UNIVERSITY OF WATERLOO

SENATE
MONDAY June 10, 2024
4:45 P.M. EST
NH 3407 / Zoom
Governing Documents and Resources

(To follow the special meeting of Senate, 3:00-4:30 p.m.)

TIMING	AGENDA ITEM	PAGE	ACTION
	OPEN SESSION		
4:45 p.m.	1. Territorial Acknowledgement (Bruce Frayne)	Oral	
	2. Conflict of Interest	Oral	Declaration
	3. Approval of the Agenda, and Approval of the Consent Agenda To approve the agenda as presented/amended, and to approve or receive for information the items on the consent agenda, listed as items 11-17 of the Senate agenda.	Oral	Decision
	4. Minutes of the May 6, 2024 Meeting To approve the minutes of the May 6, 2024 meeting as distributed/amended.	5	Decision
	5. Business Arising from the Minutes	Oral	
4:50 p.m. (5 mins)	6. Report of the President a. President's Update	Oral	Information
4:55 p.m. (10 mins)	7. Report – COU Academic Colleague	11	Information

5:05 p.m.
(10 mins)
	8. Reports – Senate Graduate and Research Council
	      a. Major Modifications – Master of Science in Physics
	      To approve the proposed major modifications to MSc in Physics, MSc in Physics – Quantum Information, and MSc in Physics – Nanotechnology programs, effective September 1, 2024, as presented.
		15	Decision

	b. Regulation Revisions – Approved Doctoral Dissertation Supervisors To approve the proposed academic regulation revisions to the Approved Doctoral Dissertation Supervisors (ADDS) section of the Graduate Studies Academic Calendar (GSAC), effective September 1, 2024, as presented	39	Decision

UNIVERSITY OF WATERLOO

TIMING	AGENDA ITEM	PAGE	ACTION

5:15 p.m. (5 mins)	9. Report – Senate Undergraduate Council
	   a. Major Modifications – Recreation and Leisure Studies, and Recreation and Sport Business
	   To approve the proposed major modifications to Honours Recreation and Leisure Studies, and Honours Recreation and Sport Business, effective September 1, 2025, as presented.
		55	Decision

5:20 p.m. (10 mins)	10. Report - Honorary Degrees Committee
	   a. Revisions to Guidelines for Distinguished Professor Emeritus/a
	   To approve the revisions to the Distinguished Professor Emeritus/a Guidelines, as presented
		69	Decision

	b. Revisions to Criteria for Honorary Members of the University To approve the revisions to the Criteria for Honorary Member of the University, as presented.	77	Decision
5:30 p.m. (5 mins)	**Consent Agenda** *Motion: To approve or receive for information the items on the consent agenda, listed as items 11-17 of the Senate agenda*		
	11. Senate Work Plan	85	Information
	12. Report – Senate Graduate & Research Council	87	Information
	13. Report – Senate Undergraduate Council	89	Information
	14. Report – Senate Long Range Planning Committee	91	Information
	15. Report - Vice-President, Research & International - Awards, Distinctions, Grants, Waterloo International Engagements	121	Information

	16. Report of the Vice-President, Academic and Provost
	   a. Faculty Appointments, Leaves
	   b. University Appointments Review Committee
		127
		129
			Information

	17. Report – Secretariat
	   a. Composition of the Dean of Mathematics Nominating Committee
	   On the recommendation of the Faculty of Mathematics Faculty Council, that Senate approve increasing the membership of the 2024 Nominating Committee for the Dean of Mathematics by one, to provide a total of seven (7) regular faculty members.
		135	Decision

	18. Other Business	Oral	

TIMING	AGENDA ITEM	PAGE	ACTION
5:35p.m.	**CONFIDENTIAL** Senators, Secretariat and Technical Staff as required		
	19. Minutes of the May 6, 2024 Meeting To approve the minutes of the May 6, 2024 meeting as distributed/amended.	137	Decision
	20. Business Arising from the Minutes	Oral	Input
	21. Report of the Honorary Degrees Committee	139	Decision
	22. Annual Report of New Gifts and Pledges $250,000+ received (May 1, 2023 to April 30, 2024)	143	Information
	23. Other Business	Oral	Input
	24. Adjournment		

June 3, 2024

Mike Grivicic
Associate University Secretary to Senate

Important Dates

June 18, 2024	Board of Governors Meeting
June 27-28, 2024	International Conference – From Targeting Academia to Promoting Trust and Understanding
September 23, 2024	Senate Meeting
September 25, 2024	Board & Senate Retreat
October 21, 2024	Senate Meeting
October 29, 2024	Board of Governors Meeting

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University of Waterloo
SENATE
Minutes of the Monday May 6, 2024 Meeting
[in agenda order]

