requires cumulative averages of 65% in Science courses, 70% in Economics courses, and 70% overall. The plan has a retention rate of 45%, with most students voluntarily moving into other programs with lower cumulative averages. Students leaving this plan most often choose larger enrolment plans such as Honours Co-operative Science and Business, Biotechnology Specialization, Honour Co-operative Biology or Honours Science.

Decreased enrolment and low retention support inactivation of the plan. The Departments of Biology, Chemistry and Economics have been consulted and support inactivation. Students entering the plan for fall 2020, and those already in the plan will be able to continue. There are no courses in the plan, solely intended for the plan, that will require inactivation as a result of this plan inactivation.

## FOR INFORMATION

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### ACADEMIC PROGRAM REVIEWS

**Final Assessment Report – English Language and Literature.** Council's reviewers commented favorably on the thoroughness of the report and the feasibility of the implementation plan. Following discussion, Council approved the final assessment report on behalf of Senate. See Attachment #1.

**Two-Year Report – Social Development Studies.** Council's reviewer commented favorably on the speed with which findings had been addressed, and the program's responsiveness to questions and comments from the reviewer. Following discussion, Council approved the two-year report on behalf of Senate. See Attachment #2.

### UNDERGRADUATE SCHOLARSHIPS, AWARDS & BURSARIES

This report was received for information. See Attachment #3.

### MINOR PLAN & CURRICULAR MODIFICATIONS

Council approved the following on behalf of Senate:

- minor plan changes for the faculties of arts (religious studies minor); engineering (architectural engineering and civil engineering); science (honours biochemistry, biotechnology specialization, honours co-operative biotechnology/economics).
- new courses for the faculty of arts (music, economics, English language and literature, fine arts, philosophy, psychology, Arabic, Chinese, studies in Islamic and Arabic cultures, religious studies, sociology and legal studies).
- course changes for the faculties of arts (anthropology, dean of arts, music, economics, English language and literature, history, gender and social justice, political science, East Asian studies, Mohawk, studies in Islamic and Arabic cultures, Jewish studies, religious studies, sociology and legal studies, Canadian studies, indigenous studies); engineering (management sciences, nanotechnology); science (pharmacy).
- course inactivations for the faculty of arts (English language and literature, Germanic & Slavic studies, East Asian studies, studies in Islamic and Arabic cultures, religious studies, Jewish studies).

/rmw

David DeVidi  
Associate Vice-President, Academic



# Final Assessment Report

## English Language and Literature (BA/MA/PhD)

### July 2019

#### Executive Summary

External reviewers found that the programs (BA, MA, PhD) delivered by the Department of English Language and Literature were in good standing.

*"The undergraduate and graduate programs are in good standing. The programs are unique among English departments in Canada because they embrace both literature and rhetoric, and this broad scope and diversity is one of the programs' main strengths."*

A total of 5 recommendations were provided by the reviewers, touching on maintaining the program's uniqueness, program communication, undergraduate curriculum and graduate recruitment and funding. In response, the program created a plan outlining the specific actions proposed to address each recommendation as well as a timeline for implementation. The next cyclical review for this program is scheduled for 2024-25.

#### Student Complement in all Undergraduate Year Levels and Graduate Programs<sup>1</sup>

	General (3 and 4-year)	Honours Co-op	Honours	MA	PhD
2016-2017	58	137	135	50	62
2015-2016	68	118	95	71	70
2014-2015	81	115	106	75	71

#### Background

In accordance with the University of Waterloo's Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external evaluation and the internal response of the following programs (BA, MA, PhD) delivered by the Department of English Language and Literature.

- English Language and Literature (BA)
- English – Literature (BA)
- English – Literature and Rhetoric (BA)
- English – Rhetoric, Media and Professional Communication (BA)
- Literary Studies (MA)
- Rhetoric and Communication Design (MA)
- Experimental Digital Media (MA)
- English (PhD)

<sup>1</sup> Undergraduate enrollment data is for Fall-term registration only.  
July 2019



- Technical Writing (minor)
- English (minor)

In addition, there are bachelor specializations in the following: Technical Writing; Global Literatures; Digital Media Studies and an Intensive specialization.

A self-study (Volume I, II, III) was submitted to the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs on October 24, 2017. The self-study (Volume I) presented the program descriptions and learning outcomes, an analytical assessment of the programs, including the data collected from a student survey, along with the standard data package prepared by the Office of Institutional Analysis & Planning (IAP). The CVs for each faculty member with a key role in the delivery of the programs were included in Volume II of the self-study.

From Volume III, two arm's-length external reviewers were selected by the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs: Dr. Martin Kreiswirth, Professor of English, McGill University, and Dr. Tania Smith, Associate Professor of Communication, Media and Film, University of Calgary.

Reviewers appraised the self-study documentation and conducted a site visit to the University on February 5-6, 2018. An internal reviewer from the University of Waterloo, Dr. Michael Chong, Professor of Chemistry, was selected to accompany the external reviewers. The visit included interviews with the Vice-President, Academic & Provost; Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs; Dean of the Faculty of Arts; Associate Dean of Arts for Graduate Studies; Chair of the Department of English Language and Literature, as well as meetings with faculty members, staff and current graduate and undergraduate students. The Review Team also had an opportunity to visit and meet with representatives from the Library and Co-operative Education.

This final assessment report is based on information extracted, in many cases verbatim, from the self-study, the external reviewers' report and the program response.

### **Program characteristics**

**English Language and Literature (BA):** grounds students in the discipline of English and allows multiple opportunities for students to explore their own interests. Includes a wide range of national and historical literatures, and courses in rhetoric, digital media studies, professional writing, information design and other areas.

**English – Literature (BA):** gives insight into our world, our culture, and our human identity through an analysis of historical and contemporary literature (e.g., British, American, Canadian, and Postcolonial) and theory.



**English – Rhetoric, Media and Professional Communication (BA):** provides intellectual challenge and practical insight into rhetoric, professional writing and communication design, and digital media.

**English – Literature and Rhetoric (BA):** provides intellectual challenge and practical insight by combining the analysis of historical and contemporary literature and the study of rhetoric.

**English (minor):** provides a grounding in some of the essential areas of the discipline of English literature.

**Technical Writing (minor):** provides an understanding of how innovative companies and organizations communicate with one another and with the public.

**Literary Studies (MA):** covers a broad range of literature written in English, including British literature from the medieval period to the present, American literature, Canadian literature, and English-language literature of the postcolonial world. Students study these areas with the aid of traditional techniques of literary research, recent advances in the theory of literature, and tools made available in the digital humanities.

**Rhetoric and Communication Design (MA):** emphasizes the intersection of rhetorical and semiotic theory (classical and recent) on the one hand, with problems of textual analysis, the design of digital media, and the social forms of communication on the other.

**Experimental Digital Media (MA):** offers a praxis-based exploration of the creative and critical processes provided by digital media through a lab-based, hands-on approach to digital technology and the production of objects-to-think-with.

**English (PhD):** explicitly integrates the fields covered by the MAs to demonstrate the myriad fruitful ways in which the study of rhetoric and the study of literature can benefit one another.

## Summary of strengths, challenges and weaknesses based on self-study

### Strengths

- External Research Funding: colleagues are highly successful in securing research funding
- Scholarly Output: colleagues are highly productive scholars
- Honours Rhetoric, Media and Professional Communication BA: the program is one of the fastest-growing majors in Arts
- Co-op: students have high employment rates, receive excellent evaluations by their employers, and graduate with resumes that provide strengths in both academia and the workplace
- Graduate Student Support and Graduate Program Management: the program has worked continuously to make improvements that help students succeed
- PhD Placement: graduates do comparatively well in academic employment generally and in tenure-stream employment in particular





- Quality of Teaching: students rate their instructors very highly

### **Challenges and Weaknesses**

- Diversity: racial and ethnic diversity in hiring in general and in tenure-stream hiring in particular is an issue of concern discussed within the Department
- Undergraduate Enrollment: recruiting undergraduates into Honours Literature and Honours Literature and Rhetoric remains a challenge
- Service Teaching: Maintaining focus on the quality and effectiveness of the Department's undergraduate Honours degrees and graduate MAs and PhD is an important challenge. Long-standing and new demands for service teaching will require careful balancing of attention to ensure that all aspects of the Department remain robust
- Conference Travel Support: although Departmental trust funds are available to support conference travel for graduate students, there are no longer funds to support faculty conference travel
- Office Space: a critical point has been reached in the Department's lack of adequate office space

### **Summary of key findings from the external reviewers**

The undergraduate and graduate programs are in good standing. The programs are unique among English departments in Canada because they embrace both literature and rhetoric, and this broad scope and diversity is one of the programs' main strengths.

For undergraduates, the unique combination of majors — Literature; Literature and Rhetoric; and Rhetoric, Media and Professional Communication (RMPC) — each coupled with a co-op option, provides students interested in English language, communication, cultural studies, rhetoric and writing more choice than most English departments in Canada.

The graduate programs are generally solid, with less strength in the Master's program than in the PhD largely due to challenges with graduate student funding. Both the Master's and PhD students spoken to said their experience in graduate study in English at Waterloo was positive, despite the funding and some issues with restrictions caused by program requirements, the timing of their deadlines, and the nature of their TA teaching assignments. They have a vibrant student community and appreciate the professional development support the department provides for their TA roles.

### **Program response to external reviewers' recommendations**



## Recommendations

### 1. Maintain the uniqueness of the department

Although the list of similar-themed English programs is relatively small, the department should not feel any sense of insecurity, and least of all, inferiority, about its choice to innovate its curriculum beyond literary studies. It is not alone in its embrace of rhetoric, media and professional communication as well as literature. The humanities fields must innovate and adapt in order to assert their value and relevance to today's culture and society. The English department at Waterloo demonstrates strength on both its literature side and its rhetoric side and we see neither as more important than the other as a foundation for its future success. However, the challenge will be to continue to collaborate, maintain morale, support one another's development (of programs, of research areas), and to permit each undergraduate and graduate plan to express sufficiently distinctive characteristics while sharing core values and resources. We offer these recommendations in a spirit of humble respect and confidence that the department will flourish.

#### Response

See implementation plan

### 2. Service teaching initiatives

The increasing number of service courses taught by English (as seen in the current Math Initiative and upcoming Undergraduate Communications Outcomes Initiative) needs to be closely monitored to ensure that there remain enough resources to maintain the department's core responsibilities to English studies.

Since lecturers will be hired to offer some of these courses and since there is currently (as the reviewers were told) some confusion regarding the specifics of their positions, we suggest that the department and university have discussions with the lecturers regarding such issues as "definite term" vs. "continuing" lecturers, course loads over several years, TA assignments, and other relevant issues.

#### Response

See implementation plan

### 3. Program communication

**3.1 Make detailed course outlines more readily available publicly online** in an easily indexed database so that teaching and learning methods are easier to see, especially assessment types. Currently, nine other Arts departments provide sample course outlines indexed through the current "Arts course outlines" page. At other institutions, all the instructors' detailed course outlines are published every term. This practice reinforces the importance of pedagogical methods, not just subject matter, in achieving learning



objectives across the curriculum. Such easy access may also enable instructors to learn from their colleagues' course designs.

**3.2 Encourage instructors to collaborate on “master syllabi” for core required courses.**

It is not known the extent to which this is already occurring, but the reviewers assume one has already been constructed for the core required courses such as ENGL 200 A and B. English courses should allow considerable instructor autonomy, but all instructors who often teach a course — especially a required course that functions as a prerequisite for other courses — should craft what is called a “master syllabus” — a document outlining general learning objectives and purposes of the course within the overall curriculum, as well as recommendations for textbook selection, teaching methods, assignment types and weights.

**3.3 Promote experiential, applied and innovative pedagogy (especially those involving the use of communication technologies)** and more publicly feature these learning opportunities' presence in every BA program's academic coursework. Students appear not to perceive the presence of application and experiential learning as strongly as faculty do. Experiential learning and application are not just the role of co-op; they are integral to a healthy academic program and are core values at the University of Waterloo. Faculty in English may be able to meet several challenging objectives at once by encouraging course-based learning methods and/or assessment types that are both 1) experiential and/or applied in nature and 2) require students to build proficiency in their use of communication technologies.

**Response**

See implementation plan

**4. Undergraduate Curriculum**

**4.1 Consider bolstering the role that 100-level courses play** in developing students' interest in and building a foundation for the three academic plans in English. Although entry to the English major occurs in the second year, the department still has control over the first-year courses they teach and their academic plan requirements. At other institutions, programs offer more advice, even online and in the calendar, about which first-year course(s) to take if a student is interested in a future English degree. Should certain 100-level courses be required as prerequisites for future courses in the field, and should certain 100-level courses be required or recommended in each of the three academic plans? Revisiting courses at this level would align with the objectives of the 2014-19 Arts Strategic Plan to “Revise [the] first year program to provide common foundations, core skills, and improved pathways to majors” (p. 6) and to “Direct greater attention to core skills and competencies in first year programming for both academic



success and co-op/career readiness” (p. 7)

**4.2 Consider focusing the list of 100-level courses.** Other programs mount fewer 100-level courses and more sections of each type. Staffing and offering many diverse courses may become a challenge in the future with increasing service teaching responsibilities at the 100 level. It may also build community among instructors who teach the same 100-level course and promote fruitful pedagogical conversations about how these courses inspire students to become English majors.

**4.3 Consider balancing literature and rhetoric course offerings at the 200 level** in order to more fully represent the English department’s range of academic plans and course offerings at the 300 level and beyond. For example, current rhetoric courses could be used to form a two-course sequence in rhetoric at the 200-level that would be the counterpart to the current 200-level survey of British literature. Alternatively, the existing two-course 200A/B sequence could incorporate both rhetorical and literary studies and not just focus on British texts, promoting pedagogical collaboration between faculty members in each specialization. The “Literature and Rhetoric” plan could require courses in both themes while the other plans, especially Honours degrees, could promote focus in one stream or the other.

**4.4 Consider permitting more room for RMPC students, especially those in Honours degrees, to focus more on their interests within English** by reducing their literature course requirements beyond the core. Allowing the RMPC plan requirements to focus more could help with retention rates in the RMPC program. Students may still freely choose their options from both areas. At present the RMPC plan is not much different from the combined Literature and Rhetoric plan. We believe a combined middle-ground plan is as necessary in this program as it is at UBC, and its presence makes distinctive plans at either end of the spectrum more justifiable. It is helpful to have three plans for both students and faculty to manage and navigate the broad scope of the field of English at Waterloo.

**4.4.1 Consider whether the 100- and 200-level requirements for RMPC students are adequately preparing them for their third and fourth years.** Currently there is better intellectual preparation offered to Literature students than RMPC students. Literature students are required to take three 200-level literature and theory courses (ENGL 200A, 200B, 251) while RMPC students are only required to take one 200-level rhetoric course (ENGL 292). We suggest that ENGL 293, Introduction to Digital Media Studies, seems reasonable as an academic plan requirement for RMPC.

**4.4.2 Consider that an existing or reworked rhetorical theory course could be an**



**alternative to ENGL 251 for RMPC students.** Rhetorical theory and media studies provide tools for critical analysis and equip students for a very close examination of political, professional, and popular arguments and their underlying ideologies as well as an understanding of the ways in which media shape genres, messages, and interactions with readers/audiences.

**4.4.3 Consider the purpose of requiring the Introduction to Linguistics course, ENGL 306A, for RMPC students** when this course is neither required for Honours Literature students nor for Literature and Rhetoric students. Although we lack data showing that students struggle or find it lacks relevance, Linguistics is a different field of study and is not foundational to advanced studies in RMPC. A rhetoric course that touches on linguistics but focuses on rhetorical theories of style and language may be more suited to RMPC majors.

**4.4.4 Consider whether it is necessary to require RMPC students to take two upper level courses in literature.** Students in this plan, like students in the Literature plan, desire and deserve freedom to take advanced courses in their declared area of interest. RMPC students are not likely to be preparing themselves for graduate studies in English Literature, and if they are, advisors should direct them toward one of the other two academic plans. A program focused on RMPC can still provide a strong academic preparation for graduate studies and careers in Rhetoric, Media, and Professional Communication.

**4.5 Consider the role of other Arts course offerings in degree requirements.** Currently the English academic plans mention only ENGL courses and those that are cross-listed as courses in other fields. If staffing ENGL courses becomes a challenge, enabling students to use non-ENGL courses as requirements may allow for a more economical use of human resources. It may also “facilitate opportunities for interdisciplinary study” listed as an action in the Arts Strategic Plan 2014-19 (p. 6). Many other Arts plans such as Fine Arts and Cognitive Science enable students to choose requirements among courses offered by other departments.

**4.6 Consider a 400-level academic plan capstone course for each stream.** Many undergraduate Arts programs have required “capstone” courses that synthesize and build on prior learning. These help to launch students into post-graduation journeys and can foster a sense of community among students. It may also foster future alumni engagement. By requiring students to reflect on their entire degree, such courses can also enable faculty members to observe how well program-wide learning outcomes are being met by the fourth year level and how various courses have contributed to these outcomes.



## Response

See implementation plan

## 5. Graduate program

**5.1 Continue to carefully track** graduate student recruitment and admission, funding packages (and their components), and supervision (with a view towards dispersion throughout the department) to try to attract the best and brightest novice scholars from Canada and beyond and match them with the full range of the department's strengths.

**5.2 Consider measures to recruit diverse, high quality graduate students.**

**5.2.1 Consider changing the wording of admission requirements** so that students who have very high grades and relevant coursework are not discouraged to apply despite lacking an "honours" designation on their BA degree. Because Honours programs elsewhere may involve not only a high grade average but also special coursework and a thesis, it cannot be assumed that all your best candidates will hold Honours degrees. The quality of a degree and the student's attainment should matter more than the word "honours."

**5.2.2 Make active efforts to research and recruit from specific Canadian and international programs** that are likely to produce eligible and strong graduate students. Targeted and personalized efforts can be more fruitful than passive or mass campaigns. Such measures, if successful, would enhance the diversity of the program and broaden the diffusion of the English program's reputation.

**5.2.3 Consider the value of recruiting students not only from English literature programs but closely related programs in other disciplines.** This may be especially appropriate when recruiting students for the media and rhetoric MA and PhD. Across Canada and internationally, these fields of study are housed not only in English but in other disciplines. Do not consider it a serious setback if an excellent student from a related field must first progress through qualifying coursework in English, since this provides the student an excellent opportunity to adapt to a new culture and learn from the department's own courses.

**5.3 Continue to implement the excellent systems developed to shepherd graduate students smoothly through their programs,** such as checklists and TA mentoring and training. Although we acknowledge the frustration with program time to completion voiced in the self-study, we believe that on balance, more important factors are the department's attention to the academic quality of the graduate program, the quality of supervision, recruitment, retention, graduation rates, mental health, community, and the



quality of TAs' classroom teaching and professional development.

**5.4 Ensure that graduate students' teaching and academic workloads are reasonable.** It is essential to continue maintaining small class sizes per TA and to provide TA training and support. Departments must not only account for the labor involved in students' teaching duties but also their professional development as instructors while they are progressing through their graduate program. We praise the department for incorporating pedagogical training and mentoring into TA positions. We also acknowledge recent efforts to create manageable standardized qualifying field examinations for the PhD candidacy exam, since covering both rhetoric and literature can make it very tempting to double the amount of subject matter an individual student is expected to digest.

**5.5 The department and university should consider adjusting program length expectations and advertising** to account for the wide variation in time to completion. The university's program evaluation standards and statistical measures should not be too demanding in regard to this metric, which can be skewed by a few individuals. Delays often have unavoidable causes such as health and family responsibilities that should be accommodated.

**5.6 The university administration should applaud this department** for its ability to adapt with such sensitivity to individual graduate students' situational challenges and to foster their academic strengths. Their respect for graduate students' experience is well in line with the university's strategic plan -- its desire for "a vibrant student experience" and its value for "Integrity, equity, diversity and a balanced life for students, faculty and staff."

**5.7 Consider occasionally offering opportunities for PhD students to teach a higher-level course** in their own research area, not just a first-year course.

**5.8 Support and collaborate with the graduate students' organization** in their efforts to provide peer support and mentoring for PhD students after their coursework is complete, when students feel most isolated and challenged. Some of what they do could be institutionalized rather than continually remade by each new cohort of students.

**5.8.1 A "graduate student handbook,"** if not already in existence, could be co-developed by the student society and the graduate officer, perhaps with appendices customized to each unique stream. An ideal handbook would not just state official policies and procedures (since the department and university should already do that) but provide friendly and supportive advice and tips from the student point of view. While handbooks require continual revision, they assist new students to become acclimatized and pass on practical wisdom.





**5.9 Carefully look into the distribution of graduate supervision** through a task force, working group, or committee with representation across the department based on supervisory activity. Include in the working group faculty who currently supervise and those who don't. As noted above, supervision (particularly PhD supervision, since very few MA students take the thesis option) is very unevenly distributed across the department. Some things for this group to consider:

- Should there be some form of concrete recognition for supervision — e.g. course release, significant merit weight?
- Since supervision can sometimes be determined by applicants' research area choices, should the admissions committee consider potential field as well as quality with the goal of spreading the students among the researchers' specialties?
- In connection with this, should more faculty members be involved in the PhD admission process? If the goal were to admit, say, 10 PhD students, the admission committee could do an initial screening, choosing a group of 30 potential students from the applicant pool; all (or as many as are interested) of the faculty can then look over these files and indicate which, if any, of the applicants they would be willing to supervise. The admission committee can then use this additional information in their final deliberations, thus more likely admitting a cohort whose research interests would be better spread across the academic staff.

