University of Waterloo
SENATE
Notice of Meeting

Date: Monday 30 March 2020
Time: 3:30 p.m.
Place: Video conference (log in information will be sent separately)

	OPEN SESSION	Action
3:30	**Consent Agenda**	
	Motion: To approve or receive for information by consent items 1-7 below.	
	1. Minutes of the 20 January 2020 Meeting	Decision
	2. Reports from Committees and Councils	
	a. Graduate & Research Council	
	i. Information Items	Information
	ii. Program Change	Decision
	b. Undergraduate Council	Decision/Information
	3. Report of the President	
	a. 23 March 2020 Electronic Vote	Information
	b. Honorary Degrees and Convocation Speakers	Information
	c. Recognition and Commendation	Information
	4. Reports from the Faculties	Information
	5. Report from the COU Academic Colleague	Information
	6. Committee Appointments	Decision
	7. Report of the Vice-President, Academic & Provost	
	a. Department Name Change – Waterloo Residences	Decision
	Regular Agenda	
3:35	8. Business Arising from the Minutes	
3:40	9. Report of the President	Information
	10. Reports from Committees and Councils	
3:50	a. Finance Committee	
	i. Committee Report	Decision
	ii. Operating Budget Presentation	Information
4:05	11. Other Business	
	CONFIDENTIAL SESSION	
	Consent Agenda	
	Motion: To approve or receive for information by consent items 12-14 below.	
4:10	12. Minutes of the 20 January 2020 Meeting	Decision
	13. Minutes of the 9 March 2020 Extraordinary Meeting	Decision

CONFIDENTIAL SESSION	Action
14. Report of the Vice-President, Advancement a. Donor List – 2018/19 Gifts and Pledges $250,000+	Information
<u>Regular Agenda</u> 15. Business Arising from the Minutes	
16. Other Business	

23 March 2020
KJJ/ees

Karen Jack
University Secretary
Secretary to Senate

University of Waterloo
SENATE
Minutes of the 20 January 2020 Meeting

Present: Sheila Ager, Jean Andrey, Sandra Banks, Chris Bauch, Michael Beauchemin, Kankar Bhattacharya, Anne Bordeleau**, Carmen Bruni, Claudio Canizares, Jeff Casello, Joan Coutu, Eric Croiset, Richard Culham, Alexandria De Sousa, Shannon Dea, Peter Deadman, Charmaine Dean, David DeVidi, Mathieu Doucet, Fraser Easton, Paul Fieguth, Wendy Fletcher, Cindy Forbes**, Mark Giesbrecht, David Ha, John Haddock, Craig Hardiman, Kevin Hare (for Stephen Watt), Dennis Huber, Natalie Hutchings, Martin Karsten, Veronica Kitchen, Scott Kline, Karen Jack (secretary), Alex Lee**, Kesen Ma, Ellen MacEachen, Teferi Mergo, Ian Milligan, Zoran Miskovic, Barb Moffatt, Cathy Newell Kelly, Erin O'Connell, Troy Osborne, David Perrin, Bill Power, James Rush (chair), Beth Sandore Namachchivaya, Mark Seasons, Marcus Shantz, Joanne Shoveller, Siva Sivoththaman, Jason Small, Marlee Spafford (for Robert Lemieux), Richard Staines (for Lili Liu), Susan Tighe, Bryan Tolson, Cristina Vanin, Maya Venters, Johanna Wandel, Nancy Worth

Guests: Bruce Campbell, Aldo Caputo, Nick Manning, Harman Minhas, Norah McRae, Diana Parry, Alice Raynard, Chris Read, Emily Schroeder, Daniela Seskar-Hencic, Allan Starr, Brandon Sweet, Megan Town

Absent: Michael Balogh, Dominic Barton, Lisa Bauer-Leahy, Ashreena Bhangu, Kofi Campbell, Fred Chereshski*, David Clausi*, Tara Collington*, Lynette Eulette*, George Freeman*, Shikha Gandhi, Robert Gorbet*, Julia Goyal*, Kelly Grindrod*, Feridun Hamdullahpur*, Sabrina Khandakar*, Robert Lemieux*, Lili Liu*, Katie Misener*, Richard Myers*, Linda Ogechi Iheme, William Pristanski*, Neil Randall*, Max Salman*, Naima Samuel*, Hamid Tizhoosh*, Bruno Tremblay*, Vivek Unnithan*, Stephen Watt, June Xu, En-Hui Yang*

*regrets
**joined by telephone

OPEN SESSION

Opening Remarks
Rush advised members that in the president's absence, he will serve as chair. He welcomed interim deans Richard Culham and Kevin Hare to the meeting, and made remarks acknowledging the University's, and indeed, Canada's loss of so many individuals on the recent tragic plane crash in Iran. Notably, Marzieh Foroutan, a PhD student in geography, and Mansour Esnaashary Esfahani, a PhD student in civil engineering died in the crash. Rush spoke to recent services in Waterloo and beyond, and ways the University celebrates and will consider future actions to mark their input and contributions at Waterloo. Senate took a moment to observe and honour these individuals.

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

Coutu and Dea.

Senate heard that the report of the Dean of Environment must regrettably be revised to remove Marzieh Faroutan's appointment as a part-time lecturer.

1. **MINUTES OF THE 18 NOVEMBER 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 Arts, Communication Arts
Senate heard a motion to approve the following name changes (as outlined in the report), effective 1 September 2021.

Faculty of Arts, History
Senate heard a motion to approve the name change, Applied History Specialization to Digital and Public History Specialization, effective 1 September 2021.

Faculty of Science, Three-Year General Science – Online
Senate heard a motion to approve the closure of applications to the online only completion of the Three-Year General Science program, until such time as the Faculty develops a more robust set of Science courses to allow the degree to be completed entirely online at Waterloo.

Faculty of Science, Honours Co-operative Biotechnology/Economics
Senate heard a motion to approve the inactivation of the Honours Co-operative Biotechnology/Economics, effective 1 September 2021.

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.   **COMMITTEE APPOINTMENTS**
     Senate approved the following committee appointments:

     Amit and Meena Chakma Awards for Exceptional Teaching by a Student Committee:
     •   Maggie Nguyen and Zurie Campbell as undergraduate student representatives, terms to 31 December 2021.

     Distinguished Teacher Awards Committee:
     •   Sara Seabrook as undergraduate student representative, and Tiffany Bradley as alumni representative, terms to 31 December 2021.

     The question was called, and the motion carried unanimously.

Regular Agenda

6.   **BUSINESS ARISING FROM THE MINUTES**
     There was no business arising from the minutes.

7.   **PRESENTATION – MARIOS IOANNIDIS, PROFESSOR, CHEMICAL ENGINEERING**
     The chair introduced and then invited Professor Ioannidis to present to Senate. Senate heard from Dr. Ioannidis about ways his department is engaging students as "agents of continuous program improvement". In discussion: the department's work in articulating its purpose, and ways it is providing students with agency in this process; the "learn-tell-do loop" and specific ways the department has engaged students; lessons learned, including key actions the department can take to reduce student stress; the necessity of following up once engagement has occurred. In response to questions, Senate heard: this activity has been taking place for approximately three years and there is

more to learn and do; the contagious effect of the positive feelings and perspectives, and a growing sense of collegiality; benefits of faculty working together re: "due dates", etc., to effect better experiences for students, and the desire by faculty to work together toward this end; simple tools that the department is using and is happy to share; acknowledgement that cohort and non-cohort systems will have differences; a desire to find ways to monitor whether there are measurable reductions in stressors for students.

8. **REPORTS FROM COMMITTEES AND COUNCILS**
   Joint Report – Graduate & Research Council and Undergraduate Council
   Senate heard a motion to approve two amendments to the 2020-2021 calendar dates as presented in Attachment #1.

   Newell Kelly and Casello. Carried unanimously.

   Graduate & Research Council
   Faculty of Engineering
   Senate heard a motion to approve two new specializations within the Master of Engineering (MEng) in Chemical Engineering, effective 1 May 2020, as presented in Attachment #1.

   Casello and Culham. Carried unanimously.

   Undergraduate Council
   Faculty of Arts, Religious Studies
   Senate heard a motion to 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.

   DeVidi and Ager. Carried unanimously.

   Faculty of Arts, New Regulation – Declaring a Major, Minor, or Specialization
   Senate heard a motion to approve the following new regulation regarding declaring a major, minor or specialization in the Faculty of Arts, effective 1 September 2021.

   DeVidi and Ager. Carried unanimously.

   Registrar's Office, Dean's Honours List/ Awards of Excellence
   Senate heard a motion to approve the harmonization of rules and practices related to recognition of excellence as set forth in the report, effective 1 September 2020.

   DeVidi and Ager. Carried unanimously.

9. **REPORT OF THE PRESIDENT**
   There was no report.

10. **Q&A PERIOD WITH THE PRESIDENT**
    There was no Q&A period.

11. **REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST**
    Rush provided members with a brief update on the third Strategic Mandate Agreement. Members heard about: timelines, performance metrics, metric weighting considerations, some examples, areas in which Waterloo may be considered "best in class." He advised of future meetings with the Ministry and of his intention to keep Senate apprised of this activity.

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12. REPORT OF THE VICE-PRESIDENT, RESEARCH & INTERNATIONAL
Following a brief overview by Dean, Senate received the report for information.

13. OTHER BUSINESS
Rush offered kudos to the Graduate Studies and Postdoctoral Affairs office re: the recent "GRADflix" event and its great expression of community and support for graduate activity at Waterloo. There was no other business.

Senate convened in confidential session.

11 February 2020   Karen Jack
                                                                                                                 University Secretary

CONFIDENTIAL SESSION

The confidential minutes have been removed.

University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Report to Senate
30 March 2020

Senate Graduate & Research Council met on 10 February 2020 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, new milestones, and minor program revisions for the Faculty of Arts (school of accounting and finance; psychology; economics), Faculty of Applied Health Science (school of social work; school of public health and health systems), and Faculty of Engineering (electrical and computer engineering; management sciences).

GRADUATE AWARDS
On behalf of Senate, council approved the Maks Wulkan Graduate Scholarship (trust), Master Mathematics for Teachers (MMT) Indigenous Scholarship (operating), Kris Bajaj Memorial Scholarship (endowment), and Mary R. Hardy Graduate Award in Actuarial Science (endowment).

UNIVERSITY RESEARCH
On behalf of Senate, council approved:
(1) updates to the Terms of Reference, as presented in Attachment 1, for both the Clinical Research Ethics Committee and the Human Research Ethics Committee—most noteworthy are: now referring to each of these bodies henceforth as a "Board" versus a "Committee", reflecting changes in research ethics staff position titles, being more gender inclusive in membership, ensuring consistency across both terms of reference, and improving the readability of the terms by using clearer and concise language for members;
(2) two new members on the Clinical Research Ethics Board (CREB) and one new member on the Human Research Ethics Board (HREB).

/kw   Jeff Casello   Charmaine Dean
        Associate Vice-President, Graduate Studies and   Vice President, Research & International
        Postdoctoral Affairs

Memorandum

To: **Members**
                Senate Graduate and Research Council

From: **Julie Joza**
                Director, Research Ethics

Date: **February 10, 2020**

Subject: **Updates to terms of reference for the Research Ethics Committees**

The following is information for consideration by the Senate Graduate and Research Council. This memo outlines proposed changes the research ethics committees would like to request be made to their terms of reference. This memo is for both the Clinical Research Ethics Committee (CREC) and the Human Research Ethics Committee (HREC). See attached revisions.

The most notable change to the terms of reference for both CREC and HREC is that the members would like to revise their name to replace "Committee" with "Board". This change would mean Waterloo is better aligned with the standard naming convention used within Canada. Most research ethics committees are research ethics board (REBs) in Canada.

Further updates are being presented to revise both terms of reference to reflect changes in research ethics staff position titles, to be more gender inclusive in membership, ensure consistency in the use of language across both terms of reference, and to improve the readability of the terms by using clearer and concise language for members.

The membership of CREC is also being expanded to include a member with expertise in statistical methodologies. This position was not required previously as former CREC Chair, Dr. Andrea Edginton PhD, Associate Professor, School of Pharmacy provided expertise in this area. As Dr. Edginton is no longer on the committee, the members want to ensure they have the appropriate expertise around the table, thus, a new member position is required.

The membership of CREC is further being expanded to include a graduate student or postdoctoral fellow. This was felt to be important as academic trainees make up a high proportion of both participants and researchers at Waterloo. This new position will help ensure this point of view is taken into consideration during the ethics review process.

UNIVERSITY OF WATERLOO
CLINICAL RESEARCH ETHICS BOARD

TERMS OF REFERENCE
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A.   Statement of Institutional Authority for Research Ethics Boards

The University of Waterloo has two Research Ethics Boards (REBs): the Clinical Research Ethics Board and the Human Research Ethics Board. As constituted sub-committees of the University of Waterloo's Senate Graduate and Research Council, both of the University of Waterloo's REBs are established and empowered under the authority of the University of Waterloo Senate.

B.   Mandate and Accountability of the Research Ethics Boards

The REBs' mandate, on behalf of the University, is to protect the rights and welfare of human participants who take part in research conducted under the auspices of the University. The University of Waterloo's REBs review such research to ensure that it meets ethical principles and that it complies with all applicable regulations, guidelines and standards pertaining to human participant protection. These include but are not limited to the University of Waterloo's Statement on Human Research; its Guidelines for Research with Human Participants (Guidelines) and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, 2nd edition (TCPS 2). For clinical trials, the REBs follow Health Canada's Food and Drugs Act, the International Conference on Harmonization (ICH) Good Clinical Practice: Consolidated Guideline, and where applicable, U.S. federal regulations. The University of Waterloo's REBs also operate under applicable laws and regulations of the Province of Ontario and of Canada.

The University of Waterloo requires that all research involving humans or human biological materials conducted in its jurisdiction or under its auspices, undergo ethics review and clearance by one of its two REBs prior to initiation of any research related activities, including recruitment and screening activities.

The Clinical Research Ethics Board (CREB) has jurisdiction over clinical trials research (i.e., involving a drug or natural health product or is medical device testing) conducted under the auspices of the University of Waterloo, research involving a "controlled act" as defined under the Regulated Health Professionals Act of Ontario, 1991, and other research activities as defined under approved standard operating procedures. The Human Research Ethics Board (HREB) has jurisdiction over all other research involving humans with which the University is affiliated.

C.   Membership of the CREB

Membership shall be consistent with the requirements for REB composition specified in Article 6.4. of the TCPS 2 and ICH Good Clinical Practice: Consolidated Guideline. All REB members shall be competent to judge the ethical acceptability of research ethics applications they review. In accordance with Article 6.3 and Chapter 8 of the TCPS 2, in the interest of fostering a collaborative spirit and appropriate levels of information sharing between both REBs, and to facilitate timely and effective reviews for researchers, members of CREB may be required to serve as reviewers, in either a delegated or ad-hoc sub-committee capacity, for applications

made to HREB if, in the judgment of the Chair of HREB, the application requires expertise which the CREB member has been judged to possess.

To fulfill the mandate of the Board, the membership will be comprised of both voting and non-voting members.

The CREB shall consist of a minimum of 10 voting members:

- three faculty members including
  - one faculty member with expertise in vision science from Optometry
  - one faculty member with expertise in Pharmacology or Immunology/Toxicology from Pharmacy
  - one faculty member with expertise in the science of human movement from Kinesiology
- two clinical physicians knowledgeable about clinical trials research
- one lawyer preferably knowledgeable about clinical trials research and privacy
- one member knowledgeable in ethics/bioethics
- one community member who has no affiliation with the institution
- one member that is a student or post-doctoral fellow preferably with experience in the conduct of research with humans
- one member with expertise in statistical methodologies

The committee must reflect gender diversity, including at minimum both men and women.

Non-voting members of the Board act as resource support, offer expertise and assistance on matters under consideration by the Board, and share information as needed[1]. The following additional members are ex-officio (non-voting):

- Director, Research Ethics
- Senior Manager / Manager, Research Ethics
- Research Ethics Advisor(s), Research Ethics

An alternate community member and an alternate student member may be sought to ensure these positions are represented on the Board at each meeting, whenever possible.

D.   Terms of Office for the CREB

1.   Following consultation with the respective Faculty Deans and Department Chairs/School Directors and the CREB Chair, the Director will nominate members of the CREB.

2.   The Senate Graduate and Research Council shall appoint members of CREB.

3.   The Vice-President Research and International will nominate the Chair and Vice Chair from the CREB membership. The Chair will have a minimum of one year prior experience as a member of the CREB. An additional member may be appointed from the same area of expertise as the Chair. The Vice Chair may discharge the responsibilities of the Chair when the Chair is unable to do so, discharge responsibilities assigned by the Chair and assist in the overall operation of the REB, as requested.

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[1] TCPS 2, Article 6.4 stipulates "where research ethics administration staff have the requisite experience, expertise and knowledge comparable to what is expected of REB members, institutions may appoint them (based on written policies and procedures of the institution) to serve as non-voting members on the REB.

4. Members of the CREB, except the ex-officio members, will serve for a three-year term when possible, normally renewable once. Terms will be overlapping to preserve experience and continuity of function.

E.   Meetings of the CREB

1. The CREB normally will meet face to face eleven times per year. In the absence of any business, meetings may be cancelled by the Manager (or delegate) in consultation with the Chair.

2. Additional meetings of the CREB, or of a sub-committee of its members, may be called by the Manager in consultation with the Chair, as necessary.

3. Each meeting will require the involvement of a quorum defined as half the total voting membership plus one. Quorum must also meet membership criteria specified by relevant research ethics guidelines and regulations. Every effort will be made to ensure that each meeting includes the community member.

4. Members shall normally attend CREB meetings with at least 70% attendance per year. When unexpected circumstances arise that prevent a regular member from attending a CREB meeting in person, arrangements will be made where feasible with the member to participate through use of technology (e.g., telephone or video link). In cases where a regular member cannot attend CREB meetings for a protracted period (e.g., during a 6 month's sabbatical), a substitute member from the same discipline may be appointed to serve during the regular member's absence.

5. Members shall notify the Manager of an anticipated absence at least one day prior to a meeting. Members who cannot attend a meeting are expected to provide written comments or each of the protocols under review at the respective meeting. This information is provided to other members of the CREB and becomes part of the discussion and meeting minutes.

6. At the outset of each meeting, members shall declare any real, perceived or potential conflict(s) of interest related to the applications under review. Examples of conflicts of interest include but are not limited to applications on which they are listed as Principal Investigator (PI) or co-investigator; current or past research collaborations with investigators listed on the application; applications on which students they supervise are listed. Other members of the CREB will decided whether the member with the conflict of interest should recuse themselves from related discussions.

7. The CREB will reach its decisions concerning the ethical acceptability of research that is undergoing ethics review through a process of open discussion and consensus. When members are unable to reach consensus, a vote of the quorum present may be taken and recorded.

8. The CREB's deliberations and decisions will be documented in comprehensive, confidential minutes that are securely maintained. The Research Ethics Advisor, shall serve as secretary to the CREB.

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9. Detailed written feedback from the CREB including its decision on the ethical acceptability of the research shall be communicated to the researcher(s) by the Manager following consultation with the Chair, CREB, in an efficient and timely manner according to standard operating procedures. Feedback is based on minutes of discussion of the research project.

10. The CREB may, where appropriate, request that the PI or his/her designate attend a meeting to provide further information about and/or to discuss his/her research. The CREB will also accommodate reasonable requests from a PI to attend a meeting to participate in discussions about their research.

11. The CREB may seek the confidential opinion or advice of an ad hoc advisor/reviewer from among University of Waterloo faculty or from a confidential external consultant on a particular application to ensure it has the necessary background information and knowledge to review the ethical acceptability of the application.

F.   Responsibilities and Mandates of the CREB

1. To ensure that all research under CREB jurisdiction, involving human participants conducted by students, staff and faculty affiliated with the University of Waterloo, and all clinical trials research conducted at Waterloo by unaffiliated students, staff and faculty researchers, undergo ethics review and clearance prior to being conducted. This research may be conducted on- or off-campus and may be funded or unfunded.

2. To review the ethical acceptability of all research projects, under CREB jurisdiction, involving human participants on behalf of the institution including, but not limited to, those that:
    - may pose greater than minimal risk to participants (i.e., physiological, psychological, economic, social, or other);
    - involve recruitment of persons who may be vulnerable as research participants in the context of a specific study, and/or cannot legally give free and informed consent
    - include ethically sensitive issues, topics and/or procedures; and
    - stipulate full REB review as required by certain granting agencies

The CREB may grant clearance, propose modifications, disapprove, or terminate proposed or ongoing research conducted within the jurisdiction of the University or under its auspices to ensure that a proportionate review of risks and benefits has occurred in accordance with the ethical framework proposed under the TCPS 2.

G.   Delegation of CREB Authority Related to Ethics Review and Clearance

The CREB delegates to the Director, Senior Manager / Manager, and Research Ethics Advisor(s), by virtue of their membership on the CREB, and according to standard operating procedures, authority to conduct:

1. Initial ethics review and clearance of research under its jurisdiction that poses minimal risk to research participants, and includes provision of comprehensive and timely written feedback.

2. Ethics review and clearance of modifications to ongoing research under its jurisdiction that poses minimal risk to research participants, and includes provision of comprehensive and timely written feedback.

3. Annual ethics review and clearance of all research under its jurisdiction that continues beyond one year.

4. Ethics review and clearance of all revised materials and related documents associated with the ethics review feedback process involving minimal and greater than minimal risk research that have been categorized as requiring a review by a sub-committee of the CREB or the full CREB.

H. Delegation of CREB Responsibility for Record Keeping and Research Ethics Education

The CREB ensures with assistance of Research Ethics Staff that:

1. CREB members are provided with opportunities for research ethics education during their tenure on the CREB beginning with a new member orientation session.

2. Comprehensive, accurate records (i.e., paper and electronic) of the initial and continuing (i.e., modifications, annual) ethics review and clearance processes are securely maintained for all research under its jurisdiction. This includes all revised materials associated with initial and continuing ethics review.

3. CREB meeting dates and submission deadlines are easily accessible by researchers through information posted on the Research Ethics website.

4. CREB members receive a monthly report is received on minimal risk research that has undergone ethics review and clearance through the delegated ethics review process by the Research Ethics staff.

5. Timely information and regular reports are received on any unanticipated issues (events) that have occurred in association with research under its jurisdiction.

6. University of Waterloo guidelines, procedures and sample materials related to the conduct of research with humans are reviewed and updated on a regular basis (e.g., annually) to ensure that they remain current in an evolving research ethics environment.

7. Educational activities (e.g., in-class presentations, seminars and workshops) are provided to University of Waterloo students, faculty and staff involved in research with human participants.

8. Legal or other advice is sought, as required, on matters related to the protection of human participants in research.

9. Timely information on guidelines, procedures, and other matters related to the conduct of research with human participants is provided to the CREB as well as student, staff and faculty researchers who conduct research with humans.

G. Reconsideration and Appeal of CREB Decisions

1. Reconsideration Process

A Principal Investigator (PI) may make a written request for reconsideration of a CREB decision when ethics clearance is not granted, or when ethics clearance is conditional on revisions that the PI believes may jeopardize the feasibility or integrity of the research. In consultation with the Chair, the Director (or delegate) will refer such a request, including documentation and supporting materials received for reconsideration from the PI, to other members of the CREB for discussion at its next meeting. The CREB will review the written documents, and where appropriate, will request an informal meeting with the PI (or their designate). Following consideration of all additional information (verbal and written), the CREB will reach a final decision with respect to its position on the original decision. Every attempt will be made, in consultation with the PI to reach a resolution by this informal route.

2. Appeal Process

In the event the matter cannot be resolved through a reconsideration or informal process, the institution shall provide the PI with prompt access to an established appeal process through which the PI may appeal the CREB's decision. An appeal can be requested for procedural or substantive reasons. An appeal committee shall be appointed through the same authority that established the REB, ensuring that members of the appeal committee will have expertise and knowledge to be able to competently judge the ethical acceptability of the research ethics application under review. Members of the CREB whose decision is under appeal shall not serve on the appeal committee. The appeal committee will act impartially in its review of documentation provided by the CREB and the PI (or designate), and will consult with others as required, including but not limited to, members of the CREB and the PI (or designate). The appeal committee will issue a written report with its decision on the matter with copies to the PI and CREB. It may approve, reject or request modifications to the research proposal. The appeal committee's decision will be final.

UNIVERSITY OF WATERLOO
HUMAN RESEARCH ETHICS BOARD

TERMS OF REFERENCE
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A.   Statement of Institutional Authority for Research Ethics Boards

The University of Waterloo has two Research Ethics Boards (REBs): the Human Research Ethics Board and the Clinical Research Ethics Board. As constituted sub-committees of the University of Waterloo's Senate Graduate and Research Council, both of the University of Waterloo's REBs are established and empowered under the authority of the University of Waterloo Senate.

B.   Mandate and Accountability of the Research Ethics Boards

The REBs' mandate, on behalf of the University, is to protect the rights and welfare of human participants who take part in research conducted under the auspices of the University. The University of Waterloo's REBs review such research to ensure that it meets ethical principles and that it complies with all applicable regulations, guidelines and standards pertaining to human participant protection. These include but are not limited to the University of Waterloo's Statement on Human Research; its Guidelines for Research with Human Participants (Guidelines) and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, 2nd edition (TCPS 2). For clinical trials, the REBs follow Health Canada's Food and Drugs Act, the International Conference on Harmonization (ICH) Good Clinical Practice: Consolidated Guideline, and where applicable, U.S. federal regulations. The University of Waterloo's REBs also operate under applicable laws and regulations of the Province of Ontario and of Canada.

The University of Waterloo requires that all research involving humans or human biological materials conducted in its jurisdiction or under its auspices, undergo ethics review and clearance by one of its two REBs prior to initiation of any research related activities, including recruitment and screening activities.

The Human Research Ethics Board (HREB) has jurisdiction over research involving humans conducted under the auspices of the University of Waterloo with the exception of research that is reviewed by the Clinical Research Ethics Board (CREB). CREB has jurisdiction over clinical trials research (i.e., involving a drug or natural health product or medical device testing), research involving a "controlled act" as defined under the Regulated Health Professionals Act of Ontario, 1991, and other research activities as defined under approved standard operating procedures.

C.   Membership of the HREB

Membership shall be consistent with the requirements for REB composition specified in Article 6.4. of the TCPS 2 and ICH Good Clinical Practice: Consolidated Guideline. All Committee members shall be competent to judge the ethical acceptability of research ethics applications they review. Members of HREB may be required to serve as reviewers, in either a delegated or an ad-hoc sub-committee capacity for applications made to CREB. This is in accordance with Article 6.3 and Chapter 8 of the TCPS 2, encouraging collaboration and information sharing between both REBs, and facilitating timely and effective reviews for researchers. The CREB

chair will determine if the application requires expertise that the HREB member has been judged to possess.

To fulfill the mandate of the Board, the membership will be comprised of both voting and non-voting members.

The HREB shall consist of a minimum of 12 voting members.

- six faculty members including:
  - one member with expertise in clinical psychology
  - one member with expertise in the science of human movement
  - one member with expertise in the methods or processes used in engineering/technology research for the conduct of research with humans
  - one member with expertise in statistical methodologies
  - one member with expertise in qualitative methodologies
  - Chair of the Delegated Ethics Review Committee (DERC)[1] from the Department of Psychology (ex-officio)
- one member who is knowledgeable in the relevant law and privacy
- two graduate students preferably with experience in the conduct of research with humans
- two members of the community who have no affiliation with the institution
- Medical Director, University of Waterloo Health Services (ex-officio)

The committee must reflect gender diversity, including at minimum both men and women.

Non-voting members of the Board act as resource support, offer expertise and assistance on matters under consideration by the Board, and share information as needed[2]. The following additional members are ex-officio, non-voting:

- Director, Research Ethics Senior Manager/Manager, Research Ethics
- Research Ethics Advisor(s)
- Research Experiences Group (REG) Coordinator and Ethics Administrator for DERC

Faculty members of DERC also serve on HREB as alternate members. When serving as an alternate member they may vote and count in quorum.

D.   Terms of Office of the HREB

1.   Following consultation with the respective Faculty Deans and Department Chairs/School Directors and the HREB Chair, the Director will nominate members of the HREB.

2.   The Senate Graduate and Research Council shall appoint members of HREB.

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[1] DERC (Psychology) operates under the auspices of HREB with the sole purpose of conducting delegated reviews within Psychology under the Delegated Ethical Review Committee (Psychology) terms of reference.