**Response**

See implementation plan

**Recommendations added by the Program<sup>2</sup>:**

**Graduate student funding**

A five-year funding package should be projected for each admitted PhD student, consisting of a combination of teaching remuneration and fellowships. Since the times to completion in English are empirically something over 5 years, in order to make satisfactory progress towards the degree (and not be distracted by external employment) students should be supported for

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<sup>2</sup> These were not identified as formal recommendations in the external reviewers' report and are being put forward at the suggestion of the program. Hence, they are not required to be included in the implementation plan.  
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this time period; as well, 5 years of funding is common at many competing English PhD programs.

This package should be clearly communicated to prospective students so that they understand exactly how they can support themselves throughout the degree and the means by which this support is provided.

We recommend that no more than half of the terms during 5 years should be spent in teaching.

**Response**

See implementation plan

**Staffing**

Increase the number of support staff and honour and reward them appropriately, especially in light of the complexity and necessity of their current roles and the increased logistical workload accompanying the expansion of the writing service courses.

Reassess the workload and position designations of the entire support staff.

**Response**

See implementation plan



## Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	<p><b>Maintain the uniqueness of the department:</b></p> <p>The Department demonstrates strength on both its literature side and its rhetoric side; however, the challenge will be to continue to collaborate, maintain morale, support one another's development (of programs, of research areas), and to permit each undergraduate and graduate plan to express sufficiently distinctive characteristics while sharing core values and resources.</p>	<p>Faculty in English agree that these elements—continuing collaboration, mutual support, maintaining morale, and carefully considering possible degree plan development—are essential for sustaining the uniqueness and strength of the Department.</p> <p>Awareness of these factors will inform discussion in the Undergraduate and Graduate Studies Committees and in the Department as a whole.</p>	Chair SJU Chair	<p>2018-20 academic years: The Undergraduate Associate Chair has brought the Honours Literature Plan requirements to the Department for discussion at its monthly meetings. She has also brought motions to change the Honours RMPC plan to the Department. These have passed. In the coming year, it is likely that motions to alter the Literature plan requirements will also come before the Department.</p> <p>At the graduate level, changes made to the area examination committees were implemented in 2018-19. The Department has reorganized the examination process to include a defense of the PhD dissertation proposal by the dissertation committee. We continue to monitor the effect of these changes on student morale and completion times.</p>
2.	<p><b>Service teaching initiatives:</b></p> <p>2.1 The increasing number of service courses taught by English (as seen in the current</p>	The careful development of and planning for the new UCOI communication courses and the	Chair; UCOI Associate Chair;	2.1 In 2018-19, the UCOI Advisory Committee has met monthly and provided reports to the Department at

July 2019

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	<p>Math Initiative and upcoming English Language Competency Initiative) needs to be closely monitored.</p> <p>2.2 The department and university should have discussions with the lecturers regarding such issues as “definite term” vs. “continuing” lecturers, course loads over several years, TA assignments, and other relevant issues.</p>	<p>recent hiring of excellent new faculty members will, we hope, ensure the success of the new UCOI service teaching initiatives for the Faculties of Science and Engineering. We believe they will be as successful as the on-going communication course delivery for the Faculties of Math and Environment (GEM).</p> <p>To manage current service teaching obligations, the Chair will appoint a UCOI Associate Chair; any new service teaching requests will need to be carefully considered in light of current course offerings.</p> <p>The Chair and the new Associate Chair will be fully involved in the UCOI advisory process. Assessment of the overall UCOI initiative and of the place of English within that initiative will be important future markers of success.</p>	<p>SJU Chair</p>	<p>its regular meetings. Members of the UCOI Committee, in concert with the Chair and the UCOI Associate Chair, have organized several events to bring together instructors from Arts, Science, and Engineering to discuss diverse kinds of teaching and learning in the different Faculties.</p> <p>Delegates from the UCOI Advisory Committee have met with Samantha St. Amand of the Faculty of Science to discuss methods of assessing the impact of first-year Science UCOI courses by surveying students when they reach years 2, 3, 4. UCOI Committee delegates have also met with Co-op to explore similar assessment measures that will track how these courses have prepared students to communicate during their work terms. These discussions are ongoing.</p> <p>2.2 The Chair has met with all main-campus Definite-Term Lecturers at least once (in most cases twice) to discuss subjects such as process and timelines to lecturer reappointment; policy language re. continuing lecturer applications; the “1-in-6.” She will</p>
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				continue to meet as needed with lecturers regarding their concerns and questions.
3.	<b>Program communication</b> 3.1 Make detailed course outlines more readily available publicly online 3.2 Encourage instructors to collaborate on “master syllabi” for core required courses. 3.3 Promote experiential, applied and innovative pedagogy (especially those involving the use of communication technologies).	These program communication recommendations will be referred to the Undergraduate and Graduate Studies Committees for discussion and possible recommendations. <b>Notes:</b> 3.1. an online syllabus builder and repository, which the Faculty of Science is developing, may make this possible without new staff resources from the Faculty of Arts. 3.3. may require new communication resource technologies from the Faculty of Arts (e.g. licenses for products such as Adobe Creative Suite; student labs to access these tools, etc.)	Undergraduate Associate Chair; Graduate Associate Chair; Chair; Dean	2018-20 academic years 3.1 and 3.3 The Chair has contacted Mirko Vucicevich to discuss the online syllabus builder and accessible course outline repository he has designed and which is being piloted in Faculties such as Science. 3.2 Under discussion in the Undergraduate Committee. 3.3 The Chair will determine whether new technologies are required after meeting with Mr. Vucicevich (see 3.1).
4.	<b>Undergraduate Curriculum</b> 4.1 Consider bolstering the role that 100-level courses play 4.2 Consider focusing the list of 100-level courses. 4.3 Consider balancing literature and rhetoric course offerings at the 200 level 4.4 Consider permitting more room for RMPC students, especially those in Honours	These undergraduate curriculum recommendations will be referred to the Undergraduate Studies Committee for discussion and possible recommendations to the Department as a whole. <b>Notes:</b> 4.1-4.3 are detailed curricular recommendations for 100- and 200-	Undergraduate Associate Chair	2018-20 academic years 4.1-3 Under discussion at the Undergraduate Committee, particularly the role and content of the 200 A/B survey courses in each undergraduate plan. 4.4 In 2018-19 the Department approved changes to the Honours and Four-Year General Rhetoric, Media, and Professional Communication



	<p>degrees, to focus more on their interests within English</p> <p>4.4.1 Consider whether the 100- and 200-level requirements for RMPC students are adequately preparing them for their third and fourth years.</p> <p>4.4.2 Consider that an existing or reworked rhetorical theory course could be an alternative to ENGL 251 for RMPC students.</p> <p>4.4.3 Consider the purpose of requiring the Introduction to Linguistics course, ENGL 306A, for RMPC students</p> <p>4.4.4 Consider whether it is necessary to require RMPC students to take two upper level courses in literature.</p> <p>4.5 Consider the role of other Arts course offerings in degree requirements.</p> <p>4.6 Consider a 400-level academic plan capstone course for each stream.</p>	<p>level courses. They are worthy of further discussion.</p> <p>4.4.1.-4. would create a more distinctive RMPC degree stream. The benefits of these proposed curricular changes must be weighed against the strengths of the existing structure of collaboration and common degree elements.</p> <p>4.5. Other Arts courses already play a crucial role in all undergraduate degree programs. English majors can also request to substitute a non-English course for a required course in their plan. We will study this recommendation in more detail.</p> <p>4.6. Our degrees do have 400-level capstone courses relevant to each stream. These are called "Special Topics" courses in the degree plans. Students have some choice in the capstone course they take, and so there is no "one" capstone course per degree plan. The exigencies of a large Co-op program, in which students must fit their degree requirements into their study terms, demands a flexibility that discourages the introduction of a capstone course, where "capstone" means a specific required course that</p>		<p>(RMPC) degree plan to increase the number of electives within the plan from 0 to 2.</p> <p>4.4.1 In 2018-19 the Department approved a change to the RMPC Honours, Four-Year, and Three-Year plans to reduce the number of required 200-level courses by one.</p> <p>4.4.2 The Undergraduate Committee (UGC) continues to evaluate the plan requirements in RMPC and its other degree plans.</p> <p>4.4.3 In 2018-19 the Department approved the elimination of 306A as a requirement for RMPC students. 306A is now one of two courses that they can take in fulfilment of plan requirements.</p> <p>4.4.4 Degree plan requirements for all three undergraduate Honours degrees are presently under discussion, including the literature course requirements for RMPC students.</p>
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		must be taken in the student's final semester of study. We will study this recommendation in more detail.		
5.	<b>Graduate matters</b> 5.1 Continue to carefully track graduate student recruitment and admission, funding packages (and their components), and supervision 5.2 Consider measures to recruit diverse, high quality graduate students. 5.2.1 Consider changing the wording of admission requirements 5.2.2 Make active efforts to research and recruit from specific Canadian and international programs 5.2.3 Consider the value of recruiting students not only from English literature programs but closely related programs in other disciplines. 5.3 Continue to implement the excellent systems developed to shepherd graduate students smoothly through their programs. 5.4 Ensure that graduate students' teaching and academic workloads are reasonable. 5.5 The department and university should consider adjusting program length expectations and advertising 5.6 The university administration should applaud this department for its ability to adapt with such sensitivity to individual	5.1. and 5.3. Effective tracking and mentoring will continue to be managed by the Graduate Associate Chair. 5.2 Recruitment and admissions: recruiting diverse, high quality graduate students has been and will continue to be a key consideration. 5.2.1. Recommended changes to graduate admission criteria are referred to GSPA; Changes to admission wording to make it clearer will be considered by the Graduate Studies Committee. 5.2.2. This item is referred to the Faculty of Arts; it controls the admission of international students. 5.4. Reasonable workloads for students will be discussed by the Graduate Studies Committee and is also referred to the Faculty of Arts; it controls the 2-course/year teaching load of graduate students. 5.5. Adjusting program length expectations and advertising will be discussed by the Graduate Studies	Graduate Associate Chair  Dean; Associate V-P, Graduate Studies and Postdoctoral Affairs (5.2, 5.2.1, 5.6); Provost  Student Association of Graduate English (SAGE) Executive	2018-20 academic years 5.1 The introduction in 2018-19 of an oral defense of the dissertation proposal as part of doctoral candidates' area examinations now enables the Associate Chair Graduate Studies to track PhD supervision at a relatively early stage of students' progress through the program. Efforts to find new ways to track supervision at later stages are ongoing. 5.2 In 2019 the Department requested and received an increase to the number of international graduate students it was allowed to admit (it went from 1 to a maximum of 4). For the PhD program, the Department has successfully recruited award-winning students from other universities. The Department will continue its active efforts to recruit diverse, high-quality graduate students.  5.2.3 In the 2018-19 recruitment cycle, the Department accepted XDM and RCD students from communications,



	<p>graduate students' situational challenges and to foster their academic strengths. Their respect for graduate students' experience is well in line with the university's strategic plan -- its desire for "a vibrant student experience" and its value for "Integrity, equity, diversity and a balanced life for students, faculty and staff."</p> <p>5.7 Consider occasionally offering opportunities for PhD students to teach a higher-level.</p> <p>5.8 Support and collaborate with the graduate students' organization</p> <p>5.8.1 collaborate on a "graduate student handbook"</p> <p>5.9 Carefully look into the distribution of graduate supervision</p>	<p>Committee and are also referred to the Faculty of Arts.</p> <p>5.6. We hope that the university administration will applaud our efforts to support and respect graduate student aspirations and strengths. We believe we offer "a vibrant student experience" and that we value and support "Integrity, equity, diversity and a balanced life for students, faculty and staff."</p> <p>5.7. Graduate student teaching assignments are based on student expertise and Departmental need. The Chair will determine if upper-level courses can be offered to graduate students.</p> <p>5.8. The Department is pleased to work with the Student Association of Graduate English (SAGE). SAGE has indicated an interest in collaborating on a graduate student handbook. The Department will consult with SAGE on creating an updateable resource to aid graduate students in navigating their degree programs.</p> <p>5.9. The distribution of graduate supervision will be investigated by the Associate Chair Graduate Studies and the Chair. Recommendations will</p>		<p>environmental science, and accounting as well as English literature programs.</p> <p>5.3 Implemented in 2018-19, the new design of PhD area examinations puts students in close contact with their dissertation committees as they draft their dissertation proposals.</p> <p>5.4. In 2018-19 the Department's TA Coordinator completed an audit of students to compile data on their teaching workload and address possible differences in hours worked. One result of the audit is that students now fill out a contract for teaching to safeguard equity in the teaching assignments.</p> <p>5.5 At the Master's level, the Department maintains its one-year MA. At the PhD level, the revamped area examinations rolled out in 2018-19 are designed to improve completion rates by (among other things) increasing early contact between the candidates and their dissertation committees.</p> <p>5.6 The Department continues to highlight graduate student experience,</p>
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		be made to the Graduate Studies Committee and the Department.		<p>achievements, and organization on its web pages and in its blog.</p> <p>5.7 Teaching opportunities for graduate students continue to be determined by Departmental need. While the Chair finds occasional chances to offer students this kind of valuable teaching experience, few such courses are available to graduate students.</p> <p>5.8 The Associate Chair Graduate Studies has collaborated with SAGE to co-deliver SSHRC and area examination workshops, starting in Fall 2019. This will ensure more effective support for graduate students and a more consistent focus on scholarships.</p> <p>5.9 In 2018-19, the Graduate Studies Committee has looked at the distribution of graduate supervision and will bring this item to the Department for discussion in 2019/20. The recent loss of a faculty member in two highly-subscribed areas of the graduate program, XDM and RCD, increases the urgency of addressing this issue.</p>
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<p><b>Graduate student funding<sup>3</sup></b></p> <p>6.1 A five-year funding package should be projected for each admitted PhD student, consisting of a combination of teaching remuneration and fellowships. Since the times to completion in English are empirically something over 5 years, in order to make satisfactory progress towards the degree (and not be distracted by external employment) students should be supported for this time period; as well, 5 years of funding is common at many competing English PhD programs.</p> <p>6.2 This package should be clearly communicated to prospective students so that they understand exactly how they can support themselves throughout the degree and the means by which this support is provided.</p> <p>6.3 We recommend that no more than half of the terms during 5 years should be spent in teaching.</p>	<p>Because these recommendations are beyond the scope of the Department of English, they are referred to GSPA and the Faculty of Arts.</p> <p>The Department agrees that a five-year funding package is ideal for all new PhD students. While the Department is taking various steps to ensure timely PhD completion (e.g. a new comprehensive exam structure), a five-year funding package will significantly assist students and assist recruitment.</p> <p>6.2. The Department agrees that it is desirable that letters of offer sent out by GSPA be as clear as possible.</p> <p>6.3. PhD students currently teach or TA 2 courses per year. Reducing that number would, we believe, improve degree completion times.</p>	<p>Dean; Conversations with GSPA</p>	<p>2018-20:</p> <p>6.1 In 2018-19 the Dean and Acting Associate Dean, Graduate Studies, of the Faculty of Arts advocated unsuccessfully at GSPA for a five-year funding package for doctoral students in the Faculty.</p> <p>6.2 The Department's Graduate Coordinator and Graduate Studies Associate Chair provide guidance to students on the interpretation of their letters of offer and explain the means by which the support described in these letters is provided. In particular, they explain the roles that teaching assistantships and graduate teaching play in that support over the duration of their funding packages.</p> <p>6.3 In 2019-20, the Associate Chair Graduate Studies will continue to advocate for a reduction in the teaching currently expected of PhD students.</p>
<p><b>Staffing<sup>4</sup></b></p> <p>Increasing the number of support staff and honoring and rewarding them appropriately,</p>	<p>The Department agrees that increasing the number of support staff, giving them appropriate job</p>	<p>Chair, Dean</p>	<p>Ongoing: In 2018-19 the Chair asked Department staff to keep detailed lists of their activities and to note new</p>

<sup>3</sup> This was not identified as a formal recommendation in the external reviewers' report and is being put forward at the suggestion of the program. It is not required to be included in the implementation plan.

<sup>4</sup> This was not identified as a formal recommendation in the external reviewers' report and is being put forward at the suggestion of the program. It is not required to be included in the implementation plan.



	<p>especially in light of the complexity and necessity of their current roles and the increased logistical workload accompanying the expansion of the writing service courses. Given the unavoidable increase in workload with the introduction of the writing initiative, we feel it would be opportune at this time to reassess the workload and position designations of the entire support staff and include the Department's human resource needs in the writing initiative planning.</p>	<p>titles, and reviewing work load and job descriptions are important in order to retain the excellent staff members that we have. These items are referred to the Faculty of Arts.</p>		<p>tasks they begin to perform, especially in connection with the rollout of UCOI courses in several Faculties. She highlighted these tasks in staff evaluations for 2018-19 and will continue to do so in 2019-20 with the intention of reviewing work load, job titles, and job descriptions.</p>
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The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.

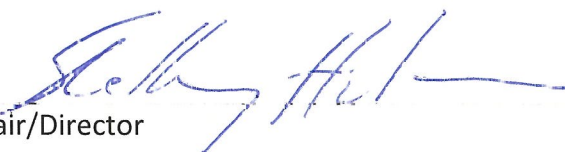


Date of next program review

2024-2025

Date

**Signatures of Approval**

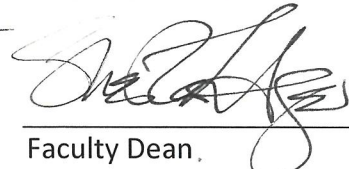
  
Chair/Director

28 August 2019

Date

AFIW Administrative Dean/Head (For AFIW programs only)

Date

\* 

24 November 2019

Faculty Dean

Date

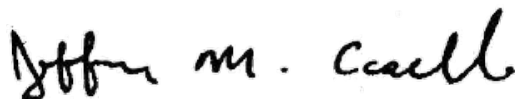
**Note:** AFIW programs fall under the Faculty of ARTS; however, the Dean does not have fiscal control nor authority over staffing and administration of the program.



April 1, 2019

Associate Vice-President, Academic  
(For undergraduate and augmented programs)

Date



March 29, 2019

Associate Vice-President, Graduate Studies and Postdoctoral Affairs  
(For graduate and augmented programs)

Date

\* Please see separate Dean's response

### **Dean's Response to Final Assessment Report: English Language & Literature**

The Faculty of Arts is currently facing financial challenges, and there is a hiring freeze in effect. Departments are being encouraged to review their curriculum in order to identify ways to make course offerings more flexible and degree programs more accessible. Growing course offerings rather than shrinking them is not very viable at the moment, and all Departments should be thinking about strategic use of their existing resources. It is my view that every Department in the Arts Faculty has important things to offer to our students, and the Dean's Office is prepared to do whatever it can to facilitate Departmental success in this regard. It may mean doing things differently as we move forward; we need to pay close attention to student interests and design curriculum that is meaningful to them.

I am pleased with the reviewers' overall positive assessment of the programs offered by the Department of English Language and Literature. With respect to the concerns raised by the reviewers and the Department, I would state the following:

1. Section 5.2.2 of the reviewers' report recommends active recruitment of international students. Because the Ontario government does not provide grant monies to universities for international students, and because the international tuition fee is for the most part rebated to the student as part of their funding package, the Faculty of Arts cannot support large numbers of international graduate students. Arts researchers do not tend to have the kind of large grants to support graduate students that STEM researchers do.
2. The reviewers expressed concern over the teaching load carried by graduate students (section 5.4). It should be clarified that the "two course/year teaching load" referenced by the Department actually means two TA-ships. The funding package provided to grad students is generally parsed out as two terms of TA-ships and one term of scholarship; students are not supposed to work more than 140 hours per term when they are acting as a TA. My understanding is that the English Department occasionally hires senior PhD students to teach a course; in instances such as this, the student would be paid at the sessional rate.
3. Section 5.5 addresses the question of graduate program length. Program length is also tied to funding (section 6.1, which was not identified as a formal recommendation by the reviewers). It is true that humanities PhDs tend to take five years (or longer) to completion; it is also true that UW has stated unequivocally that it will not fund a PhD student for more than four years. Moving forward, I would like to encourage all Departments to review their

graduate curriculum. We may need to challenge traditional expectations about what is and is not included in the scope of a PhD program.

4. The Department requests that consideration be given to the idea of increased staffing, and that attention be paid to job titles, workload, and job descriptions. I am in agreement that appropriate monitoring of workload and job descriptions should be a regular part of the Department's life-cycle. At this stage, however, I cannot authorize an increase in staff numbers; as mentioned above, the Faculty is currently under a hiring freeze.

A handwritten signature in black ink, appearing to read "Sheila A. Alger". The signature is fluid and cursive, with the first name "Sheila" being more prominent than the last name "Alger".