[2] TCPS 2, Article 6.4 stipulates "where research ethics administration staff have the requisite experience, expertise and knowledge comparable to what is expected of REB members, institutions may appoint them (based on written policies and procedures of the institution) to serve as non-voting members on the REB.

3. The Vice-President Research and International will nominate the Chair and Vice Chair from the HREB membership. The Chair will have a minimum of one-year prior experience as a member of the HREB. An additional member may be appointed from the same area of expertise as the Chair. The Vice Chair may discharge the responsibilities of the Chair when the Chair is unable to do so, discharge responsibilities assigned by the Chair, and assist in the overall operation of the REB, as requested.

4. Members of the HREB, except ex-officio members, will serve for a three-year term, when possible, normally renewable once. Terms will be overlapping to preserve experience and continuity of function.

E. Meetings of the HREB

1. The HREB normally will meet face to face eleven times per year. In the absence of any business, meetings may be cancelled by the Manager in consultation with the Chair.

2. Additional meetings of the HREB, or of a sub-committee of its members, may be called by the Manager in consultation with the Chair, as necessary.

3. Each meeting will require the involvement of a quorum defined as half the total voting membership plus one. Quorum must also meet membership criteria specified by relevant research ethics guidelines and regulations. Every effort will be made to ensure that each meeting includes at least one community member.

4. Members shall normally attend HREB meetings with at least 70% attendance per year. When unexpected circumstances arise that prevent a regular member from attending an HREB meeting in person, arrangements will be made where feasible with the member to participate through use of technology (e.g., telephone or video link). In cases where a regular member cannot attend HREB meetings for a protracted period (e.g., during a 6 month's sabbatical), a substitute member from the same discipline may be appointed to serve during the regular member's absence.

5. Members shall notify the Manager of an anticipated absence at least one day prior to a meeting. Members who cannot attend a meeting are expected to provide written comments for each of the protocols under review at the respective meeting. This information is provided to other members of the HREB and becomes part of the discussion and meeting minutes.

6. At the outset of each meeting, members shall declare any real, perceived or potential conflict(s) of interest related to the applications under review. Examples of conflicts of interest include but are not limited to applications on which they are listed as principal investigator or co-investigator; current or past research collaborations with investigators listed on the application; applications on which students they supervise are listed. Other members of the HREB will decide whether the member with the conflict of interest should recuse themselves from related discussions.

7. The HREB will reach its decisions concerning the ethical acceptability of research that is undergoing ethics review through a process of open discussion and consensus. When members are unable to reach consensus a vote of the quorum present will be taken and recorded.

8. The HREB's deliberations and decisions will be documented in comprehensive, confidential minutes that are securely maintained. The Research Ethics Advisor, shall serve as secretary to the HREB.

9. Detailed written feedback from the HREB including its decision on the ethical acceptability of the research shall be communicated to the researcher(s) by the Manager, following consultation with the Chair, HREB, in an efficient and timely manner according to standard operating procedures. Feedback is based on minutes of discussion of the research project.

10. The HREB may, where appropriate, request that the Principal Investigator (PI) or his/her designate attend a meeting to provide further information about and/or to discuss his/her research. The HREB will also accommodate reasonable requests from a PI to attend a meeting to participate in discussions about their research.

11. The HREB may seek the confidential opinion or advice of an ad hoc advisor/reviewer from among University of Waterloo faculty or from a confidential external consultant on a particular application to ensure it has the necessary background information and knowledge to review the ethical acceptability of the application.

F.   Responsibilities and Mandates of the HREB

1. To ensure that all research under HREB jurisdiction or teaching projects involving human participants and conducted by students, staff and faculty affiliated with the University of Waterloo, and all research conducted at Waterloo by unaffiliated students, staff and faculty researchers, undergo ethics review and clearance prior to being conducted. These activities may be conducted on- or off-campus and may be funded or unfunded.

2. To review the ethical acceptability of all research projects, under HREB jurisdiction, involving human participants on behalf of the institution including, but not limited to, those that
    - may pose greater than minimal risk to participants (i.e., physiological, psychological, economic, social, or other);
    - involve recruitment of persons who may be vulnerable as research participants in the context of a specific study, and/or cannot legally give free and informed consent
    - include ethically sensitive issues, topics and/or procedures; and
    - stipulate full REB review as required by certain granting agencies.

The HREB may grant ethics clearance, propose modifications, disapprove, or terminate proposed or ongoing research conducted within the jurisdiction of the University or under its auspices to ensure that a proportionate review of risks and benefits has occurred in accordance with the ethical framework proposed under the TCPS 2.

G.   Delegation of HREB Authority Related to Ethics Review and Clearance

The HREB delegates to the Director and Senior Manager/Manager, and Research Ethics Advisor(s), by virtue of their membership on the HREB, and according to Standard Operating Procedures, authority to conduct:

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1. Initial ethics review and clearance of research under its jurisdiction that poses minimal risk to research participants, and includes provision of comprehensive and timely written feedback.

2. Ethics review and clearance of modifications to ongoing research under its jurisdiction that poses minimal risk to research participants, and includes provision of comprehensive and timely written feedback.

3. Annual ethics review and clearance of research under its jurisdiction that continues beyond one year.

4. Ethics review and clearance of all revised materials and related documents associated with the ethics review feedback process involving minimal and greater than minimal risk research with the exception of applications that have been categorized as requiring a review by a sub-committee of the HREB or the full HREB.

H. Delegation of HREB Responsibility for Record Keeping and Research Ethics Education

The HREB ensures with assistance of Research Ethics Staff that:

1. HREB members are provided with opportunities for research ethics education during their tenure on the HREB beginning with a new member orientation session.

2. Comprehensive, accurate records (i.e., paper and electronic) of the initial and continuing (i.e., modifications, annual) ethics review and clearance processes are securely maintained for all research under its jurisdiction. This includes all revised materials associated with initial and continuing ethics review.

3. HREB meeting dates and submission deadlines are easily accessible by researchers through information posted on the Research Ethics website.

4. HREB members receive a monthly report on minimal risk research that has undergone ethics review and clearance through the delegated ethics review process by the Research Ethics Staff.

5. Timely information and regular reports are received on any unanticipated issues (events) that have occurred in association with research under its jurisdiction.

6. University of Waterloo guidelines, procedures and sample materials related to the conduct of research with humans are reviewed and updated on a regular basis (e.g., annually) to ensure that they remain current in an evolving research ethics environment.

7. Educational activities (e.g., in-class presentations, seminars and workshops) are provided to University of Waterloo students, faculty and staff involved in research with human participants.

8. Legal or other advice is sought, as required, on matters related to the protection of human participants in research.

9. Timely information on guidelines, procedures, and other matters related to the conduct of research with human participants is provided to the HREB as well as student, staff and faculty researchers who conduct research with humans.

I. **Reconsideration and Appeal of HREB Decisions**

1. Reconsideration Process

   A Principal Investigator (PI) may make a written request for reconsideration of an HREB decision when ethics clearance is not granted, or when ethics clearance is conditional on revisions that the PI believes may jeopardize the feasibility or integrity of the research. In consultation with the Chair, the Director (or delegate) will refer such a request, including documentation and supporting materials received for reconsideration from the PI, to other members of the HREB for discussion at its next meeting. The HREB will review the written documents, and where appropriate, will request an informal meeting with the PI (or their designate). Following consideration of all additional information (verbal and written), the HREB will reach a final decision with respect to its position on the original decision. Every attempt will be made in consultation with the PI to reach a resolution by this informal route.

2. Appeal Process

   In the event the matter cannot be resolved through a reconsideration or informal process, the institution shall provide the PI with prompt access to an established appeal process through which the PI may appeal the HREB's decision. An appeal can be requested for procedural or substantive reasons. An appeal committee shall be appointed through the same authority that established the REB, ensuring that members of the appeal committee will have expertise and knowledge to be able to competently judge the ethical acceptability of the research ethics application under review. Members of the HREB whose decision is under appeal shall not serve on the appeal committee. The appeal committee will act impartially in its review of documentation provided by the HREB and the PI (or designate), and will consult with others as required, including but not limited to, members of the HREB and the PI (or designate). The appeal committee will issue a written report with its decision on the matter with copies to the PI and HREB. It may approve, reject or request modifications to the research proposal. The appeal committee's decision will be final.

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University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Report to Senate
30 March 2020

Senate Graduate & Research Council met on 10 February 2020 and agreed to forward the following item to Senate for approval as part of the regular agenda [Note: this report was moved to the consent agenda of the 30 March 2020 meeting.]

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 Arts
Motion: To approve the program name change of the Master of Applied Science (MASc) in Applied Psychology to the Master of Applied Science (MASc) in Industrial and Organizational Psychology, effective 1 May 2020, as presented at Attachment 1. As a result of this change, the Department of Psychology also seeks approval to remove the "Industrial/Organizational Psychology" graduate research field from the program as it will be redundant.

Rationale: The proposed change would make the name of the MASc program consistent with the graduate research field in the Doctoral program (i.e., I/O and not Applied Psychology) and also make the program clearer to both students and graduate studies administrators outside of the Department of Psychology. This would also more easily distinguish it from the other MASc program in Psychology - Developmental and Communication Science. This will not change the learning outcomes, courses, or program requirements.

/kw   Jeff Casello   Charmaine Dean
        Associate Vice-President, Graduate Studies and   Vice President, Research & International
        Postdoctoral Affairs

UNIVERSITY OF WATERLOO

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**Graduate Studies
Program Revision Template**

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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 (GSPA).

Faculty: Arts

Program: Master of Applied Science (MASc) in Applied Psychology

Program contact name(s): Jonathan Fugelsang

Form completed by: Jonathan Fugelsang

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).

We would like to change the program name of the Master of Applied Science (MASc) in Applied Psychology to the Master of Applied Science (MASc) in Industrial and Organizational Psychology. As a result of this change, we would also like to remove the "Industrial/Organizational Psychology" graduate research field from the program as it will be redundant.

Is this a major modification to the program? Yes

Rationale for change(s):

This would make the name of the MASc program consistent with the graduate research field in the Doctoral program (i.e., I/O and not Applied Psychology) and also make the program clearer to both students and graduate studies administrators outside of the Department. This would also more easily distinguish it from our other MASc program in Psychology - Developmental and Communication Science. This won't change the learning outcomes, courses, or program requirements.

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/arts/department-psychology/master-applied-science-masc-applied-psychology

Current Graduate Studies Academic Calendar content:	Proposed Graduate Studies Academic Calendar content:
MASTER OF APPLIED SCIENCE (MASC) IN ~~APPLIED~~ PSYCHOLOGY ~~**Graduate research fields**~~ • ~~**Industrial/Organizational Psychology**~~	**MASTER OF APPLIED SCIENCE (MASC) IN <u>INDUSTRIAL AND ORGANIZATIONAL</u> PSYCHOLOGY**

How will students currently registered in the program be impacted by these changes?

Students currently registered will have the option to have Applied Psychology rather than Industrial and Organizational Psychology degree name listed on their transcript. Currently registered students will be notified of this option.

Department/School approval date (mm/dd/yy): 08/23/19

Reviewed by GSPA (for GSPA use only) ☒ date (mm/dd/yy): 09/13/2019

Faculty approval date (mm/dd/yy): (11/26/2019)

Senate Graduate & Research Council (SGRC) approval date (mm/dd/yy):

Senate approval date (mm/dd/yy) (if applicable):

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University of Waterloo
SENATE UNDERGRADUATE COUNCIL
Report to Senate
30 March 2020

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Senate Undergraduate Council met on 11 February 2020 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

FOR APPROVAL

ACADEMIC PLAN CHANGES

Faculty of Applied Health Sciences
Recreation and Leisure Studies

1. **Motion:** That Senate approve the admission, transfer credit and progression requirements outlined in the articulation agreement (see Attachment #1) with Conestoga College for students in the School of Community Services, Recreation and Leisure Services transferring into the Recreation and Leisure Studies program at the University of Waterloo.

Background and Rationale: This articulation agreement facilitates the process of transfer student pathways by outlining progression, admission, and transfer credit information. Highlights are as follows:
- This is a new articulation agreement between the University of Waterloo and Conestoga College governing the transfer of students from the School of Community Services, Recreation and Leisure Services (Two (2) year Ontario College Diploma) program at Conestoga College to the Department of Recreation and Leisure Studies, Honours Bachelor of Arts, Recreation and Leisure Studies (Four (4) year) program at the University of Waterloo. The admission requirement is 75% overall with up to 7.5 units of transfer credit for courses with a minimum 70% or higher.
- Students in School of Community Services, Recreation and Leisure Services (Two (2) year Ontario College Diploma) program will be able to take advantage of this pathway effective upon the signing of this agreement.
- This articulation agreement between the two institutions is expected to increase transfer student enrolment to the Recreation and Leisure Studies programs by simplifying the transfer process and improving the transparency of transfer credit assessment.
- The agreement will be reviewed annually, in March by the partners, and adjusted, as necessary for program changes at the partner institutions.

FOR INFORMATION

ACADEMIC PROGRAM REVIEWS

Final Assessment Report – English Language Studies. Following discussion regarding some of the challenges and the implementation plan, Council approved the final assessment report on behalf of Senate. See Attachment #2.

Final Assessment Report – Italian Studies. Following discussion regarding the quality of the report and benefit of the review exercise, Council approved the final assessment report on behalf of Senate. See Attachment #3.

Two-Year Report – Engineering. Following discussion regarding resolution of the findings, Council approved the two-year report on behalf of Senate. See Attachment #4.

MINOR PLAN & CURRICULAR MODIFICATIONS
Council approved the following on behalf of Senate:
- minor plan changes for engineering (architecture); Renison (bachelor of social work); science (pharmacy).
- new courses for the faculty of environment (school of environment, resources & sustainability, knowledge integration).
- course changes for engineering (architecture); environment (dean of environment, school of environment, resources & sustainability, school of planning, school of environment, enterprise & development, international development); Renison (bachelor of social work); science (optometry).

David DeVidi
/rmw Associate Vice-President, Academic

Articulated Admission and Transfer Credit Agreement

between

University of Waterloo
Faculty of Applied Health Sciences
Waterloo, Ontario, Canada

and

Conestoga College Institute of Technology and Advanced Learning
School of Community Services
Kitchener, Ontario, Canada

WHEREAS, University of Waterloo and Conestoga College Institute of Technology and Advanced Learning have developed this transfer credit agreement (the "Agreement") with the purpose of facilitating the educational mobility and transfer of students from Conestoga College Institute of Technology and Advanced Learning to University of Waterloo.

WHEREAS, University of Waterloo and Conestoga College Institute of Technology and Advanced Learning enter into this Agreement as cooperating, equal partners who shall maintain the integrity of their separate programs while working to ensure a smooth curriculum transition for interested and qualified students.

NOW THEREFORE in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficient of which is hereby acknowledged, the parties covenant and agrees as follows:

Definitions

In this Agreement, the following terms shall have the following meanings:

"Waterloo" shall mean the University of Waterloo;
"Conestoga" shall mean Conestoga College Institute of Technology and Advanced Learning;
"REC" shall mean the Recreation and Leisure Studies at Faculty of Applied Health Sciences, Waterloo;
"RLS" shall mean Recreation and Leisure Services at Conestoga.

Article I
Organization Information

Sending Organization
Conestoga
School of Community Services
Recreation and Leisure Services – (Two (2) year Ontario College Diploma)

Receiving Organization
Waterloo
Faculty of Applied Health Sciences
- Honours Bachelor of Arts, Recreation and Leisure Studies (Four (4) year program)

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Article II
Terms of Agreement

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This Agreement shall be effective from the date of signing, and expires on 30 June 2024 unless renewed in accordance with the "**Terms for Renewal or Cancellation**" section within this Agreement.

The terms of cooperation for each specific activity implemented under this Agreement, including any financial aspects, will be mutually discussed and signed-off by official representatives of both institutions prior to the initiation of that activity.

It is not the intent of this Agreement to create a legally binding partnership, and the participating institutions do not intend to impose financial obligations upon one another. Neither institution has the right to assign any duty or responsibility arising from the Agreement to another institution or individual without the written consent of the other participant.

Intellectual Property Rights

The two institutions here named have independent intellectual property policies:

University of Waterloo

Conestoga College

Students participating in this pathway will fall under the IP policy of the institution that they are attending in accordance with the schedule of attendance at the two institutions.

Indemnification

Conestoga shall indemnify and hold Waterloo, its governors, officers, faculty, students, employees, independent contractors, and agents harmless in respect of any claim, demand, action, cause of action, damage, loss, injury, cost, liability or expense, which may be made or brought against Waterloo or which Waterloo may suffer or incur as a result of or arising out of any breach or non-fulfillment of any representations, warranties, covenants, or other contractual obligations under this agreement or any negligence or willful misconduct on the part of Conestoga or anyone for whom Conestoga is responsible at law. Conestoga agrees that the foregoing indemnity shall survive the termination of this Cooperation Agreement notwithstanding any provisions of this Cooperation Agreement to the contrary. Students are not employees of Conestoga or Waterloo for the purposes of this arrangement.

Waterloo shall indemnify and hold Conestoga, its officers, students, employees, independent contractors, and agents harmless in respect of any claim, demand, action, cause of action, damage, loss, injury, cost, liability or expense, which may be made or brought against Conestoga or which Conestoga may suffer or incur as a result of or arising out of any breach or non-fulfillment of any representations, warranties, covenants, or other contractual obligations under this Cooperation Agreement or any negligence or willful misconduct on the part of Waterloo or anyone for whom Waterloo is responsible at law. Students are not employees of Conestoga or Waterloo for the purposes of this arrangement.

Miscellaneous

Items not covered by this Agreement may be determined and negotiated separately by both institutions without abrogating this Agreement. This Agreement does not prevent additional agreements between the institutions.

The participating institutions will ensure that all in-progress articulation activities will have the opportunity to be completed within a reasonable time frame; however, no new articulations will be undertaken after the expiration date.

Terms for Renewal or Cancellation

This agreement will be reviewed annually in March by a committee to ensure that the academic standards of each institute are being adequately met. The committee will be comprised of representation from the partner institutes, and shall ensure that no program or policy changes have occurred that may affect the accuracy of this Agreement, and agree on necessary changes to the Agreement. Two (2) members from both institutes shall be appointed. The committee shall conduct a minimum of one (1) meeting per year, and may include participation by video or audio conferencing.

Beginning in March 2024, and in March every three (3) years thereafter for which this Agreement has been extended, the committee will review performance pursuant to this Agreement. As part of the review, the committee shall incorporate an evaluation of cooperation and a recommendation of necessary changes (where applicable). As a result of the review, the parties may agree to extend this Agreement for an additional three years, beginning on 1 July of the then current year and expiring on 30 June of the third year thereafter. Such extension of this Agreement may be done with or without amendment. If no agreement is reached on extension of this Agreement by 15 June of the then current year, then this Agreement shall expire on 30 June of the then current year.

Any amendments to and renewals of this Agreement shall be done with a view to the integrity of each party's academic programs, as well as to improve the processes and student articulation implemented under this Agreement, with a view overall to student success. The Agreement may be amended only in writing signed by all parties.

Termination of the agreement, with or without statement of the reasons for termination may be made in writing at any time and shall incorporate a six (6) month notice.

The parties agree that in the event of revision, expiration or termination of this Agreement, students enrolled in the program will have the opportunity to complete the program under the terms of this Agreement.

Program and Policy Changes

Conestoga and Waterloo agree to communicate any substantive changes at the annual review to their program including changes in admission standards, graduation requirements, curriculum, course offerings, length of program, hours of instruction, delivery method, co-op or work-integrated learning (where applicable). Substantive change is any change that alters learning outcomes, admission or graduation requirements, or delivery.

Conestoga and Waterloo agree to communicate any policy changes at the annual review which may affect the agreed upon relationship. Such policy changes will be considered during discussions at the time this Agreement is reviewed, as referred to above.

Organizational Contacts

The below named individuals are responsible for the development, maintenance and coordination of the Agreement. All notices or communications should be directed to the below named persons.

Sending organization:
Kim Carr
Academic Agreements and Pathways Officer
Conestoga College Institute of Technology and Advanced Learning
299 Doon Valley Drive
Kitchener, ON, N2G 4M4
Phone: 519-748-5220 Ext. 3198
Email: kacarr@conestogac.on.ca

Receiving organization:
Heather O'Leary
Manager, Admissions Pathways
University of Waterloo
200 University Avenue West
Waterloo, ON, N2L 3G1
Phone: 519-888-4567 Ext. 43207
Email: heather.oleary@uwaterloo.ca

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Article III
Agreement Information

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Type of Agreement
Articulated Admission and Transfer Credit Agreement

Transfer Pathway Progression Recreation and Leisure Services Diploma (Two (2) year)
The following table depicts typical progression for students moving from RLS into the REC, Regular program. The sequence will depend on which program the student is following and the number of courses taken per term.

Academic year:	1			2			7.5 units of Transfer Credit	3			4			5
Program:	Conestoga RLS		Off	Conestoga RLS		Off		Waterloo RLS		Off	Waterloo RLS		Off	Waterloo RLS
Academic term:	F	W	S	F	W	S		2B	3A	S	3B	4A	S	4B
Units per term:								2.5	2.5		2.5	2.5		2.5
Unit totals:								**10.0**	**12.5**		**15.0**	**17.5**		**20.0**

Co-op note: Since 7.5 units of transfer credits offered through this agreement, the co-op program is not available due to sequencing issues and the number of credits transferred. Any student interested in co-op should contact their REC academic advisor before they arrive in their first fall term on campus.

Admission Requirements

Recreation and Leisure Services

This agreement recognizes that a student who has completed a diploma at Conestoga in the two (2) year RLS program, with a minimum average of 75%, including a minimum of 70% in an acceptable English writing course (COMM 1085), will be eligible for admission into Rec with transfer credits as outlined in this Agreement.

Using the 105 form on the Ontario Universities' Application Centre (OUAC), applicants will apply to the Honours Recreation and Leisure Studies (WX OUAC code) program at Waterloo. Conestoga applicants will be required to submit their high school transcript and all post-secondary transcripts, including their final Conestoga transcript showing graduation from the program.

Conestoga graduates will be considered in the same applicant pool as other external transfer students, but will be given preferential consideration over all other college Recreation and Leisure Services programs where agreements do not exist. Each student's application and academic record will be assessed on an individual basis.

This Agreement recognizes the high quality of courses that Conestoga students currently take and the confidence Waterloo's Faculty of Applied Health Sciences has in considering Conestoga graduates for admission.

Transfer Credit Recreation and Leisure Services

Conestoga RLS diploma graduates are eligible for up to 7.5 units of transfer credit (equivalent of 15 courses of 0.5 unit weight).

Transfer credit according to the outline below will be offered to qualified students, transferring from the Conestoga RLS program into the Rec program at Waterloo.

Conestoga Course Code	Conestoga Course Title	UW Course Code	Credit Weight
PSYC1040	Developmental Psychology	SDS 150R	0.50
REC1060	Group Dynamics for Recreation	SPCOM 1XX	0.50
REC1080	Dynamics of Leadership	SPCOM 227	0.50
REC1090	Program Planning	REC 120	0.50
REC2170	Community Research and Planning		
REC2180	Program Design and Development		
REC1130	Introduction to Field of Recreation and Leisure	REC 101	0.50
REC1140	Volunteerism in Recreation & Leisure	REC 319	0.50
REC2100	Special Event and Festival Planning		
REC2010	Community Development	REC 2XX	0.50
REC2150	Inclusive and Therapeutic Recreation	REC 252	0.50
REC2160	Leisure Education in Recreation and Therapeutic Settings	REC 2XX	0.50
REC2200	Advanced Therapeutic Practices in Recreation	REC 2XX	0.50
REC2210	Community Evaluation and Service Enhancement	REC 420	0.50
REQUIRED COURSES UNITS TRANSFERRED: UP TO			**5.50**

1 OUT OF THE FOLLOWING 3 COURSES			
REC1150/FPLT1270	Fundamentals of Practice	REC 253 and/or REC 312	0.50
REC2190/FPLT2300	Expansion of Practice		
REC2220/FPLT2310	The Emerging Professional		
PRACTICUM COURSE UNITS TRANSFERRED: **UP TO**			**0.50**

Conestoga Course Code	Conestoga Course Title	UW Course Code	Credit Weight
LIBS 1110	World Religions	RS 100	0.50
LIBS 1170	Introduction to Astronomy	SCI 237	0.50
LIBS 1180	Issues in World Affairs	PSCI 150	0.50
LIBS 1420	Issues in Canadian Politics	PSCI 260	0.50
LIBS 1500	Aesthetics and Visual Cultures	VCULT 1XX	0.50
LIBS 1650	Quest for Wisdom	PHIL 1XX	0.50
LIBS 1660	Viewing Philosophy Through Film	PHIL 1XX	0.50
LIBS 1690	Applied Organizational Behavior	PSYCH 238	0.50
LIBS 1910	Environmental Science	SCI 2XX	0.50
SOC 1030	Sociology I	SOC 101	0.50
LIBERAL STUDIES ELECTIVE COURSE UNITS TRANSFERRED: **UP TO (3 COURSES)**			**1.5**
TOTAL UNITS TRANSFERRED: **UP TO**			**7.50**

Other Liberal Studies elective courses offered by Conestoga may be assessed and awarded for transfer by the University of Waterloo and are not limited to those assessed and listed in the chart above. Up to 1.5 units of Liberal Studies elective courses may be awarded into RLS program at Waterloo.

The transfer credit assessment outlined in the chart above applies only to the pathway articulated in this Agreement. If students transfer to another plan at Waterloo, admission and transfer credits will be re-assessed and transfer credits may be reduced.

Transfer credit requirements:

Transfer credits, up to a maximum of 7.5 units, will be awarded for courses (listed above) in which a minimum grade of B- (70%) has been achieved.

In order to receive the transfer credit for REC 253 and/or REC 312 a grade of B- (70%) must be achieved in either REC1150/FPLT1270 or REC2190/FPLT2300 or REC2220/FPLT2310 AND a grade of 70% must be achieved in their respective WORK course. Applicants should submit documentation outlining following criteria to adequately document their practicum achievement.

- Name of placement setting
- Name and credentials of placement supervisor
- Dates of placement and number of hours
- Evaluation from placement supervisor – must have satisfactory rating (minimum)
- Numeric grade for academic components (course cannot be P/F)

Credits that must be achieved at the receiving organization:

Credits are as outlined by the Faculty of Applied Health Sciences graduation requirements at Waterloo. All Faculty of Applied Health Sciences Four (4)year degrees require a minimum of 40 courses of 0.5 unit credit weight, for a minimum total of 20 units.

Credential(s) to be granted on successful completion of all required components:

- Honours Bachelor of Arts (Four (4) year program)
    - Recreation and Sport Business
    - Recreation and Leisure Studies
    - Therapeutic Recreation
    - Tourism Development

Article IV
Communication and Marketing

Communication

The Chair of Human Services, School of Community Services at Conestoga shall be responsible for the ongoing communication and monitoring of the Agreement at Conestoga. Waterloo will designate an individual responsible for this Agreement at Waterloo.

These individuals will work together to develop marketing and recruitment strategies for this Agreement. Furthermore, the two individuals will co-ordinate annual pathway reviews.

Positioning

Opportunities pursuant to this Agreement will be advertised in the respective University and College promotional materials. Conestoga and Waterloo will exchange, where applicable, such items as marketing publications, academic calendars, student guides, housing information, course outlines, and/or research materials.

Each party will obtain the other's consent before issuing any official media releases and/or marketing or promotional materials relating to this Agreement and/or incorporating the other party's name or logo(s).

Conestoga agrees to inform its students of this Agreement in order to provide opportunity for eligible graduates of the RLS program to apply to the REC program and apply for transfer of credit. Conestoga agrees to set aside class time for promotion of this Agreement during the winter term of the first and second years of the RLS program.

Signatories

This Agreement is effective upon signature of all parties. The signatories hereby warrant that they have express and sufficient authority to execute this Agreement on behalf of the institutions on whose behalf they have signed.

For University of Waterloo   **For Conestoga College ITAL**

_____   _____

Dr. James Rush   Dr. Barbara Kelly
Vice-President Academic & Provost   Vice President, Academic / Student Affairs and Human
University of Waterloo   Resources
                                                   Conestoga College ITAL
I have authority to bind the Corporation.

                                              I have authority to bind the Corporation.

_____   _____

Date   Date

_____   _____

Dr. Lili Liu   Jacinda Reitsma
Dean of Applied Health Sciences   Vice President, Finance and Corporate Services
University of Waterloo   Conestoga College ITAL

I have authority to bind the Corporation.   I have authority to bind the Corporation.

_____   _____

Date   Date

Final Assessment Report
English Language Studies
November 2019

Executive Summary

External reviewers were satisfied with the programs in English Language Studies, including the Certificate in English for Multilingual Speakers, delivered by the Department of Cultural and Language Studies at Renison University College.

> "The Certificate in English for Multilingual Speakers (EMLS) and related EMLS credit courses offered through English Language Studies (ELS) at Renison University College appear to be in good standing. Students, both undergraduate and graduate, consistently expressed appreciation for the dedication and enthusiasm of the ELS teaching team in providing engaging in-class sessions and detailed feedback both in and outside of the EMLS courses."

A total of 4 recommendations were provided by the reviewers, pertaining to reviewing workload of teaching staff, fostering research expertise, and marketing the EMLS program across campus. 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 2024-2025.

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 programs in English Language Studies, including the Certificate in English for Multilingual Speakers, delivered by the Department of Culture and Language Studies. A self-study (Volumes I, II, III) was submitted to the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs on August 11, 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). Appended to Volume I were the course outlines for all courses in the program. The CVs for each faculty member with a key role in the delivery of the program(s) were included in Volume II of the self-study.

From Volume III, two arm's-length reviewers were selected by the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs: Dr. Carol Acton, Professor of English Language and Literature, and Dr. Carolyn MacGregor, Professor of Systems Design Engineering.

Reviewers appraised the self-study documentation and conducted a site visit on March 13, 2018. The visit included interviews with the Associate Vice-President, Academic; President and Vice-Chancellor and the Academic Dean of Renison University College; Acting Chair of the Department of Culture and Language Studies; Director of English Language Studies, as well as a number of faculty and staff. The reviewers also had the opportunity to meet with representatives from the library, and current undergraduate and graduate students.

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 Studies (ELS) offers English for Multilingual Speakers (EMLS) credit courses and certificates at both the undergraduate and graduate levels.

The Undergraduate Certificate in English for Multilingual Speakers is intended for undergraduate students whose first language is not English to demonstrate their commitment to mastering English communication skills. Requirements include three EMLS courses (1.5 credits) and a cumulative average of 70%. Likewise, the Graduate Certificate in English for Multilingual Speakers is intended for graduate students whose first language is not English to demonstrate their commitment to mastering English communication skills. Requirements include three EMLS courses (1.5 units) and a cumulative average of 60%.

EMLS courses are open to University of Waterloo (UW) students, from all faculties, who self-identify as English language learners. EMLS courses are English language communication skills courses.

At the undergraduate level, EMLS courses are embedded within several University of Waterloo programs and initiatives. These are the most notable:

- The Math Faculty's Communication Skills Initiative requires all undergraduate Math students to complete two communication skills courses within the first two years of study. Math students whose first language is not English may choose to take EMLS courses to satisfy this requirement.
- EMLS participation in the Arts First program

At the graduate level, EMLS courses are frequently used to support the English language communication skills of students whose English language proficiency scores (from, for example, the Test of English as a Foreign Language [TOEFL] or the International English Language Testing System [IELTS] exams) are slightly below admission standards as determined by their admitting departments.

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

Strengths

- The strength of the ELS unit lies in its teaching. In the 2016-2017 academic year, instructors in ELS taught 1,744 students in 84 sections, and teaching evaluations are strong. Survey data indicate students clearly see the relevance of their EMLS courses to their other academic courses. In this way, ELS fulfills its mission to support undergraduate and graduate students who use English as a second or additional language to succeed in their academic work.
- ELS is embedded in the University of Waterloo context with many connections at both the undergraduate and graduate levels. ELS is a significant participant in many university-wide initiatives. Further, ELS instructors are active participants at the college, university, local, provincial, national, and international levels of their profession.

Challenges

- As ELS delivers courses, and not a full program, recognition of the courses is not as broad as we might like. Some people are aware of EMLS undergraduate courses, but not graduate ones. Growing awareness of the EMLS courses and the impact the courses can have on student learning outcomes will ensure admissions staff and faculty keep them in mind as they admit and advise EMLS students.
- A further challenge relates to the high fluctuation in enrolment over the three terms of the academic year. Consistently low spring term enrolment means that ELS will remain dependent on sessional instruction during high-enrolment fall and winter terms.
- While ELS has had solid representation within the Undergraduate Communication Outcomes Initiative (UCOI) and the Steering Committee, English Language Competency Initiative (SCELCI), Engineering, Science and Applied Health Sciences faculties have opted to develop communication skills courses without seeking ELS input.
- Continuing Lecturers (CLs) in ELS teach eight courses per year and carry a 20 percent service requirement. ELS would like to gather more information about comparable

teaching loads for CLs on main campus. If there is a discrepancy, ELS would like to explore the possibility of moving to commensurate workloads.

Weaknesses

- ELS should work more closely with admitting units from all faculties so enrolment highs do not come as a surprise. For example, some programs admit more students than expected or make offers to more students with EMLS program conditions than expected. This causes the ELS to scramble to accommodate students seeking communication skills courses that term. Greater communication with admissions early in the course scheduling cycle would likely be helpful to prevent the surprise factor in terms when enrolment exceeds expectations.

Summary of key findings from the external reviewers

The Certificate in English for Multilingual Speakers (EMLS) and related EMLS credit courses offered through English Language Studies (ELS) at Renison University College appear to be in good standing. Those interviewed, from senior administrators to students, praised the Director for fostering opportunities to contribute to the growth and direction of the ELS offerings to UW. A common theme from the interviews is that instructors and support staff are committed to delivering a quality program – often at their own personal expense. Students, both undergraduate and graduate, consistently expressed appreciation for the dedication and enthusiasm of the ELS teaching team in providing engaging in-class sessions and detailed feedback both within and outside of the ELMS courses.

Program response to external reviewers' recommendations
Recommendations

1. Immediate review of workload, task weighting, and compensation for teaching staff and the Director to ensure equity and parity for the ELS teaching team when compared to similar staff positions at the University of Waterloo, with considerations to include:
   a. Provide further teaching relief for the Director so that more time can be devoted to administrative service tasks focused on increasing the health and stability of the ELS program and faculty. The costs of additional teaching relief can likely be offset by the increased service provided by ELS to the wider UW community.
   b. Recognize actual week-to-week workload of teaching staff driven by pedagogical best practices for multilingual language acquisition, while appreciating that course capacity may be an inadequate indicator of week-to-week workload. The risk of "grading burnout" of dedicated faculty seems high due to the lack of downtime for instructors within a week, a term, or between terms – especially for full-time faculty.

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c. Offer fair benefits and in-kind support for long-term contract faculty. With the current limitations in projecting EMLS course enrollment, ELS relies on the flexibility of contract instructors. Retaining access to high-quality contract instructors is key to consistent program delivery. Contract instructors, like full-time faculty, need access to private space for course preparation, and meeting with students. Contract instructors who feel undervalued are likely to look for positions elsewhere, taking their gained expertise with them. While a pro-rated benefit package may or may not be possible, at minimum reasonable compensations should be made when contract instructors must use their own home resources for grading and teaching related activities. UW full-time faculty are allowed reasonable expense related to teaching through annual professional allowance (FPER).

d. Financial and time-supported opportunities for interested faculty to do program, curriculum, and professional development that would otherwise be at the expense of faculty personal resources, vacation time, and/or personal health. Supported opportunities to add balance and rejuvenation in one's professional life can help offset burnout. In additional to reasonable FPER, an ELS discretionary fund to help supplement attendance at primary ELMS-related conferences could be used for both full-time and contract instructors.

e. Reconsider task weightings to acknowledge research and scholarship undertaken by Director and teaching team members to contribute to ELS pedagogical research and best practice materials to be shared with the wider ELS community. There are known examples in other UW units of continuing lecturers who have their research and scholarship contributions recognized as part of task weightings.

Response

ELS appreciates the reviewers' recognition of the workload demands of the ELS Director, Continuing Lecturers, and Definite-Term Lecturers (referred to as teaching staff). The reviewers have broad knowledge of comparable positions and workload demands across the University, and they have offered useful ways to begin investigating issues of equity and parity.

All workload-related issues are being addressed though the negotiation of the first Memorandum of Agreement (MoA) between Renison administration and the new Renison Association of Academic Staff (RAAS). RAAS executive members and negotiators, as well as the Renison administrative team, are aware of the reviewers' recommendations. The negotiations are ongoing, and we hope the MoA will be implemented by spring 2020.

We hope the MoA will address the workload issues identified by the reviewers, specifically that the Director will receive further teaching workload relief; and CLs and DTLs will see an annual one-course reduction (from eight to seven) and provisions for non-teaching terms.

2. Foster ELS research expertise by allowing at least some of the current ELS team to allocate 10% of their time to ELS research and scholarship through potential "living lab" opportunities involving participation of current students and alumni to continue to build and share best practices for ELS support – both inside and outside of the classroom. Given the rarity of credit-based EMLS courses offered at North American universities and the expertise among the ELS teaching team, there is rich opportunity for ELS to promote Renison and UW through its research contributions.

    Response

    The possibility of CLs and DTLs officially allocating 10% of their workload to research activities is also under consideration in the negotiation process between Renison's administrative team and RAAS. We anticipate that the Memorandum of Agreement will be implemented by spring 2020.

3. Strategically position marketing to raise awareness of the EMLS program and its success stories (teaching term, undergraduate and graduate students).

    Response
    ELS and APPLS units currently have a part-time marketing assistant who creates website and social media content, writes promotional materials for the *Renison This Month* electronic newsletter (and occasionally for the *Daily Bulletin*), represents the units at college and university open house events, and designs and distributes marketing materials related to unit initiatives. We hope to increase the impact of the assistant's efforts by integrating her more fully into Renison's larger Marketing department, which, in the past, has been largely focused on Renison's other programs. As Renison's Marketing department is open to this possibility, this is a good opportunity to encourage greater integration to extend ELS's marketing efforts.

4. Encourage broader collegial support across campus for both EMLS teaching staff and new tenure-track hire to better leverage ELMS teaching expertise.

    Response
    The implementation of this recommendation requires a multi-pronged approach involving a variety of people.
    *   The Chair of Culture and Language Studies will continue to represent English Language Studies on the university-level Steering Committee for English Language Competency Initiatives (and hopefully on any official body that may replace it);
    *   The Director of English Language Studies will continue to represent English Language Studies on the ARTS First Steering Committee;

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- The Renison Dean and the Chair of Culture and Language Studies will engage with the Deans and Associate Deans of the faculties of Engineering, Science, Applied Health Sciences, and Environment to encourage them to consider including EMLS versions of communication skills courses in their communication skills initiatives. If successful, English language learners in these faculties will have a choice to study in courses that explicitly address English language issues in tandem with communication skills development as they do within the Math and Arts First communication skills initiatives;

- The Director and other CLs of English Language Studies will continue to work collaboratively with both the CTE and the Writing and Communications Centre by participating in the Undergraduate Communication Outcome Initiatives (UCOI) Community of Practice Meetings.

We hope these efforts will disseminate knowledge more broadly about how English Language Studies may contribute to English language communication skills initiatives across campus.

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Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	Immediate review of workload, task weighting, and compensation for teaching staff and the Director to ensure equity and parity for the ELS teaching team when compared to similar at the University of Waterloo.	Workload issues are currently under negotiation as the RAAS and Renison negotiation teams develop a new MoA.	RAAS and Renison negotiating teams.	Possibly spring 2020
2.	Foster ELS research expertise by allowing at least some of the current ELS team to allocate 10% of their time to ELS research and scholarship both inside and outside of the classroom.	The possibility of allocating 10% of CL/DTL workload to research is currently under negotiation as the RAAS and Renison negotiation teams develop a new MoA.	RAAS and Renison negotiating teams.	Possibly spring 2020
3.	Strategically position marketing to raise awareness of the EMLS program and its success stories.	Work more closely with Renison's college-wide Marketing department to raise awareness of the EMLS program in more systematic ways.	Director of ELS; Marketing Assistant to ELS (no additional resources required)	Starting fall 2018 and ongoing
4.	Encourage broader collegial support across campus for both EMLS teaching staff and new tenure-track hire to better leverage EMLS teaching expertise.	Work continuously to ensure strong representation on communication skills initiative planning committees.	Director of ELS; Research faculty in APPLS/EMLS	Representation on communication skills initiative planning committees is ongoing.

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

November 2019   Page 8 of 9

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Date of next program review   2024-2025
                                                              Date

Signatures of Approval

Jeff Wilson   Jan 10, 2019
Chair/Director   Date

[signature]   **JAN 1 0 2019**

AFIW Administrative Dean/Head (*For AFIW programs only*)   Date

_____   _____
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.

[signature]   Dec 11, 2018

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

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

Checklist for SUC/SGRC Reviewer Feedback
Quality Assurance Office

Final Assessment Report: English Language Studies, November 2018

Name of Reviewer: Brendon Larson

Date: 12/16/2019

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 program has made several revisions to the document in response to reviewers' feedback. I now think that it is acceptable, though clearly some outcomes will depend on productive new RAAS - Renison MoA.

Requested Revisions

See tracked changes and comments in Word document.

Checklist for SUC/SGRC Reviewer Feedback
Quality Assurance Office

Final Assessment Report: English Language Studies

Name of Reviewer: Bruce MacVicar

Date: 11/4/2019

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

Nov 4, 2019

Overall the report is positive and the response is good. I did find some vague wording in the program characteristics and it is not clear to me how the authors are using the word 'notable'. More definition, with estimates of numbers of students and impacts on resources and ability to hire full-time team members would be useful.

I also note that the 10% allocation time to foster ELS research is not addressed by adding a research faculty member because it doesn't encourage others to participate. Should address whether the recommendation will be followed or not, and what the resource implications would be if it were to be implemented.

Recommendation 4 has a list of activities, but does not address who is responsible for ensuring that they are completed.

Jan 20, 2020

I have had a chance to review it now and find that the comments and changes are all positive. I do not have any further comments.

Final Assessment Report
Italian Studies (Minor)
December 2019

Executive Summary

External reviewers found that the Italian Studies Minor delivered by the Department of Italian and French Studies at St. Jerome's University (SJU) was in good standing.

"The Review Team commends the colleagues at SJU for their efforts and determination to provide a quality program in the face of very challenging times. Students enjoy the courses [they] offer".

A total of two recommendations were provided by the reviewers. 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 2025-2026.

Number of Students Graduating with a Minor in Italian Studies

Degree Year	Total
2017	2
2016	3
2015	3

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 Italian Studies Minor delivered by the Department of Italian and French Studies at St. Jerome's University (SJU). A self-study (Volumes I, II, III) was submitted to the Associate Vice-President, Academic on August 30, 2018. The self-study (Volume I) presented the program descriptions and learning outcomes, an analytical assessment of the program, 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 program were included in Volume II of the self-study.

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From Volume III, two arm's-length reviewers were selected by the Associate Vice-President, Academic: Dr. David Porreca, Associate Professor in the Department of Classical Studies, and Dr. Monica Leoni, Associate Professor in the Department of Spanish and Latin American Studies.

Reviewers appraised the self-study documentation and conducted a site visit on January 23, 2019. The visit included interviews with the Associate Vice-President, Academic; Dean of Arts; Acting Dean of St. Jerome's University; Chair of the Department of Italian and French Studies; faculty members and staff. The review team also had the opportunity to meet with a group of current students, tour the facilities, and meet with a representative from the SJU Library.

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

Minor in Italian Studies: Students enrolled in any degree program may pursue a minor designation in Italian Studies. This program offers students the possibility to study and understand the language and culture – including the art, music, and *dolce vita* – of one of the world's greatest contributors to knowledge. Literary texts may be studied either in the original Italian or in English. Graduates may capitalize on job opportunities in government agencies, school boards, as well as multinational companies in Italy.

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

Strengths
- The strength of Italian Studies continues to be teaching excellence. Student surveys revealed high levels of satisfaction, which were attributed primarily to the passion, dedication, and enthusiasm of their instructors.
- Enrolment in both beginner Italian language courses (30 to 40 per class) and Italian culture courses (50 to 70 per class) has remained strong. The new course offering, ITALST 265 (Mafia) drew 89 students in the Winter 2019 term.
- Over the years, class size in upper-level literature courses has typically been small, but nevertheless compares favourably to enrolment in similar courses at the University of Waterloo in other disciplines such as French and English; for example, ITALST 370 (Women Writers of the Italian Renaissance) had an enrolment of 16 when last taught in Winter 2015, ITALST 360 (Dante) had an enrolment of 19 in Fall 2015.

Challenges
- Student recruitment for the Italian Studies Minor has been the greatest challenge (there are no more than one or two candidates a year).

- There is also chronically low enrolment in the intermediate Italian language courses (ITAL 201 and 202).

Weaknesses
- One noticeable weakness of the Minor program in comparison to others across North America is that the completion of four language courses, or the equivalent of intermediate-level language competency, is not compulsory. Students are free to choose six courses from ITAL (language) **or** ITALST (culture) offerings. It is therefore possible to earn a minor in Italian Studies while having only a basic knowledge of the Italian language.

Summary of key findings from the external reviewers
The reviewers found that courses related to the minor in Italian Studies were enjoyed by students and they commended the instructors at SJU for being able to offer such a quality program under challenging circumstances, including the retirement of two key faculty members.

Program response to external reviewers' recommendations

Recommendations
1. Institutionally, if the program is indeed "Mission Critical" to SJU, it should receive proportional consideration and support. The Review Team feels that this support would be most directly demonstrated by the immediate replacement of at least one of the two retired Italian Studies full-time faculty members with at least one tenure-track position. The long-term survival of the program depends on this being made a top priority. Replacing both retired faculty members should be a longer-term goal.

Response
As one of St. Jerome's few unshared disciplines, Italian Studies represents unique possibilities for growth that the SJU administration recognizes and is committed to supporting.
  a) The SJU Interim Vice President Academic and Dean (VPAD) (previously the Acting Dean) authorized the hiring of a Lecturer for 2019-2020 who will teach seven courses. Additional courses will be offered by sessional instructors. This Lecturer was hired on a one-year contract, effective Sept 1, 2019-Aug. 31, 2020.
  b) The search has begun for a tenure-track position effective July 1, 2020, subject to budgetary approval. At SJU, the normal teaching load of full-time faculty members is five courses/year. Therefore, in the short term the program will continue to rely on sessional instructors to teach additional course offerings.
  c) The VPAD requested a five-year plan for growth from the Department. This plan was delivered in August 2019. The department has already taken measures to enrich our Italian Studies program. For example, in Spring 2020, in collaboration with the University of Guelph, students will have the opportunity to study in Sorrento, Italy.

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2. The Department of [Italian and French] Studies should also consider offering some key culture courses online to attract larger numbers of students. The development of such courses requires, however, support from the administration in the form of a tenure-track faculty member who can manifest a longer-term commitment to the program and the institution.

Response
The VPAD has authorized the Chair to propose new online courses to be approved at SJU and at the University of Waterloo in the Winter 2020 term. These will be proposals for a series of online courses, including online versions of existing key courses, as well as one new culture course. Depending on the capacity of the Centre for Extended Learning (CEL) to accommodate these requests, one course will ideally be launched in 2021-2022, and another by 2023.

Recommendations that were not selected for implementation
The reviewers' report included a third recommendation, concerning parking facilities for instructors; however, it was based on a misunderstanding and later found not to be factually valid.

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Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	Institutionally, if the program is indeed "Mission Critical" to SJU, it should receive proportional consideration and support. The Review Team feels that this support would be most directly demonstrated by the immediate replacement of at least one of the two retired Italian Studies full-time faculty members with at least one tenure-track position. The long-term survival of the program depends on this being made a top priority. Replacing both retired faculty members should be a longer-term goal.	a) The SJU Interim Vice President Academic and Dean (VPAD) authorized the hiring for 2019-2020 of a Lecturer, who will teach seven courses. Additional courses will be offered by sessional instructors.	The Department Chair will take the lead, in consultation with SJU senior administration.	Fall 2019 A Lecturer was hired on a one-year contract, effective Sept 1, 2019-Aug. 31, 2020.
		b) The VPAD authorized the search for a tenure-track position effective July 1, 2020, subject to budgetary approval.	Department Chair	July 2020 The program has begun the search for a tenure-track position, effective July 1, 2020, subject to budgetary approval.
		c) The VPAD has requested a five-year plan for growth, to be delivered no later than the end of the Fall 2019 term.	The Department Chair will take the lead, in consultation with SJU senior administration.	The Chair submitted the plan in August 2019. The department has already taken measures to enrich the Italian Studies program. For example, in Spring 2020, in collaboration with the University of Guelph, students will have the opportunity to study in Sorrento, Italy.
2.	The Department of Italian and French Studies should also consider offering some key culture courses online to attract larger numbers of students. The development of such courses requires, however, support from the	The VPAD has authorized the Chair to propose new online courses, to be approved at SJU and the University of Waterloo in Winter 2020.	Department Chair	2023 Depending on the capacity of the CEL to accommodate these requests, one course will ideally

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administration in the form of a tenure-track faculty member who can manifest a longer-term commitment to the program and the institution.			be launched in 2021-2022, and another by 2023.

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

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Date of next program review   2025-2026
                                                                  Date

_____

Signatures of Approval

December 10, 2019

Chair/Director   Date

December 10, 2019

AFIW Administrative Dean/Head (*For AFIW programs only*)   Date

Jan 26/20

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.

January 2020

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

_____

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

Checklist for SUC/SGRC Reviewer Feedback
Quality Assurance Office

Final Assessment Report: Italian Studies Minor

Name of Reviewer: Benoit Charbonneau

Date: 1/14/2020

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

This FAR is well-written and clearly addresses the external reviewers' recommendations.

Requested Revisions

Minor edits were suggested by this reviewer and adopted. Some reworking of the report had to be done regarding resourcing and feasibility of passing through the various University academic bodies. The revised report addresses these concerns.

Checklist for SUC/SGRC Reviewer Feedback
Quality Assurance Office

Final Assessment Report: Italian Studies Minor

Name of Reviewer: Marlee M. Spafford

Date: 1/14/2020

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

This FAR is well-written and clearly addresses the external reviewers' recommendations.

Requested Revisions

Some minor edits were suggested and adopted. A small number of statements required clarification, including:

- **Specify the challenging circumstances that SJU instructors faced in delivering a quality program (p. 3).**
- **Add context to the Recommendation #1 response that explains the use of the term 'Mission Critical' (p. 3-4).**
- **Indicate the University of Guelph collaboration into the Recommendation #1 response (p. 3-4) that is mentioned in the table (p. 5).**
- **Clarify who is the lead in responding to each Recommendation (p. 5-6).**
- **Update Recommendation response timelines, as needed (p. 5-6).**

Requested changes were made.

UNIVERSITY OF
WATERLOO

Two Year Progress Report

Engineering Undergraduate Programs
(Chemical, Civil, Computer, Electrical, Environmental, Geological, Management, Mechanical, Mechatronics, Nanotechnology, Software, Systems Design)

May 2018, revised January 2020

Background: The Faculty of Engineering employs an integrated approach for the Canadian Engineering Accreditation Board (CEAB) accreditation and undergraduate program review processes. The CEAB process is required as the primary external assessment of the program quality.

In the 2014 CEAB accreditation, nine of 12 programs (Chemical, Civil, Environmental, Management, Mechanical, Mechatronics, Nanotechnology, Software and Systems Design) received the maximum accreditation of six years to June 30, 2020. Three programs (Computer, Electrical, and Geological) received recommendations that resulted in requirement to follow-up to the CEAB after three years (2017). The following document provides a summary of the CEAB recommendations and resulting actions that the programs took to address the specific concerns.

For Computer, Electrical and Geological engineering, the CEAB identified the professional status of the professoriate as a weakness, for Electrical and Geological engineering programs, additional issues related to curriculum content required addressing, and for Geological engineering, the CEAB determined that student morale needs attention. With the exception of these issues, all three programs were positively appraised.

Progress on Implementation Plan:

Recommendations:

<u>Computer Engineering</u>
1. Increase the number of Accreditation Units (AU) in Engineering Design (ED) taught by faculty licensed to practice engineering in Canada. (Criterion 3.5.5)

Status: completed
Details:
*   The program revised the assignment of teaching tasks to ensure that ED AUs taught by licensed faculty is well above threshold (Actual: 274 CEAB accreditation units (AU);

required: 225 CEAB AU).

Electrical Engineering
2. Increase the teaching of statistics and numerical analysis. (Criterion 3.4.3.1)

Status: completed
Details:
*   Created two new half weight, lab courses (ECE 204A Numerical Methods 1 and ECE 204B Numerical Methods 2) and then combined the two courses ECE204A/B into a full weight lecture-based course, 'ECE 204 Numerical Methods', which was introduced into the Electrical Engineering curriculum in the 2017-2018 academic calendar year.
*   The course 'ECE 316 Probability and Random Processes' was revised to 'ECE316 Probability Theory and Statistics' with increased content of statistics

3. Increase the number of AUs in ED taught by licensed engineers. (Criterion 3.5.5)

Status: completed.
Details:
*   The program revised the assignment of teaching tasks to ensure that ED AUs taught by licensed faculty is well above threshold (Actual: 233 CEAB accreditation units (AU); required: 225 CEAB AU).

Geological Engineering
4. Increase the Engineering Design (ED) and Engineering Science (ES) content of the program. (Criterion 3.4.4).

Status: completed.
Details:
*   The curriculum was revised to increase the ES and ED content (Actual: 932 accreditation units (AU); required: 900 AU) and was first implemented in September 2015. New courses were introduced, changes were made to the content of existing courses, and courses were inactivated in support of the proposed changes. The changes of courses containing ES and ED are outlined below.

First Year
*   Replaced PHYS 115 Mechanics with a new course CIVE 104 Mechanics 1 (0.25 weight) that retains key mechanics content from PHYS 115 and presents this content in a manner to emphasize understanding of civil engineering structures and applications.
*   Renamed ENVE 127 as CIVE 105 Mechanics 2; increased its weight to 0.75 to accommodate new content on foundations and fluid statics.
*   Revised the content of GENE123 Electrical Circuits and Instrumentation; addition of an instrumentation component and emphasis of the application of electrical engineering principles to instrumentation and data acquisition.

May 2018, revised January 2020   Page 2 of 9

UNIVERSITY OF WATERLOO

- Renamed CIVE 121 as Computational Methods.

Second Year
- Renamed ENVE 214 as ENVE 280 Fluid Mechanics; decreased its weight to 0.5 by moving the fluid statics content to ENVE 127; modified the offering from 2B to 2A.
- Added CIVE 204 Solid Mechanics 1. Material related to structural analysis was needed as foundation material for CIVE 354 Geotechnical Engineering 2 in order to design subsurface structures.
- Moved and changed the status of EARTH 221 Geochemistry 1 from a core course in second year to a technical elective in third year.

Third Year
- Removed ENVE 321 Environmental Modeling.
- Added one technical elective in 3A: students must choose one of: ARCH 277 Timber Design, Structures and Construction; CIVE 205 Solid Mechanics 2; EARTH 221 Geochemistry 1.
- Replaced CIVE 381 Hydraulics with CIVE 382 Hydrology and Open Channel Flow. This course combines the introductory material from CIVE 381 Hydraulics and from CIVE 486 Hydrology.
- Modified EARTH 438 Engineering Geology. Increased lab hours from 2 to 3 hours per week to provide time to introduce practical field exercises with engineering design implications.

Fourth Year
- All third and fourth year CIVE, EARTH and ENVE courses that are accessible to the students based on pre-requisites are listed.

5. Increase the engineering design content of the GEO 400/401 course (Criterion 3.4.4.4)

Status: completed.
Details:
- Since Fall 2013, the engineering design content of the GEO 400/401 course has been increased by holding the course in conjunction with ENVE430/431 (Environmental Engineering program) which has engineering design content.

6. Increase the Engineering Science (ES) and Engineering Design (ED) taught by faculty licensed to practice engineering in Canada. (Criterion 3.5.5)

Status: completed.
Details:
- The program has assisted those faculty members teaching ES and ED to apply and receive their PEng license.
- The Civil and Environmental Engineering department responsible for delivering most of

the courses with ES and ED for the Geological Engineering program is requesting that all new faculty hires apply immediately for licensure and that they work towards satisfying the licensing requirements within five years of their appointment.

- The program revised the assignment of teaching tasks to ensure that ES and ED AUs taught by licensed faculty are well above threshold (Actual: 834 CEAB accreditation units (AU); required: 600 CEAB AU).