24 November 2019

## Checklist for SUC/SGRC Reviewer Feedback Quality Assurance Office

**Final Assessment Report:** English Language and Literature (BA/MA/PhD)

**Name of Reviewer:** Leeann Ferries

**Date:** 6/28/2019

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### Does the Final Assessment Report:

1. Include a credible implementation plan that not only addresses the substantive issues identified from the program review process, but also clearly identifies:
  - The actions that will follow from specific recommendations? ☒ Yes ☐ No
  - Those who will be responsible for acting on those recommendations? ☒ Yes ☐ No
  - Those who will be responsible for providing resources? ☒ Yes ☐ No
  - Priorities for implementation and realistic timelines for initiating and monitoring actions? ☒ Yes ☐ No
2. Provide rationales for any recommendations that have not been pursued? ☒ Yes ☐ No

### General Comments

Overall, the FAR provides a thorough overview of the strengths, challenges, and weaknesses based on the self-study. The proposed actions that will follow from the external reviewers' recommendations are well developed and reflective of these recommendations. However, there are a few areas where some specific detail would be helpful in clarifying the actions and/or items to consider incorporating to assist with the related tasks.

## Checklist for SUC/SGRC Reviewer Feedback Quality Assurance Office

**Final Assessment Report:** English Language and Literature (BA/MA/PhD)

**Name of Reviewer:** Vivian Dayeh

**Date:** 6/6/2019

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### Does the Final Assessment Report:

1. Include a credible implementation plan that not only addresses the substantive issues identified from the program review process, but also clearly identifies:
  - The actions that will follow from specific recommendations? ☒ Yes ☐ No
  - Those who will be responsible for acting on those recommendations? ☒ Yes ☐ No
  - Those who will be responsible for providing resources? ☒ Yes ☐ No
  - Priorities for implementation and realistic timelines for initiating and monitoring actions? ☒ Yes ☐ No
2. Provide rationales for any recommendations that have not been pursued? ☒ Yes ☐ No

### General Comments

The final assessment report (FAR) is a well-written, succinct response to the external reviewers' recommendations. The implementation plan highlights the path that will be taken to implement change where recommended by the reviewers. The Department is commended on their dedication to the student experience at both the undergraduate and graduate levels.



# Two-Year Progress Report

## Social Development Studies (BA)

### October 2019

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#### **Background**

In accordance with the University Institutional Quality Assurance Process (IQAP), a self-study was submitted by the Department of Social Development Studies (SDS) to the Associate Vice-President, Academic in June 2016. The self-study presented the program descriptions and learning outcomes, an analytical assessment of the program, data collected from a student survey, and the standard data package prepared by the Office of Institutional Analysis & Planning (IAP).

Two arm's-length external and one internal reviewer examined the self-study documentation and then conducted a site visit on January 19-20, 2017. The visit included interviews with the Associate Vice-President, Academic; the President of Renison University College; two Faculty Associate Deans of Arts; the Department Chair; Renison's Administrative Dean; Chairs of other programs at Renison; faculty members, staff and students.

The Final Assessment Report was approved by Senate Undergraduate Council (SUC) in September 2018.

#### **Progress on Implementation Plan**

Each recommendation included in the Final Assessment Report is listed below with an update on its status. Rationales for alterations to the original implementation plan and timelines are included.

The most significant development that arose since the 2017 program review was the creation of a Renison faculty association in April 2018, the Renison Association for Academic Staff (RAAS). RAAS has been working on negotiating a Memorandum of Agreement with the administration, which will address issues related to workload and research support that were raised by the program reviewers in discussion with faculty.

#### **Recommendations**

1. Include part-time instructors in department meetings to ensure the depth and viability of the program and its curriculum.

*Status:* Completed





*Details:* Unlike full-time faculty, part-time instructors are not paid to attend meetings, and they do not have voting rights at meetings. Rather than invite all of them to attend Department meetings then, an SDS instructor group was created on LEARN to facilitate communication. Minutes from department meetings are posted there so they are available to part-time instructors. The Chair seeks feedback via email in advance of department meetings for topics relevant to part-time instructors, inviting further conversation if desired. Depending on the willingness and availability of the sessional instructors, representatives may also be invited to participate in department meetings to ensure their perspectives are included in discussion. The Department continues to hold annual workshops and dinners including all full-time and part-time instructors.

2. Explore the creation of an Interdisciplinary Master's degree with other units in Renison and beyond.

*Status:* Incomplete

*Details:* The Academic Dean at Renison shows interest and support for the development of an MA program. Work towards this initiative has been delayed due to other priorities. A group of interested SDS faculty members and the SDS Chair will work with the Dean to explore the possibility further. Anticipated start to this discernment process is May 2020.

3. To ensure the continuation of a high quality program and improve the ratio of full-time to part-time instructors, it is recommended that the Department be granted 2-3 additional tenure-track faculty positions.

*Status:* In progress

*Details:* The Department hired one new full-time tenure-track faculty member who began July 1<sup>st</sup>, 2018. The Dean has indicated that one further hire will be delayed due to budget cuts (for a start date of July 1<sup>st</sup>, 2021).

4. Establish an Associate Chair position to provide support for the Chair and to raise the profile of SDS in the Faculty of Arts and the University.

*Status:* Not selected for implementation at this time

*Details:* The new Chair (as of July 1<sup>st</sup>, 2018) kept track of her duties from July to December 2018. During this time, she surveyed Associate Chairs in six other Faculty of Arts departments about their duties. From this investigation it became clear that the majority of typical Associate Chair duties are already being done either by SDS administrative staff (e.g., advising students, approval of plan modifications), or by the Renison Registrar's office (e.g., managing course enrollment, review of transfer credits). In February 2019, this information was brought to a department meeting and it was



agreed that the Department would not proceed with the creation of an Associate Chair position at this time.

5. To meet expanded administrative support roles in academic advising and recruitment, it is recommended that an additional .5 to 1.0 support person be hired.

*Status:* Completed

*Details:* An additional .5 administrative support person for SDS was hired in February 2018.

6. Review SDS teaching loads and supports in light of a desire for increased research productivity and higher profile for the SDS program, as well as the apparent inequity between teaching loads in Faculty of Arts and SDS.

*Status:* In progress

*Details:* A faculty association was formed at Renison in April 2018. The Renison Association of Academic Staff (RAAS) has taken on the task of addressing workload and research supports as part of the negotiation of their Memorandum of Agreement. Expected completion date of the agreement is December 2019.

7. To enable the growth of research and retain research-intensive faculty members in SDS, increase the number of course remissions available to faculty to support their research programs.

*Status:* In progress

*Details:* In recent years, SDS faculty with active research programs have typically been granted one course remission per academic year, upon approval of the Dean. The eligibility criteria and application process are currently being formalized in RAAS negotiations.

8. Help faculty to identify matching fund sources – [particularly for faculty applying to highly competitive tri-councils such as CIHR and SSHRC].

*Status:* Completed

*Details:* Renison regularly supports applications for matching grants with faculty. The Academic Dean consults with faculty about their research plans. Faculty are often referred to the University of Waterloo's Office of Research for further assistance.

9. Explore ways to improve communication and engagement with the SDS program including formalizing an SDS/Faculty of Arts liaison person to apprise the Faculty of Arts on SDS activities.



*Status:* In progress

*Details:* The Dean continues to examine the existing lines of communication and committee memberships with an eye to improving communication and deepening engagement with Arts, in consultation with the Chair of SDS and the Dean of Arts.

Greater communication and engagement with the Faculty of Arts has also become part of the agenda for Renison's recently hired Director of External Relations and Communications.

10. Incorporate SDS more directly in the development of materials and process of recruitment for the SDS program. Highlight the dynamic and innovative research in SDS as a means to recruit students with higher academic aspirations.

*Status:* In progress

*Details:* One of the SDS administrative staff has been named as the point person for Renison's Marketing Department to reach out to in regards to the development of materials, and is connected with Marketing and Undergraduate Recruitment on main campus. A recently hired Communications Manager for Renison is working on developing content for web and print to highlight SDS faculty research and student accomplishments.



### Updated Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1	Include part-time instructors in department meetings to ensure the depth and viability of the program and its curriculum.	<p>1. Minutes from department meetings are posted on SDS Learn site so they are available to part-time instructors.</p> <p>2. The Chair seeks feedback via email in advance of department meetings for topics relevant to part-time instructors. Representatives may also be invited to attend meetings.</p> <p>3. The Department will continue to hold annual workshops and dinners including all full-time and part-time instructors.</p>	SDS Chair	Completed
2	Explore the creation of an Interdisciplinary Master's degree with other units in Renison and beyond	The Academic Dean at Renison shows interest and support for the development of an MA program. A group of interested SDS faculty members and the SDS chair will work with the Dean to explore the possibility further.	Renison Dean and SDS Chair, Arts Associate Dean of Graduate Studies	Anticipated start to discernment process is May 2020
3	To ensure the continuation of a high quality program and improve the ratio of full-time to part-time instructors, it is recommended that the Department be granted 2-3 additional tenure-track faculty positions.	The Department hired one new full-time tenure-track faculty member who began July 1 <sup>st</sup> , 2018. Another search will begin in fall 2020.	Renison President and Dean	One full-time tenure track position began July 1 <sup>st</sup> , 2018; second scheduled for July 1 <sup>st</sup> , 2021



4	Establish an Associate Chair position to provide support for the Chair and to raise the profile of SDS in the Faculty of Arts and the University.	The new Chair (as of July 1 <sup>st</sup> , 2018) kept track of her duties and surveyed associate chairs in six other Faculty of Arts departments about their duties. From this investigation it became clear that the majority of typical associate chair duties are already being done either by SDS administrative staff or by the Renison Registrar's office. The department agreed not to proceed with the creation of an Associate Chair position at this time.	Not selected for implementation	Not selected for implementation
5	To meet expanded administrative support roles in academic advising and recruitment, it is recommended that an additional .5 to 1.0 support person be hired.	An additional .5 administrative support person for SDS was hired in February 2018.	Completed	Completed February 2018
6	Review SDS teaching loads and supports in light of a desire for increased research productivity and higher profile for the SDS program, as well as the apparent inequity between teaching loads in Faculty of Arts and SDS.	A faculty association was formed at Renison in April 2018. The Renison Association of Academic Staff (RAAS) has taken on the task of addressing workload and research supports as part of the negotiation of their Memorandum of Agreement.	RAAS and Renison administration negotiating teams	Expected completion date of agreement is December 2019
7	To enable the growth of research and retain research-intensive faculty members in SDS, increase the number of course remissions available to faculty to support their research programs.	SDS faculty with active research programs have typically been granted one course remission per academic year, upon approval of the Dean. The eligibility criteria and application process are currently being formalized in RAAS negotiations.	RAAS and Renison administration negotiating teams	Expected completion date of the agreement is December 2019



8	Help faculty to identify matching fund sources – [particularly for faculty applying to highly competitive tri-councils such as CIHR and SSHRC].	Renison regularly supports applications for matching grants with faculty. The Academic Dean consults with faculty about their research plans. Faculty are often referred to the University of Waterloo's Office of Research for further assistance.	Renison Dean	Ongoing
9	Explore ways to improve communication and engagement with the SDS program including formalizing an SDS/Faculty of Arts liaison person to apprise the Faculty of Arts on SDS activities.	The Dean continues to examine the existing lines of communication and committee memberships with an eye to improving communication and deepening engagement with Arts.  Greater communication and engagement with the Faculty of Arts has also become part of the agenda for Renison's recently hired Director of External Relations and Communications.	SDS Chair, Renison Dean, Renison Director of External Relations and Communications, Associate Dean of Arts Undergraduate	Ongoing
10	Incorporate SDS more directly in the development of materials and process of recruitment for the SDS program. Highlight the dynamic and innovative research in SDS as a means to recruit students with higher academic aspirations.	One of the SDS administrative staff has been named as the point person for Renison's Marketing Department to reach out to in regards to the development of materials, and is connected with Marketing and Undergraduate Recruitment on main campus. A recently hired Communications Manager for Renison is working on developing content for web and print to highlight SDS faculty research and student accomplishments.	SDS Chair, Renison Manager of Marketing and Recruitment, Renison Director of External Relations and Communications	Ongoing

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.



Date of next program review: 2023-2024  
Date

Signatures of Approval:

Denise Mangold April 30/19  
Chair/Director Date

Jeff Wilson April 29, 2019  
AFIW Administrative Dean/Head (For AFIW programs only) Date

[Signature] Nov. 19/2019  
Faculty Dean Date

**Note:** AFIW programs fall under the Faculty of ARTS; however, the Dean does not have fiscal control nor authority over staffing and administration of the program.

Dan DeVidi August 2, 2019

Associate Vice-President, Academic  
(For undergraduate and augmented programs) Date

Associate Vice-President, Graduate Studies and Postdoctoral Affairs  
(For graduate and augmented programs) Date

## Checklist for SUC/SGRC Reviewer Feedback Quality Assurance Office

**Two-Year Progress Report: Social Development Studies May 2019**

**Name of Reviewer: Chris Vigna**

**Date: 11/1/2019**

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### Does the Two-Year Progress Report:

- |  |   |                             |
|--|---|-----------------------------|
| 1. Clearly describe progress achieved on the various action items in the implementation plan?  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Explain convincingly any circumstances that would have altered the original implementation plan?  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. For items that are behind schedule, propose an amended implementation schedule that is reasonable and credible?   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Address significant developments or initiatives that have arisen since the program review process, or that were not contemplated by the program review process? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

### General Comments

I am quite satisfied with the speed and decisiveness that the Department of Social Development Studies has tackled the recommendations from their Program Review. The SDS Department has some great initiatives that are ongoing, which will enhance the department in the areas of undergraduate recruitment, faculty research and research funding.



## **NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES**

**to be added to the Undergraduate Awards Database**

*- submitted for November 12, 2019 meeting of Senate Undergraduate Council -*

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### **ENTRANCE AWARDS**

#### **Frank and Janet Hill Scholarship for Women in Math**

One scholarship, valued at \$2,500, will be awarded annually to a full-time female undergraduate student entering Year One of any program in the Faculty of Mathematics wherein women are underrepresented. Selection will be based on academic excellence (minimum 80% admission average), the Admission Information Form, and contest scores as assessed through the Centre for Education in Mathematics and Computing (CEMC). This fund is made possible by a donation from Daphne Lucas (BMath '03, MMath '04) in honour of her parents, to thank them for their unwavering support in her journey to the University of Waterloo.

*Method of Financing: annual donation (four-year pledge)*

#### **McQueen Family Entrance Bursary**

A bursary, valued at \$2,000, will be awarded annually to an undergraduate student entering Year One of Civil or Mechanical Engineering who has a demonstrated financial need as determined by Waterloo. To be considered, students must submit the University of Waterloo Entrance Bursary application by April 15. This fund is made possible by a donation from Don McQueen (BASc '77, Civil Engineering).

*Method of Financing: annual donation (five-year pledge)*

### **UPPER-YEAR AWARDS**

#### **Actuarial Science Diversity Award**

One award, valued at up to \$1,000, will be presented annually to a student in Year Two, Three, or Four of an Actuarial Science program in the Department of Statistics and Actuarial Science. Selection will be based on academic excellence (minimum 75% cumulative average) and an essay wherein the candidate describes the positive impact they have had on underrepresented groups (visible minorities, Indigenous, LGBTQ, etc.) in the Actuarial Science program through extracurricular involvement and/or volunteer activities. The recipient will be given the opportunity to do an outreach visit to a high school with a view to inspiring more diverse students to study Actuarial Science, and/or given sponsorship to attend a professional networking event for diverse actuaries from the International Association of Black Actuaries. Interested students should submit an application by June 1.

*Method of Financing: annual donation (five-year pledge)*

#### **Janét Aizenstros Entrepreneurial Award**

One or more awards are offered annually to full-time undergraduate female engineering students (individual or all-female co-founder teams) enrolled in the Conrad School of Entrepreneurship and Business Enterprise Co-op program. Students must have taken BET 300, BET 410, or another relevant BET course. Recipients will be chosen by Conrad faculty on the basis of the rate of progress and venture development stage of the candidates' business idea. Interested students or student teams should submit an application by November 1. This fund is made possible by a donation from Janét Aizenstros to encourage entrepreneurial women to pursue careers in technology.

*Method of Financing: annual donation (two-year pledge)*

## **NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES**

### **to be added to the Undergraduate Awards Database**

*- submitted for November 12, 2019 meeting of Senate Undergraduate Council -*

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#### **Barkat Ali Community Service Award**

An award, valued at \$2,500, will be given annually to a full-time undergraduate student enrolled in Year Three or Four of any program at the University of Waterloo. Selection is based on academic achievement (minimum 80% cumulative average) combined with an essay (1,000 words maximum) describing the positive impact they have had on their community through involvement in volunteer activities related to community service. Interested students are to submit an application by October 15. This fund is made possible by a donation from the family of Barkat Ali, who was involved in community service and political engagement throughout his life. This award will continue his legacy of giving back to the community and improving the lives of its residents.

*Method of Financing: annual donation (five-year pledge)*

#### **Yves and Cynthia Bled Women in Engineering Scholarship**

One or more scholarships, valued at up to \$2,000 each, will be awarded annually to full-time female undergraduate students entering Year Three of a program in the Faculty of Engineering wherein women are underrepresented. Selection is based on academic excellence (minimum 80% cumulative average). This fund is made possible by a donation from Professors Yves and Cynthia Bled to support outstanding female students in Engineering.

*Method of Financing: endowment*

#### **Shiloh Brawn Award for Women in Physics**

An award, valued at \$1,500, will be presented annually to a full-time female undergraduate student enrolled in Year Two, Three, or Four of any program in the Department of Physics & Astronomy, wherein women are underrepresented. Selection is based on academic excellence (minimum 75% cumulative average) and extracurricular involvement. Preference will be given to students making an effort to advance women in science (e.g., involvement in FemPhys Club, Women in Science Society, etc.), and/or who have completed an Undergraduate Research Assistantship (URA). Interested students should submit an application by October 15. This fund is made possible by a donation from the Brawn family in honour of their daughter and to encourage women pursuing an education in STEM.

*Method of Financing: annual donation (five-year pledge)*

#### **Monica Chaudhury Award in Actuarial Science**

An award, valued at \$2,500, will be provided annually to a full-time undergraduate student enrolled in Year Two, Three, or Four in the Department of Statistics and Actuarial Science. Selection is based on academic excellence (minimum 80% cumulative average), combined with a demonstrated interest in achieving their actuarial fellowship designation by having passed at least one of the professional examinations set by the Society of Actuaries or the Casualty Actuarial Society. Preference will be given to students in financial need; to that end, candidates will be invited to explain what it would mean to them to receive this award. Interested students should submit an application by June 15. This award is made possible by a gift made in honour of Monica Chaudhury.

*Method of Financing: annual donation (five-year pledge)*

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**NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES**

**to be added to the Undergraduate Awards Database**

*- submitted for November 12, 2019 meeting of Senate Undergraduate Council -*

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**Cecilia Downing Linton Memorial Award for Women in Math**

An award, valued at up to \$4,500, will be provided annually to a full-time female undergraduate student entering Year Two of any program in the Faculty of Mathematics wherein women are underrepresented. Selection is based on academic excellence (minimum 80% cumulative average) and financial need. Preference will be given to students who participated in volunteer or community activities in Year One. Interested students should submit the University of Waterloo Full-Time Bursary application by October 15. This fund is made possible by a donation from the late Cecilia Downing Linton. Cecilia felt strongly about encouraging women to pursue careers in mathematics and computer science.

*Method of Financing: endowment*

**Equitable Life Scholarship in Actuarial Science**

A scholarship, valued at \$2,500, will be awarded annually to a full-time undergraduate student enrolled in Year Three or Four of the Actuarial Science program in the Department of Statistics and Actuarial Science. Selection will be based on academic excellence (minimum 80% cumulative average) combined with a demonstrated interest in the community as evidenced by participation in extracurricular and/or volunteer activities. Interested students should submit an application by June 15. This fund is made possible by a donation from Equitable Life Insurance Company of Canada to support the next generation of actuaries.

*Method of Financing: annual donation (five-year pledge)*

**Anil K. Gandhi Memorial Scholarship**

A scholarship, valued at \$2,000, will be awarded annually to a full-time undergraduate student enrolled in Year Two of any program in the School of Accounting and Finance or the David R. Cheriton School of Computer Science. Selection is based on academic excellence (minimum 80% cumulative average), combined with demonstrated community involvement. Preference will be given to students who are first-generation Canadians or who are the children of immigrants to Canada. Interested students should submit an application by October 1. This fund is made possible by donations from alumni Shikha Gandhi (MAcc '04) and Vikas Gandhi (BMath '07) in honour of their father, Anil K. Gandhi, and his support of his children in pursuing higher education, while helping others to achieve their goals.

*Method of Financing: annual donation (five-year pledge)*

**Johnson/Richardson Family Perseverance Award**

An award, valued at up to \$1,000, is presented annually to a fourth-year Science and Business student, who has demonstrated academic perseverance. Selection will be based on readmission to the program, continued academic eligibility, and demonstrated involvement in leadership, community activities, and/or SCIBUS co-curricular activities. Interested students enrolled in the Science and Business plan, who were readmitted prior to the 4A term may apply by October 15. This fund is made possible by a donation from Professor Jean Richardson and Robert Davie, to honour Jean's parents who believed in the importance of perseverance, determination, and education.

*Method of Financing: endowment*

## **NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES**

**to be added to the Undergraduate Awards Database**

*- submitted for November 12, 2019 meeting of Senate Undergraduate Council -*

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### **Douglas Lankshear Scholarship for Women in Computer Science**

A scholarship, valued at \$2,000, will be awarded annually to a full-time female undergraduate student enrolled in Year Two, Three, or Four of any program in the David R. Cheriton School of Computer Science wherein women are underrepresented. Selection is based on academic excellence (minimum 80% cumulative average). Preference will be given to students who are not in a co-op program. This fund is made possible by a donation from Douglas Lankshear.

*Method of Financing: annual donation (five-year pledge)*

### **Bev Marshman Scholarship in Applied Math and Computing**

A scholarship, valued at \$1,500, will be awarded annually to a full-time female undergraduate student enrolled in Year Three or Four of the Applied Mathematics or Computer Science programs wherein women are underrepresented. Selection is based on academic excellence (minimum 80% cumulative average), and a commitment to campus life through volunteerism. Preference will be given to students in financial need; to that end students are invited to explain what it would mean to them to receive this award. Further preference will be given to students from outside the province of Ontario. Interested students should submit an application by October 15. This fund is made possible by a donation from M. Lisa Yeo (BMATH '93) and W. Jonathan Baldwin (BMATH '93) to encourage and assist students who are interested in the pursuit of technological innovation and committed to achieving the very highest standards of excellence.

*Method of Financing: annual donation (five-year pledge)*

### **Palihapitiya Venture Creation Fund**

Two awards, valued at \$50,000 each, will be provided to two elite student teams enrolled in the Faculty of Engineering and undertaking the fourth-year Capstone Design Project. Eligible students must have completed a minimum of two BET courses (at the 300 and/or 400 level) by the end of their 4B term. Interested students must present their project idea to an interview panel in March during the 4B term. Selection will be based on how innovative the design project idea is from both a technical and business venture perspective. Student teams must work on their project for a period of four months immediately following completion of their 4B term. During this time, appropriate industry mentors are assigned to work with each project team. Funding for the two teams is made possible by a gift from ECE alumnus Chamath Palihapitiya.

*Method of Financing: annual donation (four-year pledge)*

### **Uroosa Zaib Panjwani Memorial Award**

An award, valued at up to \$1,500, will be presented annually to a full-time undergraduate student enrolled in Year Three or Four in the Faculty of Arts who is majoring in Legal Studies. Selection will be based on academic excellence (minimum 75% cumulative average) and participation in extracurricular and/or volunteer activities. Preference will be given to students in need; to that end candidates are invited to explain what it would mean to them to receive this award. Interested students must submit an application by February 15. This fund is made possible by the many donations from family, friends, and colleagues of Uroosa Panjwani to honour her memory. The Panjwani family hope to memorialize all the love and light Uroosa gave to others, such that other students may enjoy its radiance, and give other students the opportunity to follow Uroosa's example on their journey to a law career.

*Method of Financing: endowment*

## **NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES**

**to be added to the Undergraduate Awards Database**

*- submitted for November 12, 2019 meeting of Senate Undergraduate Council -*

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### **Lovinsky Pierre-Antoine Award**

An award, valued at up to \$1,200, will be awarded annually to a full-time undergraduate student enrolled in Year Two, Three, or Four of any program. Selection will be based on a combination of academic achievement (minimum 70% cumulative average) and an essay (1000 words maximum) describing the demonstrable contributions they have made to the African, Caribbean, or Black communities within Canada through extracurricular or volunteer involvement. Interested students should submit an application by October 15. This fund is made possible by a donation from Briana C. Holmes, (BMath '90) to honour friend Lovinsky Pierre-Antoine.

*Method of Financing: endowment*

### **Ubisoft Scholarship for Women in Computer Science**

Two scholarships, valued at \$4,000 each, will be awarded to full-time female undergraduate students enrolled in Year Three or Four of any program in the David R. Cheriton School of Computer Science (including Software Engineering), wherein women are underrepresented. Selection will be based on academic excellence (minimum 80% cumulative average) and leadership potential as demonstrated through volunteerism in on-campus or community endeavours. An application must be submitted by October 1. This fund is made possible by a donation from Ubisoft. Ubisoft is committed to enriching players' lives with original and memorable gaming experiences.

*Method of Financing: annual donation (four-year pledge)*

### **Western Union Business Solutions Bursary**

A bursary, valued at \$1,200, will be awarded annually to a full-time international undergraduate student enrolled in Year, Two, Three, or Four in any Faculty who is in good academic standing, and who has demonstrated financial need as determined by Waterloo. To be considered, students must submit the International Undergraduate Emergency Bursary application by October 15. This fund is made possible by a donation from Western Union Business Solutions.

*Method of Financing: endowment*

## **ATHLETIC AWARDS**

### **Rothwell Football Excellence Award**

One award, valued at \$2,000, is given to a student-athlete on the varsity football team. This award recognizes leadership qualities, a positive attitude, strong character, and enthusiasm for Warriors Football and their community. This fund is supported by Warriors football alumnus John Rothwell (BA '77, Sociology).

*Method of Financing: one-time donation (to support awards for five years)*

### **RWDI Engineering and Athletics Excellence Award**

One award, valued at \$3,500, will be presented annually to a deserving full-time undergraduate student enrolled in Year Two, Three, or Four in the Faculty of Engineering who is a member of any varsity team. Candidates must have a minimum overall average of 80%. Preference will be given to a student-athlete who has made a positive impact on their team, the Athletics and Recreation program, and/or the University through involvement in extracurricular or volunteer activities. This fund is made possible by a donation from RWDI.

*Method of Financing: annual donation (five-year pledge)*

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**NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES**

**to be added to the Undergraduate Awards Database**

*- submitted for November 12, 2019 meeting of Senate Undergraduate Council -*

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**Strickland Family O Line Excellence Award**

One or more awards, valued at up to \$2,500, are given to student-athletes on the varsity football team who play on the offensive line. These awards recognize leadership, athletic talent, and contribution to Warriors Athletics and Recreation, Warriors Football, and their community. This fund is supported by Warriors Football alumnus Sean Strickland (BA '86) and Dance alumnus Jill Strickland (BA '86).

*Method of Financing: annual donation (five-year pledge)*

**Jayden Thomas Athletic Excellence Award**

One award, valued at \$1,000 or more, is given to a student-athlete enrolled in the Accounting and Financial Management program in the Faculty of Arts. Preference will be given to members of the varsity football team and to students enrolled in Year One. This award recognizes athletic talent, leadership qualities, and contribution to Warriors Athletics and Recreation, their team, the school, and their community. This fund is supported by Warriors football alumnus Benjie Thomas.

*Method of Financing: endowment*

**Warriors Football Special Teams Award**

One award, valued at \$4,500, is given to a student-athlete on the varsity football team who plays on special teams. Preference will be given to a student in their third, fourth, or fifth year who has not previously received an athletic financial award. This award recognizes leadership, athletic talent, and contribution to Warriors Athletics and Recreation, Warriors Football, and their community. This fund is supported by Warriors Football alumnus Matt Armstrong (BMath '97, MMath '99, BA '04).

*Method of Financing: annual donation (five-year pledge)*

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**INTERNATIONAL EXPERIENCE AWARDS**

**Bayne International Experience Award**

An award, valued at \$1,000, will be provided annually to a full-time undergraduate student enrolled in Year Two, Three, or Four of Computer Engineering or Software Engineering who will be participating in an international study or co-op work experience. Candidates must have a minimum cumulative average of 80%. Preference will be given to students travelling to an unfamiliar country where they will experience a different culture. Interested students must submit the general International Experience Award application by November 15. This fund is made possible by a donation from Chad Bayne and his family to encourage students to pursue an international experience.

*Method of Financing: progressive endowment plus annual donation (five-year pledge)*

**Hewitt-Vinette Math in Europe Travel Award**

One or more awards, valued at \$1,000 - \$1,500 each, are available annually to provide financial assistance to undergraduate Math students who participate in the Faculty of Mathematics' Math in Europe program. Selection is based on demonstrated financial need and a personal letter describing why the student wishes to participate in the Math in Europe program. Interested first-year students are to submit the general International Experience Award application by November 1. This fund has been established in memory of Thomas Hewitt and Jean-Jacques Vinette.

*Method of Financing: annual donation (five-year pledge)*

**University of Waterloo**  
**SENATE**  
**Report of the President**  
**20 January 2020**

**FOR INFORMATION**

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**Recognition and Commendation**

**The Association for Computing Machinery** has named Professor **Florian Kerschbaum** a Distinguished Member. He joins 62 individuals globally who have received this prestigious recognition in 2019 for outstanding scientific contributions. ACM Distinguished Members are responsible for an extraordinary array of achievements, reflecting many areas of research and practice in the field of computing and information technology. Professor Kerschbaum, who is also the executive director of Waterloo's Cybersecurity and Privacy Institute, has developed and helped deploy several application-specific methods for searching and computing on encrypted data. He has developed a comprehensive set of searchable encryption algorithms for database operations. Over his career, Dr. Kerschbaum's work has resulted in 49 US patents to date. Since 2017 he has been an associate professor at the Cheriton School of Computer Science and since 2018 has served as the inaugural director of Waterloo's Cybersecurity and Privacy Institute. Before his faculty appointment at Waterloo, he had been with SAP in Germany for 11 years. Professor Kerschbaum is the tenth faculty member at the Cheriton School of Computer Science to be recognized as a Distinguished Member by ACM, following Professors Jo Atlee (2016), Charles Clarke (2015), Don Cowan (2010), Mark Giesbrecht (2013), Ian Goldberg (2017), Ihab Ilyas (2014), Anna Lubiw (2009), Kenneth Salem (2017), and Jeffrey Shallit (2008).

(adapted from the *Cheriton School of Computer Science News*, 30 October 2019)

Three members of **Centre for Ocular Research and Education (CORE)** research team were inducted as Fellows of the American Academy of Optometry (FAAO). **Alison Ng, Chau-Minh Phan, and Hendrik Walther** were honoured at the third World Congress of Optometry held in Orlando, Florida, from October 23-27, 2019. To obtain a fellowship from the Academy and maintain it, individuals are evaluated against high standards of professional competence. These standards include those who have accredited themselves and optometry by their contributions to optometry or vision science. Having the status of FAAO indicates that the optometrist, scientist, or other qualified person have met the rigorous qualifications for fellowship.

(adapted from the *Daily Bulletin*, 5 November 2019)

The **University of Waterloo** has achieved Gold certification in **Excellence Canada's Excellence, Innovation and Wellness (EIW)** program, which recognizes the University for its exceptional organizational and workplace practices. Waterloo was officially awarded Gold at the Excellence Canada Summit, which took place on November 5, 2019 in Toronto. While other Canadian universities have achieved department or unit-level certification, Waterloo is the first university to achieve certification across an entire post-secondary institution. The University's achievement is a result of the collective effort of many employees, including 20 Advisory Committee members, 50 Working Group members, and over 2,000 others who participated in focus groups, information sessions, department-level certifications, and surveys since the initiative began. The EIW program provides a framework for continuous improvement that emphasizes innovation and healthy workplace practices, with a focus in five key areas:

leadership, planning, customers (service), people, and processes. For more information, [visit the University's Excellence Canada website](#).

(adapted from the *Daily Bulletin*, 7 November 2019)

Professor **John McPhee** (systems design engineering) was presented with this year's **Engineering Medal: Engineering Excellence from Professional Engineers Ontario** (PEO) at its annual gala held earlier this month in Mississauga. McPhee was recognized for his innovative work into the modeling, simulation and design of dynamic physical systems. "What I'm most proud of, after my three children of course, is probably the developments we've done in graph-theoretical modelling and the fundamental ideas that we've discovered but also implemented in practical form that engineers in industry can easily use," he said. The impact of McPhee's research has been influential. He pioneered the use of linear graph theory and symbolic computing to model dynamic systems, providing a powerful systems-level design methodology that allows engineers to model and simulate the impact of individual components on overall performance of multi-domain systems (such as hybrid electric vehicles) within a single design package. McPhee, Canada Research Chair in System Dynamics and a Waterloo Engineering alumnus, said that the keys to his career success have been an interest in learning and discovering new ideas. McPhee offers two pieces of advice to students after they graduate and start building their careers. "First is to never stop learning," he said. "And the second is to make sure that you are able to enjoy working in a team. Because I think the best advances are made as a team as opposed to individuals."

(adapted from the *Engineering News*, 21 November 2019)

On November 20, 2019, the **Concept \$5K Finals** competition (previously known as the Velocity Fund Finals \$5K) was hosted in the Student Life Centre at the University of Waterloo and drew in an audience of over two hundred. Nine finalists took to the stage to pitch and compete for one of four Concept \$5K Grants. The competition is held three times a year, and students from any Faculty who want to build an early-stage startup can enter. The winners were:

- **CodeGEM:** CodeGEM is developing a feedback management system to quantify code improvements and promote better feedback. CodeGEM has had 20+ users install their system and will use the \$5,000 to continue market validation. (Team members: **Stephanie Mills**, **Ian Kemp**, and **Kaylyn Lau**, all from management engineering)
- **Flowy:** Flowy is building AI-powered digital transformation tools to commoditize frictionless automation. They currently have two demos in the pipeline and a letter of intent. Flowy will use the \$5,000 to refine their software and implement their first pilot in 2020. (Team members: **Neil Liu**, computer science, **Kevin Cheng**, mathematics, and **David Zhao**, accounting and financial management)
- **Ribbit:** Ribbit aims to create the world's first fully autonomous commercial airline service. Ribbit will use the \$5,000 to validate its software on an actual flight marker, and in the future plan to buy a recreational plane to retrofit. (Team members: **Jeremy Wang**, PhD of mechanical engineering, and **Carl Pigeon**, master of aerospace engineering, University of Toronto)
- **Scope:** Scope is building lenses with electronically tunable optical power. Scope will put the \$5,000 towards advanced prototyping materials and testing. In 2020 they aim to have a zooming system complete and to file their patents. (Team members: **Fernando Pena**, **Zhenle Cao**, **Ishan Mishra**, **Alisha Bhanji**, and **Holden Beggs**, all from nanotechnology engineering)

(adapted from the *Concept News*, 21 November 2019)



This fall, 253 University of Waterloo student-athletes were honoured for their academic achievements, each receiving the **Academic All-Canadians by Fairfax Awards**. The sum of these achievements is the best in the University's history and tops Ontario says Roly Webster, director of athletics and recreation. Amongst the recipients is varsity runner and fifth-year biochemistry student **Stephanie Ryall**, earning an average of 97.8 per cent in fourth year. Ryall trains daily, running about 100 kilometres a week, including a 20-kilometre run on Sundays. Following Ryall's graduation in spring 2020, the young athlete hopes to pursue an MD-PhD program. **MacKenzie** and **Kennedy Strong**, twin brothers, were also honoured with Fairfax awards. MacKenzie's average was 97.5 per cent, while Kennedy checked in at 98.83 per cent. Both are in their second-year of chemical engineering and remain active varsity baseball players — MacKenzie, a centre fielder, and Kennedy, a pitcher. The twins considered an education south of the border, but were both influenced to stay in Canada because of Waterloo's strong reputation. Overall, 80 per cent of Warriors have averages above 70 per cent, making Waterloo athletes all-stars, all around.

(adapted from the *Waterloo Warriors News*, 27 November 2019)

On November 8-9, 2019, **Jeremy Wang**, **Sunny Li**, and **Seldi Shembitraku**, a team of 5A Mathematics Business and Accounting BBA/BMath double degree students, participated in the **McGill International Portfolio Challenge** (MIPC) in Montreal. The third edition of the MIPC case competition was focused on sustainability issues. Even though our team did not make it to the list of five finalists, the team should be proud to be among the 25 semi-finalists. Semi-finalists were chosen from roughly 90 team applications submitted from the best universities throughout the world, and competition was intense. This was the first time the University of Waterloo participated in MIPC and the experience should be useful for future participants.

(adapted from the *Mathematics Business and Accounting News*, 13 November 2019)

A management engineering Capstone Design project that explored the need for pay-and-display parking machines in Toronto took top prize in an international competition. **Milan Preet Kaur**, a recent management engineering graduate, presented her team's Capstone project at the 2019 **Institute for Operations Research and Management Sciences (INFORMS) Undergraduate Operations Research Prize Competition**, which took place at the organization's annual meeting in Seattle. Team members used optimization models to re-evaluate the need for pay-and-display machines throughout Toronto after a drastic increase in mobile payments since the city's parking authority introduced a mobile-pay app in 2016. The team's solution involved developing a data analysis tool that consolidates multiple large-scale datasets on historical parking transactions and a mathematical optimization methodology that finds the optimal number and locations of parking payment options while minimizing operational and maintenance costs. Waterloo's project was one of six to be presented at the INFORMS annual meeting. The other five were from the U.S. (University of Michigan, Northwestern University and University of California at Berkeley), Germany (Karlsruhe Institute of Technology) and Turkey (TOBB University of Economics and Technology).

(adapted from the *Daily Bulletin*, 9 December 2019)

Professor **Blair Feltmate** has been named to the Ontario government's **Advisory Panel on Climate Change**. The Honorable Jeff Yurek, minister of the environment, conservation and parks, made the announcement on November 28. The advisory panel on climate change, which includes Paul Kovacs, founder of the Institute for Catastrophic Loss Reduction at Western University as the chair and Lynette Mader, manager of provincial operations for Ontario for Ducks Unlimited Canada, as the vice-chair, consists of experts on climate change resiliency who have experience in a variety of sectors, including the not-for-profit, agriculture and insurance sectors. Professor Feltmate is the head of the Intact

Centre on Climate Change Adaptation at Waterloo. The centre focuses on cost-effective ways to help minimize risks posed by extreme weather. Feltmate also chairs the development of two flood adaptation standards for the Canadian Standards Association and is the chair of the Government of Canada Expert Panel on Climate Adaptation and Resilience Results.

(adapted from the *Daily Bulletin*, 12 December 2019)

**University of Waterloo**  
**REPORT OF THE DEAN OF APPLIED HEALTH SCIENCES TO SENATE**  
**January 20, 2020**

**FOR INFORMATION**

**A. APPOINTMENTS**

**Probationary Term Appointment**

**HORSLEN, Brian**, Assistant Professor, Department of Kinesiology, July 1, 2020 – June 30, 2023. BSc, Kinesiology, University of Waterloo, 2007, M.Sc., Kinesiology, University of British Columbia, 2010, PhD, Kinesiology, University of British Columbia, 2016. Dr. Horslen's research focusses on human sensorimotor control as it relates to standing balance. His research is a strong fit with the department and provides unique opportunities for collaborative links and partnerships within the Department and Faculty.

**Adjunct Appointment**

*Graduate Supervision*

**GREER, Amy**, Associate Professor, School of Public Health and Health Systems, November 18, 2019 – December 31, 2022.

**HOEBER, Larena**, Professor, Department of Recreation and Leisure Studies, October 15, 2019 – June 30, 2021.

**LAW, Michael**, Associate Professor, School of Public Health and Health Systems, November 1, 2019 – August 31, 2020.

**MASLOVE, David**, Assistant Professor, School of Public Health and Health Systems, January 1, 2020 – August 31, 2020.

**PARMLEY, Jane**, Associate Professor, School of Public Health and Health Systems, November 18, 2019 – December 31, 2022.

*Graduate Supervision and Research*

**BURHAN, Amer**, Associate Professor, Department of Kinesiology, November 1, 2019 – October 31, 2022.

**CRAVEN, Catharine**, Associate Professor, Department of Kinesiology, July 1, 2019 – June 30, 2022.

**Special Appointments**

**RAMCHANDANI, Rohit**, Lecturer, School of Public Health and Health Systems, November 1, 2019 – December 31, 2019, course development.

**TONG, Catherine**, Co-Lecturer, School of Public Health and Health Systems, January 1, 2020 – April 30, 2020.

**Research Associate Appointment**

**SINN, Chi-Ling**, School of Public Health and Health Systems, September 1, 2019 – August 31, 2021.

**Visiting Researcher**

**MILUPI, Inonge**, School of Public Health and Health Systems, January 1, 2020 – June 30, 2020.

**Postdoctoral Appointments**

**PETRYCHYN, Jonathan**, Department of Recreation and Leisure Studies, November 11, 2019 – November 10, 2020.

**ZUCKERMANN, Alexandra**, School of Public Health and Health Systems, November 13, 2019 – November 12, 2020 (extension).

**Cross Appointments**

**DEAN Jennifer**, Assistant Professor, School of Planning, Faculty of Environment to School of Public Health and Health Systems, Faculty of Applied Health Sciences, November 1, 2019 – June 30, 2020.

**McLACHLIN, Stewart**, Assistant Professor, Mechanical and Mechatronics Engineering, Faculty of Engineering to Department of Kinesiology, Faculty of Applied Health Sciences, September 1, 2019 – April 30, 2022.

**B. SABBATICALS**

***For Approval by Board of Governors***

**GIANGREGORIO, Lora**, Professor, Department of Kinesiology, September 1, 2020 – August 31, 2021, one year at 93.3% salary.

**NIECHWIEJ-SZWEDO, Ewa**, Associate Professor, Department of Kinesiology, September 1, 2020 – August 31, 2021, one year at full salary.

***Already Approved by the Board of Governors***

**STARK, Ken**, Professor, Department of Kinesiology, May 1, 2020 – April 30, 2021, one year at full salary.

**STOLEE, Paul**, Professor, School of Public Health and Health Systems, May 1, 2021 – April 30, 2022, one year at full salary.

**C. ADMINISTRATIVE REAPPOINTMENT**

**STAINES, Richard**, Professor and Associate Dean, Research, Faculty of Applied Health Sciences, July 1, 2020 – June 30, 2022.