7. The morale of the students should be improved. The quality of the education experience may be adversely affected by the morale of the students. (Criterion 3.5.1.1)

Status: Complete.
Details:

- The morale of Geological Engineering students has improved immensely since 2014. As stated by the Director of Geological Engineering in January 2020, "The dark days are behind us." The 2019 CEAB Accreditation visitors spoke specifically about the positive morale among the students. This dramatic improvement in morale is attributed to two main factors:
  - The program has improved communication between the program and the students:
    - The Director of Geological Engineering interacts with all the cohorts of students and follows them through their undergraduate career.
    - Formal 90-minute 'town hall' meetings are now held every term with all cohorts on campus. These town halls, chaired by the Director of Geological Engineering, have been running for about two years. At each meeting, students discuss what is going well and what needs addressing in their program.
  - Geological Engineering students have the option of taking EARTH 490 (Field Course) as an elective. This course features a major field trip (e.g., to Peru) and is a highlight of the curriculum.

Explain any circumstances that have altered the original implementation plan:

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

UNIVERSITY OF
WATERLOO

Updated Implementation Plan:

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	**Computer Engineering** Increase the number of Accreditation Units (AU) in Engineering Design (ED) taught by faculty licensed to practice engineering in Canada. (Criterion 3.5.5)	The program revised the assignment of teaching tasks to ensure that ED AUs taught by licensed faculty is well above threshold (Actual: 274 CEAB accreditation units (AU)); required: 225 CEAB AU).	**Electrical and Computer Engineering Department Chair**	**Completed.**
2.	**Electrical Engineering** Increase the teaching of statistics and numerical analysis. (Criterion 3.4.3.1)	First created two new half weight, lab courses (ECE 204A Numerical Methods 1 and ECE 204B Numerical Methods 2) and then combined the two courses ECE204A/B into a full weight lecture-based course, 'ECE 204 Numerical Methods'. The course 'ECE 316 Probability and Random Processes' was revised to 'ECE316 Probability Theory and Statistics' with increased content of statistics	**Electrical and Computer Engineering Department Chair.**	**Completed**
3.	**Electrical Engineering** Increase the number of AUs in ED taught by licensed engineers. (Criterion 3.5.5)	The program revised the assignment of teaching tasks to ensure that ED AUs taught by licensed faculty is well above threshold (Actual: 233 CEAB AU; required: 225 CEAB AU).	**Electrical and Computer Engineering Department Chair.**	**Completed**

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4.	**Geological Engineering** Increase the Engineering Design (ED) and Engineering Science (ES) content of the program. (Criterion 3.4.4).	The curriculum was revised to increase the ES and ED content (Actual: 932 AU; required: 900 AU) and was first implemented in September 2015. New courses were introduced, changes were made to the content of existing courses, and courses were inactivated in support of the proposed changes.	**Geological Program Director.**	**Completed.**
5.	**Geological Engineering** Increase the engineering design content of the GEO 400/401 course (Criterion 3.4.4.4)	Since Fall 2013, the GEO 400/401 project course has been held in conjunction with the ENVE430/431 course (Environmental Engineering program), which has engineering design content.	**Geological Program Director.**	**Completed.**
6.	**Geological Engineering** Increase the Engineering Science (ES) and Engineering Design (ED) taught by faculty licensed to practice engineering in Canada. (Criterion 3.5.5)	• The program has assisted those faculty members teaching ES and ED to apply and receive their PEng license. • The Civil and Environmental Engineering department responsible for delivering most of the courses with ES and ED for the Geological Engineering program is requesting that all new faculty hires apply immediately for licensure and that they work towards satisfying the licensing requirements within five years of their appointment. • The program revised the assignment of teaching tasks to ensure that ES and ED AUs taught by licensed faculty are well above threshold (Actual: 834 CEAB AU; Required: 600 CEAB AU).	**Geological Program Director.**	**Completed.**

May 2018, revised January 2020   Page 6 of 9

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7.	**Geological Engineering** The morale of the students should be improved. The quality of the education experience may be adversely affected by the morale of the students. (Criterion 3.5.1.1)	The program has improved Communication between the program and the students: • The Director of Geological Engineering meets with all cohorts of students regularly. • Formal 90-minute 'town hall' meetings are held every term with all cohorts on campus In addition, the field trip course EARTH490 is an elective bringing an exciting highlight to the curriculum.	**Geological Program Director.**	**Completed.**

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

UNIVERSITY OF WATERLOO

Date of next program review: _____2020-2021_____
                                                          Date

Signatures of Approval:

Sign here _Vincent Gaudet_   Date Jan. 7, 2020
Chair – Electrical Engineering   Date

Sign here _[signature]_   Date Jan. 10, 2020
Director – Geological Engineering   Date

[signature]   JAN 7, 2020
Faculty or Administrative Dean   Date

[signature]   June 15, 2018
Associate Vice-President, Academic   Date
(For undergraduate and augmented programs)

_____   _____
Associate Provost, Graduate Studies   Date
(For Graduate and augment programs)

Checklist for SUC/SGRC Reviewer Feedback
Quality Assurance Office

Two-Year Progress Report: Engineering Undergraduate Programs

Name of Reviewer: Russ Tupling

Date: 1/13/2020

Does the Two-Year Progress Report:

1. Clearly describe progress achieved on the various action items in the implementation plan? ☒ **Yes** ☐ **No**

2. Explain convincingly any circumstances that would have altered the original implementation plan? ☒ **Yes** ☐ **No**

3. For items that are behind schedule, propose an amended implementation schedule that is reasonable and credible? ☒ **Yes** ☐ **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? ☒ **Yes** ☐ **No**

General Comments

The Engineering progress report was very straightforward and the Faculty programs did an excellent job at addressing all of the reviewers' recommendations. I only had a few minor comments/suggestions related to details on specific actions that were taken to improve student morale in Geological Engineering. These were addressed fully in the revised report.

University of Waterloo
SENATE
Report of the President
30 March 2020

FOR INFORMATION

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On 22 March 2020, an electronic vote was put to Senate by email in order to expedite critical and time-sensitive decisions needed to facilitate emergency planning. At the deadline of noon of 23 March 2020, all three motions were carried, as follows. In all three cases, Newell Kelly moved the motion, and Rush seconded the motion.

Winter Term Course Credits

Motion 1: Senate endorses that some courses originally set to use numerical grades for the Winter 2020 term will instead use CR/NCR (for all students in the course), at the discretion of the Instructor and with the approval of the Faculty.

Motion 2: For courses using numerical grading for the Winter 2020 Term, Senate directs the Registrar's Office and the Associate Vice Presidents, Academic, and Graduate Studies and Postdoctoral Affairs, in consultation with the Faculties, to develop a process by which, after the completion of the Winter 2020 Term, within a specified time limit a student may convert a numerical grade to a CR/NCR without need for a Policy 70 petition.

Rationale:
The University recognizes that the disruption to the academic term, the necessary modifications to the delivery mechanisms for academic content, and changes to evaluation methods all have the potential to leave some instructors with limited information about the degree to which students have shown mastery of course objectives, and also influence students' likelihood of success.

The first motion is intended to allow instructors who feel that circumstances mean that they have insufficient information to provide a numerical grade to nevertheless allow students to complete their courses and progress towards completion of their academic programs. (Direction from the academic AVPs and the Faculties has been to continue with numerical grading where it remains reasonable to do so.)

With respect to Motion 2: The University has been recommending that instructors use numerical grading whenever possible. As noted, present circumstances are sure to disadvantage some students. Given this situation, the University intends to provide some agency to students as to how the Winter 2020 term may be represented on their academic record.

Note that Policy 70 currently allows students to seek relief from an academic decision, including marks in a course, if the student is able to demonstrate extenuating circumstances. Our belief is that the events of Winter 2020 will, in many cases, constitute extenuating circumstances. The second motion is intended to allow the process to be simplified. The perceived benefits include:

1. Reduced stress on students;
2. Expedited and more timely processing of students' request;
3. Reduced workload for those involved with responding to students' request;

4. A demonstration of empathy towards students whose academics have been influenced by the term;
5. Consistency with processes being adopted by peer institutions.

The University recognizes that this decision will have implications and future decisions will need to be made. These include:
1. The way in which Faculties interpret CR/NCR in terms of academic progression, scholarships and awards, etc.
2. The development of the process by which students' requests are formulated, received, vetted and decisions are made;
3. The interpretation for and explanation to students of how CR/NCR may be interpreted both at Waterloo and by external organizations.

Spring Term Academic Calendar Dates

Motion: Senate endorses the revised Spring 2020 term academic calendar dates (attached).

Rationale: Extenuating circumstances caused by the COVID-19 pandemic have necessitated that the University make the decision to replace all in-person course related activities with alternative delivery methods for the Spring 2020 term. To allow more time for instructors and students to prepare for teaching and learning at a distance/online, the Spring term dates have been pushed back by one week. In order to end the term on the original date, a one-week final assessment period is proposed (rather than a two-week final examination period).

Academic Calendar Dates – Spring 2020

Revisions made necessary by the COVID-19 virus, and the decision to delay Spring term start by one week, and move course delivery to online/remote teaching.

The following symbols and abbreviations are used throughout this table:

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

	Spring 2020
Co-operative Work Term Begins *	~~May 4~~ May 11 (M)
Classes Begin	~~May 4~~ May 11 (M)
Holidays	May 18 (M) July 1 (W) Aug. 3 (M)
Mid-Term Break	N/A
Convocation	June 9-13 (T-S)
Classes End	~~July 28 (T)~~ Aug 5 (W)
Make-up Day(s) for in-term holidays	~~July 28 (T) following (W) schedule for July 1~~ N/A
Pre-~~Final Assesment~~ Study Days	~~July 29, 30~~ Aug 6 (R) ~~(W,R)~~
~~On-Campus Examinations~~ Final Assessment period Begins	~~July 31~~ Aug 7 (F)
~~Online Class Examination Days~~	~~Aug. 7, 8 (F,S)~~
~~On-Campus Examinations~~ Final Assessment period ~~Ends (including Emergency Day)~~	Aug. 15 (S)
Co-operative Work Term Ends	~~Aug. 21~~ Aug 28 (F)
Teaching days	60
Pre-~~Final Assessment~~ Study Day(s)	~~2~~ 1
~~Examination days~~	~~11 (+1 Emergency Day)~~

UNIVERSITY OF WATERLOO

To:	Senate
From:	Feridun Hamdullahpur, president and vice-chancellor
Date:	30 March 2020
Subject:	**Call for Nominations for Honorary Degrees**

An honorary degree is the highest honour conferred by the University. Through the conferring of honorary degrees, the University of Waterloo seeks to recognize outstanding achievement, whether academic or through service to society. These achievements are celebrated at Convocation where they inspire those in attendance and, in particular, our newly graduating students.

Guidelines for the awarding of honorary degrees, including selection guidelines, procedures, considerations to make in assessing a candidate's qualifications, and details on what to submit in a nomination package, can be found on the website for the Senate Nominating Committee for Honorary Degrees (https://uwaterloo.ca/secretariat/committees-and-councils/honorary-degrees-committee/guidelines-awarding-honorary-degrees). You are also welcome to contact the committee secretary, Rebecca Wickens (rebecca.wickens@uwaterloo.ca) for information and assistance.

We invite you to consider nominating a worthy candidate for this honour. Please note, the University embraces and appreciates diversity and wants to ensure a diverse pool of candidates. With the community's input we can continue to maintain a substantial pool of deserving individuals whose achievements the University would be delighted to celebrate and honour.

Thank you in advance for your contribution to this important tradition.

University of Waterloo
SENATE
Report of the President
30 March 2020

FOR INFORMATION

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Recognition and Commendation

The **University of Waterloo** has been named one of Waterloo Area's Top Employers. This year's list of Waterloo Area's Top Employers showcases the organizations that lead their industries in creating forward-thinking workplaces and progressive HR policies. The University was cited for its broad charitable focus and volunteer opportunities, the work of its Healthy Workplace Committee, and its support of its retirees through pensions, health benefits, and retirement assistance programs. Now in its thirteenth year, Waterloo Area's Top Employers recognizes employers in the Kitchener-Waterloo and Guelph area that lead their industries in offering exceptional places to work. Employers were evaluated by the editors at Canada's Top 100 Employers using the same criteria as the national competition: physical workplace; work atmosphere and social; health, financial and family benefits; vacation and time off; employee communications; performance management; training and skills development; and community involvement.

 (adapted from the *Daily Bulletin*, 13 December 2019)

On December 28, Her Excellency the Right Honourable **Julie Payette**, governor general of Canada announced 120 new appointments to the Order of Canada. The Order of Canada is one of the highest honours in Canada. It recognizes those individuals whose service shapes our society; whose innovations ignite our imaginations and whose compassion unites our communities. The following Waterloo faculty members and alumni were appointed for outstanding contributions in their respective fields and for enriching the lives of others.

Companion of the Order of Canada

Donna Strickland is a professor in the Department of Physics and Astronomy. She was awarded the 2018 Nobel Prize in Physics for her invention of chirped pulse amplification. It has several applications, including the cutting of a patient's cornea during laser eye surgery. Professor Strickland is being recognized for her work in high-intensity laser physics.

Member of the Order of Canada

Anne Dagg has had a distinguished career in the field of animal biology and has been a tireless advocate for gender equality in academia. She pioneered the study of animal behaviour in the wild of Africa and is credited with being the first person to study wild giraffes. Dagg worked as a part-time lecturer at Waterloo Lutheran University in anatomy and physiology from 1962 to 1965, and then as an anatomy demonstrator at the University of Waterloo in 1966. In 1967, she received her PhD from the University of Waterloo.

Professor Emeritus **Stuart McGill** was a professor in Waterloo's Department of Kinesiology for 32 years. His laboratory and experimental research clinic investigated issues related to the causal mechanisms of

back pain, how to rehabilitate those with back-pain and enhance injury resilience and performance. He is the Chief Scientific Officer for BackFitPro Inc., a resource centre with evidence-based information to help prevent and rehabilitate back pain.

Paul Born (BA, 1986) is co-founder and co-CEO of the Tamarack Institute, a non-profit organization that develops and supports collaborative strategies that engage citizens and institutions in solving major community issues. Based at Conrad Grebel University College, the Tamarack Institute conducts training and coaching sessions for communities globally on poverty reduction, creating better communities, tackling health problems, or improving emergency management.

Eric D. Friesen (BA, English, 1967, Conrad Grebel University College) is recognized for contributing to the public appreciation of classical music as a radio broadcaster, writer and speaker.

Cathy Levy (BA, Dance Honours, 1994) is recognized for her contributions to the performing arts as a producer and dance advocate.

Officers of the Order of Canada

John J. Clague (Honorary DSc, 2017) is recognized for his national contributions to environmental earth sciences and for his impact on the study of natural hazards, such as earthquakes, tsunamis, landslides and floods.

Debra Pepler (PhD, Psychology, 1979) is recognized for her innovative, community-based research on social issues involving children and youth, which has changed the way psychologists study bullying.

(adapted from the *Daily Bulletin*, 8 January and 17 January 2020)

On January 15, 2020, Graduate Studies and Postdoctoral Affairs hosted its second annual **GRADflix Showcase**, a red-carpet event featuring the 23 best one-minute videos made by graduate students to describe their research. After a short deliberation, a judging panel comprising Ryan Antooa (Marketing and Strategic Initiatives), Clare Bermingham (Writing and Communication Centre), Gina Hickman (Human Rights, Equity and Inclusion Office), Camelia Nunez (Concept, imagined by Velocity) and Chris McIntyre (Waterloo Artificial Intelligence Institute) decided which four videos were most deserving of the top prizes. The audience decided the People's Choice Award winner. All of this year's GRADflix videos can now be viewed online.

The winners are:

- 1st place - $750 prize: **Sadaf Faisal** (School of Pharmacy) for her video Use of smart technology for medication management
- 2nd place - $500 prize: **Muhammad Saad** (Electrical & Computer Engineering) for his video Price prediction with machine learning
- 3rd place - $250 prize: **Michelle Anagnostou** (Geography & Environmental Management) for her video Crime convergence and the illegal wildlife trade
- 4th place and People's Choice - $500 combined: **Megan Schmidt** (Geography & Environmental Management), for her video #GenerationRestoration: Peatlands and greenhouse gases

(adapted from the *Daily Bulletin*, 17 January 2020)

Waterloo PhD candidate **Preston Arens** has won the **Peter Lyon Prize** for his article "'Strictly Non-committal': British Economic Policy and the Commonwealth", published in *The Round Table: The Commonwealth Journal of International Affairs* in October of 2018. The annual prize by Routledge, the publishers of *The Round Table*, is awarded to the best policy-oriented article on a theme of significance for the contemporary Commonwealth. Arens' article looks at how economic ideas from the Commonwealth of the 1920s and '30s resurfaced in discussions leading up to Brexit. The persistence of those ideas and their ability to shape contemporary international relations is one of the main foci of Arens' research, which examines the evolution of the Commonwealth. "My research in the history of international relations has benefitted from the wealth of expertise available in the Faculty of Arts, and through Waterloo's strong institutional connections with Laurier, Guelph, and the Balsillie School of International Affairs," says Arens. His current research on the formation of the Commonwealth Secretariat explores how the Commonwealth became a modern international organization both in conceptual and practical terms. He has presented widely on intellectual history and historiography, and teaches British and Commonwealth history, as well as special topics in decolonization and international relations.

(adapted from the *Daily Bulletin*, 30 January 2020)

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University of Waterloo
REPORT OF THE DEAN OF APPLIED HEALTH SCIENCES TO SENATE
March 30, 2020

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FOR INFORMATION

A. APPOINTMENTS
Probationary Term

AU, Jason, Assistant Professor, Department of Kinesiology, May 1, 2020 – June 30, 2023. [BSc, 2012, McMaster University, PhD, 2017, McMaster University]. Dr. Au's research is based on a novel program of study that includes attention to advancing the development and use of new health technologies applied to human cardiovascular health and disease. He is specifically interested in emerging ultrasound techniques to study why vascular disease is more prevalent in the bends and bifurcations of arteries, and the health impacts of sedentary behaviour and exercise. His research is an excellent complement to the department and will provide unique opportunities for partnership and collaboration.

Definite Term Reappointment

JANDU, Narveen, Lecturer, School of Public Health and Health Systems, August 1, 2020 – July 31, 2021. [Hon. BSc, Wilfrid Laurier University, 2002; MSC, McMaster University, 2004; PhD, University of Toronto, 2008; MPH, University of Waterloo, 2017].

Adjunct Appointment
Graduate Supervision
BHUTTA, Zulfiqar, School of Public Health and Health Systems, February 1, 2020 – December 31, 2021.

DAVISON, Colleen, School of Public Health and Health Systems, February 1, 2020 – August 31, 2022.

GARNER, Rochelle, School of Public Health and Health Systems, January 1, 2020 – April 30, 2020.

SYLVETSKY, Allison, School of Public Health and Health Systems, December 9, 2019 – August 31, 2022.

Graduate Supervision and Research
BANERJEE, Albert, Department of Kinesiology, January 1, 2020 – December 31, 2023.

GIOSA, Justine, School of Public Health and Health Systems, December 9, 2019 – December 31, 2023.

Special Lecturer Appointments
FERRO, Annalise, Lecturer, School of Public Health and Health Systems, January 1, 2020 – April 30, 2020.

GALLANT, Ashley, Lecturer, Department of Recreation and Leisure Studies, January 1, 2020 – April 30, 2020.

HYNDMAN, Brian, Lecturer, School of Public Health and Health Systems, May 1, 2020 – August 31, 2020.

KACZYNSKI, Andrew, Lecturer, School of Public Health and Health Systems, May 1, 2020 – August 31, 2020.

MAYERS, Rebecca, Lecturer, Department of Recreation and Leisure Studies, January 1, 2020 – April 30, 2020.

STEVENS, Zachary, Lecturer, Department of Recreation and Leisure Studies, January 1, 2020 – April 30, 2020.

ZAZA, Christine, Lecturer, Faculty of Applied Health Sciences, January 1, 2020 –April 30, 2020.

Postdoctoral Appointments
EAST, Katherine, School of Public Health and Health Systems, April 14, 2020 – March 31, 2022.

Postdoctoral Reappointments
MARRIOTT, Kendal, Department of Kinesiology, January 1, 2020 – December 31, 2020 (one year extension).

SAARI, Margaret, School of Public Health and Health Systems, January 1, 2020 – February 29, 2020 (two month extension at 70%).

WOOD, Katelyn, Department of Kinesiology, January 1, 2020 – December 31, 2020.

Cross Appointment
REN, Carolyn, Professor, Mechanical and Mechatronics Engineering, Faculty of Engineering **to** Department of Kinesiology, Faculty of Applied Health Sciences, September 1, 2019 – April 30, 2022.

B. **CHANGE IN ADMINISTRATIVE APPOINTMENT**
QUADRILATERO, Joseph, Associate Professor, Associate Chair, Graduate Studies, **from** May 1, 2017 – April 30, 2020 **to** May 1, 2017 – June 30, 2019.

C. **ADMINISTRATIVE APPOINTMENTS**
LAING, Andrew, Associate Chair, Graduate Studies, Department of Kinesiology, January 1, 2020 – December 31, 2022.

LAIRD, Brian, Associate Dean, Graduate Studies, Faculty of Applied Health Sciences, July 1, 2020 – June 30, 2023.

D. SABBATICAL
   ALREADY APPROVED BY THE BOARD OF GOVERNORS
   HALL, Peter, Professor, School of Public Health and Health Systems, September 1, 2020 – August 31, 2021, one year at 98.9%.

Lili Liu, Dean
Applied Health Sciences

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF THE FACULTY OF ARTS TO SENATE
March 30, 2020

FOR INFORMATION

A. **APPOINTMENTS**
Definite Term Reappointments
D'AMATO, John, Lecturer, School of Accounting and Finance, January 1, 2020 to June 30, 2021.

FONG, Laura, Lecturer, Stratford School of Interaction Design and Business, January 1, 2020 to December 31, 2020.

Visiting Appointment
BERDINI, Federica, Visiting Scholar, Department of Philosophy, February 6, 2020 to August 5, 2020.

PITTS, Andrea, Visiting Assistant Professor, Department of Philosophy, September 1, 2020 to December 31, 2020.

Transfer
NACKE, Lennart, Associate Professor, **from** Communication Arts (1.0 FTE) **to** Stratford School of Interaction Design and Business (.51) and Communication Arts (.49 FTE), effective September 1, 2019.

Adjunct Appointments – Instruction
CASTANEDA OCHOA, Jorge Vladimir, Lecturer, Department of Spanish and Latin American Studies, January 1, 2020 to April 30, 2020.

DE SOUSA, Peter, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

HURST, Carolyn, Lecturer, School of Accounting and Finance, January 1, 2020 to December 31, 2020.

LAWRENCE, David, Lecturer, Department of History, January 1, 2020 to April 30, 2020.

VAN VOORST, David, Lecturer, School of Accounting and Finance, January 1, 2020 to December 31, 2020.

Adjunct Appointments – Graduate Supervision
HENNE, Kate, Assistant Professor, Department of Sociology and Legal Studies, March 1, 2020 to December 31, 2020.

MAKON, Rianne, Professor, Department of Political Science, January 1, 2020 to April 30, 2025.

Adjunct Appointments – Miscellaneous (research, consultations, etc.)
BLIGHT, James, Professor, Department of History, January 1, 2020 to December 31, 2024.

LANG, Janet, Professor, Department of History, January 1, 2020 to December 31, 2024.

RIZK, Jessica, Assistant Professor, Department of Sociology and Legal Studies, February 1, 2020 to January 31, 2021.

Adjunct Reappointments – Instruction

ALMAULA, Mirali, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

BALAISIS, Nicholas, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

BALTRUSAITIS, Jonathan, Lecturer, Stratford School of Interaction and Design, January 1, 2020 to April 30, 2020.

BARNES, Brooke, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

BORONKA, Irina, Lecturer, Department of Germanic and Slavic Studies, January 1, 2020 to April 30, 2020.

BRIGGS, Catherine, Lecturer, Department of History, January 1, 2020 to April 30, 2020.

COREY, Dylan, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

CYR, Dylan, Lecturer, Department of History, January 1, 2020 to April 30, 2020.

DE ROOVER, Megan, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

ENNIS, Richard, Lecturer, Department of Psychology, January 1, 2020 to April 30, 2020.

EZEH, Alphonsus Onyeka, Lecturer, Department of Germanic and Slavic Studies, January 1, 2020 to April 30, 2020.

FOLLETT, Alec, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

GLADKOVA, Olga, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

HAHN, Darius, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

HARVIE, Jo, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

HILL, Heather, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

HUTCHISON, Jesse, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

IV, Kieng, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

JOLLIFFE, Cameron, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

KHOLDI, Amir-Shahram, Lecturer, Department of History, January 1, 2020 to April 30, 2020.

KLEIN, Michael, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

KUNTZ, Carlyanna, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

LAZAR, Karen, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

LEWIS, Dennis, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

KEKO, Vesna, Lecturer, Department of Germanic and Slavic Studies, January 1, 2020 to April 30, 2020.

LITTLE, Melinda, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

LOCHNER, Martin, Faculty of Arts, January 1, 2020 to April 30, 2020.

MACDONALD, Christy, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

MACDONALD, Ian, Lecturer, Department of Philosophy, January 1, 2020 to April 30, 2020.

MCGAIRE, Heather, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

MORTON, Janet, Lecturer, Department of Fine Arts, January 1, 2020 to April 30, 2020.

PACEY, Dean, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

POLOTSKAIA, Anna, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

PUURUNEN, Elias, Lecturer, Department of Political Science, January 1, 2020 to April 30, 2020.

RUFFUDEEN, Zamal, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.

SCHWARTZ, Shira, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

SCHWEITZER, David, Lecturer, Department of History, January 1, 2020 to April 30, 2020.

SIDER, Kimber, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

SILK, Matthew, Lecturer, Department of Philosophy, January 1, 2020 to April 30, 2020.

STACEY, Jeffery, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

STETTNER, Shannon, Lecturer, Department of Philosophy, January 1, 2020 to April 30, 2020.

ST. MARIE, Denise, Lecturer, Department of Fine Arts, January 1, 2020 to April 30, 2020.

VANOVERBEKE, Chelsea, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

WELLUM, Caleb, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

WIENS, Brianna, Lecturer, Department of Communication Arts, January 1, 2020 to April 30, 2020.

YAZDANI, Amin, Lecturer, Department of Psychology, January 1, 2020 to April 30, 2020.

YEUNG, Amy, Lecturer, Department of Psychology, January 1, 2020 to April 30, 2020.

YEUNG, Jayme, Lecturer, School of Accounting and Finance, January 1, 2020 to April 30, 2020.
Graduate Students Appointed as Part-Time Lecturers
BATIOT, Maxime, Department of French Studies, January 1, 2020 to April 30, 2020.

BHOYROO, Haneesha, Department of French Studies, January 1, 2020 to April 30, 2020.

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

FORD, Katherine, Department of Sociology and Legal Studies, January 1, 2020 to April 30, 2020.

GARIEPY, Emilie, Department of French Studies, January 1, 2020 to April 30, 2020.

GRUENEWALD, Aleta, Department of Philosophy, January 1, 2020 to April 30, 2020.

MACALPINE, Rebecca, Department of History, December 1, 2019 to December 31, 2019.

MCCHESNEY, Dylon, Department of Philosophy, January 1, 2020 to April 30, 2020.

MITCHELL, Karice, Department of Fine Arts, January 1, 2020 to April 30, 2020.

ROWE, Raquel, Department of Fine Arts, January 1, 2020 to April 30, 2020.

SEWELL, Jamie, Department of Philosophy, January 1, 2020 to April 30, 2020.

WAGNER-RIZVI, Department of Political Science, January 1, 2020 to April 30, 2020.

Staff Appointments to Faculty
RAINVILLE, Janelle, Lecturer, Faculty of Arts, January 1, 2020 to April 30, 2020.

Research Faculty
BOUCHER, Maxime, Research Associate, Department of Political Science, December 1, 2019 to June 30, 2020.

B. **ADMINISTRATIVE APPOINTMENTS**
ACHESON, Katherine, Interim Director, Global Engagement Seminar, Department of English Language and Literature, December 1, 2019 to June 30, 2020.

BOEHRINGER, Michael, Chair, Department of Germanic and Slavic Studies, January 1, 2020 to June 30, 2022.

DANISCH, Robert, Director of Arts First, Department of Communication Arts, July 1, 2019 to June 30, 2021.

ESSELMENT, Anna, Associate Dean, Graduate Studies, July 1, 2020 to June 30, 2023.

GALLUPE, Owen, Associate Chair, Graduate Studies, Department of Sociology and Legal Studies, January 1, 2020 to June 30, 2020.

NILSEN, Elizabeth, Associate Dean, Graduate Studies (Interim), January 1, 2020 to June 30, 2020.

ROBERTS-SMITH, Jennifer, Associate Chair, Undergraduate Studies-Theatre and Performance, Department of Communication Arts, January 1, 2020 to June 30, 2020.

Administrative Reappointment
PARK, Robert, Acting Chair, Department of Anthropology, January 1, 2020 to April 30, 2020.

CANCELLATIONS
SMYTH, Heather, Director of Arts First, Department of English Language and Literature, July 1, 2019 to July 31, 2021.

CHANGE in DATES
HOUSTON, Andrew, Associate Chair, Undergraduate Studies (Drama), **from** July 1, 2018 to June 30, 2020 **to** July 1, 2018 to December 31, 2019.

SINGH, Rashmee, Associate Chair, Graduate Studies, **from** July 1, 2019 to June 30, 2021 **to** July 1, 2019 to December 31, 2019.

C. **RETIREMENT**
MACDOUGALL, Heather, Associate Professor, Department of History, effective January 1, 2021.

TAYLOR, Lynne, Associate Professor, Department of History, effective December 1, 2020.

D. **SABBATICAL LEAVES**
For approval by the Board of Governors:
BAUER, Andrew, Assistant Professor, School of Accounting and Finance, July 1, 2020 to December 31, 2020, six months leave at full salary.

BORITZ, J. Efrim, Professor, School of Accounting and Finance, September 1, 2020 to August 31, 2021, twelve months leave at full salary.

BROWN, Douglas, Professor, Department of Psychology, May 1, 2020 to April 30, 2021, twelve months leave at full salary.

COSKUN, Altay, Associate Professor, Department of Classical Studies, July 1, 2020 to December 31, 2020, six months leave at 85% salary.

COX, Jordana, Assistant Professor, Department of Communication Arts, July 1, 2020 to December 31, 2020, six months leave at full salary.

DUSAILLANT-FERNANDES, Valérie, Assistant Professor, Department of French Studies, July 1, 2020 to December 31, 2020, six months leave at 85% salary.

GROSSMANN, Igor, Associate Professor, Department of Psychology, January 1, 2021 to June 30, 2021, six months leave at 85% salary.

HIRSCHKOP, Ken, Professor, Department of English Language and Literature, July 1, 2020 to December 31, 2020, six months leave at 85% salary.

LLUIS, Stéphanie, Associate Professor, Department of Economics, January 1, 2021 to June 30, 2021, six months leave at 85% salary.

MCMURRY, Andrew, Associate Professor, Department of English Language and Literature, July 1, 2020 to December 31, 2020, six months leave at 85% salary.

MICHELA, John, Associate Professor, Department of Psychology, July 1, 2020 to December 31, 2020, six months leave at full salary.

NOLETTE, Nicole, Assistant Professor, Department of French Studies, July 1, 2020 to December 31, 2020, six months leave at full salary.

OZ, Seda, Assistant Professor, School of Accounting and Finance, July 1, 2020 to December 31, 2020, six months leave at full salary.

QUINLAN, Andrea, Assistant Professor, Department of Sociology and Legal Studies, July 1, 2020 to December 31, 2020, six months leave at full salary.

THOMPSON, Jessica, Assistant Professor, Department of Fine Arts, July 1, 2020 to December 31, 2020, six months at 85% salary.

TIAN, Joyce, Associate Professor, School of Accounting and Finance, September 1, 2020 to February 28, 2021, six months leave at full salary.

Approved by the Board of Governors
HAYES, Geoffrey, Associate Professor, Department of History, January 1, 2020 to December 31, 2020, twelve months leave at 91.2% salary.

SABBATICAL LEAVE – Cancelled
O'NEILL, Daniela, Professor, Department of Psychology, January 1 to June 30, 2020.

Sheila Ager
Dean, Faculty of Arts

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF ENGINEERING TO SENATE
March 30, 2020

FOR INFORMATION

A.   *APPOINTMENTS*
Probationary Term Reappointment
GOSTICK, Jeff, Associate Professor, Department of Chemical Engineering, July 1, 2020 – June 30, 2023. PhD, Chemical Engineering, University of Waterloo, Waterloo, ON, 2008; MSc Chemical Engineering, University of Waterloo, Waterloo, ON, 2002; BEng, Chemical Engineering, Ryerson University, Toronto, ON, 2000.

YIN, Shunde, Associate Professor, Department of Civil and Environmental Engineering, July 1, 2021 – June 30, 2024. PhD, Geotechnical Engineering, University of Waterloo, Waterloo, ON, 2008; MS, Geotechnical Engineering, Chinese Academy of Sciences, China, 2003; BS, Civil Engineering, Shijiazhuang Railway Institute, China, 1999.

BASIR, Nada, Assistant Professor, Conrad School of Entrepreneurship and Business, July 1, 2020 – June 30, 2023. PhD, Business Administration - Strategic Management and Policy – Schulich School of Business, York University, Toronto, ON, 2015; MSc Applied Biotechnology, McGill University, Montreal, QC, 2007; BSc Molecular Biotechnology, University of Waterloo, Waterloo, ON, 2005.

Visiting Appointments
DUVEDI, Ravinder Kumar, Scholar, Department of Mechanical and Mechatronics Engineering, May 18, 2020 – July 17, 2020.

EMBIRUCU DE SOUZA, Marcelo, Professor, Department of Chemical Engineering, July 1, 2020 – July 31, 2021.

HUANG, Ying, Scholar, Department of Mechanical and Mechatronics Engineering, December 30, 2019 – December 29, 2020.

LOUVIER-HERNANDEZ, Jose Francisco, Professor, Department of Chemical Engineering, March 1, 2020 – January 19, 2021.

MA, Haiqiang, Scholar, Department of Electrical and Computer Engineering, December 20, 2019 – March 20, 2020.

MASOUMI, Nasser, Professor, Department of Electrical and Computer Engineering, March 1, 2020 – December 30, 2020.

ZHANG, Caizhi, Scholar, Department of Mechanical and Mechatronics Engineering, May 1, 2020 – October 31, 2020.

Visiting Reappointments
YU, Suling, Scholar, Department of Electrical and Computer Engineering, April 1, 2020 – March 12, 2022.

Special Appointments

Undergraduate Instruction
ASTRAY, Tatiana, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

ATHAR, Shahrukh, Lecturer, Department of Electrical and Computer Engineering, January 1, 2020 – April 30, 2020.

DUGGINS, Peter, f Lecturer, Department of Systems Design Engineering, January 1, 2020 – April 3, 2020.

MATHAI, Nebu John, Lecturer, Department of Electrical and Computer Engineering, January 1, 2020 – April 30, 2020.

MORLEY, Mark, Lecturer, Department of Systems Design Engineering, January 1, 2020 – April 30, 2020.

REID, ROBERTSON, Lecturer, Department of Civil and Environmental Engineering, January 1, 2020 – April 30, 2020.

SAAD, John, J.F., Lecturer, Department of Electrical and Computer Engineering, January 1, 2020 April 30, 2020.

SCHMIDILIN, Karin, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 April 30, 2020.

TAIT, Morgan, Lecturer, Department of Systems Design Engineering, January 1, 2020 – April 30, 2020.

ZARNETT, Jeffrey, Lecturer, Department of Electrical and Computer Engineering, January 1, 2020 – April 30, 2020.

Special Appointments
Undergraduate Instruction, Research and Other
MURRAY, Mike, Engineer in Residence, Department of Civil and Environmental Engineering, January 1, 2020 – April 30, 2020.

Special Appointments
Graduate Instruction
EL-SADAANY, Ehab, Lecturer, Department of Electrical and Computer Engineering, September 1, 2019 – December 31, 2019.

JACKSON, Tim, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

LENNOX, Michelle, Maria Enrica, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

SALVINI, Paul, Lecturer, Conrad School of Entrepreneurship and Business, January

1, 2020 – April 30, 2020.

SHAFIEE, Mohammad Javad, Lecturer, Department of Systems Design Engineering, January 1,

2020 – April 30, 2020.

Special Reappointments
Undergraduate Instruction
CHUNG, Audrey, Lecturer, Department of Systems Design Engineering, January 1, 2020 – April 30, 2020.

HOOD, Kevin, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

MOUSAVI LAJIMI, S. Amir, Lecturer Department of Systems Design Engineering, January 1, 2020 – April 30, 2020.

Special Reappointments
Graduate Instruction
BABAEE CHESHMEAHMADREZAEE, Reza, Lecturer, Department of Electrical and Computer Engineering, January 1, 2020 – April 30, 2020.

BANSAL, Harvir, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 - April 30, 2020.

CHANG, Wayne, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

HURWITZ, Marc, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

MALHOTRA, Shavin, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

MARTIN, Tim, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

WANG, Chaoran, Lecturer, Conrad School of Entrepreneurship and Business, January 1, 2020 – April 30, 2020.

Adjunct Appointments
Graduate Supervision and Research
BACKHOUSE, Christopher Professor (retired), Department of Electrical and Computer Engineering, December 1, 2019 – June 30, 2023.

CELEBI, Emre, Assistant Professor, Department of Management Sciences, February 1, 2020 – January 31, 2023.

LI, Yeti, Assistant Professor, Department of Systems Design Engineering, December 1, 2019 – November 30, 2022.

LOHI, Ali, Professor, Department of Chemical Engineering, January 1, 2019 – December 31,

2021.

MATTHEW, Manoj, Assistant Professor, Department of Chemical Engineering, January 20, 2020 – January 19, 2022.

MISHRA, Akshaya, Assistant Professor, Department of Systems Design Engineering, January 1, 2020 – December 31, 2023.

WU, Xiaohua, Professor, Department of Mechanical and Mechatronics Engineering, December 1, 2019 – November 30, 2022.

Adjunct Reappointments
Graduate Supervision and Research
KE, Ginger, Y., Associate Professor, Department of Management Sciences, March 1, 2020 – February 28, 2023.

MEDLEY, John, Professor, Department of Mechanical and Mechatronics Engineering, January 1, 2020 – December 31, 2022.

Cross Appointments
JONES, Lyndon, Professor, Department of Optometry to Department of Chemical Engineering, December 1, 2019 – November 30, 2022.

MCPHEE, John, Professor, Department of Systems Design Engineering to Mechanical and Mechatronics Engineering, January 1, 2020 – December 31, 2022.

RUDOLPH, David, Professor, Department of Earth and Environmental Sciences to Department of Civil and Environmental Engineering, November 1, 2019 – December 31, 2022.

Cross Reappointments
MANN, Stephen, Professor, School of Computer Science to Department of Mechanical and Mechatronics Engineering March 1, 2020 – February 28, 2023.

B.   *ADMINISTRATIVE APPOINTMENTS*
FISCHMEISTER, Sebastian, Research Chair, Automotive Software for Connected and Automated Vehicles, NSERC-Magna Industry, March 1, 2020 – March 1, 2025.

KENNINGS, Andrew, Director of Mechatronics Engineering, January 1, 2020 – December 31, 2022.

MORTON, Andrew, Associate Chair Undergraduate Studie**s,** Department of Electrical and Computer Engineering, January 1, 2020 – December 31, 2022.

PETERSON, Sean, Academic Director, WatPD Engineering, May 1, 2020 – April 30, 2023.

RAYSIDE, Derek, Director, Software Engineering Program, January 1, 2020 – December 31, 2022.

SACHDEV, Manoj, Interim Chair, Department of Electrical and Computer Engineering, July 1, 2020 – June 30, 2021.

TRIPP, Bryan, Director, Biomedical Engineering, January 1, 2020 – December 31, 2022.

YAVUZ, Mustafa, Director, Graduate Nanotechnology Program, January 1, 2020 – December 31, 2022.

ADMINISTRATIVE REAPOINTMENTS
FISCHMEISTER, Sebastian, Executive Director, Waterloo Centre for Automotive Research (WatCAR), January 1, 2020 – December 31, 2022.

NAIRN, David, Director of First Year Engineering, May 1, 2020 – April 30, 2023.

ROBINSON, Mary, Associate Director, First Year Engineering, September 1, 2019 – April 30, 2020.

FOR APPROVAL BY THE BOARD OF GOVERNORS

C. *SABBATICALS*
    SIMON, Leonardo, C., Professor, Department of Chemical Engineering, September 1, 2020 – February 28, 2021, six months at 100% salary.

Paul Fieguth
Associate Dean, Policies and Resources

for

Richard Culham,
Interim Dean, Faculty of Engineering

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF THE FACULTY OF ENVIRONMENT TO SENATE
March 30, 2020

FOR INFORMATION
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A. APPOINTMENTS
Probationary-Term Reappointments
COCKAYNE, Daniel (BA 2010 University of Manchester, MA 2012 University of London, PhD 2016 University of Kentucky) Assistant Professor, Department of Geography and Environmental Studies, July 1, 2020 to June 30, 2023.

HABIB, Komal, (BS 2008 Lahore College for Women University, MSc 2011 Aalborg University, PhD 2015 University of Southern Denmark) Assistant Professor, School of Environment, Enterprise and Development, July 1, 2020 to June 30, 2023.

Continuing Lecturer Appointments
BARBEAU, Christine, School of Environment, Resources and Sustainability, September 1, 2020 [PhD & MES, University of Waterloo, 2017 & 2011; BSc, Queen's University, 2009]. Dr. Barbeau was appointed as a three-year, definite-term Lecturer in the School of Environment, Resources and Sustainability effective September 1, 2017. She has taught six unique courses and 12 course offerings since her appointment. Dr. Barbeau developed SERS' first online course. Her teaching versatility from small to large classes and from field to lecture to online delivery methods, is particularly noteworthy.

NUGENT, James, School of Environment, Resources and Sustainability, September 1, 2020 [PhD, MA, and HBSc, University of Toronto, 2018, 2009 & 2006]. Dr. Nugent has taught five unique courses and eight course offerings. Three of his offerings were in China at a 2+2 partner institution. Dr. Nugent developed the first Faculty-level online course and contributed to the development of the Sustainability Diploma that is open to all undergraduates at UW.

Adjunct Appointments
Graduate Supervision
CHURCH, Andrew, Professor, School of Planning, September 1, 2019 to August 31, 2022.

EPSTEIN, Graham, Assistant Professor, School of Environment, Resources and Sustainability, January 1, 2020 to December 31, 2023.

MARCUS, Joel, Associate Professor, School of Environment, Enterprise and Development, September 1, 2019 to August 31, 2022.

ORDONEZ-PONCE, Eduardo, Assistant Professor, School of Environment, Enterprise and Development, January 1, 2020 to December 31, 2020.

SEBASTIAN, Riviere, Assistant Professor, School of Planning, January 1, 2020 to December 31, 2023.

VAN DER SANDEN, Josephus Johannes, Assistant Professor, Department of Geography and Environmental Management, January 1, 2020 to December 31, 2023.

VINODRAI, Tara, Associate Professor, School of Environment, Enterprise and Development, January 1, 2020 to December 31, 2023.

Graduate Supervision and Research
ALEXANDER, Steven, Assistant Professor, Faculty of Environment, January 1, 2020 to December 31, 2022.

BALSDON, Jennifer, Assistant Professor, School of Environment, Sustainability and Resources, February 1, 2020 to January 31, 2023.

LOBB, David, Professor, Faculty of Environment, October 1, 2019 to September 30, 2020.

Research
RODRIGUEZ, Gabriela, Assistant Professor, School of Planning, November 1, 2019 to December 31, 2022.

SHAMAS, Amanda, Lecturer, School of Environment, Resources and Sustainability, December 1, 2019 to December 31, 2022.

Special Appointments
Undergraduate Instruction
BAKER, Denise, Associate Professor, School of Planning, January 1, 2020 to April 30, 2020.

CASTON, Wayne, Lecturer, School of Planning, January 1, 2020 to April 30, 2020.

HERTEL, Sean, Assistant Professor, School of Planning, May 1, 2020 to August 31, 2020.

HUYNH, Patricia, Lecturer, School of Environment, Resources and Sustainability, May 1, 2020 to August 31, 2020.

LESNIKOWSKI, Alexandra, Lecturer, Department of Geography and Environmental Management, January 1, 2020 to April 30, 2020.

SMITH, Nancy, Associate Professor, School of Planning, January 1, 2020 to April 30, 2020.

STIRBET, Hari, Lecturer, School of Environment, Enterprise and Development, January 1, 2020 to April 30, 2020.

Cross Appointments
LAW, Jane, Associate Professor, School of Planning to Department of Geography and Environmental Management, December 1, 2019 to December 31, 2020.

MCCARTHY, Daniel, Associate Professor, School of Environment, Resources and Sustainability to the School of Planning, September 1, 2019 to August 31, 2022.

SCHWEIZER, Vanessa, Assistant Professor, Department of Knowledge Integration to the Department of Geography and Environmental Management, December 1, 2019 to June 30, 2020

Graduate Students appointed as Part-time Lecturer
ESMAIL, Shefaza, Lecturer, School of Environment, Resources and Sustainability, May 1, 2020 to August 30, 2020.

GILES, Richard, Lecturer, School of Environment, Resources and Sustainability, May 1, 2020 to August 30, 2020.

B. ADMINISTRATIVE APPOINTMENTS
MOOS, Markus, Director, School of Planning, July 1, 2020 to June 30, 2024.

WOUDSMA, Clarence, Acting Chair, Department of Knowledge Integration, September 1, 2020 to December 31, 2021.

ADMINISTRATIVE REAPPOINTMENT
ARMITAGE, Derek, Associate Director, Graduate Studies, School of Environment, Resources and Sustainability, January 1, 2021 to December 31, 2023.

GORBET, Robert, Chair, Department of Knowledge Integration, January 1, 2022 to June 30, 2023.
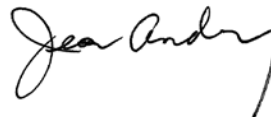
C. SABBATICAL LEAVES
For approval by the Board of Governors
MURPHY, Stephen, Professor, School of Environment, Resources and Sustainability, July 1, 2020 to July 31, 2021 at 100% salary.

Approved by the Board of Governors:
COCKAYNE, Daniel, Assistant Professor, Geography and Environmental Management, September 1, 2020 to February 28, 2021 at 100% salary.

GORBET, Robert, Associate Professor, Centre for Knowledge Integration, September 1, 2020 to December 31, 2021 at 100% salary.

SCOTT, Steffanie, Professor, Department of Geography and Environmental Management, March 1, 2020 to August 31, 2020 at 85% salary.

Jean Andrey
Dean

University of Waterloo
REPORT OF THE DEAN OF MATHEMATICS TO SENATE
March 30, 2020

FOR INFORMATION

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A.   APPOINTMENTS (for approval by the Board of Governors)
Probationary-Term Appointments

TATARKO, Kateryna (BS, 2014; MSc, 2015, both from V.N. Karazin Kharkiv National University; PhD, (exp 2020), University of Alberta), Assistant Professor, Dept. of Pure Mathematics, July 1, 2021 – June 30, 2024. Ms. Kateryna Tatarko expects to receive her PhD from the University of Alberta this June. Even at this early stage of her career, she has already published papers in top tier journals and features a different research team with each paper. Her research is in the area of convex analysis, and she has already obtained outstanding results on the reverse isoperimetric problem and in random matrix theory. Ms. Tatarko is a rising research star and an award-winning teacher, who will serve as a powerful interdisciplinary force in our department.

Probationary-Term Reappointments
SLOFSTRA, William, Assistant Professor, Dept. of Combinatorics and Optimization, July 1, 2020 – June 30, 2023.

Definite Term - Appointments
FREELAND, Keith, Lecturer, Office of the Dean, September 1, 2020 – August 31, 2023.

Continuing Appointments
BAUMAN, Shane, Lecturer, Office of the Dean, effective July 1, 2020.

BELTAOS, Andrew, Lecturer, Office of the Dean, effective July 1, 2020.

NAEEM, Nomair, Lecturer, Office of the Dean, effective July 1, 2020.

SPEZIALE, Sean, Lecturer, Office of the Dean, effective July 1, 2020.

Definite Term - Reappointments
CASTANEDA SANTOS, Diana, Office of the Dean, September 1, 2020 – August 30, 2022.

HUYNH, Mirabelle, Lecturer, Dept. of Statistics and Actuarial Science, September 1, 2020 – August 31, 2023.

LIU, Zhiyong, Lecturer, Office of the Dean, September 1, 2020 – August 31, 2023.

Visiting Appointments
AMMAR, Mostafa (Georgia Institute of Technology), Professor, David R. Cheriton School of Computer Science, January 1, 2021 – April 30, 2021.

ARENAS GONZALEZ, Alvaro, Scholar, Dept. of Combinatorics and Optimization, February 17, 2020 – June 15, 2020.

BOCOVICH, Cecylia, Researcher, David R. Cheriton School of Computer Science, February 1, 2020 – October 31, 2021.

BURGER, Reinhold, Research Associate, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

DAROONEH, Amir Hossein (University of Zanjan), Research Associate, Dept. of Applied Mathematics, February 1, 2020 – January 31, 2021.

ISAAKIDIS, Marios, Researcher, David R. Cheriton School of Computer Science, April 27, 2020 – September 30, 2020.

JIA, Fujin (Nanjing University), Scholar, Dept. of Applied Mathematics, April 1, 2020 – September 30, 2020.

JUNG, Sunwoo (Handong University), Scholar, David R. Cheriton School of Computer Science, June 25, 2020 – December 24, 2020.

LI, Yongwu (Beijing University of Technology), Scholar, Dept. of Statistics and Actuarial Science, April 1, 2020 – March 31, 2021.

MARZOUK, Mirette, Research Associate, David R. Cheriton School of Computer Science, January 1, 2020 – December 31, 2020.

MOZAFFARI, Ahmad, Research Associate, Dept. of Statistics and Actuarial Science, January 1, 2020 – August 31, 2020.

RAO SATTI, Srinivasa (Seoul National University), Associate Professor, David R. Cheriton School of Computer Science, February 26, 2020 – August 28, 2020.

RENOUF, Elizabeth, Research Associate, Dept. of Statistics and Actuarial Science, January 1, 2020 – December 31, 2020.

WOODBECK, Christopher, Research Associate, Dept. of Combinatorics & Optimization, January 1, 2020 – December 31, 2021.

XIE, Yutong (Rensselaer Polytechnic Institute), Scholar, David R. Cheriton School of Computer Science, January 6, 2020 – April 30, 2020.

ZHANG, Jun (Dalian Maritime University), Researcher, David R. Cheriton School of Computer Science, April 1, 2020 – September 30, 2020.

Adjunct Appointments
Instructor
HILBURN, Justin, Lecturer, Dept. of Pure Mathematics, January 1, 2020 – April 30, 2020.

PACEY, Dean, Lecturer, Office of the Dean, January 1, 2020 – April 30, 2020.

Research
TRAN, Hieu (Bioinformatics Solutions Inc), Assistant Professor, David R. Cheriton School of Computer Science, February 1, 2020 – June 30, 2023.

Grad Committee
KUBIZNAK, David (Perimeter Institute), Associate Professor, Dept. of Applied Mathematics, January 1, 2020 – December 31, 2023.

YOSHIDA, Beni (Perimeter Institute), Junior Researcher, Dept. of Applied Mathematics, January 1, 2020 – December 31, 2023.

Adjunct Reappointments
Instructor
ELGUN, Elcim, Lecturer, Office of the Dean, January 1, 2020 – April 30, 2020.

ESFAHANI, Navid, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

HACKMAN, Robert, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

WEHBE, Rina, Lecturer, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

Research
BOYLE, Phelim, Professor Emeritus, Dept. of Statistics and Actuarial Science, January 1, 2020 – December 31, 2023.

Cross Appointments
DAUTENHAHN, Kerstin (Depts. of Electrical and Computer Engineering and Systems Design Engineering), in the David R. Cheriton School of Computer Science, December 1, 2019 – June 30, 2025.

GURFINKEL, Arie (Dept. of Electrical and Computer Engineering), in the David R. Cheriton School of Computer Science, December 1, 2019 – June 30, 2022.

MOMBAUR, Katja (Dept. of Systems Design Engineering and the Dept. of Mechanical & Mechatronics Engineering), in the Dept. of Applied Mathematics, March 1, 2020 – June 30, 2023.

Graduate Students reappointed as Part-time Lecturers
BROOKS, Michael, David R. Cheriton School of Computer Science, January 1, 2020 – April 30, 2020.

LeGROW, Jason, Dept. of Combinatorics and Optimization, January 1, 2020 – April 30, 2020.

SHAW, Justin, Dept. of Applied Mathematics, January 1, 2020 – April 30, 2020.

WALSH, Zachary, Dept. of Combinatorics and Optimization, January 1, 2020 – April 30, 2020.

Postdoctoral Fellows appointed as Part-time Lecturers
LUO, Peng, Dept. of Statistics and Actuarial Science, March 1, 2020 – February 28, 2021.

VAN DER POL, Jorn, Dept. of Combinatorics & Optimization, February 2, 2020 – August 31, 2020.

Postdoctoral Fellow reappointed as part-time Lecturers
ROY, Quentin, David R. Cheriton School of Computer Science, March 19, 2020 – September 18, 2020.

B. ADMINISTRATIVE APPOINTMENTS
AKHUNDOV, Ilham, Director, Math Business & Accounting Programs, July 1, 2020 – June 30, 2023.

BOUTABA, Raouf, Director, David R. Cheriton School of Computer Science, July 1, 2020 – June 30, 2024.

CAMPBELL, Sue Ann, Associate Chair Undergraduate Studies, Dept. of Applied Mathematics, January 1, 2020 – December 31, 2020.

COTTON, Cecilia, Associate Chair, Undergraduate Studies, Dept. of Statistics and Actuarial Science, July 1, 2020 – June 30, 2023.

LARSON, Kate, Director, Undergraduate Studies, David R. Cheriton School of Computer Science, January 1, 2020 – June 30, 2022.

SCHOST, Eric, Associate Director of Graduate Studies, David R. Cheriton School of Computer Science, July 1, 2019 – June 30, 2021.

WOOD, Peter, Assistant Dean, On-Line Instruction, Office of the Dean of Mathematics, July 1, 2020 – June 30, 2022.

YEATS, Karen, Associate Chair, Graduate Studies, Dept. of Combinatorics & Optimization, February 1, 2020 – August 31, 2021.

ZHU, Mu, Associate Director of Data Science (Graduate), Office of the Dean, January 1, 2020 – June 30, 2022.

ADMINISTRATIVE REAPPOINTMENTS
LYSY, Martin, Director, Statistical Consulting & Collaborative Research Unit, Dept. of Statistics and Actuarial Science, July 1, 2020 – June 30, 2023.

B.1. Changes in Appointments
CASE, Lori, Office of the Dean, July 1, 2020 – June 30, 2023 (*ref.* Dean's Report to Senate, Dec 2019)
From   Associate Dean, Co-Op Education
To   Associate Dean, Co-Op Education & Life Long Learning

GEELEN, James, Associate Chair, Graduate Studies, Dept. of Combinatorics and Optimization (*ref.* Dean's Report to Senate, Sept 2019)
From   September 1, 2019 – June 30, 2020
To   September 1, 2019 – January 31, 2020

HARE, Kevin, Office of the Dean, January 1, 2018 – June 30, 2020 (*ref.* Dean's Report to Senate, Jan 2018)
From   Vice Dean
To   Associate Dean Administration and Vice Dean

C.   **SABBATICALS** (for approval by the Board of Governors)
FENG, Ben, Assistant Professor, Dept. of Statistics and Actuarial Science, September 1, 2020 – February 28, 2021, with 100% salary. This is a special early sabbatical.

LAMB, Kevin, Professor, Dept. of Applied Mathematics, September 1, 2020 – August 31, 2021, with 100% salary.

ORCHARD, Jeff, Associate Professor, David R. Cheriton School of Computer Science, September 1, 2020 – August 31, 2021, with 85% salary.

D.   **SPECIAL LEAVE**
SANITA, Laura, Associate Professor, Dept. of Combinatorics and Optimization, February 1, 2020 – January 31, 2021. This is an unpaid leave.