**CANADA RESEARCH CHAIR REAPPOINTMENT**

**DICKERSON, Clark**, Professor and Canada Research Chair, Tier 2 in Shoulder Mechanics, Department of Kinesiology, November 1, 2019 – October 31, 2024.



**Lili Liu, Dean  
Applied Health Sciences**

**UNIVERSITY OF WATERLOO**  
**REPORT OF THE DEAN OF THE FACULTY OF ARTS TO SENATE**  
**January 20, 2020**

**FOR INFORMATION**

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**A. APPOINTMENTS**

**Visiting Appointment**

**LEFEBVRE, Benjamin**, Visiting Scholar, Department of English Language and Literature, January 1, 2020 to December 31, 2021.

**Adjunct Appointments – Instruction**

**AQUINO, Sara**, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**BERGSTROM, Anton**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**BOUSFIELD, Jourdan**, Lecturer, Stratford School of Interaction and Design, January 1, 2020 to April 30, 2020.

**GAETANI, Melisa**, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**MCINTOSH, Alex**, Lecturer, Stratford School of Interaction and Design, October 28, 2019 to December 31, 2019.

**THIELEN, Tobias**, Lecturer, Stratford School of Interaction and Design, January 1, 2020 to April 30, 2020.

**Adjunct Appointments – Graduate Supervision**

**DEPPERMAN, Arnulf**, Professor, Department of Germanic and Slavic Studies, September 1, 2019 to August 31, 2022.

**LACKENBAUER, Whitney**, Professor, Department of History, July 1, 2019 to December 31, 2021.

**Adjunct Reappointments – Instruction**

**ABULLARADE GAMEZ, Hector**, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**ADAMS, Russell**, Lecturer, Department of Anthropology, January 1, 2020 to April 30, 2020.

**ALEKBEROV, Elshan**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**ALMUSTAFA, Maissaa**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**BASHIR, Mohsin**, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**BOLT, Laura**, Lecturer, Department of Anthropology, January 1, 2020 to April 30, 2020.

**BRASSARD, Brooke**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**BUCHENAUER, Cody**, Lecturer School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**BULLOCH, Dean**, Lecturer, Department of Psychology, January 1, 2020 to April 30, 2020.

**CARTER, Veronica**, Lecturer, Department of Fine Arts, January 1, 2020 to April 30, 2020.

**CARVER, Matthew**, Lecturer, Department of Fine Arts, January 1, 2020 to April 30, 2020.

**CHANG, Wayne**, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**CHAPUT, Louise**, Lecturer, Department of Political Science, Master of Public Service, January 1, 2020 to April 30, 2020.

**DEHGHANI, Morteza**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**DE ROOIJ-MOHELE, Margreet**, Lecturer, Department of Germanic and Slavic Studies, January 1, 2020 to April 30, 2020.

**DESHANE, Evelyn**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**DOLSON, Mark**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**EHRENTAUT, Judy**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**FATIMA, Nafeez**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**GALLAGHER, Sara**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**GAZZOLA, Lynn**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**GERNON, Marc**, Lecturer, Department of Psychology, January 1, 2020 to April 30, 2020.

**HANCOCK, Michael**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**HAYES, Nicole**, Lecturer, Department of Anthropology, January 1, 2020 to April 30, 2020.

**HUNTER, Natalie**, Lecturer, Department of Fine Arts, January 1, 2020 to April 30, 2020.

**JAIMES-DOMINGUEZ, Luis**, Lecturer, Department of Spanish and Latin American Studies, January 1, 2020 to April 30, 2020.

**JANG, Lauri**, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

**KARIMZADA, Muhebullah**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**KUMASE, Wokia**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**Lajoie, Jason**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**LAM, Ibis**, Lecturer, Department of Spanish and Latin American Studies, January 1, 2020 to April 30, 2020.

**LIAQAT, Zara**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**LIN, David**, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**MANJI, Noorin**, Lecturer Department of Sociology and Legal Studies, January 1, 2020 to April 30, 2020.

**MCCAULEY, Eva**, Lecturer, Department of Fine Arts, January 1, 2020 to April 30, 2020.

**MCgee, Ted**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**MCGOWAN, Rosemary**, Lecturer, Department of Political Science, Master of Public Service, January 1, 2020 to April 30, 2020.

**MCINTOSH, Alex**, Lecturer, Stratford School of Interaction Design and Business, January 1, 2020 to April 30, 2020.

**O'NEILL, Terry**, Lecturer, Stratford School of Interaction Design and Business, January 1, 2020 to April 30, 2020.

**OFILI, Patricia**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**OZKARDAS, Ahmet**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**PAWLEK, Konrad**, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**PECKHAM, William**, Lecturer, Department of Psychology, January 1, 2020 to April 30, 2020.

**PETRESCU, Maria**, Lecturer, Department of French Studies, January 1, 2020 to April 30, 2020.

**RAHMAN, Fiona**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**RAJSIC, Predrag**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**RANA, Saeed**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**REDDOCK, Jennifer**, Department of Communication Arts, January 1, 2020 to April 30, 2020.

**SHAKESPEARE, Robert**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**SIEK, Thomas**, Lecturer, Department of Anthropology, January 1, 2020 to April 30, 2020.

**SLETHAUG, Gordon**, Professor, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**SMITH, Greg**, Lecturer, Stratford School of Interaction Design and Business, January 1, 2020 to April 30, 2020.

**TANGUAY, Greg**, Lecturer, Department of Economics, January 1, 2020 to April 30, 2020.

**TROIT, Anne Sophie**, Lecturer, Department of French Studies, January 1, 2020 to April 30, 2020.

**VASTA, Sameer**, Lecturer, Department of Political Science, Master of Public Service, January 1, 2020 to April 30, 2020.

**WOODFORD, Benjamin**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**ZMETANA, Katherine**, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

#### **Adjunct Reappointments – Graduate Supervision**

**KENYON, Tim**, Professor, Department of Philosophy, January 1, 2020 to December 31, 2023.

**THAGARD, Paul**, Professor, (Professor Emeritus), Department of Philosophy, October 1, 2019 to April 30, 2023.

#### **Adjunct Reappointments – Miscellaneous (research, consultations, etc.)**

##### **Research Faculty**

**LYONS, Andrew**, Professor, Department of Anthropology, December 1, 2019 to November 30, 2021.

**LYONS, Harriet**, Professor, (Professor Emerita), Department of Anthropology, December 1, 2019 to November 30, 2021.

**ZELLER, Anne**, Professor, (Professor Emerita), Department of Anthropology, December 1, 2019 to November 30, 2021.

#### **Graduate Students Appointed as Part-Time Lecturers**

**ALTAHER, Ayesha**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**BARNETT, Richard**, Department of Germanic and Slavic Studies, January 1, 2020 to April 30, 2020.

**BERESFORD, Sally**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**BREY, Elizabeth**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**CAMERON, Christopher**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**CHEN, Stella**, School of Accounting and Finance, January 1, 2020 to April 30, 2020.



**DOAN, Tiffany**, Department of Psychology, January 1, 2020 to April 30, 2020.

**DOMONCHUK, Michael**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**GIANNAKOPOULOS, Christopher**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**GIBSON, Ian**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**GNANIAH, Vanya**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**HOBIN, Nicholas**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**JAFARI, Zahra**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**KAMPHERM, Monique**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**KARKI, Chitra**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**KIM, Jin Sol**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**LEROUX, Carlie**, Department of Sociology and Legal Studies, January 1, 2020 to April 30, 2020.

**MORENO OJEDA, Diana**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**MORTON, Robert**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**NORTHCOTE, Graeme**, Lecturer, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**RICKERT, Jennifer**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**RILEY, Meghan**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**ROBINSON, Rowland**, Department of Sociology and Legal Studies, January 1, 2020 to April 30, 2020.

**SHALABI, Doaa**, Department of Religious Studies, January 1, 2020 to April 30, 2020.

**SMITH, Cameron**, Department of Psychology, January 1, 2020 to April 30, 2020.

**STEPHAN, Sigmund Jakob**, Department of Germanic and Slavic Studies, January 1, 2020 to April 30, 2020.

**SWYERS, Erica**, Department of Germanic and Slavic Studies, January 1, 2020 to April 30, 2020.

**SYCZ, Damian**, Department of Sociology and Legal Studies, January 1, 2020 to April 30, 2020.

**TAYLOR, Christin**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

**WALKER, Alex**, Department of Psychology, January 1, 2020 to April 30, 2020.

**WARRAICH, Hamza**, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

**WOJCIECHOWSKI, Christine**, Department of Sociology and Legal Studies, January 1, 2020 to April 30, 2020.

**YOON, John**, Department of English Language and Literature, January 1, 2020 to April 30, 2020.

#### **Staff Appointments to Faculty**

**CAMPBELL, Greg**, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

**DI GRAVIO, Katrina**, Lecturer, Department of Psychology, January 1, 2020 to April 30, 2020.

**GLOVER, Adam**, Lecturer, Department of Fine Arts, January 1, 2020 to April 30, 2020.

**WILLEMSSEN, Annaka**, Lecturer, Stratford School of Interaction Design, September 1, 2019 to December 31, 2019.

#### **Research Faculty**

**ROTELLA, Amanda**, Research Associate, Department of Psychology, October 21, 2019 to September 30, 2020.

### **B. ADMINISTRATIVE APPOINTMENTS**

**BOIDO, Mario**, Associate Chair, Undergraduate Studies, Department of Spanish and Latin American Studies, January 1, 2020 to December 31, 2020.

**MALONE, Paul**, Associate Chair, Graduate Studies, Department of Germanic and Slavic Studies, January 1, 2020 to June 30, 2020.

### **C. SABBATICAL LEAVES**

#### **Approved by the Board of Governors**

**HARRIS, Jennifer**, Associate Professor, Department of English Language and Literature, September 1, 2020 to August 31, 2021, twelve months at 85% salary.

**HOUSTON, Andrew**, Associate Professor, Department of Communication Arts, January 1 to June 30 2020, six months leave at full salary.

#### **For approval by the Board of Governors:**

**DEA, Shannon**, Professor, Department of Philosophy, September 1, 2020 to August 31, 2021, twelve months at 85% salary.

**KUZNIAR, Alice**, Professor, Department of Germanic and Slavic Studies, July 1, 2020 to December 31, 2020, six months at 85% salary.

**MILLIGAN, Ian**, Associate Professor, Department of History, July 1, 2020 to December 31, 2020, six months at 85% salary.

**SCHULENBERG, Jennifer**, Associate Professor, Department of Sociology and Legal Studies, March 1, 2020 to August 31, 2020, six months at 100% salary.

A handwritten signature in black ink, appearing to read "Sheila Ager". The signature is fluid and cursive, with the first name "Sheila" written in a larger, more prominent script than the last name "Ager".

Sheila Ager  
Dean, Faculty of Arts

**UNIVERSITY OF WATERLOO**  
**REPORT OF THE DEAN OF ENGINEERING TO SENATE**  
**January 20, 2020**

**FOR INFORMATION**

**A. *APPOINTMENTS***

**Probationary Term**

**WU, Xiao Yu**, Assistant Professor, Department of Mechanical and Mechatronics Engineering, May 1, 2020 – June 30, 2023. PhD in Mechanical Engineering, Cambridge, MA, 2017; MS, in Thermal and Energy Engineering, Zhejiang University, China; BS, Hons., in Energy and Environment System Engineering, Zhejiang University, China, 2009. Dr. XiaoYu Wu's research focuses on developing smart and sustainable energy conversion and chemical production technologies based on a fundamental understanding of the kinetics, reliability and economics of these processes from both experimental and numerical perspectives. He received his PhD in Mechanical Engineering from MIT in 2017, and is presently a postdoctoral Associate in Mechanical and Materials Engineering at MIT. He joins the Thermal research group following the retirement of Prof. John Wright.

**New Definite Term-full-time**

**CAMLICA, Ahmet**, Research Assistant Professor, Department of Electrical and Computer Engineering, September 16, 2019 – August 31, 2021. PhD in Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, 2019; MS in Mechanical and Mechatronics in Engineering, University of Waterloo, Waterloo, ON, 2013; BS in Electric and Electrical Engineering, Erciyes University, Kayseri, Turkey, 2009. Dr. Camlica will assist Prof. Karim Karim in overseeing aspects of design, fabrication and characterization of detectors for diagnostic medical imaging applications, contributing to the department's growing presence in biomedical engineering.

**GHAFURIAN, Moojan**, Research Assistant Professor, Department of Electrical and Computer Engineering, May 1, 2020 – April 30, 2021. Doctor of Philosophy in Information Systems and Technology, The Pennsylvania State University, USA, 2017; PhD minor in Computational Science, The Pennsylvania State University, USA, 2017; BSc in Computer Science and Engineering, (Software Engineering), University of Tehran, Iran, 2013. Dr. Ghafurian will assist Prof. Kerstin Dautenhahn and her Canada 150 Research Chair mandate by helping to run projects related to Human Computer/Robot Interaction, Artificial Intelligence, and Cognitive Science.

**New Definite Term Reappointment-full-time**

**AHMADI, Lena**, Lecturer, Department of Chemical Engineering, May 1, 2020 – April 29, 2022. PhD in Chemical Engineering, University of Waterloo, Waterloo, ON, 2014; MSc, in Energy Systems Engineering, University of Manchester, UK and K.N Tossi University of Technology, Iran, 2008; BSc in Mechanical Engineering, University of Mazandaran, Iran, 2004.

**BORJI, Amir**, Research Assistant Professor, Department of Electrical and Computer Engineering, December 2, 2019 – March 2, 2020. PhD in Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, 2004; MSc in Electrical and Computer Engineering (Communication Systems), Isfahan, Iran, 1998; BSc in Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran, 1994.

**ROSE, David**, Lecturer, Conrad School of Entrepreneurship and Business, August 1, 2020 – July

31, 2023. MBA, Wilfrid Laurier University, Waterloo, ON, School of Business & Economics, 1998; B.Math, University of Waterloo, Waterloo, ON, 1978.

**SHAIFFEE, Mohammad Javad**, Research Assistant Professor, Department of Systems Design Engineering, September 1, 2019 – August 31, 2022. PhD, University of Waterloo, Waterloo, ON, 2017, MASc, Shiraz University, Shiraz, Iran, 2011; BASc Shiraz University, Shiraz, Iran, 2008.

**Visiting Appointments**

**COOKE, Mitchell**, Researcher, Department of Civil and Environmental Engineering, December 1, 2019 – May 1, 2022.

**DENG, Xiaohu**, Scholar, Department of Electrical and Computer Engineering, November 1, 2019 – October 31, 2020.

**FEREIDANI, Kaveh**, Scientist, Department of Electrical and Computer Engineering, November 1, 2019 – July 2, 2020.

**HAI MIRZA ALIAN AMINABADI, Ehsan**, Scientist, Department of Electrical and Computer Engineering, November 1, 2019 – September 4, 2020.

**KIM, Jae Eun**, Scholar, Department of Mechanical and Mechatronics Engineering, September 1, 2020 – August 31, 2021.

**LI, Bao**, Scholar, Department of Chemical Engineering, January 1, 2020 – December 31, 2020.

**LIU, Hongwei**, Scholar, Department of Civil and Environmental Engineering, January 1, 2020 – April 30, 2020.

**LIU, Shentan**, Researcher, Department of Civil and Environmental Engineering, March 1, 2020 – February 28, 2021.

**QIN, Ling**, Researcher, Department of Civil and Environmental Engineering, December 30, 2019 – December 31, 2020.

**SAEEDI, Behzad**, Researcher, Department of Civil and Environmental Engineering, March 1, 2020 – February 28, 2021.

**SHEN, Xiaojuan**, Scholar, Department of Chemical Engineering January 1, 2020 – December 31, 2020.

**SI, Xujie**, Scholar, Department of Electrical and Computer Engineering, December 4, 2019 – April 28, 2020.

**YUAN, Xianju**, Professor, Department of Systems Design Engineering, April 1, 2020 – March 31, 2021.

**ZENG, Delu**, Scholar, Department of Electrical and Computer Engineering, November 7, 2019 – May 6, 2020.

**Visiting Reappointments**

**YU, Suling**, Scholar, Department of Electrical and Computer Engineering, March 13, 2020 –

March 12, 2022.

**Special Appointments**

Undergraduate Instruction

**DEHART, Brandon**, Lecturer, Department of Systems Design Engineering, January 1, 2020 – April 30, 2020.

**LADUBEC, Chris**, Lecturer, Department of Civil and Environmental Engineering, January 1, 2020 – April 30, 2020.

**TAVASSOTI-KHEIRY, Pezhouhan**, Lecturer, Department of Civil and Environmental Engineering, January 1, 2020 – April 30, 2020.

**Special Appointments**

Graduation Instruction

**EAJAL, Abdelsalam**, Lecturer, Department of Systems Design Engineering, September 1, 2019–

December 31, 2019.

**ELKADRI, Chadi**, Lecturer, Department of Management Sciences, January 1, 2020 – April 30, 2020.

**RYDER, Noah**, Lecturer, Department of Mechanical and Mechatronics Engineering, November 11, 2019 – November 15, 2019.

**Special Appointments**

Undergraduate and Graduate Teaching

**STOECKEL, Andreas**, Lecturer, Department of Systems Design Engineering, January 1, 2020 – April 30, 2020.

**Special Reappointments**

Undergraduate and Graduate Teaching

**MURESAN, Matthew**, Lecturer, Department of Civil and Environmental Engineering, January 1,

2020 – April 30, 2020.

**Special Reappointments**

Graduate Instruction

**ALLARAKHIA, Minna**, Lecturer, Department of Management Sciences, January 1, 2020 – April 30, 2020.

**CANIZARES, Claudio**, Lecturer, Department of Electrical and Computer Engineering, September 1, 2019 – December 31, 2019.

**FADER, Christina**, Lecturer, Department of Management Sciences, January 1, 2020 – April 30, 2020.

**KAZERANI, Mehrdad**, Lecturer, Department of Electrical and Computer Engineering, September 1, 2019 – December 31, 2019.

**Adjunct Appointments**

Graduate Supervision

**LEITCH, Brian William**, Department of Civil and Environmental Engineering, December 1, 2019 – November 30, 2021.

**Adjunct Appointments**

Graduate Supervision and Research

**TAN, Lin, Associate Professor**, Department of Electrical and Computer Engineering, January 1, 2020 – June 30, 2023.

**VANHEEGHE, Philippe**, Professor, Department of Civil and Environmental Engineering, December 1, 2019 – November 30, 2021.

**Adjunct Appointments**

Graduate Supervision and Teaching

**KOLLER, Heinz**, Lecturer, Adjunct, School of Architecture, September 1, 2019 – December 31, 2019.

**Adjunct Reappointments**

Graduate Supervision and Research

**ABEDI, Daryoush**, Professor, Department of Chemical Engineering, October 1, 2019 September 30, 2021.

**BLASCHKE, Alfred**, Associate Professor, Department of Civil and Environmental Engineering, October 31, 2019 – October 31, 2020.

**CHRISTODOULOU, Nicolas**, Assistant Professor, Department of Civil and Environmental Engineering, January 1, 2020 – December 31, 2021.

**HASSANIZADEH, Majid**, Professor, Department of Civil and Environmental Engineering, November 1, 2019 – October 31, 2020.

**ISMAIL, Fathy**, Professor, Department of Mechanical and Mechatronics Engineering, January 1, 2020 – December 31, 2022.

**SILINS, Uldis**, Professor, Department of Civil and Environmental Engineering, December 1 2019 – November 30, 2021.

**WONG, Andrew**, Professor, Department of Systems Design Engineering, December 1, 2019 November 30, 2022.

**ZHONG, Ming**, Professor, Department of Civil and Environmental Engineering, November 1, 2019 – October 31, 2021.

**Adjunct Reappointments**

Research

**MCNAUGHTON, Rod**, Professor, Department of Management Sciences, January 1, 2020 – December 31, 2022.

**Adjunct Reappointments**

Graduate Teaching and Research

**MCNAUGHTON, Rod**, Professor, Conrad Business Entrepreneurship and Technology Centre, September 1, 2019 – December 31, 2022.

**Changes in Appointments**

**Adjunct Appointments**

Graduate Supervision and Research

**MOO YOUNG, Murray**, Distinguished Professor Emeritus, Department of Chemical Engineering, July 1, 2019 – April 30, 2025. (Change from previous end date of December 31, 2020).

**B. CANADA RESEARCH CHAIR REAPPOINTMENT**

**GOLAB, Lukasz**, Associate Professor, Canada Research Chair, Tier 2, Department of Management Sciences, December 1, 2019 to November 30, 2024.

**C. ADMINISTRATIVE APPOINTMENTS**

**KARRAY, Fakhri**, Professor, Department of Electrical and Computer Engineering, Loblaw's Chair in Artificial Intelligence, July 1, 2018- June 30, 2022.

**ADMINISTRATIVE REAPPOINTMENTS**

**TSUI, Ting**, Associate Director, Nanotechnology Undergraduate program, September 1, 2019 August 31, 2020.

**D. FOR APPROVAL BY THE BOARD OF GOVERNORS**

**SABBATICALS**

**YEOW, John T. W.**, Professor, Department of Systems Design Engineering, September 2020 – August 2021, one year leave at 85% salary.