G.1. Change in Special Leave
DUNBAR, Fiona, Continuing Lecturer, Office of the Dean, (*ref.* Dean's Report to Senate, June 2019)
From: May 1, 2019 – April 30, 2020
To: May 1, 2019 – March 31, 2020

Kevin Hare
Interim Dean

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF SCIENCE TO SENATE
March 30, 2020

For information:

A.   *APPOINTMENTS*

New Probationary Term

DelSONTRO, Tonya, Assistant Professor, Department of Earth and Environmental Sciences, July 1, 2020 to June 30, 2023.   [B.S., Marine Science, Stockton University (2003); M.S., Marine Science, University of California, Santa Barbara (2006); Ph.D., Environmental Science, ETH Zurich (2011).]   Dr. DelSontro has been hired into the position of Integrated Hydrosystem Modeller.   Dr. DelSontro is an Aquatic biogeochemist and limnologist with a strong focus on lacustrine systems, but has experience/interest also in rivers, dammed rivers and their artificial reservoirs.   This is a rapidly developing area of research within the Department of Earth and Environmental Sciences (EES) and globally.   Her work provides novel insights on greenhouse gas emissions and their dominant controls using top-down and bottom-up approaches, identification of ecosystem drivers of emissions, and upscaling approaches.   Although her primary research focus is on greenhouse gas dynamics, her research program encompasses a broad perspective (e.g., nutrient and carbon biogeochemistry, mechanistic models, gas physical transport models, isotope geochemistry, biology/ecology, landscapes, climate).   We anticipate that she will immediately be able to collaborate with multiple faculty within EES.

Definite Term Appointment – Full-Time

NGO, William, Research Assistant Professor, School of Optometry and Vision Science, March 1, 2020 to February 28, 2022.   [O.D., University of Waterloo (2011); Ph.D., Vision Science, University of Waterloo (2016).]   Dr. Ngo's expertise and experience in biosciences research will be an asset to the School and CORE.   Past activities include clinical trials in dry eye disease, optical imaging techniques, and investigations of extracellular vesicles on the ocular surface.   As Director of CORE Biosciences, he oversees the development of 22 research proposals and grants.

Definite Term Reappointment – Full-Time

GILBERT, Dara, Lecturer, Department of Chemistry, July 1, 2020 to June 30, 2023.

McCANNA, David, Research Assistant Professor, School of Optometry and Vision Science, May 15, 2020 to May 14, 2022.

Adjunct Appointments

Graduate Supervision

HORSMAN, Geoffry, Associate Professor, Department of Biology, January 1, 2020 to June 30, 2022.

LONG, Darrel, Professor, Department of Earth and Environmental Sciences, December 1, 2019 to November 30, 2022.

McBETH, Joyce, Assistant Professor, Department of Earth and Environmental Sciences, December 1, 2019 to November 30, 2022.

Graduate Supervision and Research

COOPER-ROY, Alexandre, Assistant Professor, Department of Physics and Astronomy, January 1, 2020 to August 31, 2024.

Adjunct Reappointments

Undergraduate Instruction

DHAMI, Rita, Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2020.

PACEY, Dean, Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2020.

TARIO, Allison, Clinical Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2020.

Graduate Supervision

ENGLISH, Michael C., Professor, Department of Earth and Environmental Sciences, March 1, 2020 to February 28, 2023.

GOULD, William D., Professor, Department of Earth and Environmental Sciences, February 1, 2020 to January 31, 2023.

KOOPS, Marten, Assistant Professor, Department of Biology, November 1, 2019 to June 30, 2022.

MOHAMED, Mohamed, Professor, Department of Earth and Environmental Sciences, February 1, 2020 to January 31, 2023.

THOMAS, Janis, Professor, Department of Earth and Environmental Sciences, January 1, 2020 to December 31, 2022.

Research

TROPE, Graham E., Professor, School of Optometry and Vision Science, January 1, 2020 to December 31, 2022.

Undergraduate Instruction and Research

HO, Certina, Assistant Professor, School of Pharmacy, January 1, 2020 to December 31, 2022.

Graduate Supervision and Research

BURGESS, Cliff, Professor, Department of Physics and Astronomy, February 1, 2020 to August 31, 2024.

CHAKRABORTY, Arijit, Assistant Professor, School of Optometry and Vision Science, February 11, 2020 to February 28, 2022.

COOKE, Steven, Professor, Department of Biology, November 1, 2019 to October 31, 2022.

LAUGHINGHOUSE, Dail, Assistant Professor, June 1, 2020 to June 30, 2022.

MUNKITTRICK, Kelly, Professor, Department of Biology, March 1, 2020 to June 30, 2023.

Graduate Instruction, Graduate Supervision and Research

FREIDEL, Laurent, Professor, Department of Physics and Astronomy, February 1, 2020 to August 31, 2024.

Changes in Appointments

CHIANG ROJAS, Gustovo, Adjunct Professor, Department of Biology, appointment dates changed from December 1, 2019 to November 30, 2021 to December 1, 2019 to June 30, 2022.

McFARLANE, Thomas, Clinical Lecturer, School of Pharmacy, appointment changed from Definite Term to Continuing effective January 1, 2020.

SIAN, Preet, Adjunct Assistant Professor, School of Pharmacy, appointment dates changed from January 1, 2018 to December 31, 2020 to January 1, 2018 to March 2, 2021.

WONG, Jeffrey, Adjunct Assistant Professor, School of Pharmacy, appointment dates changed from January 1, 2019 to December 31, 2020 to January 1, 2019 to February 28, 2021.

Cross Appointments

HOLYOAK, Todd, Associate Professor, Department of Biology, cross appointed to Department of Chemistry, December 15, 2019 to August 31, 2022.

TSEN, Adam (Wei), Assistant Professor, Department of Chemistry, cross appointed to Department of Physics and Astronomy, January 1, 2020 to December 31, 2023.

Cross Reappointments

CHEN, Pu, Professor, Department of Chemical Engineering, cross appointed to Department of Chemistry, September 1, 2019 to August 31, 2022.

JONES, Lyndon, Professor, School of Optometry and Vision Science, cross appointed to Department of Physics and Astronomy, January 1, 2020 to December 31, 2023.

LAKSHMINARAYANAN, Vasudevan (Vengu), Professor, School of Optometry and Vision Science, cross appointed to Department of Physics and Astronomy, January 1, 2020 to December 31, 2023.

LU, Qing-Bin, Professor, Department of Physics and Astronomy, cross appointed to Department of Biology, February 1, 2020 to January 31, 2023.

ZELEK, John, Associate Professor, Department of Systems Design Engineering, cross appointed to School of Optometry and Vision Science, January 15, 2020 to January 14, 2023.

Special Appointments
Undergraduate Instruction

FERNANDES, Heidi, Lecturer, School of Pharmacy, January 1, 2020 to April 30, 2020.

GURSKA, Jola, Lecturer, Department of Biology, May 1, 2020 to August 31, 2020.

KARUNAGODA, Renuka, Lecturer, Department of Biology, February 1, 2020 to April 30, 2020.

LONG, Darrel, Lecturer, Department of Earth and Environmental Sciences, January 1, 2020 to April 30, 2020.

OFFMAN, Elliot, Lecturer, School of Pharmacy, January 1, 2020 to April 30, 2020.

YEUNG, Debby, Lecturer, School of Optometry and Vision Science, January 1, 2020 to April 30, 2020.

Graduate Student Appointed as Part-time Lecturer

BISHOP, Kevin, Lecturer, Department of Chemistry, January 1, 2020 to April 30, 2020.

VAN ECK, Peter, Lecturer, Department of Earth and Environmental Sciences, January 1, 2020 to April 30, 2020.

Postdoctoral Fellow Appointed as Part-time Lecturer

RONAGH, Pooya, Lecturer, Department of Physics and Astronomy, January 1, 2020 to April 30, 2020.

Special Reappointments
Undergraduate Instruction

CHAUDET, Marcia, Lecturer, Department of Biology, February 1, 2020 to April 30, 2020.

DOLMAN, Howard, Lecturer, School of Optometry and Vision Science, January 1, 2020 to April 30, 2020.

LI, Yantian (Terry), Assistant Professor, School of Pharmacy, April 18, 2020 to August 21, 2020.

SILVA, Andrew E., Lecturer, School of Optometry and Vision Science, January 1, 2020 to April 30, 2020.

SINGH, Arvind, Lecturer, School of Pharmacy, January 1, 2020 to April 30, 2020.

VARIKOOTY, Jalaiah, Lecturer, School of Optometry and Vision Science, January 1, 2020 to April 30, 2020.

B.   ADMINISTRATIVE REAPPOINTMENTS

DIECKMANN, Thorsten, Associate Chair, Graduate and Research, Department of Chemistry, January 1, 2020 to December 31, 2022.

STANBERRY, Andre, Clinic Director, School of Optometry and Vision Science, January 1, 2020 to May 31, 2022.

FOR APPROVAL BY THE BOARD OF GOVERNORS

C.   SABBATICAL

HAINES, Lacey, Assistant Clinical Professor, School of Optometry and Vision Science, Special Early Sabbatical, January 1, 2020 to June 30, 2020, 100% salary arrangement.

NEKKAR RAO, Praveen P., Associate Professor, School of Pharmacy, May 1, 2020 to April 30, 2021, 100% salary arrangement.

R.P. Lemieux
Dean

Report of the Council of Ontario Universities Academic Colleagues Meetings – December 2019

December 10-11, 2019

The August Academic Colleagues Meeting included an evening meeting on December 10th, and a full morning of discussion which included COU updates on December 11.

Dinner Meeting – The Evolving Role of Ontario Universities – Insights from Futurists

The evening meeting featured a conversation with Prof. Michele Mastroeni, OCADU and his former student Ms. Leah Zaidi, a strategic foresight consultant. The theme of the conversation focused on how publicly-assisted universities fit into the future in general, and the conversation was primarily dominated by considerations of the future of work. The futurists stressed the need for universities to articulate a value proposition considering the volume of readily accessible, affordable information online. The two featured speakers primarily treated universities as teaching institutions, and stressed that given evolving societies and labour demands, universities should prioritize multidisciplinarity and expand opportunities for students to curate their own education experiences. The futurists also pointed to three dominant factors that must be considered in future planning: climate change, protecting diversity, equity and democracy and artificial intelligence, but did not elaborate how these could or should relate to evolving social and labour demands. Environmental issues and research priorities did not come up beyond the above list of issues to be considered.

In a subsequent debrief, Academic Colleagues noted that climate change, diversity, equity, democracy and artificial intelligence were already strong themes in much of the teaching and research conducted at Ontario universities. The dinner discussion served to highlight the disconnect between what the university sector does and what the public, including recent university students, perceive it to do.

COU Updates

Updates on Strategic Mandate Agreement 3

All institutions have finished bi-lateral SMA3 discussions with MCU, and were expected to submit their first drafts by December 17th. Early insights were that there was not as much as expected differentiation in how individual institutions plan to weight their metrics.

COU submitted a memo to MCU re: the new faculty workload reporting metric, with recommendations that this metric focus on teaching activity only and not be disaggregated beyond the institutional level, with context narratives on universities' own websites.

Updates on the Student Choice Initiative

Academic colleagues were reminded of the Nov. 21, 2019 Divisional Court decision, which stuck down the Ontario government's Student Choice Initiative. The Government intends to appeal,

noting (in the government brief, "*attaching conditions to government grants in no way interferes with university autonomy and independence. Universities remain free to exercise their independence and autonomy through the choice to accept public funding, subject to whatever conditions are attached*."

Bill 132 (Better for People, Smarter for Business Act)

Bill 132 passed on December 10, 2019. Schedule 5 of the Bill is relevant to the Ontario Universities Sector: the Algoma University Act was amended to allow Algoma to confer bachelor degrees in any arts or science programs, and to offer degrees in any branch of learning in the future. The Ontario College of Art and Design University Act was amended to allow OCADU to offer Bachelor of Arts, Master of Arts and PhD degrees, and to offer degrees in any branch of learning in the future.

Other MCU-related Updates

Program Approval Changes

According to ministry staff, the new program funding approvals and quality assurance processes will be streamlined to speed up new program approvals.

Internationalization

According to ministry staff, the Ontario government has indicated interest in developing an internationalization strategy through the likely lenses of immigration, regional economic development and outward student mobility.

Collaborative Nursing Education

Ontario colleges are asking to deliver stand-alone bachelors nursing programs. Currently, nursing degrees at colleges are offered in partnership with universities. Universities with nursing programs are supportive.

Math Proficiency Testing

As of March 31, 2020, all new Ontario College of Teachers members will need to pass math proficiency test as a condition of entry. This will likely be administered by a third party provider, not universities.

Free Speech Reporting

Colleagues received a copy of the HEQCO report *Freedom of Speech on Campus: 2019 Annual Report to the Ontario Government* All universities and colleges are in compliance with the Government of Ontario's free speech policy requirement.

Indigenous Faculty Survey Results

UBC's Zac Vescera has termed the current aggressive push to hire indigenous faculties at Canadian Universities as "the Gold Rush", and raised concerns with respect to intense competition for indigenous scholars leading to early career entry of ABD scholars, high service loads, burnout, and a potential lack of institutional support for indigenous faculty. COU surveyed Ontario indigenous faculty, with reported results based on responses from 86 faculty members from sessional lecturer to full professor (including 5 full, 28 associate and 28 assistant professors). Results include:

- Sixty-one participants (85%) indicated that they use Indigenous methodologies or ways of knowing in their research.

- 78% (N=37) of pre-tenured faculty indicated that they use Indigenous methodologies.

- Most survey respondents (63%, N=60) noted that their university is "supportive" or "very supportive" of their research.

- Challenges for faculty include time, Research Ethics Boards, and western frameworks/expectations

- Challenges were elaborated to include institutional practices and cultures, the lack of alignment between tenure requirements and Indigenous research methods and topics, experiences with racism, and balancing workloads.

Johanna Wandel
Academic Colleague, University of Waterloo

University of Waterloo
SENATE
30 March 2020

FOR APPROVAL
_____

Committee Appointments
Motion: To approve the following appointments:

- **Distinguished Teacher Awards Committee:** Emily Arnold as undergraduate student representative, and Giuseppe Femia as graduate student representative, terms to 31 December 2021.

University of Waterloo
SENATE
30 March 2020

FOR APPROVAL

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Waterloo Residences
Motion: That Senate recommends to the Board of Governors the following name change: "Waterloo Residences" to "Campus Housing."

Rationale:

In winter 2019, Waterloo Residences began to assess how current students living in residence perceive the brand and how it compares to our growing competition. It was evident that a new voice, visual identity, and name would be needed to not only compete in the Waterloo housing market but to align with the type of experience students were seeking. This is needed to celebrate our unique story, clarify our strengths, reiterate how we live our departmental values and promote better alignment with the University of Waterloo's brand of innovation, connection, and curiosity.

Through student and staff surveys, we discovered that the housing department was known internally and externally by many names. Committing to one name moving forward will create unity and provide clarity for our students, staff and campus partners. Market research and analysis indicated "Campus Housing" as the ideal departmental name moving forward. Campus Housing is recognizable, clear, and emphasizes how we support the institution and our students. It will differentiate us from our competitors by allowing students and partners to easily understand what we do and where we provide housing. This name will allow our department to be familiar and recognizable to our next generation of students both in person and online.

Living in residence is less common for Waterloo students than it used be. The University's ability to build housing has not kept pace with enrolment growth. Other university city housing markets are not seeing the volume of private development of purposeful, student-built accommodations as Waterloo. Waterloo is competing with more rental properties and new developments each year. The long-held belief that residence is foundational for the overall university experience needs to be redefined to our incoming students. In order to do this, we need to be clear about who we are and reposition ourselves as the top housing choice for current and prospective students.

If approved, the proposed name change would be implemented during the Fall 2020 academic term.

Glen Weppler   Chris Read
Director, Waterloo Residences   Associate Provost, Students

FOR APPROVAL

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The Senate Finance Committee met on 14 February 2020 to receive an update on the 2019/20 Operating Budget and to consider 2020/21 Operating Budget scenarios.

On 24 March 2020, the committee considered the proposed provisional 2020/21 Operating Budget, and endorsed the budget as presented.

1. **Motion:** That Senate recommend that the Board of Governors approve the 2020/21 Operating Budget, as described in Attachment 1.

/kw   Feridun Hamdullahpur
                                                                  Chair

UNIVERSITY OF WATERLOO
2020/21 Operating Income Budget (in thousands)

Provisional

Senate Finance Committee
March 24, 2020

	2019/20 Base Budget	Increase / (Decrease) $	Increase / (Decrease) %	2020/21 Base Budget	Notes
INCOME					
Operating Grant					
Enrolment	224,740	(36,894)	-16.4%	187,846	
Student Success and Differentiation	20,576	(20,576)	-100.0%	0	
SMA3 Performance Outcomes	0	62,615	100.0%	62,615	
Special Purpose	5,068	31	0.6%	5,099	
International Student Recovery	(5,803)	(102)	1.8%	(5,905)	
Graduate Expansion	4,024	(4,024)	-100.0%	0	
Transfers to AFIW	(13,978)	340	-2.4%	(13,638)	
	234,627	1,390	0.6%	236,017	Note 1
Tuition					
Domestic - Undergraduate	231,240	(4,928)	-2.1%	226,312	Note 2
Domestic - Graduate	28,350	152	0.5%	28,502	
International - Undergraduate	205,491	22,045	10.7%	227,536	Note 3
International - Graduate	44,948	4,421	9.8%	49,369	Note 4
Transfers to AFIW	(19,435)	13	-0.1%	(19,422)	
	490,594	21,703	4.4%	512,297	
Other Revenue					
Co-op Recovery	22,508	526	2.3%	23,034	
Student Services Fee	12,887	1,477	11.5%	14,364	Note 5
Research Overhead	8,460	668	7.9%	9,128	
Interest	9,600	1,500	15.6%	11,100	Note 6
Services to AFIW	3,907	(20)	-0.5%	3,887	
Miscellaneous Income	9,773	-	0.0%	9,773	
	67,135	4,151	6.2%	71,286	
Total Income	792,356	27,244	3.4%	819,600	

Note 1 - Consistent with the transition to the next Strategic Mandate Agreement (SMA3, 2020/21-2024/25), effective April 1, 2020, the Enrolment, Student Success and Differentiation and SMA3 Performance Outcomes grants have been updated. These grants reflect the roll in of funding associated with SMA2 Graduate Expansion growth (up to negotiated targets), and a planned redistribution to designate a share of total grant funding as subject to performance outcomes, shown above as SMA3 Performance Outcomes.

Note 2 - The decrease in Domestic Undergraduate tuition revenue is primarily driven by the 10% tuition rate reduction in 2019/20, and subsequent tuition freeze for 2020/21, as required by the Ministry of Colleges and Universities (MCU) tuition framework effective 2019-2020 to 2020-2021.

Note 3 – The increase in International Undergraduate tuition revenue is consistent with tuition rate increases approved by the Board of Governors in its February 2020 meeting.

Note 4 - The increase in International Graduate tuition revenue is driven by international tuition rate increases approved by Board in its February 2020 meeting as well as a slight projected increase in overall international graduate volume.

Note 5 - The increase in the student services fee revenue relates mainly to past decision by students through the Student Services Advisory Committee to provide funding for designated student services.

Note 6 - The investment income earned on operational funds is based on current and forecasted cash management and investment plans.

Provisional

Senate Finance Committee
March 24, 2020

	2019/20 Base Budget	Increase / (Decrease) $	Increase / (Decrease) %	2020/21 Base Budget	2020/21 Base Budget as of Income	Notes
EXPENSES						
Salary and Wages						
Current salaries and wages	454,798	15,937	3.5%	470,735	57.4	Note 1
Benefits						
Current benefits	102,822	5,525	5.4%	108,347	13.2	
Faculty professional expense reimbursement plan	2,688	54	2.0%	2,742	0.3	
Parental leave supplement	2,000	-	0.0%	2,000	0.2	
Total benefits	107,510	5,579	5.2%	113,089	13.8	Note 2
Total salaries and benefits	562,308	21,516	3.8%	583,824	71.2	
Student Support						
Graduate student support	8,831	-	0.0%	8,831	1.1	
Graduate incentive fund	450	-	0.0%	450	0.1	
Support for international graduate students	9,943	(181)	-1.8%	9,762	1.2	
Senate matching scholarships	160	-	0.0%	160	0.0	
Tuition set aside	23,846	(226)	-0.9%	23,620	2.9	Note 3
Undergraduate scholarships/bursaries	11,580	-	0.0%	11,580	1.4	
Total student support	54,810	(407)	-0.7%	54,403	6.6	
Other						
Accessibility fund for students with disabilities	1,051	-	0.0%	1,051	0.1	
Insurance	2,000	-	0.0%	2,000	0.2	
Library acquisitions	8,519	-	0.0%	8,519	1.0	
Municipal taxes	2,800	-	0.0%	2,800	0.3	
University Fund	35,975	4,000	11.1%	39,975	4.9	Note 4
Utilities	22,825	100	0.4%	22,925	2.8	
Total other	73,170	4,100	5.6%	77,270	9.4	
Supplies and expenses	118,207	2,201	1.9%	120,408	14.7	Note 5
Gross expenses	808,495	27,410	3.4%	835,905	102.0	
Cost recoveries	(12,720)	-	0.0%	(12,720)	(1.6)	Note 6
Estimated net expenses	795,775	27,410	3.4%	823,185	100.4	
Estimated income	792,356			819,600		
Budget surplus (deficit)	(3,419)			(3,585)		
One-time contribution from Faculties	3,656			-		Note 7
Surplus (Unfunded deficit)	237			(3,585)		

Note 1 - This reflects committed May 1, 2020 salary increases based on existing salary agreements with the University's employee groups. 2020/21 is the third year of a three year salary agreement with each of the employee groups.

Note 2 - This reflects increases in benefits costs related to a number of factors including changes as a result of salary increases and rate/premium increases.

Note 3 - The Tuition Set Aside amount is calculated based on a formula mandated by the Ministry of Training, Colleges and Universities. It is to be used on needs based student support programs.

Note 4 - The University Fund is used strategically for funding the University's strategic priorities and managing risk.

Note 5 - Supplies and expenses reflects the budget for a variety of non-salary operating expenses of the faculties and academic support units such as supplies, enterprise software, maintenance, professional services, etc.

Note 6 - Chargeouts and cost recoveries primarily include recoveries from Ancillary Enterprises (Housing, Food Services, Print & Retail Solutions, Watcard and Parking) for space charges and administrative support.

Note 7 - Faculties made a contribution in 2019/20 to balance the budget in that year, mainly achieved by redistributing resources available from recent underspending against available budgets.

University of Waterloo Senate Finance Committee
2020-2021 Supplementary Institutional Enrolment
And Employment Data

The "Supplementary Institutional Enrolment and Employment" report provides historical data trends on undergraduate and graduate student enrolment as well as faculty and staff employment. It provides a general overview of the volume and proportion of students, faculty, and staff over time as a major component underlying overall university revenues and expenditures.

The report presents Faculty-level breakout of the data for descriptive and reference purposes only, and is not meant to reflect an attribution of revenues or expenditures.

Notes:
†   The table includes data for the Affiliated and Federated Institutions of Waterloo. Throughout the tables the symbol ° is used to identify terms defined in the Glossary.

Prepared by Institutional Analysis & Planning, March 16, 2020

University of Waterloo
Fall Year One Enrolments° and Targets°
as at February 2020 (Including Affiliated and Federated Institutions of Waterloo)

		Fall 2016 Actual	Fall 2017 Actual	Fall 2018 Actual	Fall 2019 Target	Fall 2019 Actual	Fall 2020 Target
Applied Health Sciences							
Co-op	Health Studies	97	134	159	127	119	128
	Kinesiology	196	167	194	184	170	170
	Public Health	27	39	43	42	49	42
	Recreation & Leisure St	75	89	87	106	114	105
		395	**429**	**483**	**459**	**452**	**445**
Regular	Health Studies	88	62	76	72	80	74
	Kinesiology	92	92	73	85	49	57
	Public Health	19	28	31	29	17	19
	Recreation & Leisure St	19	21	23	25	17	18
		218	**203**	**203**	**211**	**163**	**168**
		613	632	686	670	615	613
Arts							
Co-op	Accounting & Financial Mgmt	436	384	405	357	396	378
	Arts	3			1		1
	Arts and Business	339	362	342	362	387	645
		778	**746**	**747**	**720**	**783**	**1,024**
Regular	Arts	368	491	439	475	537	281
	Arts and Business	37	49	39	40	44	39
	Global Bus & Digital Arts	169	195	169	189	186	175
	Social Development	81	82	79	80	75	54
		655	**817**	**726**	**784**	**842**	**549**
		1,433	1,563	1,473	1,504	1,625	1,573
Computing & Financial Mgmt							
Co-op	Computing & Fin Management	45	53	41	46	50	47
		45	**53**	**41**	**46**	**50**	**47**
		45	53	41	46	50	47
Engineering							
Co-op	Architecture	76	76	78	77	78	76
	Architecture Engineering			90	91	80	92
	Biomedical Engineering	56	69	80	86	93	86
	Chemical Engineering	142	127	154	150	158	151
	Civil Engineering	137	143	138	117	122	124
	Computer Engineering	277	266	253	259	315	260
	Electrical Engineering	160	126	129	123	136	132
	Environmental Engineering	63	59	71	80	57	78
	Geological Engineering	21	20	17	35	12	29
	Management Sciences	77	86	92	84	89	94
	Mechanical Engineering	231	222	240	207	217	219
	Mechatronics	204	226	209	209	261	219
	Nanotechnology Engineering	119	114	120	117	127	124
	Systems Design	97	94	100	89	97	96
		1,660	**1,628**	**1,771**	**1,724**	**1,842**	**1,780**
		1,660	1,628	1,771	1,724	1,842	1,780

		Fall 2016 Actual	Fall 2017 Actual	Fall 2018 Actual	Fall 2019 Target	Fall 2019 Actual	Fall 2020 Target
Environment							
Co-op	Env & Resource Studies	61	87	68	81	71	72
	Environment & Business	116	114	102	112	104	106
	Geography	33	35	26	26	28	28
	Geomatics	64	90	80	82	64	69
	Urban&Regional Planning	129	146	124	131	153	138
		403	**472**	**400**	**432**	**420**	**413**
Regular	Env & Resource Studies	14	13	19	13	14	13
	Environment & Business	4	5	4		6	
	Geography	27	34	31	58	72	68
	Geomatics	10	9	11	8	7	8
	Integrated Studies	26	29	24	27	23	26
	International Development	35	30	29	29	25	23
		116	**120**	**118**	**135**	**147**	**138**
		519	592	518	567	567	551
Mathematics							
Co-op	Business	116	118	145	120	104	120
	Chartered Accountancy	81	51	101	55	41	100
	Computer Science	375	306	356	342	368	342
	Fin. Analysis & Risk Mgmt	119	124	135	119	93	130
	Mathematics	339	446	444	431	394	451
		1,030	**1,045**	**1,181**	**1,067**	**1,000**	**1,143**
Regular	Computer Science	31	10	7	17	9	15
	Fin. Analysis & Risk Mgmt	29	15	13	14	15	15
	Mathematics	372	295	305	262	223	247
		432	**320**	**325**	**293**	**247**	**277**
		1,462	1,365	1,506	1,360	1,247	1,420
Science							
Co-op	Chartered Accountancy	9	6	6	10	6	15
	Life Sciences	316	342	308	281	311	281
	Physical Sciences	238	309	278	232	264	246
	Science	22	17	25	46	18	41
	Science & Business	79	86	89	100	78	85
		664	**760**	**706**	**669**	**677**	**668**
Regular	Life Sciences	268	266	277	274	262	267
	Physical Sciences	48	41	54	55	31	34
	Science	204	233	257	282	250	258
	Science & Business	6	9	7	17	11	10
		526	**549**	**595**	**628**	**554**	**569**
		1,190	1,309	1,301	1,297	1,231	1,237
Software Engineering							
Co-op	Software Engineering	132	140	122	127	136	129
		132	**140**	**122**	**127**	**136**	**129**
		132	140	122	127	136	129
Total Fall Year One							
Co-op		5,107	5,273	5,451	5,244	5,360	5,649
Regular		1,947	2,009	1,967	2,051	1,953	1,701
		7,054	7,282	7,418	7,295	7,313	7,350
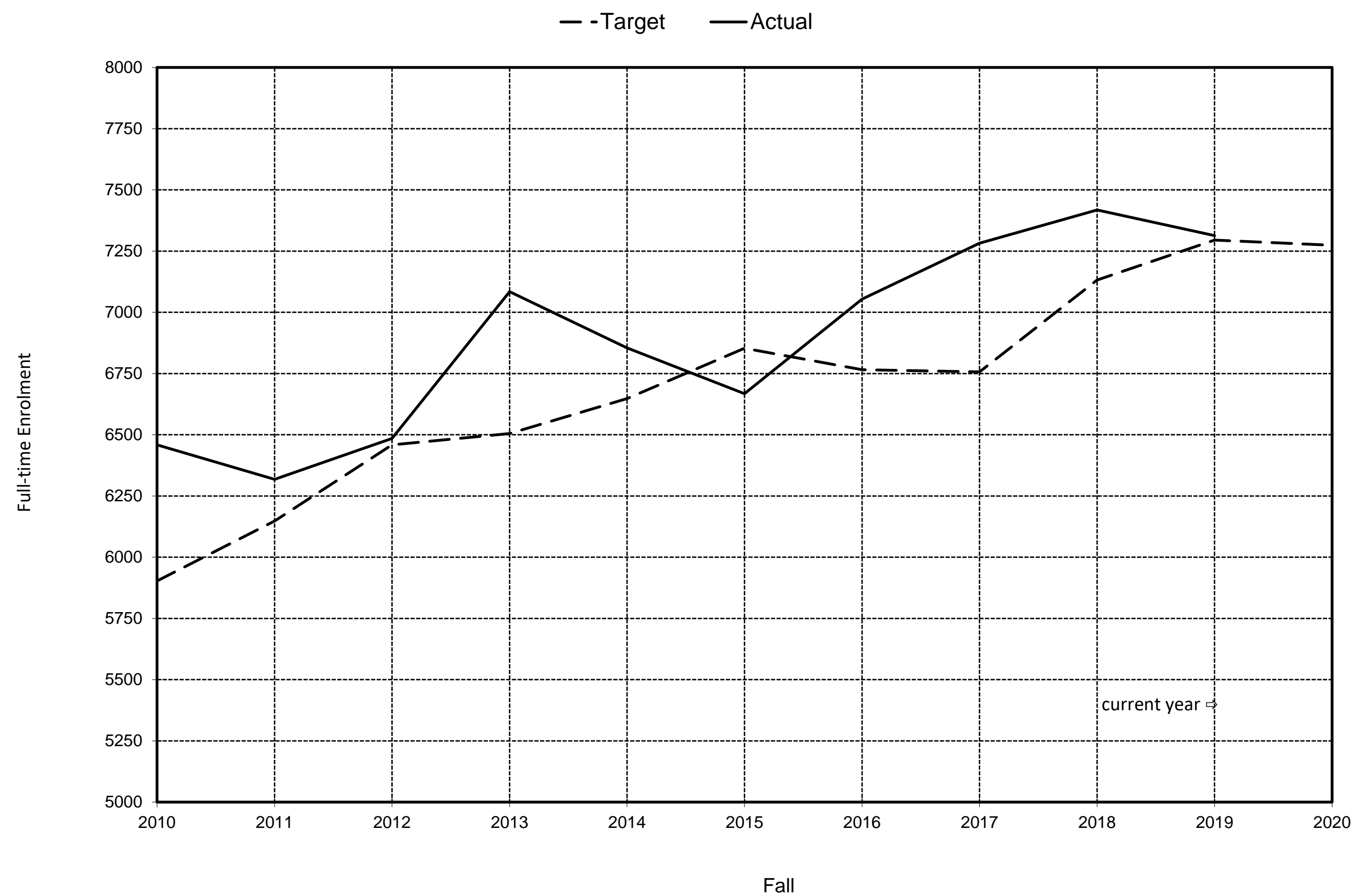
Notes:

The report includes full-time 1A and 1B students registered in the Fall term only. Students admitted in the Winter and Spring, ESL and non-degree are excluded.
AFIW students are included in the Faculty of Arts. Bachelor of Social Work, Optometry, and Pharmacy are excluded as they are 2nd entry programs.

Totals may not add due to rounding.
*Term is defined in Glossary.

Source: Undergraduate Forecast - Institutional Analysis & Planning
Prepared by: Institutional Analysis & Planning

University of Waterloo
Fall Year One Enrolments° and Targets°

— - Target   ——— Actual

Full-time Enrolment

Fall

current year ⇨

SD1a

University of Waterloo
Summary of Undergraduate FTEs°
as at February 2020 (Including Affiliated and Federated Institutions of Waterloo)

	16.17 Actual	17.18 Actual	18.19 Actual	19.20 Actual
Total Undergraduate Enrolment				
Regular				
Applied Health Sciences	1,240	1,224	1,229	1,218
Arts	4,042	4,004	3,886	4,042
Engineering	188	148	149	137
Environment	776	805	788	780
Mathematics	2,823	2,735	2,604	2,400
Renison	135	118	118	126
Science	3,329	3,376	3,478	3,651
	12,533	**12,410**	**12,252**	**12,354**
Co-op				
Applied Health Sciences	1,061	1,110	1,211	1,259
Arts	2,359	2,435	2,563	2,778
Computing & Financial Mgmt	135	155	165	169
Engineering	5,605	5,755	5,893	6,136
Environment	1,346	1,431	1,405	1,425
Mathematics	4,220	4,322	4,641	4,638
Science	2,232	2,372	2,385	2,445
Software Engineering	495	524	461	477
	17,453	**18,104**	**18,724**	**19,327**
Faculties				
Applied Health Sciences	2,301	2,334	2,440	2,477
Arts	6,401	6,439	6,448	6,820
Computing & Financial Mgmt	135	155	165	169
Engineering	5,792	5,903	6,042	6,273
Environment	2,123	2,236	2,193	2,205
Mathematics	7,043	7,057	7,245	7,038
Renison	135	118	118	126
Science	5,562	5,747	5,862	6,096
Software Engineering	495	524	461	477
	29,987	**30,513**	**30,974**	**31,681**
Part-Time				
On-Campus	473	474	471	467
Distance Education	444	455	449	495
	917	**929**	**920**	**962**

Notes:

Enrollment as reported at February 1, 2020.

Part-Time Undergraduate FTEs are also included in the report of Total Undergraduate Enrolment above.

Source: Undergraduate Forecast - Institutional Analysis & Planning
Prepared by: Institutional Analysis & Planning

University of Waterloo
Summary of Undergraduate FTEs°
Undergraduate Enrolment
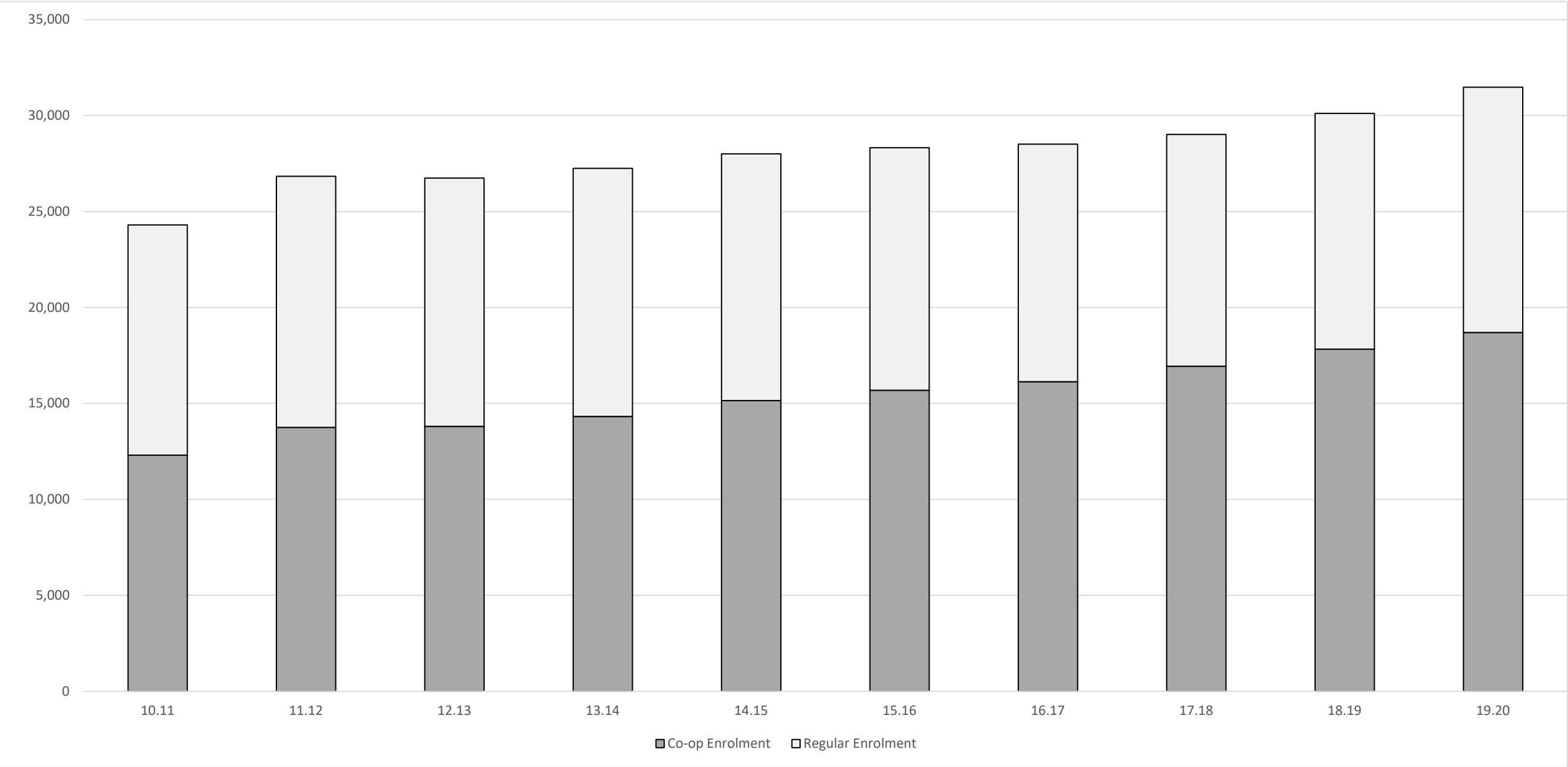
Source: Undergraduate Forecast - Institutional Analysis & Planning
Prepared by: Institutional Analysis & Planning

University of Waterloo
Summary of FTE Graduate Enrolment°
as at February 2020 (Including Affiliated and Federated Institutions of Waterloo)

	16.17 Actuals	17.18 Actuals	18.19 Actuals	19.20 Actuals[1]
Master's				
Applied Health Sciences	316	324	325	323
Arts	438	467	452	487
Engineering	860	992	1,016	1,045
Environment	271	278	275	267
Mathematics	392	403	430	427
Optometry	15	17	13	12
Science	256	255	283	275
Theology	20	23	22	21
Total	2,568	2,759	2,817	2,858
Doctoral				
Applied Health Sciences	121	133	144	154
Arts	256	253	254	261
Engineering	655	676	681	676
Environment	133	139	150	153
Mathematics	301	326	350	356
Optometry	19	19	15	15
Science	285	286	295	320
Total	1,770	1,831	1,889	1,935
Grand Total	4,338	4,590	4,706	4,794

Graduate Enrolment
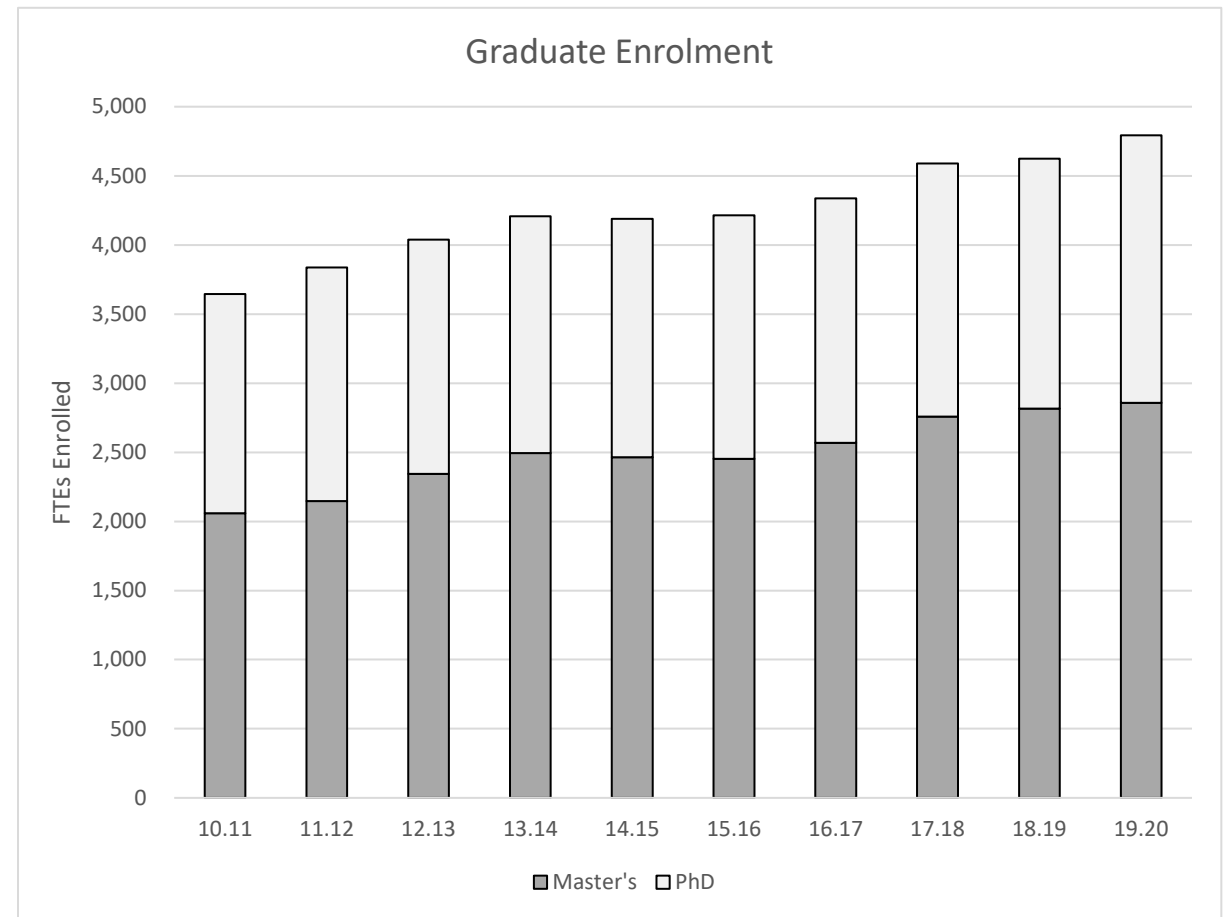
Notes:

(1) Enrollment as reported at February 1, 2020

Master's enrollment includes graduate-level, non-degree, diploma and certificate programs and Year 1 of 3-Year PhD.

Graduate programs offered at the Affiliated and Federated Institutions of Waterloo are included with their home Faculty.

Master of Social Work is included in AHS Faculty

Master of Peace and Conflict Studies is included in Arts Faculty

Graduate Programs in Pharmacy are included in Science Faculty

Totals may not add due to rounding.

° Term is defined in the Glossary.

Source: Graduate Forecast - Institutional Analysis & Planning
Prepared by: Institutional Analysis & Planning

University of Waterloo
Summary of Home Enrolment And Teaching Activity Indicators
by Faculty (Excluding Affiliated and Federated Institutions of Waterloo)

		2015.16	2016.17	2017.18	2018.19	2019.20	
Applied Health Sciences							
Undergraduate	Fall Year One	491	613	632	686	615	⬇
	Home Enrolled FTEs°	2,151	2,299	2,334	2,440	2,477	⬆
	FTEs Taught°	1,418	1,634	1,643	1,818	1,826	⬆
Masters FTEs°		258	270	263	257	255	⬇
Doctoral FTEs°		119	121	133	144	154	⬆
Arts							
Undergraduate	Fall Year One	1,185	1,204	1,337	1,288	1,425	⬆
	Home Enrolled FTEs	5,527	5,451	5,466	5,534	5,863	⬆
	FTEs Taught	8,043	8,121	7,990	8,078	8,305	⬆
Masters FTEs		434	418	446	426	462	⬆
Doctoral FTEs		262	256	253	254	261	⬆
Engineering							
Undergraduate	Fall Year One	1,665	1,726	1,698	1,832	1,910	⬆
	Home Enrolled FTEs	5,761	6,035	6,165	6,272	6,511	⬆
	FTEs Taught	4,713	4,910	4,974	5,122	5,367	⬆
Masters FTEs		796	860	992	1,016	1,045	⬆
Doctoral FTEs		665	655	676	681	676	⬇
Environment							
Undergraduate	Fall Year One	522	519	592	518	567	⬆
	Home Enrolled FTEs	2,107	2,122	2,236	2,193	2,205	⬆
	FTEs Taught	1,602	1,645	1,752	1,805	1,793	⬇
Masters FTEs		281	271	278	275	267	⬇
Doctoral FTEs		123	133	139	150	153	⬆
Mathematics							
Undergraduate	Fall Year One	1,449	1,551	1,462	1,588	1,340	⬇
	Home Enrolled FTEs	6,957	7,355	7,397	7,558	7,361	⬇
	FTEs Taught	6,587	6,880	7,177	7,138	7,199	⬆
Masters FTEs		356	392	403	430	427	⬇
Doctoral FTEs		285	301	326	350	356	⬆

SD4

University of Waterloo
Summary of Home Enrolment And Teaching Activity Indicators
by Faculty (Excluding Affiliated and Federated Institutions of Waterloo)

		2015.16	2016.17	2017.18	2018.19	2019.20	
Optometry							
Undergraduate	Fall Year One	0	0	0	0	0	
	Home Enrolled FTEs	399	411	402	405	403	↓
	FTEs Taught	395	406	397	400	399	↓
Masters FTEs		8	15	17	13	12	↓
Doctoral FTEs		23	19	19	15	15	
Science, including Pharmacy							
Undergraduate	Fall Year One	1,131	1,190	1,309	1,301	1,231	↓
	Home Enrolled FTEs	5,000	5,148	5,345	5,458	5,693	↑
	FTEs Taught	4,636	4,708	4,763	4,922	4,960	↑
Masters FTEs		244	240	243	268	263	↓
Doctoral FTEs		284	266	266	272	291	↑
Total							
Undergraduate	Fall Year One	6,442	6,802	7,029	7,212	7,088	↓
	Home Enrolled FTEs	27,902	28,820	29,345	29,859	30,513	↑
	FTEs Taught	27,394	28,304	28,696	29,283	29,849	↑
Masters FTEs		2,377	2,467	2,641	2,686	2,732	↑
Doctoral FTEs		1,761	1,751	1,811	1,865	1,906	↑

Undergraduate FTEs Taught in Computing and Financial Management and Software Engineering are credited to the Faculty instructing the students.
Computing and Financial Management Fall Year One and Home Enrolled FTEs are shown equally in Math and Arts.
Software Engineering Fall Year One and Home Enrolled FTEs are shown equally in Math and Engineering.
MSW and MPACS program totals have been excluded from their respective faculties (AHS) and (Arts).
Totals may not add due to rounding. Historical data are restated.
° Term is defined in the Glossary.

Sources: Various student databases - Institutional Analysis & Planning
Prepared by: Institutional Analysis & Planning

University of Waterloo
Summary of Regular Faculty Appointments (Excluding Affiliated and Federated Institutions of Waterloo)

	Number of Full-Time Faculty					**Percentage of Total Salary Dollars**				**Total Full-Time Faculty Salary Costs (000)**	**Average Nominal Salary**
	Tenured	Probationary	Continuing	Definite	**Total**	Tenured	Probationary	Continuing	Definite		
Applied Health Sciences											
2014/2015	39	21	4	7	**71**	64%	23%			$ 8,845	$ 124,575
2015/2016	37	22	4	11	**74**	60%	23%			$ 9,468	$ 127,939
2016/2017	38	26	5	7	**76**	61%	27%			$ 10,227	$ 134,563
2017/2018	40	21	6	6	**73**	64%	22%	7%	6%	$ 10,217	$ 139,954
2018/2019	45	16	8	5	**74**	69%	17%	9%	5%	$ 10,574	$ 142,892
Arts											
2014/2015	181	69	17	26	**293**	70%	19%	5%	6%	$ 37,452	$ 127,821
2015/2016	195	59	17	26	**297**	74%	16%	5%	6%	$ 39,756	$ 133,858
2016/2017	193	59	19	29	**300**	73%	15%	5%	6%	$ 41,769	$ 139,231
2017/2018	195	47	21	42	**305**	72%	12%	6%	9%	$ 43,313	$ 142,009
2018/2019	191	53	21	52	**317**	69%	14%	6%	11%	$ 45,753	$ 144,331
Engineering											
2014/2015	207	58	16	15	**296**	76%	16%	5%	4%	$ 44,259	$ 149,522
2015/2016	215	56	16	17	**304**	77%	15%	4%	4%	$ 46,454	$ 152,809
2016/2017	220	53	17	17	**307**	78%	14%	5%	4%	$ 48,599	$ 158,304
2017/2018	218	53	18	14	**303**	78%	14%	5%	3%	$ 49,280	$ 162,641
2018/2019	228	53	18	26	**325**	77%	13%	5%	5%	$ 54,175	$ 166,694
Environment											
2014/2015	56	18	1	1	**76**	80%	18%			$ 9,879	$ 129,989
2015/2016	52	21	1	1	**75**	77%	21%			$ 9,905	$ 132,064
2016/2017	55	23	1	2	**81**	77%	21%			$ 10,938	$ 135,034
2017/2018	58	18	1	4	**81**	80%	16%			$ 11,280	$ 139,260
2018/2019	59	19	2	5	**85**	77%	17%			$ 12,041	$ 141,657
Mathematics											
2014/2015	145	25	19	27	**216**	75%	9%	7%	8%	$ 30,389	$ 140,690
2015/2016	145	30	21	31	**227**	79%	11%	8%	9%	$ 32,941	$ 145,114
2016/2017	146	31	23	32	**232**	72%	11%	8%	9%	$ 34,869	$ 150,299
2017/2018	152	34	24	36	**246**	71%	11%	8%	9%	$ 37,846	$ 153,844
2018/2019	154	43	22	40	**259**	69%	14%	8%	10%	$ 40,899	$ 157,913
Optometry											
2014/2015	21	5	3	1	**30**	74%				$ 4,665	$ 155,507
2015/2016	20	7	2	0	**29**	73%	21%			$ 4,685	$ 161,563
2016/2017	17	9	1	0	**27**	69%	28%			$ 4,383	$ 162,348
2017/2018	18	9	1	1	**29**	68%	26%			$ 4,884	$ 168,406
2018/2019	19	8	0	1	**28**	73%	24%			$ 4,933	$ 176,191
Science (excl. Optometry)											
2014/2015	112	28	9	5	**154**	79%	14%			$ 21,530	$ 139,808
2015/2016	117	25	12	6	**160**	79%	12%	6%	2%	$ 22,986	$ 143,662
2016/2017	118	23	13	5	**159**	80%	11%			$ 23,918	$ 150,430
2017/2018	118	25	15	9	**167**	78%	11%	8%	4%	$ 25,391	$ 152,043
2018/2019	123	21	12	13	**169**	80%	9%	6%	5%	$ 26,848	$ 158,865
Total											
2014/2015	**761**	**224**	**69**	**82**	**1136**	**74%**	**16%**	**5%**	**5%**	**$ 157,019**	**$ 138,221**
2015/2016	**781**	**220**	**73**	**92**	**1166**	**79%**	**16%**	**6%**	**6%**	**$ 166,194**	**$ 142,534**
2016/2017	**787**	**224**	**79**	**92**	**1182**	**74%**	**15%**	**6%**	**5%**	**$ 174,704**	**$ 147,804**
2017/2018	**799**	**207**	**86**	**112**	**1204**	**74%**	**14%**	**6%**	**6%**	**$ 182,210**	**$ 151,337**
2018/2019	**819**	**213**	**83**	**142**	**1257**	**73%**	**14%**	**6%**	**7%**	**$ 195,224**	**$ 155,310**

Notes:

Full-time faculty as at April 1st of the year. Includes Faculty Deans.
Excludes those on less than 100% load except leaves where the faculty member receives full salary. Excludes full-time senior administrators.
Percentage of total salary dollars figures have been suppressed where necessary to ensure confidentiality for small numbers.
This summary differs from SD6 (Faculty Complement) as this report does not include open positions but does include definite term appointments.