**E. ALREADY APPROVED BY THE BOARD OF GOVERNORS**

**SABBATICALS**

**KHAMESEEE, Behrad**, Professor, Department of Mechanical and Mechatronics Engineering, one year leave at 100% salary.



Pearl Sullivan  
Dean, Faculty of Engineering



**UNIVERSITY OF WATERLOO**  
**REPORT OF THE DEAN OF THE FACULTY OF ENVIRONMENT TO SENATE**  
**January 20, 2020**

**FOR INFORMATION**

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**A. APPOINTMENTS**

**New Definite Term – Part-Time**

**SWERDFAGER, Trevor**, Resource for Educational Partnerships and Government Relations, School of Environment, Resources and Sustainability, January 1, 2020 to June 30, 2022; Master of Arts, Geography & Resource Management, University of Ottawa 1988; Bachelor of Environmental Studies, University of Waterloo 1985. Through senior roles with various branches of the Government of Canada, Mr. Swerdfager brings over 30 years' experience influencing local, regional and national program leadership in natural resource sustainability. He has been teaching in two departments in the Faculty of Environment, and will support the Faculty Dean in external relations.

**Adjunct Appointments**

*Graduate Supervision*

**CUTLER, G. Christopher**, Professor, School of Environment, Resources and Sustainability, November 15, 2019 to January 31, 2022.

**DAVIDSON, Scott**, Assistant Professor, Department of Geography and Environmental Management, November 1, 2019 to October 31, 2022.

**GHAREDAGHLOO, Behrad**, Assistant Professor, Department of Geography and Environmental Management, November 1, 2019 to October 31, 2022.

**TOZER, Laura**, Assistant Professor, School of Environment, Enterprise and Development, September 1, 2019 to August 31, 2020.

**VINODRAI, Tara**, Associate Professor, Department of Geography and Environmental Management, January 1, 2020 to December 31, 2022.

**WILLISTON, Byron**, Professor, Faculty of Environment, November 1, 2019 to October 31, 2023.

*Research*

**GREENE, Chelsey**, School of Environment, Resources and Sustainability, October 1, 2019 to December 31, 2021.

**Special Appointments**

*Undergraduate Instruction*

**JACKSON, John**, Lecturer, School of Environment Resources and Sustainability, January 1, 2020 to April 30, 2020.

**SCHULER, Peter**, Lecturer, School of Environment, Resources and Sustainability, January 1, 2020 to April 30, 2020.

**Cross Appointments**

**SINGH, Simron**, Associate Professor, School of Environment, Enterprise and Development to Department of Geography and Environmental Management, November 1, 2019 to December 31, 2021.

**Graduate Students appointed as Part-Time Lecturers**

**BARR, Stephanie**, Lecturer, Department of Geography and Environmental Management, January 1, 2020 to April 30, 2020.

**DAVY, Barbara Jane**, Lecturer, School of Environment, Resources and Sustainability, January 1, 2020 to April 30, 2020.

**FOROUTAN, Marzieh**, Lecturer, Department of Geography and Environmental Management, January 1, 2020 to April 30, 2020.

**HO, Elaine**, Lecturer, School of Environment, Resources and Sustainability, May 1, 2020 to August 31, 2020.

**OMAR, Faiza**, Lecturer, Department of Geography and Environmental Management, January 1, 2020 to April 30, 2020.

**B. ADMINISTRATIVE RE-APPOINTMENT**

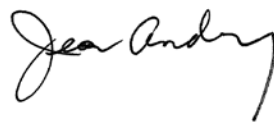
**MCCARTHY, Daniel**, Director, Waterloo Institute for Social Innovation and Resilience (WISIR), January 1, 2020 to December 31, 2024.

**ROWLANDS, Ian**, Associate Vice President International, January 1, 2021 to December 31, 2023.

**C. SABBATICAL LEAVES**

*For approval by the Board of Governors*

**COCKAYNE, Daniel**, Assistant Professor, Department of Geography and Environmental Management, September 1, 2020 to February 28, 2021 at 100% salary.



Jean Andrey  
Dean

**University of Waterloo**  
**REPORT OF THE DEAN OF MATHEMATICS TO SENATE**  
**January 20, 2020**

**FOR INFORMATION**

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**A. APPOINTMENTS (for approval by the Board of Governors)**

**Probationary-Term Reappointments**

**FENG, Mingbin**, Assistant Professor, Dept. of Statistics and Actuarial Science, July 1, 2020 – June 30, 2023.

**GHOSSOUB, Mario**, Assistant Professor, Dept. of Statistics and Actuarial Science, July 1, 2020 – June 30, 2023.

**WANG, Xiaoheng**, Assistant Professor, Dept. of Pure Mathematics, July 1, 2020 – June 30, 2023.

**Definite Term - Reappointments**

**GUAN, Shenheng**, Research Professor, David R. Cheriton School of Computer Science, January 1, 2020 – December 31, 2020.

**RAMEZAN, Reza**, Lecturer, Dept. of Statistics and Actuarial Science, July 1, 2020 – June 30, 2023.

**Visiting Appointments**

**JALILI, Ali**, Scientist, Dept. of Applied Mathematics, November 1, 2019 – October 31, 2020.

**KHODAKARAMIAN, RUHOLLA** (University of Kashan), Scholar, David R. Cheriton School of Computer Science, November 18, 2019 – February 17, 2020.

**VAN STADEN, Pieter** (University of Queensland), Scholar, David R. Cheriton School of Computer Science, January 20, 2020 – May 18, 2020.

**Adjunct Appointments**

**Instructor**

**AL-HAKEEM, Nawar**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**Research**

**YAN, Ping** (Public Health Agency of Canada), Professor, January 1, 2020 – December 31, 2022.

**Adjunct Reappointments**

**Instructor**

**ALI, Javid**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**AMMAR, Mostafa**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**ARNASON, Mark**, Lecturer, Office of the Dean, January 1, 2020 – April 30, 2020.

**BOYLE, Phelim**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**BRADLEY, Kirsten**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**HOLTBY, Dan**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**HUANG, Ziqiang**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**KAMAL, Zille Huma**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**KHARAL, Rosin**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**KOHLER, Dave**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**LENNOX, Scott**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**MALIK, Muddassir**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**MARTINDALE, David**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**McLEISH, Don**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**RAFIEE SEVYERI, Leili**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**ROBINSON, Jack**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**TURNER, Graeme**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**STRUTHERS, Cynthia**, Lecturer, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**VISHWANTHA, SOWMYA**, Lecturer, Office of the Dean, January 1, 2020 – April 30, 2020.

**ZIMA, Eugene**, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

### **Cross Appointments**

**CHEN, Helen** (Continuing Lecturer, Dept. of Public Health and Health Systems), in the David R. Cheriton School of Computer Science, December 1, 2019 – June 30, 2023.

**LAYTON, Anita** (Professor, Dept. of Applied Mathematics), in the David R. Cheriton School of Computer Science, November 1, 2019 – June 30, 2023.

**WALLACE, James** (Associate Professor, School of Public Health and Health Systems), in the David R. Cheriton School of Computer Science, October 1, 2019 – June 30, 2023.

### **Graduate Students appointed as Part-time Lecturers**

**LEVI, Amit**, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**SUCHOLUTSKY, Ilia**, Dept. of Statistics and Actuarial Science, January 1, 2020 – April 30, 2020.

**SUH, Sangho**, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

**ZI, Yangtian**, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

### **Postdoctoral Fellows appointed as Part-time Lecturers**

**HE, Yunhui**, Dept. of Applied Mathematics, September 1, 2019 – August 31, 2021.

### **Postdoctoral Fellow reappointed as part-time Lecturers**

**GHASEMI, Maryam**, Dept. of Applied Mathematics, January 1, 2020 – December 31, 2020.

## **B. ADMINISTRATIVE APPOINTMENTS**

**De STERCK, Hans**, Director, Computational Mathematics, Office of the Dean, July 1, 2020 – June 30, 2023.

**HOEY, Jesse**, Associate Dean, Innovation and Entrepreneurship, Office of the Dean, January 1, 2020 – June 30, 2022.

**SAUNDERS, David**, Director of Master of Quantitative Finance Program, Dept. of Statistics and Actuarial Science, July 1, 2020 – June 30, 2021.

**VAN BEEK, Peter**, Co-Director, Waterloo Institute for Artificial Intelligence, David R. Cheriton School of Computer Science, March 1, 2020 – February 28, 2021.

## **C. SABBATICALS (to be approved by the Board of Governors)**

**FENG, Ben**, Assistant Professor, Dept. of Statistics and Actuarial Science, May 1, 2020 – October 31, 2020 with 100% salary. This is a special early sabbatical.

**VAN BEEK, Peter**, Professor, David R. Cheriton School of Computer Science, September 1, 2021 – August 31, 2022, with 94.7% salary.

(already approved by the Board of Governors)

**WOLKOWICZ, Henry**, Professor, Dept. of Combinatorics & Optimization, September 1, 2020  
– August 31, 2021 at 85% salary.

A handwritten signature in black ink, appearing to read "Stephen Watt", with a stylized flourish at the end.

Stephen M. Watt  
Dean

**UNIVERSITY OF WATERLOO**  
**REPORT OF THE DEAN OF SCIENCE TO SENATE**  
**January 20, 2020**

**For information:**

**A. APPOINTMENTS**

**New Definite Term Full-Time**

**ROSAMOND, Madeline**, Lecturer, Department of Earth and Environmental Sciences, December 1, 2019 to August 31, 2023. [B.Sc., McMaster University (2006); Ph.D., University of Waterloo (2014).] Dr. Madeline Rosamond is joining the Department of Earth and Environmental Sciences as a Lecturer specializing in Environmental Geochemistry, Hydrology and Geology. She will be responsible for teaching and coordination within the newly established Environmental Science program that is shared with the China University of Geosciences in Wuhan, China. This will include the delivery of several courses in Wuhan, China, where she has past experience teaching geoscience courses. In addition, Dr. Rosamond will contribute to the modernization of the Earth and Environmental Sciences undergraduate curriculum and participate in the development of new on-line course offerings.

**RUFFELL, Sarah**, Lecturer, Department of Biology, January 1, 2020 to August 31, 2023. [B.Sc., University of Waterloo (2011); Ph.D., University of Waterloo (2017).] Dr. Ruffell will be joining the University of Waterloo from the University of Pittsburgh at Bradford to take up the position of Lecturer to support international teaching. In her current role, Sarah has been teaching a variety of courses including phycology, microbiology, bioinformatics and biotechnology and she will bring this breadth of knowledge to teaching in the department. Sarah's primary role will be teaching in support of our 2+1+1 joint program with the China University of Geosciences in Wuhan, China. She will teach several courses each year in Wuhan (in English) and here on our Waterloo campus.

**Definite Term Reappointment – Full-Time**

**IGBOELI, Okechukwu (Okey)**, Lecturer, Dean of Science Office, June 12, 2020 to June 30, 2023. [DVM, University of Nigeria (2002); M.Sc., University of Nigeria (2006); Ph.D. Atlantic Veterinary College, UPEI (2013); MBA, University of Prince Edward Island (2015).]

**Definite Term Reappointment – Part-Time**

**BERNATH, Peter**, Research Professor, Department of Chemistry, February 1, 2020 to March 31, 2021.

**Adjunct Appointments**

**Graduate Supervision**

**EHRMAN, Ashley D.**, Assistant Professor, Department of Biology, November 18, 2019 to November 17, 2022.

**GHARABAGHI, Bahram**, Professor, Department of Earth and Environmental Sciences, November 1, 2019 to October 31, 2022.

**KELLEY, Samuel E.**, Assistant Professor, Department of Earth and Environmental Sciences, November 1, 2019 to October 31, 2022.

**KIRKWOOD, Andrea**, Associate Professor, Department of Biology, November 1, 2019 to October 31, 2022.

**SMITH, Scott**, Professor, Department of Earth and Environmental Sciences, November 1, 2019 to October 31, 2022.

**ZITER, Carly**, Assistant Professor, Department of Biology, November 1, 2019 to October 31, 2022.

*Graduate Supervision and Other*

**HALE, Matthew C.**, Assistant Professor, Department of Biology, October 1, 2019 to September 30, 2022.

*Adjunct Reappointments*

*Undergraduate Instruction*

**BUTT, Kristi**, Clinical Assistant Professor, School of Pharmacy, October 1, 2019 to December 31, 2020.

**McCOY, Tracy**, Clinical Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2020.

**SEYMOUR, Nicole**, Clinical Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2020.

**TOLMIE, Bronwyn**, Clinical Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2020.

**YRIGOYEN-DACRUZ, Lidia**, Clinical Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2020.

*Graduate Supervision*

**SPOELSTRA, John**, Associate Professor, Department of Earth and Environmental Sciences, May 1, 2019 to April 30, 2022.

*Graduate Supervision and Research*

**COBBAERT, Danielle**, Assistant Professor, Department of Biology, December 1, 2019 to November 30, 2022.

**GLICK, Bernard** (Distinguished Professor Emeritus), Professor, Department of Biology, January 1, 2020 to December 31, 2023.



**MacLATCHY, Deborah**, Professor, Department of Biology, December 1, 2019 to November 30, 2022.

**McMASTER, Mark E.**, Assistant Professor, Department of Biology, January 1, 2020 to December 31, 2022.

*Graduate Instruction, Graduate Supervision and Research*

**JIANG, Runqing**, Associate Professor, Department of Physics and Astronomy, October 1, 2019 to August 31, 2024.

*Graduate Supervision, Research and Other*

**WOMELSDORF, Thilo**, Associate Professor, Department of Chemistry, September 1, 2019 to August 31, 2022.

*Cross-Appointment*

**LI, Xianguo**, Professor, Department of Mechanical and Mechatronics Engineering, cross-appointed to Department of Chemistry, September 1, 2019 to August 31, 2022.

*Cross-Reappointment*

**CAMPBELL, Sue Ann**, Professor, Department of Applied Mathematics, cross-appointed to Department of Biology, September 1, 2019 to August 31, 2022.

**INGALLS, Brian**, Professor, Department of Applied Mathematics, cross-appointed to Department of Biology, January 1, 2020 to December 31, 2022.

**JONES, Lyndon**, Professor, School of Optometry and Vision Science, cross-appointed to Department of Biology, October 1, 2019 to September 30, 2022.

**JOSEPH, Jamie**, Associate Professor, School of Pharmacy, cross-appointed to Department of Biology, December 1, 2019 to November 30, 2022.

**KIM, Na Young**, Associate Professor, Electrical and Computer Engineering, cross-appointed to Department of Chemistry, September 1, 2019 to August 31, 2022.

**QUADRILATERO, Joe**, Associate Professor, Department of Kinesiology, cross-appointed to Department of Biology, December 1, 2019 to November 30, 2022.

*Special Appointment*

*Undergraduate Instruction*

**SHADMEHR, Samaneh**, Lecturer, Department of Physics and Astronomy, January 1, 2020 to April 30, 2020.

**Special Reappointment**  
**Undergraduate Instruction**

**HRYCYSHYN, Matthew**, Lecturer, Department of Biology, January 1, 2020 to April 30, 2020.

**MICHAUD, Wendy**, Lecturer, Department of Biology, January 1, 2020 to April 30, 2020.

**Change in Appointment**

**DEAKIN, Laura**, Continuing Lecturer, Department of Chemistry, load increased from 0.75 to 1.00, effective January 1, 2020.

**NISSIMOV, Jozef**, Assistant Professor, Department of Biology. Start date changed from February 1, 2020 to March 1, 2020, end date remains June 30, 2023.

**B. ADMINISTRATIVE APPOINTMENT**

**DAYEH, Vivian**, Associate Chair, Undergraduate Studies, Department of Biology, January 1, 2020 to August 31, 2020.

**DEAKIN, Laura**, Associate Director, Internal, Nanotechnology Engineering Program, January 1, 2020 to December 31, 2022.

**FOR APPROVAL BY THE BOARD OF GOVERNORS**

**C. SABBATICAL**

**JOSEPH, Jamie W.**, Associate Professor, School of Pharmacy, May 1, 2020 to October 31, 2020, 100% salary arrangements.



R.P. Lemieux

Dean of Science

**University of Waterloo**  
**SENATE**  
**20 January 2020**

**FOR APPROVAL**

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**Committee Appointments**

**Motion:** To approve the following appointments:

- **Amit and Meena Chakma Awards for Exceptional Teaching by a Student Committee:**  
Stephanie Ye-Mowe and Guiseppe William Femia as undergraduate student representatives,  
terms to 31 December 2021.

**University of Waterloo**  
**SENATE GRADUATE & RESEARCH COUNCIL**  
**and**  
**SENATE UNDERGRADUATE COUNCIL**  
**Report to Senate**  
**20 January 2020**

Senate Graduate & Research Council (SGRC) met on 9 December 2019 and Senate Undergraduate Council (SUC) met on 10 December 2019. Both councils considered amendments to previously-submitted academic calendar dates for 2020-2021 and agreed to forward this item to Senate for approval as part of the regular agenda.

Further details are available at:

<https://uwaterloo.ca/secretariat/committees-and-councils/senate-undergraduate-council>

<https://uwaterloo.ca/secretariat/committees-and-councils/senate-graduate-research-council>

**FOR APPROVAL**

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**ACADEMIC CALENDAR DATES 2020-2021**

1. **Motion:** To approve two amendments to the 2020-2021 calendar dates as presented at Attachment #1.

**Rationale:**

Amendment 1:

In 2021, the Canada Day holiday falls on a Thursday, and the University of Waterloo has scheduled a Holiday (Additional Day) on Friday, July 2nd. The additional holiday day was missed in the original creation of the Academic Calendar Dates. 2020/21.

Amendment 2:

As per the wording in the Academic Calendar, Reading Weeks occur in the fall and winter terms; they start with the Saturday before the public holidays of Thanksgiving Day and Family Day and end on the following Sunday. The dates for the Fall Term Reading Week and the Winter Term Reading Week have been revised to include the dates starting the Saturday before Thanksgiving Day and Family Day and ending the following Sunday.

*/rmw & kw*

Jeff Casello  
Associate Vice-President,  
Graduate Studies and Postdoctoral Affairs

Charmaine Dean  
Vice-President, Research  
and International

David DeVidi  
Associate Vice-President, Academic

**Academic Calendar Dates, 2020/21 (REVISED)**

	<b>Fall 2020</b>	<b>Winter 2021</b>	<b>Spring 2021</b>
Co-operative Work Term Begins	Sept. 8 (T)	Jan. 4 (M)	May 3 (M)
Classes Begin	Sept. 8 (T)	Jan. 5 (T)	May 3 (M)
Holidays	Oct. 12 (M)	Feb. 15 (M) Apr. 2 (F)	May 24 (M) July 1 (R) <b>July 2 (F)</b> Aug. 2 (M)
Reading Week	<b>Oct. 10-18 (S-U)</b>	<b>Feb. 13-21 (S-U)</b>	N/A
Convocation	Oct. 23, 24 (F,S)	N/A	June 15-19 (T-S)
Classes End	Dec. 7 (M)	Apr. 6 (T)	<b>July 28 (W)</b>
Make-up Day(s) for in-term holidays	N/A	April 5 (M) for Jan 4 (M)  April 6 (T) for Apr 2 (F schedule)	July 26 (M) for May 24 (M)  July 27 (T) for July 1 (R schedule)  <b>July 28 (W) for July 2 (F schedule)</b>
Pre-Examination Study Day(s)	Dec. 8 (T)	Apr. 7,8 (W,R)	<b>July 29, 30 (R, F)</b>
Examinations Begin	Dec. 9 (W)	Apr. 9 (F)	<b>August 3 (T)</b>
Online Class Examination Days	Dec. 11,12 (F,S)	Apr. 9,10 (F,S)	Aug. 6,7 (F,S)
Examinations on Sunday	Dec. 13 (U)	N/A	N/A
Examinations End (including Emergency Day)	Dec. 23 (W)	Apr. 24 (S)	<b>Aug. 16 (M)</b>
Co-operative Work Term Ends	Dec. 23 (W)	Apr. 23 (F)	Aug. 20 (F)
Teaching days	60	60	60
Pre-examination Study Day(s)	1	2	2
Examination days	13 (+1 Emergency Day)	13 (+1 Emergency Day)	11 (+1 Emergency Day)

**Symbols and abbreviations:**

(M) Monday, (T) Tuesday, (W) Wednesday, (R) Thursday, (F) Friday, (S) Saturday, (U) Sunday, N/A – Not Applicable

### Academic Calendar Dates, 2020/21

	<b>Fall 2020</b>	<b>Winter 2021</b>	<b>Spring 2021</b>
Co-operative Work Term Begins	Sept. 8 (T)	Jan. 4 (M)	May 3 (M)
Classes Begin	Sept. 8 (T)	Jan. 5 (T)	May 3 (M)
Holidays	Oct. 12 (M)	Feb. 15 (M) Apr. 2 (F)	May 24 (M) July 1 (R) Aug. 2 (M)
Reading Week	Oct. 12-16 (M-F)	Feb. 15-19 (M-F)	N/A
Convocation	Oct. 23, 24 (F,S)	N/A	June 15-19 (T-S)
Classes End	Dec. 7 (M)	Apr. 6 (T)	July 27 (T)
Make-up Day(s) for in-term holidays	N/A	April 5 (M) for Jan 4 (M)  April 6 (T) for Apr 2 (F schedule)	July 26 (M) for May 24 (M)  July 27 (T) for July 1 (R schedule)
Pre-Examination Study Day(s)	Dec. 8 (T)	Apr. 7,8 (W,R)	July 28,29 (W,R)
Examinations Begin	Dec. 9 (W)	Apr. 9 (F)	July 30 (F)
Online Class Examination Days	Dec. 11,12 (F,S)	Apr. 9,10 (F,S)	Aug. 6,7 (F,S)
Examinations on Sunday	Dec. 13 (U)	N/A	N/A
Examinations End (including Emergency Day)	Dec. 23 (W)	Apr. 24 (S)	Aug. 14 (S)
Co-operative Work Term Ends	Dec. 23 (W)	Apr. 23 (F)	Aug. 20 (F)
Teaching days	60	60	60
Pre-examination Study Day(s)	1	2	2
Examination days	13 (+1 Emergency Day)	13 (+1 Emergency Day)	11 (+1 Emergency Day)

**Symbols and abbreviations:**

(M) Monday, (T) Tuesday, (W) Wednesday, (R) Thursday, (F) Friday, (S) Saturday, (U) Sunday, N/A – Not Applicable

**University of Waterloo**  
**SENATE GRADUATE & RESEARCH COUNCIL**  
**Report to Senate**  
**20 January 2020**

Senate Graduate & Research Council met on 9 December 2019 and agreed to forward the following items to Senate for approval as part of the regular agenda.

Further details are available at: <https://uwaterloo.ca/secretariat/committees-and-councils/senate-graduate-research-council>

**FOR APPROVAL**

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**PROGRAM CHANGE**

**Faculty of Engineering**

1. **Motion:** To approve 2 new specializations within the Master of Engineering (MEng) in Chemical Engineering, effective 1 May 2020, as presented at Attachment 1.

**Rationale:** The proposed MEng specializations (Polymer Science and Engineering; Process Systems Engineering) will enhance the existing program by providing the option for students to receive advanced specialized training in specific areas within the discipline of Chemical Engineering in which the department both has (i) a research strength and (ii) there is a strong employment market demand.

/kw     Jeff Casello  
Associate Vice-President, Graduate Studies and  
Postdoctoral Affairs

Charmaine Dean  
Vice President, Research & International



## Graduate Studies Program Revision Template

Prior to form submission, review the [content revision instructions](#) and information regarding [major/minor modifications](#). For questions about the form submission, contact [Trevor Clews](#), Graduate Studies and Postdoctoral Affairs.

**Faculty:** Engineering

**Program:** Master of Engineering (MEng) in Chemical Engineering

**Program contact name(s):** Nasser M. Abukhdeir

**Form completed by:** Colleen Mechler/Judy Caron

**Description of proposed changes:**

Note: changes to courses and milestones also require the completion/submission of the SGRC Course/Milestone-New/Revision/Inactivation form ([PC docx version](#) or [MAC docx version](#)).

*Update of MEng degree requirements to include 2 new specializations.*

Is this a [major modification](#) to the program? Yes

**Rationale for change(s):**

*The proposed MEng specializations will enhance our existing program by providing the option for students to receive advanced specialized training in specific areas within the discipline of Chemical Engineering in which our department both has (i) a research strength and (ii) there is a strong employment market demand.*

*Additional specialization information:*

**Polymer Science and Engineering**

*The specialization offers training over the wide range of synthesis, characterization, production, modification and processing of polymeric macromolecules and materials. This multidisciplinary training, appropriate for both academic and industrial positions, covers the following: Polymer Science, Chemistry and Technology; Polymer Production Technology, Polymer Reaction Engineering and Engineering applications of polymers; Polymer Characterization and property measurements, both off-line and on-line; and Polymer Processing, Rheology and Modification (and related operations). All these are complemented by mathematical modelling techniques and derivation of structure-property relationships, based on related data analysis.*

**Process Systems Engineering**

*Process Systems Engineering (PSE) is a sub-discipline of Chemical Engineering (ChE) which focuses on the design, operation, control, optimization and intensification of chemical, physical, and biological processes. This specialization provides MEng students with an advanced training in the three main areas of PSE: process modelling, control, and optimization. The graduate training provided by this specialization will make MEng graduates more competitive for a variety of positions in industry.*

**Proposed effective date:** Term: Spring Year: 2020



Current [Graduate Studies Academic Calendar \(GSAC\)](#) page (include the link to the web page where the changes are to be made):

<https://uwaterloo.ca/graduate-studies-academic-calendar/engineering/departement-chemical-engineering/master-engineering-meng-chemical-engineering>

Current Graduate Studies Academic Calendar content:	Proposed Graduate Studies Academic Calendar content:
<p><b>Program information</b></p> <ul style="list-style-type: none"> <li>• <b>Admit term(s)</b> <ul style="list-style-type: none"> <li>○ Fall</li> </ul> </li> <li>• <b>Delivery mode</b> <ul style="list-style-type: none"> <li>○ On-campus</li> </ul> </li> <li>• <b>Program type</b> <ul style="list-style-type: none"> <li>○ Master's</li> <li>○ Professional</li> </ul> </li> <li>• <b>Registration option(s)</b> <ul style="list-style-type: none"> <li>○ Full-time</li> <li>○ Part-time</li> </ul> </li> <li>• <b>Study option(s)</b> <ul style="list-style-type: none"> <li>○ <a href="#">Coursework</a></li> </ul> </li> <li>• <b>Additional program information</b> <ul style="list-style-type: none"> <li>○ Important notice for MEng applicants: applicants to the MEng program are expected to be entirely self funded. No financial assistance will be provided from the Department of Chemical Engineering or the University of Waterloo.</li> </ul> </li> </ul> <p><b>Admission requirements</b></p> <ul style="list-style-type: none"> <li>• <b>Minimum requirements</b> <ul style="list-style-type: none"> <li>○ A 75% overall standing in the last two years, or equivalent, in a four-year Honours Bachelor's degree or equivalent.</li> </ul> </li> <li>• <b>Application materials</b> <ul style="list-style-type: none"> <li>○ Résumé</li> <li>○ Supplementary information form</li> <li>○ Transcript(s)</li> </ul> </li> <li>• <b>References</b> <ul style="list-style-type: none"> <li>○ Number of references: 2</li> <li>○ Type of references: at least 1 academic</li> </ul> </li> <li>• <a href="#">English language proficiency (ELP)</a> (if applicable)</li> </ul> <p><b>Degree requirements</b></p>	<p><b><u>Graduate specializations</u></b></p> <ul style="list-style-type: none"> <li>• <a href="#">Polymer Science and Engineering</a></li> <li>• <a href="#">Process Systems Engineering</a></li> </ul> <p><b>Program information</b></p> <ul style="list-style-type: none"> <li>• <b>Admit term(s)</b> <ul style="list-style-type: none"> <li>○ Fall</li> </ul> </li> <li>• <b>Delivery mode</b> <ul style="list-style-type: none"> <li>○ On-campus</li> </ul> </li> <li>• <b>Program type</b> <ul style="list-style-type: none"> <li>○ Master's</li> <li>○ Professional</li> </ul> </li> <li>• <b>Registration option(s)</b> <ul style="list-style-type: none"> <li>○ Full-time</li> <li>○ Part-time</li> </ul> </li> <li>• <b>Study option(s)</b> <ul style="list-style-type: none"> <li>○ <a href="#">Coursework</a></li> </ul> </li> <li>• <b>Additional program information</b> <ul style="list-style-type: none"> <li>○ Important notice for MEng applicants: applicants to the MEng program are expected to be entirely self funded. No financial assistance will be provided from the Department of Chemical Engineering or the University of Waterloo.</li> </ul> </li> </ul> <p><b>Admission requirements</b></p> <ul style="list-style-type: none"> <li>• <b>Minimum requirements</b> <ul style="list-style-type: none"> <li>○ A 75% overall standing in the last two years, or equivalent, in a four-year Honours Bachelor's degree or equivalent.</li> </ul> </li> <li>• <b>Application materials</b> <ul style="list-style-type: none"> <li>○ Résumé</li> <li>○ Supplementary information form</li> <li>○ Transcript(s)</li> </ul> </li> <li>• <b>References</b> <ul style="list-style-type: none"> <li>○ Number of references: 2</li> <li>○ Type of references: at least 1 academic</li> </ul> </li> </ul>

Current Graduate Studies Academic Calendar content:	Proposed Graduate Studies Academic Calendar content:
<ul style="list-style-type: none"> <li>• <a href="#"><u>Graduate Academic Integrity Module (Graduate AIM)</u></a></li> <li>• <b>Courses</b> <ul style="list-style-type: none"> <li>○ Students must complete CHE 600 Engineering and Research Methods, Ethics, Practice, and Law (0.25 credit weight) and 8 graduate courses (0.50 unit weight per course) as follows: <ul style="list-style-type: none"> <li>▪ CHE 601 Theory and Application of Transport Phenomena</li> <li>▪ CHE 602 Chemical Reactor Analysis</li> <li>▪ 6 graduate level electives of which 3 must be CHE courses</li> </ul> </li> <li>○ No more than 2 may be 500 level courses.</li> <li>○ No more than 1 may be a reading course.</li> <li>○ Graduate courses offered by the Faculty of Engineering are numbered as 600 or 700 series courses and are assigned a unit weight of 0.50, which means that they are one-term courses as defined in the Graduate Studies Academic Calendar.</li> <li>○ Only courses taken within five years prior to the completion of the MEng degree may be counted for credit towards a degree, unless a request for revalidation is granted.</li> <li>○ Students must achieve a: <ul style="list-style-type: none"> <li>▪ Minimum cumulative average of 70%.</li> <li>▪ Minimum grade of 65% in each individual course.</li> <li>▪ Note: Probationary students may have specific grade requirements, which will be specified in their admission letter.</li> </ul> </li> <li>○ Each student is responsible for monitoring their own academic records and must immediately notify the Graduate Coordinator of any inadequate grade or average.</li> </ul> </li> <li>• <b>Link(s) to courses</b> <ul style="list-style-type: none"> <li>○ <a href="#"><u>Chemical Engineering (CHE) courses</u></a></li> <li>○ <a href="#"><u>Graduate course search</u></a></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#"><u>English language proficiency (ELP)</u></a> (if applicable)</li> </ul> <p><b>Degree requirements</b></p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Graduate Academic Integrity Module (Graduate AIM)</u></a></li> <li>• <b>Courses</b> <ul style="list-style-type: none"> <li>○ Students must complete CHE 600 Engineering and Research Methods, Ethics, Practice, and Law (0.25 credit weight) and 8 graduate courses (0.50 unit weight per course) as follows: <ul style="list-style-type: none"> <li>▪ CHE 601 Theory and Application of Transport Phenomena</li> <li>▪ CHE 602 Chemical Reactor Analysis</li> <li>▪ 6 graduate level electives of which 3 must be CHE courses</li> </ul> </li> <li>○ No more than 2 may be 500 level courses.</li> <li>○ No more than 1 may be a reading course.</li> <li>○ Graduate courses offered by the Faculty of Engineering are numbered as 600 or 700 series courses and are assigned a unit weight of 0.50, which means that they are one-term courses as defined in the Graduate Studies Academic Calendar.</li> <li>○ Only courses taken within five years prior to the completion of the MEng degree may be counted for credit towards a degree, unless a request for revalidation is granted.</li> <li>○ Students must achieve a: <ul style="list-style-type: none"> <li>▪ Minimum cumulative average of 70%.</li> <li>▪ Minimum grade of 65% in each individual course.</li> <li>▪ Note: Probationary students may have specific grade requirements, which will be specified in their admission letter.</li> </ul> </li> <li>○ Each student is responsible for monitoring their own academic records and must immediately notify the Graduate Coordinator of any</li> </ul> </li> </ul>

Current Graduate Studies Academic Calendar content:	Proposed Graduate Studies Academic Calendar content:
<ul style="list-style-type: none"> <li>• <b>Seminar Attendance</b> <ul style="list-style-type: none"> <li>○ Over the course of their degree program, all students must attend 12 seminars from departments and research institutions where Chemical Engineering faculty members have a membership. The Chemical Engineering seminars are documented in the <a href="#">Events section</a> of the Chemical Engineering Department website.</li> <li>○ Note: At Chemical Engineering seminars, attendance is documented. At other approved seminars, students must complete an attendance form and get it signed by the seminar organizer. Full instructions are available on the <a href="#">Department website</a>.</li> </ul> </li> </ul>	<p>inadequate grade or average.</p> <ul style="list-style-type: none"> <li>○ <u>Students in the MEng in Chemical Engineering program may choose to pursue one of the following Graduate Specializations:</u> <ol style="list-style-type: none"> <li>1. <u>Polymer Science and Engineering</u></li> <li>2. <u>Process Systems Engineering</u></li> </ol> </li> <li>• <u>A Graduate Specialization is a University credential that is recognized on the student's transcript but not on the diploma and is intended to reflect that a student has successfully completed a set of courses that together provide an in-depth study in the area of the Graduate Specialization. A student will only obtain the Graduate Specialization on their transcript if they have completed the requirements associated with the MEng degree and the requirements associated with the Graduate Specialization.</u></li> <li>• <u>All MEng Graduate Specializations in Chemical Engineering consist of a set of 4 graduate (0.50 weight) level courses and this set is comprised of a mix of <i>compulsory</i> and <i>elective</i> courses. <i>Compulsory</i> courses are those that are prescribed as part of the Graduate Specialization. <i>Elective</i> courses are those that are on a list of courses designated as electives for a given Graduate Specialization. The requirements for each of the Graduate Specializations are described below.</u></li> </ul> <ol style="list-style-type: none"> <li>1. <u>Graduate Specialization in Polymer Science and Engineering</u></li> </ol> <ul style="list-style-type: none"> <li>• <u>To receive the Graduate Specialization in Polymer Science and Engineering, students must successfully complete 2 compulsory courses and 2 elective courses:</u> <ul style="list-style-type: none"> <li>○ <u>Compulsory courses:</u> <ul style="list-style-type: none"> <li>▪ <u>CHE 541 Introduction to Polymer Science and Properties</u></li> <li>▪ <u>CHE 621 Model Building and Response Surface Methodology</u></li> </ul> </li> <li>○ <u>Elective courses (choose 2 from the following list):</u> <ul style="list-style-type: none"> <li>▪ <u>CHE 543 Polymer Production: Polymer Reaction Engineering</u></li> <li>▪ <u>CHE 640 Polymer Property Characterization</u></li> </ul> </li> </ul> </li> </ul>

Current Graduate Studies Academic Calendar content:	Proposed Graduate Studies Academic Calendar content:
	<ul style="list-style-type: none"> <li>▪ <u>CHE 641 Fundamentals of Polymer Processing Operations</u></li> <li>2. <u>Graduate Specialization in Process Systems Engineering</u></li> <li>• <u>To receive the Graduate Specialization in Process Systems Engineering, students must successfully complete 2 compulsory courses and 2 elective courses:</u> <ul style="list-style-type: none"> <li>○ <u>Compulsory courses:</u> <ul style="list-style-type: none"> <li>▪ <u>CHE 620 Applied Engineering Mathematics</u></li> <li>▪ <u>CHE 621 Model Building and Response Surface Methodology</u></li> </ul> </li> <li>○ <u>Elective courses (choose 2 from the following list):</u> <ul style="list-style-type: none"> <li>▪ <u>CHE 520 Process Flowsheet Analysis (currently CHE 500-Topic 4, to be renamed)</u></li> <li>▪ <u>CHE 521 Process Optimization (currently CHE 500-Topic 5, to be renamed)</u></li> <li>▪ <u>CHE 522 Advanced Process Dynamics and Control</u></li> </ul> </li> </ul> </li> <li>• <b>Link(s) to courses</b> <ul style="list-style-type: none"> <li>○ <a href="#">Chemical Engineering (CHE) courses</a></li> <li>○ <a href="#">Graduate course search</a></li> </ul> </li> <li>• <b>Seminar Attendance</b> <ul style="list-style-type: none"> <li>○ Over the course of their degree program, all students must attend 12 seminars from departments and research institutions where Chemical Engineering faculty members have a membership. The Chemical Engineering seminars are documented in the <a href="#">Events section</a> of the Chemical Engineering Department website.</li> <li>○ Note: At Chemical Engineering seminars, attendance is documented. At other approved seminars, students must complete an attendance form and get it signed by the seminar organizer. Full instructions are available on the <a href="#">Department website</a>.</li> </ul> </li> </ul>

How will students currently registered in the program be impacted by these changes?

*Current students would be grandfathered under the current requirements. If a student has completed Graduate Specialization courses during the course of a UWaterloo undergraduate degree they will need to consult with the Department to discuss possible additional course requirements to meet specialization requirements.*

**Departmental approval date** (mm/dd/yy):09/10/2019

**Reviewed by GSPA** (for GSPA use only) ☐ date (mm/dd/yy): 09/06/2019

**Faculty approval date** (mm/dd/yy):

**Senate Graduate & Research Council (SGRC) approval date** (mm/dd/yy):

**Senate approval date** (mm/dd/yy) (if applicable):

**University of Waterloo**  
**SENATE UNDERGRADUATE COUNCIL**  
**Report to Senate**  
**20 January 2020**

Senate Undergraduate Council met on 12 November 2019 and 10 December 2019 and agreed to forward the following items to Senate for approval in the regular agenda.

Further details are available: <https://uwaterloo.ca/secretariat/committees-and-councils/senate-undergraduate-council>

**FOR APPROVAL**

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**ACADEMIC PLAN CHANGES**

**Faculty of Arts**  
**Religious Studies**

1. **Motion:** That Senate approve the following changes to the three-year general religious studies plan, four-year general religious studies plan, and honours religious studies plan, effective 1 September 2021.

**Rationale and Background:**

Three-Year General Religious Studies

Current calendar text: <http://ugradcalendar.uwaterloo.ca/page/ARTS-Three-Year-General-Religious-Studies>

Revised calendar text below: (strike out = deleted text, bold = new entry)

1. Appropriate Program-level requirements. See Bachelor of Arts Degree Requirements.
2. Religious Studies Plan-level requirements:
  - a minimum Religious Studies major average of 65%
  - at least six academic course units (12 courses) in Religious Studies, including:
    - ~~at least two courses from each of the three Areas~~
    - **RS 100, RS 110, RS 260**
    - ~~one of RS 202, RS 203, RS 204~~
    - ~~one of RS 210/JS 217, RS 216, RS 240/HIST 235, RS 250~~
    - **at least two additional RS courses at the 200-level**
    - **at least** two RS courses at the 300-level or above

Four-Year General Religious Studies

<http://ugradcalendar.uwaterloo.ca/page/ARTS-Four-Year-General-Religious-Studies>

Revised calendar text below: (strike out = deleted text, bold = new entry)

1. Appropriate Program-level requirements. See Bachelor of Arts Degree Requirements.
2. Religious Studies Plan-level requirements:
  - a minimum Religious Studies major average of 65%
  - at least eight academic course units (16 courses) in Religious Studies, including:
    - ~~at least three courses from each of the three Areas~~
    - **RS 100, RS 110, RS 260, RS 499**
    - ~~one of RS 202, RS 203, RS 204~~
    - ~~one of RS 210/JS 217, RS 216, RS 240/HIST 235, RS 250~~

- **at least four additional RS courses at the 200-level**
- **at least three** ~~four~~ additional RS courses at the 300-level or above

### Honours Religious Studies

Current calendar text: <http://ugradcalendar.uwaterloo.ca/page/ARTS-Honours-Religious-Studies>

Revised calendar text below: (strike out = deleted text, bold = new entry)

1. Appropriate Program-level requirements. See Bachelor of Arts Degree Requirements.
2. Religious Studies Plan-level requirements:
  - a minimum Religious Studies major average of 70%
  - at least eight academic course units (16 courses) in Religious Studies, including:
    - ~~at least three courses from each of the three Areas~~
    - ~~RS 100, RS 110, RS 260, RS 499~~
    - ~~one of RS 202, RS 203, RS 204~~
    - ~~one of RS 210/JS 217, RS 216, RS 240/HIST 235, RS 250~~
    - **at least four additional RS courses at the 200-level**
    - **at least three** ~~four~~ additional RS courses at the 300-level or above

...

### Honours Double Majors

Honours Religious Studies may be taken in combination with most Arts majors in which an Honours major is offered or with many Honours majors in other faculties. For further information, see the double majors section of Available Arts Academic Plans.

~~Students pursuing a double major with Honours Religious Studies may forego the RS 499 requirement by completing honours requirements in the student's other department. Please consult the Religious Studies undergraduate advisor for details.~~

Rationale: The proposed changes streamline the RS plans, allowing more flexibility while still ensuring both breadth and depth in content. This will benefit students and remove barriers to completion due to the timing of course offerings. Given first-year and breadth requirements, students have less room for 100-level courses. RS 100 and 110 will continue to be offered as introductory courses and could be taken as electives towards RS plans, but will no longer be mandatory. RS 260 remains as a required foundational course. “One of” course requirements will be replaced by requiring a certain number of year-level courses. For Four-Year General and Honours Plans, RS 499 remains as a required capstone, as it is a writing intensive course, prepares students for graduate school, can be offered remotely and is offered regularly.