Source: Human Resources Mgmt System; Institutional Analysis & Planning
Prepared by: Institutional Analysis & Planning

Faculty Complement by Department
(including open positions)

	September 2015	September 2016	September 2017	September 2018	September 2019
Applied Health Sciences					
Dean's Office	0.00	0.00	0.00	0.00	0.00
Kinesiology	21.00	23.00	22.20	23.20	26.20
Public Health & Health Systems, School of	28.70	30.70	31.53	33.53	34.53
Recreation & Leisure Studies	16.00	16.00	17.00	17.00	17.00
	65.70	69.70	70.73	73.73	77.73
Arts					
Accounting & Finance, School of	42.50	42.50	44.50	46.50	46.50
Anthropology	7.00	8.00	8.00	8.00	8.00
Classical Studies	7.00	7.00	7.00	8.00	8.00
Dean's Office	1.00	1.00	1.00	1.00	1.00
Communication Arts	19.00	19.00	19.50	22.00	21.50
Economics	30.10	32.10	32.10	33.10	33.10
English Language & Literature	28.00	28.00	28.50	31.00	31.00
Fine Arts	10.00	11.00	11.00	11.00	10.00
French Studies	13.00	13.00	13.00	12.00	13.00
Germanic & Slavic Studies	9.00	9.00	9.00	9.00	8.00
History	17.00	17.00	17.00	17.00	17.00
Philosophy	15.70	16.70	16.50	16.50	16.50
Political Science	21.40	21.40	21.40	20.40	19.40
Psychology	39.00	39.00	39.00	39.00	41.00
Religious Studies	2.00	2.00	2.00	2.00	2.00
Sociology & Legal Studies	17.50	17.50	17.50	17.50	17.50
Spanish & Latin American Studies	4.00	5.00	5.00	5.00	4.00
Stratford School of Interaction Design & Business *	N/A	N/A	N/A	1.00	3.50
	283.20	289.20	292.00	300.00	301.00
Engineering					
Architecture, School of	21.00	21.00	21.00	22.00	22.00
Conrad School of Entrepreneurship and Business *	3.00	4.00	4.00	5.00	8.00
Chemical	36.50	37.50	38.50	38.50	38.50
Civil & Environmental	41.80	41.80	41.80	42.80	42.80
Dean's Office	8.00	7.50	7.50	7.50	3.50
Electrical & Computer	93.50	94.50	94.50	97.30	97.80
Management Sciences	29.30	29.30	30.30	30.30	30.30
Mechanical & Mechatronics	57.50	59.50	62.00	64.00	66.00
Systems Design	28.30	29.30	29.50	32.60	32.60
	318.90	324.40	329.10	340.00	341.50
Environment					
Dean's Office	1.50	1.50	1.50	1.50	1.50
Environment, Enterprise & Development, School of	16.00	18.00	18.00	18.00	18.00
Environment, Resources & Sustainability, School of *	16.00	16.00	16.00	16.00	16.00
Geography & Environmental Management	27.60	26.30	26.30	26.30	26.30
Knowledge Integration *	4.00	4.00	4.00	4.00	4.00
Planning, School of	16.00	16.00	16.00	16.00	16.00
	81.10	81.80	81.80	81.80	81.80
Mathematics					
Applied Mathematics	27.00	27.00	26.00	28.00	30.00
Combinatorics & Optimization	29.00	30.00	30.00	31.00	32.00
Computer Science, David R. Cheriton School of	75.80	77.80	78.80	80.30	83.30
Dean's Office	12.10	12.10	12.50	12.50	13.50
Math Business and Accounting	2.00	2.00	2.00	2.00	2.00
Pure Mathematics	25.00	25.00	26.00	26.00	26.00
Statistics & Actuarial Science	46.00	48.00	49.00	51.00	53.00
	216.90	221.90	224.30	230.80	239.80
Science					
Biology	43.50	43.50	45.50	43.50	43.50
Chemistry	42.60	43.60	43.60	43.80	43.80
Dean's Office *	N/A	1.00	1.00	1.00	1.00
Earth & Environmental Sciences	21.50	22.00	22.00	22.00	23.00
Optometry & Vision Science, School of	32.00	32.00	32.00	32.00	32.00
Pharmacy, School of	20.00	22.00	23.00	24.00	23.00
Physics & Astronomy	39.00	39.00	41.00	43.00	43.00
	198.60	203.10	208.10	209.30	209.30
Total Faculty Complement	**1,164.40**	**1,190.10**	**1,206.03**	**1,235.63**	**1,251.13**

* Significant changes:

2019/20

no significant reporting changes

2018/19

Stratford School of Interaction Design & Business faculty complement was established

Conrad Business, Entrepreneurship and Technology Centre became Conrad School of Entrepreneurship and Business

2017/18

no significant reporting changes

2016/17

Department of Environment & Resource Studies was renamed School of Environment, Resources & Sustainability

Centre for Knowledge Integration was renamed Knowledge Integration

Dean of Science Office was added to complement

University of Waterloo
Academic Support Staff Positions by Department
(Including Open Positions)

	October 2015	October 2016	October 2017	October 2018	October 2019
Faculties					
Applied Health Sciences	43.3	44.3	47.3	50.3	50.8
Arts	109.3	112.2	113.4	114.5	117.3
Engineering	227.6	235.1	238.5	243.3	252.7
Environment	47.2	48.2	48.3	48.3	49.3
Mathematics	111.8	110.9	112.8	118.8	123.5
Science	157.8	162.8	165.8	172.1	176.9
Faculty Subtotal	**697.0**	**713.5**	**726.1**	**747.3**	**770.5**
University Research Centres *	N/A	N/A	N/A	5.0	6.0
Office of the President	4.0	4.0	5.0	5.0	5.0
Vice-President, Academic & Provost	409.6	413.2	277.2	278.2	272.8
Associate Vice-President, Graduate Studies & Postdoctoral Affairs *	26.0	27.0	27.0	27.0	29.8
Associate Vice-President, International	14.0	12.0	8.0	10.0	12.0
University Secretary *	51.7	53.7	46.0	46.0	48.0
Vice-President, Advancement	79.5	79.8	85.3	87.3	85.9
Vice-President, University Relations	31.9	32.9	35.9	36.9	36.5
Vice-President, University Research	72.0	75.0	79.0	82.0	83.0
Vice-President, Administration & Finance *	502.0	507.6	531.6	553.6	563.2
Associate Provost, Resources *	13.1	14.5	N/A	N/A	N/A
Associate Provost, Co-operative & Experiential Education *	N/A	N/A	175.7	183.7	191.2
Associate Vice-President, Academic	77.9	79.9	80.9	81.9	83.5
Associate Vice-President Human Rights, Equity & Inclusion *	N/A	N/A	6.7	6.7	10.0
Associate Provost, Human Resources	49.8	51.8	55.8	57.8	58.0
Associate Provost, Students	119.1	135.5	147.7	164.6	172.0
Chief Information Officer	177.0	177.0	178.0	175.0	169.0
Non-Faculty Subtotal	**1,627.6**	**1,663.9**	**1,739.8**	**1,795.7**	**1,819.9**
Total Academic Support Staff	**2,324.5**	**2,377.4**	**2,465.9**	**2,548.0**	**2,596.4**

General Notes:
  Excludes Ancillary Enterprise staff.
* **Significant changes:**
 2019/20
 GW Centre - Chemistry staff complement was rolled up to Chemistry
 GW Centre - Physics staff complement was rolled up to Physics
 Institute for Quantum Computing complement transferred from Physics to University Research Centres
 2018/19
 Stratford Programs became Stratford School of Interaction Design & Business
 Conrad Business, Entrepreneurship and Technology Centre became the Conrad School of Entrepreneurship and Business
 University Research Centres became a new business unit with the Waterloo Institute for Nanotech and Waterloo Institute
  for Sustainable Energy transferring from the Dean of Engineering
 Research & Technology Park staff complement was established and is part of the Vice-President, Administation & Finance complement
 Bookings staff complement was rolled up to the Vice-President, Administration & Finance complement
 2017/18
 Independent Studies was dissolved October 2016
 Interdisciplinary Studies was dissolved November 2016
 Environmental Engineering complement moved to Civil & Environmental Engineering April 2017
 Geological Engineering complement moved to Civil & Environmental Engineering April 2017
 Deputy Provost, Integrated Planning & Budgeting was established May 2017
 Associate Provost, Graduate Studies was renamed Associate Vice-President, Graduate Studies & Postdoctoral Affairs
 Graduate Studies was renamed Graduate Studies & Postdoctoral Affairs
 University Secretary and Office of General Counsel were divided into two distinct offices; renamed to University Secretary;
  and Office of General Counsel renamed to Legal and Immigration Services and now reports to Vice-President, Academic & Provost
 Secretariat & Office of General Counsel renamed Secretariat
 Associate Provost, Resources was dissolved May 2017
 Associate Provost, Co-operative & Experiential Education was established February 2017
 Centre for Career Action, Co-operative Education, WatCACE and WatPD report to Associate Provost, Co-operative & Experiential Education
 Associate Vice-President Human Rights, Equity & Inclusion was established July 2017
 Conflict Management & Human Rights reports to Associate Vice-President Human Rights, Equity & Inclusion
 Equity Office reports to Associate Vice-President Human Rights, Equity & Inclusion
 2016/17
 Women's Studies complement was transferred to Philosophy
 Department of Environment & Resource Studies was renamed School of Environment, Resources & Sustainability
 Centre for Knowledge Integration was renamed Knowledge Integration
 Student Innovation reports to Associate Provost, Students
 Campus Wellness was established May 2016

University of Waterloo
Academic Support Staff Positions by Department
(Including Open Positions)

	October 2015	October 2016	October 2017	October 2018	October 2019
Applied Health Sciences					
Dean's Office	18.5	18.0	20.0	20.0	20.0
Kinesiology	15.3	16.3	17.3	20.3	20.8
Public Health & Health Systems, School of	6.5	7.0	7.0	7.0	7.0
Recreation & Leisure Studies	3.0	3.0	3.0	3.0	3.0
	43.3	44.3	47.3	50.3	50.8
Arts					
Accounting & Finance, School of	9.0	9.0	9.0	9.6	9.8
Anthropology	0.7	0.7	0.7	1.0	1.0
Arts Computing Office	8.0	8.0	8.0	8.0	8.0
Arts Language Laboratory	1.0	1.0	1.0	1.0	1.0
Classical Studies	1.0	1.0	1.0	1.0	1.0
Dean's Office	25.3	26.7	26.3	27.7	29.6
Drama & Speech Communication	5.1	5.1	5.1	5.1	5.5
Economics	4.0	4.0	4.0	4.0	4.0
English Language & Literature	3.5	3.5	4.0	4.0	4.0
Fine Arts	4.5	4.5	5.5	5.5	5.5
French Studies	4.0	4.0	4.0	3.0	3.0
Germanic & Slavic Studies	1.5	1.5	1.5	1.5	1.5
History	2.0	2.0	2.0	2.0	2.0
Independent Studies *	0.6	0.6	N/A	N/A	N/A
Interdisciplinary Studies *	0.0	0.0	N/A	N/A	N/A
Philosophy	2.0	3.0	3.0	3.0	3.0
Political Science	4.0	4.0	4.0	4.0	4.0
Psychology	17.8	18.8	18.8	18.8	19.0
Religious Studies	0.8	0.8	1.0	0.8	0.9
Sociology & Legal Studies	3.0	3.0	3.0	3.0	3.0
Spanish & Latin American Studies	1.5	0.5	0.5	0.5	0.5
Stratford School of Interaction Design & Business *	9.0	10.5	11.0	11.0	11.0
Women's Studies *	1.0	N/A	N/A	N/A	N/A
	109.3	112.2	113.4	114.5	117.3
Engineering					
Architecture, School of	11.0	11.0	11.0	11.0	11.3
Conrad School of Entrepreneurship and Business *	1.0	1.0	1.0	3.0	3.0
Chemical	20.5	21.5	21.5	21.5	21.5
Civil & Environmental	17.5	18.5	19.0	20.5	21.8
Dean's Office	41.8	44.8	49.0	47.7	50.7
Electrical & Computer	46.1	46.2	46.5	48.5	48.5
Engineering Computing	11.0	11.0	11.0	11.0	11.0
Engineering Undergraduate Office	12.5	13.5	13.5	13.5	13.5
Environmental Engineering *	0.3	0.3	N/A	N/A	N/A
Geological *	0.3	0.3	N/A	N/A	N/A
Machine Shop	14.0	14.0	12.0	12.6	15.0
Management Sciences	7.3	7.3	7.3	7.3	7.8
Mechanical & Mechatronics	32.7	33.7	34.7	34.7	35.6
Society, Technology, & Values	0.6	0.0	0.0	0.0	0.0
Systems Design	11.0	12.0	12.0	12.0	13.0
	227.6	235.1	238.5	243.3	252.7
Environment					
Dean's Office	17.0	17.0	17.0	17.0	18.0
Environment, Enterprise & Development, School of	3.7	3.7	4.0	4.0	5.0
Environment, Resources & Sustainability, School of *	3.0	3.0	3.0	3.0	3.0
Geography & Environmental Management	5.0	6.0	6.0	6.0	6.0
Knowledge Integration *	3.6	3.6	3.4	3.4	2.8
Mapping, Analysis & Design	10.0	10.0	10.0	10.0	10.0
Planning, School of	4.9	4.9	4.9	4.9	4.5
	47.2	48.2	48.3	48.3	49.3

University of Waterloo
Academic Support Staff Positions by Department
(Including Open Positions)

	October 2015	October 2016	October 2017	October 2018	October 2019
Mathematics					
Applied Mathematics	3.0	3.0	3.0	4.0	4.0
Combinatorics & Optimization	4.0	4.0	4.0	4.0	4.0
Computer Science, David R. Cheriton School of	45.8	45.8	45.8	46.8	50.0
Dean's Office	26.6	28.0	30.5	34.5	37.0
Dean of Math Graduate Office	1.9	1.9	2.0	2.0	2.0
Math Business and Accounting	2.0	2.0	2.0	3.0	3.0
Math Faculty Computing Facility	18.0	15.0	14.0	13.0	11.0
Pure Mathematics	3.8	3.5	3.5	3.5	3.5
Statistics & Actuarial Science	6.7	7.7	8.0	8.0	9.0
	111.8	110.9	112.8	118.8	123.5
Science					
Biology	22.5	23.5	23.5	24.5	24.5
Chemistry	21.0	23.0	22.0	22.0	24.0
Dean's Office	27.5	29.0	29.0	33.0	37.0
Earth & Environmental Sciences	7.0	7.0	6.0	5.5	5.5
Optometry & Vision Science, School of	14.5	14.5	14.5	14.5	15.5
Optometry Clinic	22.3	22.3	23.3	24.3	23.3
Pharmacy, School of	19.0	19.5	23.5	24.3	26.3
Physics & Astronomy	11.0	11.0	11.0	11.0	11.0
Science Technical Service	10.0	10.0	10.0	10.0	9.8
GW Centre - Chemistry *	2.0	2.0	2.0	2.0	N/A
GW Centre - Physics *	1.0	1.0	1.0	1.0	N/A
	157.8	162.8	165.8	172.1	176.9
University Research Centres *					
Institute for Quantum Computing *	N/A	N/A	N/A	N/A	1.0
Waterloo Institute for Nanotech *	N/A	N/A	N/A	3.0	3.0
Waterloo Institute for Sustainable Energy *	N/A	N/A	N/A	2.0	2.0
				5.0	6.0
Office of the President	4.0	4.0	5.0	5.0	5.0
	4.0	4.0	5.0	5.0	5.0
Vice-President, Academic & Provost	6.0	6.0	7.0	6.0	5.0
Co-op Education & Centre for Career Action *	149.7	152.2	N/A	N/A	N/A
Deputy Provost, Integrated Planning & Budgeting *	N/A	N/A	3.0	5.0	5.0
Institutional Analysis & Planning	19.0	19.0	19.0	20.0	20.0
Legal & Immigration Services *	N/A	N/A	7.0	7.0	6.0
Library	125.4	125.0	129.7	126.7	123.5
Registrar	109.5	111.0	111.5	113.5	113.3
	409.6	413.2	277.2	278.2	272.8
Associate Vice-President, Graduate Studies					
& Postdoctoral Affairs *					
Graduate Studies & Postdoctoral Affairs *	26.0	27.0	27.0	27.0	29.8
	26.0	27.0	27.0	27.0	29.8
Associate Vice-President, International	14.0	12.0	8.0	10.0	12.0
	14.0	12.0	8.0	10.0	12.0
University Secretary *					
Secretariat *	13.0	15.0	10.0	10.0	10.0
Conflict Management & Human Rights *	2.7	2.7	N/A	N/A	N/A
Equity Office *	2.0	2.0	N/A	N/A	N/A
Safety Office	8.0	9.0	9.0	9.0	10.0
UW Police	26.0	25.0	27.0	27.0	28.0
	51.7	53.7	46.0	46.0	48.0
Vice-President, Advancement	3.0	3.0	3.0	3.0	3.0
Office of Advancement	76.5	76.8	82.3	84.3	82.9
	79.5	79.8	85.3	87.3	85.9
Vice-President, University Relations	8.0	17.0	20.4	22.4	22.0
Marketing & Strategic Communications	23.9	15.9	15.5	14.5	14.5
	31.9	32.9	35.9	36.9	36.5
Vice-President, University Research					
Office of Research	72.0	75.0	79.0	82.0	83.0
	72.0	75.0	79.0	82.0	83.0

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University of Waterloo
Academic Support Staff Positions by Department
(Including Open Positions)

	October 2015	October 2016	October 2017	October 2018	October 2019
Vice-President, Administration & Finance *	1.0	1.0	1.0	3.0	3.0
Bookings *	1.0	1.0	1.0	N/A	N/A
Central Stores	31.0	31.0	31.0	32.0	32.0
Finance	38.0	37.6	37.6	38.6	41.6
Plant Operations					
Hourly Labour	363.0	368.0	392.0	407.0	412.0
Physical Plant	56.0	57.0	58.0	62.0	64.0
Procurement and Contract Services	12.0	12.0	11.0	11.0	10.6
	502.0	507.6	531.6	553.6	563.2
Associate Provost, Resources *	2.0	2.0	N/A	N/A	N/A
WatCACE *	1.5	1.5	N/A	N/A	N/A
WatPD	9.6	11.0	N/A	N/A	N/A
	13.1	14.5			
Associate Provost, Co-operative & Experiential Education *					
Co-op Education & Centre for Career Action *	N/A	N/A	162.2	170.2	176.7
WatCACE *	N/A	N/A	1.5	1.5	1.5
WatPD *	N/A	N/A	12.0	12.0	13.0
			175.7	183.7	191.2
Associate Vice-President, Academic	3.0	4.0	5.0	6.0	6.0
Centre for Teaching Excellence	20.0	20.0	21.0	22.0	21.0
Centre for Extended Learning	46.0	46.0	45.0	44.0	45.8
Writing Centre	8.9	9.9	9.9	9.9	10.7
	77.9	79.9	80.9	81.9	83.5
Associate Vice-President Human Rights, Equity & Inclusion *	N/A	N/A	2.0	2.0	5.0
Conflict Management & Human Rights *	N/A	N/A	2.7	2.7	3.0
Equity Office	N/A	N/A	2.0	2.0	2.0
			6.7	6.7	10.0
Associate Provost, Human Resources	1.0	1.0	1.0	2.0	2.0
Human Resources	42.0	44.0	47.0	48.0	47.0
Organizational & Human Development	6.8	6.8	7.8	7.8	9.0
	49.8	51.8	55.8	57.8	58.0
Associate Provost, Students	3.3	2.0	3.0	4.2	7.0
Athletics & Recreational Services	32.5	33.5	34.0	35.0	36.0
Campus Wellness *	N/A	22.1	24.1	23.6	23.6
Counselling Services	27.4	26.1	25.7	32.0	32.8
Health Services	25.9	18.8	17.9	19.9	22.6
Student Innovation *	N/A	3.0	3.0	3.0	3.0
Student Success	28.0	28.0	38.0	45.0	45.0
UW Theatre Centre	2.0	2.0	2.0	2.0	2.0
	119.1	135.5	147.7	164.6	172.0
Chief Information Officer					
Information Systems & Technology (IST)	177.0	177.0	178.0	175.0	169.0
	177.0	177.0	178.0	175.0	169.0
Total Academic Support Staff	**2,324.5**	**2,377.4**	**2,465.9**	**2,548.0**	**2,596.4**

Supplementary Data - Glossary of Terms

Full-time Equivalent (FTE) Graduate Enrolment
Graduate students normally register for three terms per year. With three terms of registration a full-time student generates 1.0 FTE and a part-time student 0.3 FTE.

Full-time Equivalent (FTE) Undergraduate Enrolment
Full-time undergraduates normally register for two terms per year. Full-time students generate 1.0 FTE with two terms of registration. Part-time FTEs are calculated by dividing the total courses taken by 10, the expected average two-term course load.

Full-time Equivalent (FTE) Undergraduates Taught
This is a measure of the number of full-time equivalent students *taught* by a Faculty. It is calculated as the number of term courses taught by a Faculty divided by the average course load of full-time students registered in that Faculty.

Home Enrolled Undergraduate
Home enrolled undergraduates is the full-time equivalency of students *registered* in the Faculty.

Year One Enrolment
Year one enrolment is the count of full-time students registered in the *fall* term at the year one level. This includes students who are repeating, have changed from part-time to full-time, or have transferred from another program. This excludes students admitted in the winter and spring, ESL students, new admits to non-degree and students admitted to second-entry programs.

Year One Enrolment Target
The year one enrolment target is the total number of year one students expected to be registered on November 1st. The year one target, applications and applicant confirmation/registration history are used to determine the number of offers of admission to be issued. These targets are reviewed annually by the Faculty deans and associate deans.

Faculty
Average Salary - Fiscal
The fiscal average salary is used in analyses involving fiscal year expenditures. When the salary year and fiscal year coincide, the nominal and fiscal average salaries are equivalent. When they do not coincide, the fiscal average salary is calculated as a weighted average of the nominal salaries paid during the fiscal year. For example, for a fiscal year beginning May 1 and a salary year beginning July 1, the fiscal average salary is 2/12ths of the May 1 nominal average salary plus 10/12ths of the July 1 salary.

Average Salary - Nominal
The nominal average salary is the average salary of full-time faculty, including lecturers and Faculty deans. Included are faculty with appointments of at least one year if the faculty member is supported by operating funds or is an instructor. The nominal salary (or base salary) excludes stipends, sessionals, and professional allowances. Faculty on leave are included in the average at full salary.

Faculty Complement
The faculty complement is the number of ongoing faculty positions (filled and open) for which the university has made a budgetary commitment. This number is distinct from other counts of full-time faculty such as those reported to Statistics Canada and in "Summary of Faculty Appointments" in this document. The latter two report full-time appointments of at least one year if the faculty member is supported by operating funds or is an instructor.

Full-time Equivalent (FTE) Faculty
The FTE for faculty is calculated as the operating expenditures on faculty salaries (from the Audited Financial Statement) divided by the average nominal salary of full-time faculty. The inclusion of all expenditures on faculty salaries adjusts for leaves, sessionals, and adjunct and part-time faculty.

Staff
Academic Support Staff Positions (Staff Complement)
The staff positions reported are ongoing positions (filled and open) supported by operating funds, for which the university has made a budgetary commitment. The full-time equivalency of part-time positions is calculated based on the annual hours worked.

SENATE

March 2020

Presented by: James W.E. Rush

Vice-President Academic and Provost

UNIVERSITY OF **WATERLOO**
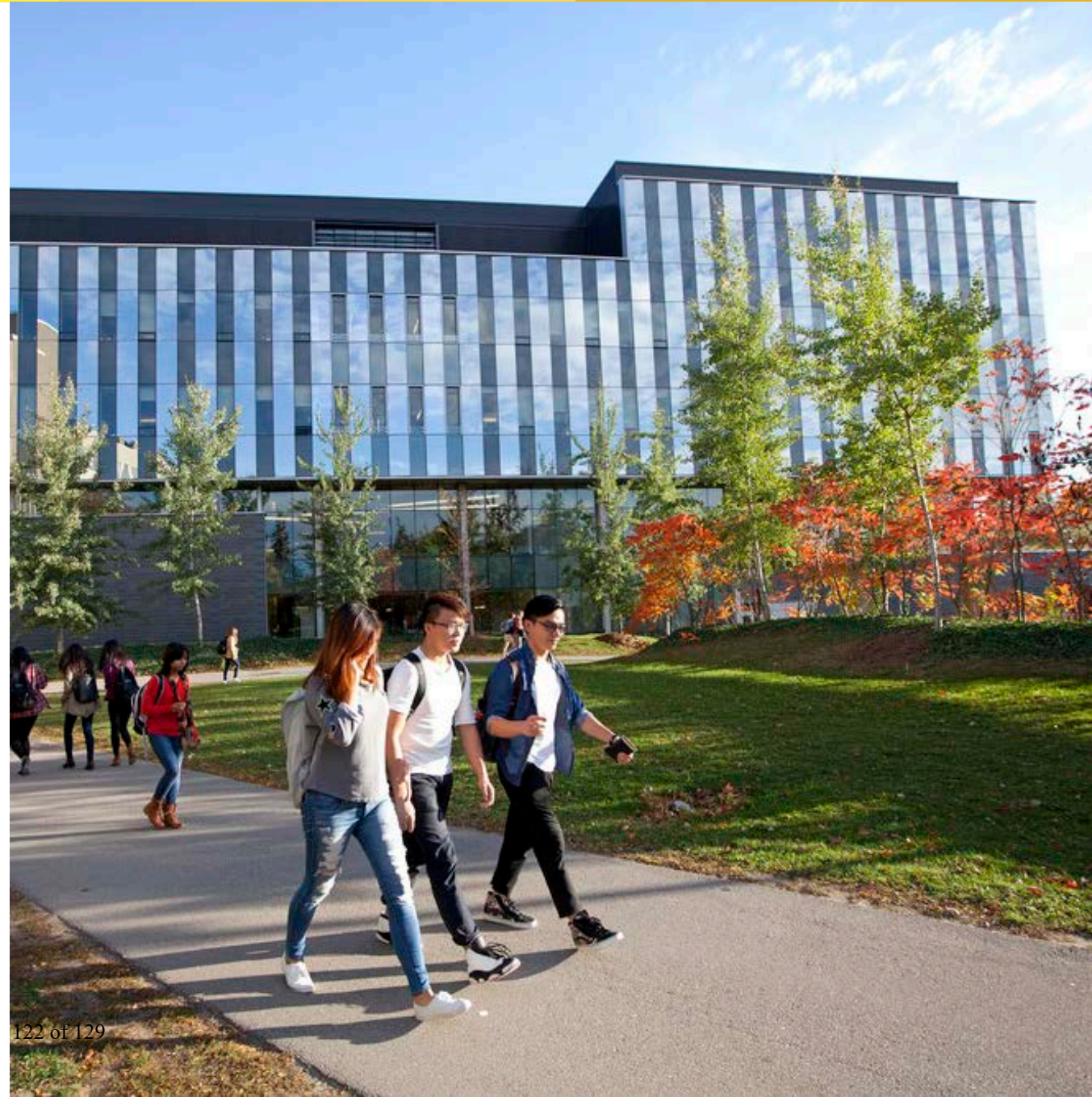
2020/21 Provisional Operating Budget Total Revenue and Expense Projections

- 2020/2021 Estimated Total Income @ March 6, 2020

    - $819.6M ($27.2M higher than 2019/2020)

- 2020/2021 Estimated Net Expenses @ March 6, 2020

    - $823.2M ($27.4M higher than 2019/2020)

- 2020/2021 Estimated Unfunded Deficit @ March 6, 2020

    - $3.6M

UNIVERSITY OF WATERLOO

2020/21 Revenue and Expense Projections are Provisional

Sources of Uncertainty:

- Geopolitical uncertainty (pre-existing and continuing)

- Accompanying enrolment uncertainty

- Operational and Planning uncertainty due to evolving COVID-19 situation

UNIVERSITY OF WATERLOO
2020/21 Operating Income Budget (in thousands)

	2019/20 Base Budget	Increase / (Decrease) $	Increase / (Decrease) %	2020/21 Base Budget	Notes
INCOME					
Operating Grant					
Enrolment	224,740	(36,894)	-16.4%	187,846	
Student Success and Differentiation	20,576	(20,576)	-100.0%	0	
SMA3 Performance Outcomes	0	62,615	100.0%	62,615	
Special Purpose	5,068	31	0.6%	5,099	
International Student Recovery	(5,803)	(102)	1.8%	(5,905)	
Graduate Expansion	4,024	(4,024)	-100.0%	0	
Transfers to AFIW	(13,978)	340	-2.4%	(13,638)	
	234,627	1,390	0.6%	236,017	Note 1
Tuition					
Domestic - Undergraduate	231,240	(4,928)	-2.1%	226,312	Note 2
Domestic - Graduate	28,350	152	0.5%	28,502	
International - Undergraduate	205,491	22,045	10.7%	227,536	Note 3
International - Graduate	44,948	4,421	9.8%	49,369	Note 4
Transfers to AFIW	(19,435)	13	-0.1%	(19,422)	
	490,594	21,703	4.4%	512,297	

UNIVERSITY OF
WATERLOO

UNIVERSITY OF WATERLOO
2020/21 Operating Income Budget (in thousands)

	2019/20 Base Budget	Increase / (Decrease) $	Increase / (Decrease) %	2020/21 Base Budget	Notes
Other Revenue					
Co-op Recovery	22,508	526	2.3%	23,034	
Student Services Fee	12,887	1,477	11.5%	14,364	Note 5
Research Overhead	8,460	668	7.9%	9,128	
Interest	9,600	1,500	15.6%	11,100	Note 6
Services to AFIW	3,907	(20)	-0.5%	3,887	
Miscellaneous Income	9,773	-	0.0%	9,773	
	67,135	4,151	6.2%	71,286	
Total Income	792,356	27,244	3.4%	819,600	

UNIVERSITY OF
WATERLOO

UNIVERSITY OF WATERLOO

2020/21 Operating Expense Budget (in thousands)

	2019/20 Base Budget	Increase / (Decrease) $	Increase / (Decrease) %	2020/21 Base Budget	2020/21 Base Budget as of Income	Notes
EXPENSES						
Salary and Wages						
Current salaries and wages	454,798	15,937	3.5%	470,735	57.4	Note 1
Benefits						
Current benefits	102,822	5,525	5.4%	108,347	13.2	
Faculty professional expense reimbursement plan	2,688	54	2.0%	2,742	0.3	
Parental leave supplement	2,000		0.0%	2,000	0.2	
Total benefits	107,510	5,579	5.2%	113,089	13.8	Note 2
Total salaries and benefits	562,308	21,516	3.8%	583,824	71.2	
Student Support						
Graduate student support	8,831	-	0.0%	8,831	1.1	
Graduate incentive fund	450	-	0.0%	450	0.1	
Support for international graduate students	9,943	(181)	-1.8%	9,762	1.2	
Senate matching scholarships	160	-	0.0%	160	0.0	
Tuition set aside	23,846	(226)	-0.9%	23,620	2.9	Note 3
Undergraduate scholarships/bursaries	11,580	-	0.0%	11,580	1.4	
Total student support	54,810	(407)	-0.7%	54,403	6.6	

UNIVERSITY OF WATERLOO

UNIVERSITY OF WATERLOO

2020/21 Operating Expense Budget (in thousands)

	2019/20 Base Budget	Increase / (Decrease) $	Increase / (Decrease) %	2020/21 Base Budget	2020/21 Base Budget as of Income	Notes
Other						
Accessibility fund for students with disabilities	1,051	-	0.0%	1,051	0.1	
Insurance	2,000	-	0.0%	2,000	0.2	
Library acquisitions	8,519	-	0.0%	8,519	1.0	
Municipal taxes	2,800	-	0.0%	2,800	0.3	
University Fund	35,975	4,000	11.1%	39,975	4.9	Note 4
Utilities	22,825	100	0.4%	22,925	2.8	
Total other	73,170	4,100	5.6%	77,270	9.4	
Supplies and expenses	118,207	2,201	1.9%	120,408	14.7	Note 5
Gross expenses	808,495	27,410	3.4%	835,905	102.0	
Cost recoveries	(12,720)	-	0.0%	(12,720)	(1.6)	Note 6
Estimated net expenses	795,775	27,410	3.4%	823,185	100.4	
Estimated income	792,356			819,600		
Budget surplus (deficit)	(3,419)			(3,585)		
One-time contribution from Faculties	3,656			-		Note 7
Surplus (Unfunded deficit)	237			(3,585)		