In addition to the specific changes above, we will eliminate the “areas” (Religions of the World; The Christian Traditions; Religion, Culture, and Society) for the purpose of the Major, for several reasons. The category “Religion, Culture, and Society” is redundant, since all RS courses deal with culture and society to some extent. Also, though historically understandable, these area listings appear to privilege “Christian Traditions.” Further, identifying “The Christian Tradition” as one category and then placing others within “Religions of the World” is highly problematic, since it implies that Christianity provides a religious norm. Many of our courses explore the hybridity involved in the practice of religious traditions in different settings (i.e. Buddhism in Canada). Additionally, these streams have led to some unnecessary confusion and work for both students and the department (for instance, categorizing ‘Special Topics’ courses). Subsequent plan changes reflect this modification. The “areas” will also eventually be removed from all courses to reflect plan restructuring.

## ACADEMIC REGULATION CHANGES

### Faculty of Arts

#### New Regulation - Declaring a Major, Minor or Specialization

2. **Motion:** That Senate approve the following new regulation regarding declaring a major, minor or specialization in the Faculty of Arts, effective 1 September 2021.

**Rationale:** A new regulation is being proposed to bring consistency across subject areas and formalize current practice in terms of the minimum number of courses and averages required for declaring majors and minors within the Faculty of Arts. See below for new calendar text outlining the regulation.

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Students in the Arts program or the Arts and Business program are encouraged to declare a major or major with specialization after their first year of study. Students who do not declare a major after their first year of study will be registered in General or Honours Liberal Studies, depending on their Faculty of Arts average, and may choose to remain in a Liberal Studies plan or declare a major at a later date. Students are able to declare or change their academic plan later in their studies, but are encouraged to consult with an advisor about the impact of doing so.

Students registered in Accounting and Financial Management, Computing and Financial Management, and Global Business and Digital Arts should consult the appropriate section of this calendar for their degree requirements. These programs are direct-entry programs and do not require students to declare a major.

Minors can be declared at any time during a student's undergraduate career however students are encouraged to declare a minor well in advance of their expected graduation date.

Specializations are not stand-alone plans and can therefore only be declared with the associated major plan.

Information on the requirements for each academic plan/major can be found in this calendar under Arts Academic Plans.

Some plans cannot be combined. Please see the page Restrictions on Multiple-Plan Combinations in this calendar further information.

### Declaring a Major

#### Honours Arts and Honours Arts and Business

To declare a major in Honours Arts or Honours Arts and Business, students must have:

- Successfully completed at least eight courses (4.0 academic units)
- Successfully completed one or two courses (0.5 or 1.0 academic units) in the major field
- Achieved the average required to declare the major as specified in the academic plan

### Notes

1. Most departments require successful completion of specific courses for admission to a major. Students should consult the corresponding academic advisor to ensure their course selections are appropriate.
2. In Fine Arts (Studio), students must pass the portfolio milestone to be admitted to the major. The portfolio is developed in first-year classes.



## Honours Liberal Studies

To be eligible for the Honours Liberal Studies academic plan students must have:

- Successfully completed at least eight courses (4.0 academic units) towards their degree
- Achieved a cumulative Faculty of Arts course average of 70% or higher

Students can elect to combine the Honours Liberal Studies academic plan with Arts and Business.

## Declaring an Honours Double Major (within the Faculty of Arts)

Any two Honours majors may be combined for a Bachelor of Arts (BA) degree, with the exception of French Teaching Specialization, Liberal Studies, and Mathematical Economics (BA).

To declare two Honours majors, students must have:

- Successfully completed at least eight courses (4.0 academic units)
- Successfully completed one or two courses (0.5 or 1.0 academic units) in each major field
- Achieved the average required to declare each of the majors

## Notes

1. Most departments require successful completion of specific courses for admission to a major. Students should consult an academic advisor to ensure their course selections are appropriate.
2. In Fine Arts (Studio), students must pass the portfolio milestone to be admitted to the major. The portfolio is developed in first-year classes.
3. Enrolment by a co-op student in a double major does not provide grounds for changes to the [study/work sequence](#).

## Joint Honours

When an Arts major is combined with a major in another faculty, it is referred to as Joint Honours.

To declare a Joint Honours program, students enrolled in Honours Arts must:

- Be eligible to declare an Honours Arts major (see Declaring a Major above), and at the same time, be eligible to declare an Honours major in the other faculty (see Faculty-specific regulations in the [Available Arts Academic Plans](#) section of this Calendar)

## Declaring a Minor

To declare a minor, students must have successfully completed one course (0.5 academic units) in the minor field and achieved the required average for the minor as specified in the academic plan.

## Registrar's Office

### Dean's Honours List/Awards of Excellence

3. **Motion:** That Senate approve the harmonization of rules and practices related to recognition of excellence as set forth below, effective 1 September 2020.

**Background and rationale:** To consolidate practices related to the recognition of excellence (Dean's Honours List) each term and at graduation and associated text (see Attachment 1, Part A), while also removing related faculty-specific text (see Attachment 2, Part B) – all faculties are participating in this harmonization, with the exception of Engineering (all majors, including Software Engineering).

Highlights of the changes (see Attachment 1 for detailed outline of changes):

- Graduation Honours:
  - There are two award levels, with new names: Dean's Honours (higher %) and Distinction (lower %).
  - Only the highest earned award will appear on the transcript and diploma.
  - It is based on cumulative average (no other averages).
  - All students graduating with a degree (general or honours) are eligible.
- Term Distinction:
  - The new name: Term Distinction.
  - Students are no longer required to carry a full course load (one numeric graded course in the average is sufficient).
  - Any student pursuing a degree-granting program who has completed a term of study is eligible.
  - Now tied to academic standing: must receive either Promoted, Satisfactory, Good, or Excellent.
  - Eligibility may be removed at the discretion of the associate dean, undergraduate studies (e.g., severe policy infractions, criminal proceedings, etc.).

**Discussion and conversation:**

- The faculties (represented by their associate deans, undergraduate) determined their respective new averages by reviewing student graduation data (e.g., cumulative averages) from the previous 5 years.
- Considerations were made for:
  - Students studying, by desire or necessity (i.e., accommodation), with less than a traditional full course load.
  - Professional programs and how progression works when a term is failed.
  - What the awards of excellence are meant to represent/the prestige of the awards (e.g., existence of a disciplinary offence, academic standing received).
- The Faculty of Engineering is still discussing elements of the harmonized changes and isn't able to join for 2020, but may in the future.

**Approvals received:**

- Applied Health Sciences Faculty Council: November 29, 2019
- Arts Faculty Council: November 26, 2019
- Environment Faculty Council: September 19, 2019
- Mathematics Faculty Council: November 19, 2019
- Science Faculty Council: November 8, 2019
- Renison (Academic Council): November 15, 2019

/rmw

David DeVidi  
Associate Vice-President, Academic

**Summary of Changes: Graduating Honours (blue columns are proposed – no colour is current)**

N/A: Not applicable

N/C: No change

	New (ALL) "Distinction" (additional award for AHS, ENV, SCI, REN- BSW)	ARTS Distinction	MATH (including SE) Distinction	New (ALL) "Dean's Honours"	AHS	ARTS	ENV	MATH (including SE)	SCI	REN – Bachelor of Social Work
Designation	Distinction	With Distinction	With Distinction	Dean's Honours	Dean's Honours List	Dean's Honours List	Dean's Honours List	With Distinction - Dean's Honours List	Dean's Honours List	Dean's Honours List
Min Major Average	N/A	N/A	N/A	N/A	80%					
Min Cum Average	80%	75%	N/C	85% (AHS, Arts, Env, Sci)  87% (Math)	80%	80%	83%	87%	80%	83%
Grade conditions	N/A	N/A	do not have any INC, IP, or UR grades	N/A	N/A	N/A	N/A	do not have any INC, IP, or UR grades	N/A	N/A
Other	All degree granting plans (excluding diplomas, certificates)	Bachelor of Arts only (Honours and General)	Honours BCS or BMath degree, either four- year honours or three-year general	All degree granting plans (excluding diplomas, certificates)	All degrees	Degree student	All degrees	Honours BCS or BMath degree	Honours program	All students

**Summary of Changes: Term Distinction (blue column is proposed – no colour is current)**

N/A: Not applicable

N/C: No change

	New (ALL, except ENG)	AHS	ARTS	ENV	MATH	SCI	REN – BSW
Designation	Term Distinction	Term Dean's Honours List	Dean's Honours List	Term Dean's Honours List	Term Dean's Honours List	Term Dean's Honours List	N/A
Minimum courses taken during the term	1 course	2.0 units	N/A	a full course load, normally 2.5 units (2.0 units for Geography and Aviation)	at least 2.5 units of courses without a grade of WD	carried a full course load, as noted in the relevant program section (with the exception of Science and Aviation plans, the full course load minimum threshold for TDHL is 2.5 units, exclusive of courses with a 0.25 unit weight)	N/A
Type of average	Term only	N/C	Cumulative	N/C	N/C	N/C	N/A
Min number of total courses completed	Not a requirement	N/A	Min 5 units completed	N/A	N/A	N/A	N/A
Min term average	80%	N/C	80% (cumulative)	83%	87%	N/C	N/A
Grade conditions	Must have min 1 numeric/alpha grade in average  Only after INC, IP, MM, UR grades resolved	No failing grades, DNW, INC, NCR, NMR, UR	N/A	Have no INC, DNW, NMR, or failing grades.	Numeric or letter grades; no failed or excluded courses; no INC, IP, or UR grades	No DNW, INC, IP, NCR, NMR, UR, WF, or failing grade - Only one AEG grade can count towards the Dean's Honours List (see <a href="#">Grades</a> ).	N/A
Academic standing	Must have Promoted, Satisfactory, Good, or Excellent	N/A	N/A	N/A	N/A	N/A	N/A
Audience	All students in degree-granting program (Optometry and Pharmacy students taking fewer courses due to failure will not be eligible for Term Distinction in the reduced-load term)	N/A	Degree student	N/A	In an Honours plan	In an Honours plan	N/A
Restrictions	Students may be deemed ineligible at the discretion of the associate dean – undergraduate studies.	N/A	N/A	N/A	N/A	N/A	N/A

**Part A: Proposed text:**

**Section of Calendar:** University Policies, Guidelines, and Academic Regulations

**New Calendar page:** Awards of Excellence

The Awards of Excellence presented on this page apply to students in degree-granting programs, excluding all majors from the Faculty of Engineering (including Software Engineering). Engineering students should view the Faculty of Engineering section of this Calendar.

**Graduating Honours**

A student who demonstrates exceptional academic performance in a degree-granting program may be recommended to graduate with either “Dean’s Honours” or “Distinction”, based on their final cumulative average. Only the highest honour is awarded.

Faculty/Program	Distinction Minimum Cumulative Average	Dean’s Honours Minimum Cumulative Average
Applied Health Sciences	80.0%	85.0%
Arts (including Computing and Financial Management)	80.0%	85.0%
Environment	80.0%	85.0%
Mathematics	80.0%	87.0%
Science	80.0%	85.0%
Bachelor of Social Work	80.0%	85.0%

**Term Distinction**

A student is eligible to receive “Term Distinction” based on their average in all courses taken during a term while in a degree-granting program. In order to receive “Term Distinction”, the following must be true:

- The term must have at least one alpha/numeric grade in the average.
- A minimum term average of 80.0% must be achieved.
- An academic standing for the term of Promoted, Satisfactory, Good, or Excellent.
- The term cannot have an INC, IP, MM, or UR. When these grades are resolved to alpha/numeric grades, the term’s average will be reviewed for eligibility.

**Notes**

1. Students may be deemed ineligible at the discretion of the associate dean – undergraduate studies.
2. Students in Optometry and Pharmacy who are taking less than a full course load due to failure will be ineligible for “Term Distinction” in reduced-load terms.

**Part B: Current (2019-2020 Undergraduate Calendar) faculty-specific text to be removed:**

1. **APPLIED HEALTH SCIENCES:** <http://ugradcalendar.uwaterloo.ca/page/AHS-Deans-Honours-List>  
**Term Dean's Honours List**

To recognize outstanding academic achievement, the Faculty of Applied Health Sciences has established the Term Dean's Honours List.

To be included on the Dean's Honours List at the end of each academic term, the student must:

- Be registered in at least 2.0 units per term.
- Achieve a minimum term average of 80.0%.

The designation "Term Dean's Honours List" will appear on the student's transcript.

Students will not be eligible for consideration of Term Dean's Honours List status if they have any failing grade in that term, or any DNW, INC, NCR, NMR, UR.

**Graduating Dean's Honours List**

Graduating students with a minimum cumulative overall average of 80.0% and a major average of 80.0% will have the designation "Graduating Dean's Honours List" appear on their graduation diploma.

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2. **ARTS:** <http://ugradcalendar.uwaterloo.ca/page/ARTS-Recognition-of-Excellence>  
**Dean's Honours List**

To recognize outstanding academic achievement the Arts Faculty has established a Dean's Honours List. To be eligible for the Dean's Honours List a student:

1. must be a Faculty of Arts degree student;
2. must have successfully completed a minimum of five University of Waterloo academic course units (10 courses) which count in the cumulative average; **and**
3. must have a cumulative overall average of 80% or higher.

For each academic term a student receives Dean's Honours List standing, it is noted on the transcript. Students who graduate with the Dean's Honours List designation will have it noted on their diplomas.

**Graduating "With Distinction" - Bachelor of Arts (BA)**

In recognition of distinguished academic achievement throughout their undergraduate careers, all students who graduate with a BA degree (Honours or General) and a cumulative average (CAV) of at least 75% are eligible to graduate "With Distinction". This notation appears on official University transcripts and diplomas.

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3. **ENVIRONMENT:** <http://ugradcalendar.uwaterloo.ca/page/ENV-Deans-Honours-List>  
**Term Dean's Honours List**

The Faculty awards the distinction Dean's Honours List (DHL) to officially recognize students who have attained a high degree of academic excellence during a term. This distinction is

awarded to selected students at the completion of each academic term and appears on their student record and on the official transcript as part of the academic decision.

To be eligible for this distinction in a given term, a student must:

1. have completed a full course load, normally 2.5 units (2.0 units for Geography and Aviation), which contribute to the overall average for that term;
2. have a term overall average of 83% or higher; and
3. have no Incomplete (INC), Did Not Write (DNW), No Mark Recorded (NMR), or failing grades.

#### Graduating Dean's Honours List

A student graduating with a cumulative overall average of 83% or higher will have the designation, Dean's Honours List, appear on their graduation diploma.

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#### 4. MATHEMATICS: <http://ugradcalendar.uwaterloo.ca/page/MATH-Recognition-of-Excellence> Graduating "With Distinction - Dean's Honours List"

In recognition of outstanding academic records throughout their undergraduate career, all students who graduate with a Honours Bachelor of Computer Science (BCS) or Bachelor of Mathematics (BMath) degree, have a cumulative average (CAV) of at least 87%, and do not have any INC (Incomplete course work), IP (Course in progress), or UR (Grade under review) grades are eligible to graduate "With Distinction - Dean's Honours List." In addition to having this notation appear on their official University transcripts and diplomas, such students have their names displayed in gold on the walls of the MC corridor 4134.

#### Graduating "With Distinction"

In recognition of distinguished academic achievement throughout their undergraduate careers, all students who graduate with a Honours BCS or BMath degree, either four-year honours or three-year general, a cumulative average (CAV) of at least 80%, and do not have any INC, IP, or UR grades are eligible to graduate "With Distinction." This notation appears on official University transcripts and diplomas.

#### Term Dean's Honours List

In recognition of outstanding academic achievement in an academic term, the designation "Term Dean's Honours List" is awarded to undergraduate Math students who satisfy all of the following criteria for the term:

- registered in an honours plan with a term average (TAV) of at least 87%;
  - normally enrolled in at least 2.5 units of courses with numeric or letter grades;
  - no failed or excluded courses;
  - no INC, IP, or UR grades;
  - at least 2.5 units of courses without a grade of WD.
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#### 5. SCIENCE: <http://ugradcalendar.uwaterloo.ca/page/SCI-Grades-and-Acad-Standings-Deans-Honours-List>

#### Term Dean's Honours List (TDHL)

To be eligible, students must have completed a term of an Honours program with an overall average for the completed term of at least 80.0%, have carried a full course load, as noted in the relevant program section, and not have a DNW, INC, IP, NCR, NMR, UR, WF, or failing grade. With the exception of Science and Aviation plans, the full course load minimum threshold for TDHL is 2.5 units, exclusive of courses with a 0.25 unit weight. Only one AEG grade can count towards the Dean's Honours List (see [Grades](#)). Students should direct eligibility questions to the Science Undergraduate Office. This award will be noted on the student's transcript.

#### [Graduating Dean's Honours List](#)

Students graduating with a cumulative overall average of 80.0% or better in an Honours program will graduate on the Dean's Honours List. This award will be noted on the student's transcript and diploma.

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#### 6. [Bachelor of Computing and Financial Management \(MATH & ARTS\):](#) <http://ugradcalendar.uwaterloo.ca/page/MATH-Computing-Fin-Mgt-Recognition-of-Excellence> [Term Dean's Honours List](#)

The designation "Dean's Honours List" is awarded to any Bachelor of Computing and Financial Management (BCFM) student who satisfies either of the following criteria:

1. Completed a minimum of 5.0 units which count in the cumulative average, with a cumulative average of at least 80%.
2. Completed a minimum of 2.5 units in that term with numeric or letter grades, with no excluded courses, no grades of INC, IP, or UR ([see Grades](#) for full grade description), and a term average of at least 87%.

The Dean's Honours List designation will appear on the student's official University transcript.

#### [Graduation Dean's Honours List](#)

A BCFM student who satisfies either of the following criteria will graduate on the Dean's Honours List.

1. A cumulative overall average of 80% with no INC, IP, or UR grades.
2. A cumulative overall average of 87% with no INC, IP, or UR grades. Any student who satisfies this criterion will have their name displayed on the walls of the MC corridor 4134.

The Dean's Honours List designation will appear on the student's official University transcript and diploma.



# Report of the Vice-President, Research and International to Senate

January 2020

## Awards

### Canadian Foundation for Innovation - John R. Evans Leaders Fund (CFI-JELF)

Calls for applications Canadian Foundation for Innovation's John R. Evans Leaders Fund (CFI-JELF) are made three times each year (February, June, and October).

Results from the June 2019 competition have been announced: from a total of five Waterloo applications submitted, three were awarded for a 60% success rate, and a 75.7% funding rate. The total funded amount is \$985,000.

For the October 2019 competition, 11 applications were submitted for a total CFI requested amount of \$1,334,860.

## International Research and Partnerships

**Brian Dixon**, Department of Biology, is the recipient of an International Development Research Centre's Innovative Veterinary Solutions for Antimicrobial Resistance (InnoVet-AMR) grant. Worth \$2 million, this award has four external partners from the University of Prince Edward Veterinary College, Centro de Ingenieria Genetica y Biotecnologia, Cuba University of Havana, and the Centro de Ingenieria Genetica y Biotecnologia, Cuba. This award will fund development of a pituitary adenylate cyclase-activating polypeptide (PACAP) into a treatment for microbial infections in fish and shrimp aquaculture. By studying Tilapia, Claria, and shrimp in Cuba, researchers aim to use PACAP as an antimicrobial immunostimulant that could significantly reduce the use of antibiotics in aquaculture and prevent the development of antibiotic resistant strains of pathogens, thus providing better food security for a growing global population.

**David Hammond**, School of Public Health and Health Systems, was awarded a sub-grant from University of Cambridge through the Wellcome Trust Foundation for approximately \$130,000 for research on the impact of cigarette pack size on consumption. The results of this study will inform tobacco control regulations regarding the maximum pack size at which cigarettes can be sold.

## Delegations

- November 13, 2019: Trade and Economic Section, Delegation of the European Union to Canada for a briefing on Horizon 2020 and Horizon Europe
- November 6, 2019: Korea Electrotechnology Research Institute and Changwon City for an agreement signing for joint research in Artificial Intelligence in various fields of Engineering
- September 4, 2019: National Informatics Institute, Japan for an exploration of joint research in Mathematics and Computer Science
- A delegation led by Prof. Doug Peers (Faculty of Arts) and supported by Waterloo International (Ishari Waduware-Jayabahu, International Relations Manager) participated in both the Shastri Indo-Canadian Institute –Vice Chancellors Summit and the Federation of Indian Chambers of Commerce and Industry Higher Education Summit from 25-29 November 2019 in Delhi, India. In addition to several meetings with prominent Indian institutes of higher education, the delegates met with the Canadian High Commission.

- Waterloo International supported the Presidential-led mission to Asia that took place 25-29 November 2019. While in Asia, visits to Soochow University, Tsinghua University, the Chinese Ministry of Education, the China Scholarship Council, the Canadian Embassy, ShanghaiTech, and Xiamen University took place. Partner dinners were also hosted in Beijing and Shanghai.

### **International Education Week**

- The University of Waterloo held a successful 2019 International Education Week that took place from 18-22 November 2019. This week long event, led by Waterloo International, brought together faculties, academic support units, the affiliated colleges and students/student groups from across the university. More than 19 separate sanctioned events and activities were hosted by various groups across campus in the 5-day period. These events and activities included among others, panel discussions, a photo contest and art gallery, movie screenings, a living library, concerts, international themed food events, info sessions, career workshops and many others. Headlining the week was a keynote speech, delivered by Alexandre Trudeau on 21 November on the topic of *"Multilingualism in an Increasingly Globalized World"* that was attended by roughly 400 students, staff, faculty, dignitaries (including the German Consul-General in Toronto), community members, and high school students.