Present: Nasser Abukhdeir, Sheila Ager, Bilal Ahmed, Avery Akkerman, Marc Aucoin, Veronica Austen, Aubrey Basdeo, Jordan Bauman, Jean Becker, Jeff Casello, Judy Castaneda, Martin Cooke, Cecilia Cotton, Laura Deakin, Charmaine Dean, Catherine Dong, Mark Ferro, Paul Fieguth, Wendy Fletcher, Genevieve Gauthier-Chalifour (Secretary), Mark Giesbrecht, Vivek Goel (Chair), Rob Gorbet, Mike Grivicic (Associate Secretary), Vikas Gupta, David Ha, Neela Hassan, Nadine Ibrahim, Narveen Jandu, Acey Kaspar, Achim Kempf, Veronica Kitchen, Scott Kline, Sachin Kotecha, Christiane Lemieux, Ondrej Lhotak, Lili Liu, Brad Lushman, Jennifer Lynes Murray, Stephanie Maaz, Ellen MacEachen, Carol Ann MacGregor, Blake Madill, Colleen Maxwell, Kristiina Montero, Kirsten Muller, Richard Myers, Cathy Newell Kelly, Christopher Nielsen, James Nugent, Everett Patterson, Nicholas Pellegrino, Nicholas Pfeifle, David Porreca, Neil Randall, Jacinda Reitsma, Mary Robinson, James Rush, John Saabas, Rida Sayed, Asher Scaini, Mark Seasons, Marcus Shantz, Siva Sivoththaman, James Skidmore, Anita Taylor, Sharon Tucker, Diana Vangelisti, Johanna Wandel, Mary Wells, Clarence Woudsma, Changbao Wu, En-Hui Yang

Guests: Aldo Caputo, Nenone Donaldson, Raj Doshi, Jenny Flagler-George, Anne Galang, Diana Goncalves, Nicholas Joseph, Andrea Kelman, Hiren Kukreja, Eleanor McMahon, Christine McWebb, Bessma Momani, Ahmad Nabil, Fayaz Noormohamed, Mary Power, Karl Schuett, Daniela Seskar-Hencic, Tham Sivakumarah, Greg Smith, Allan Starr, Brandon Sweet, Nickola Voegelin, Dan Weber, Tim Weber-Kraljevski, Sarah Willey-Thomas

Absent: John Abraham*, Dominic Barton*, Andrew Chang*, Kim Cuddington, David DeVidi*, Teresa Fortney*, Bruce Frayne*, Murray Gamble*, Peter Hall, Chris Houser*, Natalie Hutchings, Shana MacDonald, Peter Meehan, Troy Osborne, Beth Sandore Namachchivaya*, Sivabal Sivaloganathan, Katie Traynor, Stanley Woo*

OPEN SESSION

The chair welcomed Senators to the meeting and offered remarks:
- A special welcome to new Senators as well as those returning to Senate after a time away
- Upcoming observances include the National Day of Awareness for Missing and Murdered Indigenous Women, Girls, and Two Spirit Peoples (also known as "Red Dress Day")
- Convocation ceremonies upcoming in June, and watch for communications and opportunities to participate
- Recent announcement of Renison University College's 12th president and vice-chancellor, the Rev. Dr. Marc Jerry, whose term starts on July 1, 2024

1. **TERRITORIAL ACKNOWLEDGEMENT**
   Marcus Shantz offered a territorial acknowledgement along with a personal reflection.

2. **CONFLICT OF INTEREST**
   Senators were asked to declare any conflicts they may have in relation to the items on the agenda. No conflicts were declared.

3. **APPROVAL OF THE AGENDA, AND APPROVAL OF THE CONSENT AGENDA**
   The chair provided one amendment to the agenda to add a representation under item 7(b). A motion was heard to approve the agenda as presented/amended, and to approve or receive for information the items on the consent agenda, listed as items 14-19 of the Senate agenda. Porreca and Deakin. Carried.

4. **MINUTES OF THE APRIL 8, 2024 MEETING**
   Amendments were provided to clarify under item 5 of the minutes that the research funds in question are not part of the operating budget of the University but are external funds, and to correct an error in the meeting attendance. A motion was heard to approve the minutes as amended. Newell Kelly and Porreca. Carried.

5. **BUSINESS ARISING FROM THE MINUTES**
The chair observed that business arising is captured under item 7(b), and that the item pertaining to the ADDS report from April is expected to be brought back to Senate at the June meeting. There was no further business arising.

6. **TEACHING AWARD WINNERS**
    a. Carol Hulls – recipient of the Distinguished Teacher Award
    Jeff Casello introduced Professor Carol Hulls, who provided a short presentation: fostering growth in students by setting appropriate challenges; importance of finding ways to get students to think of the world around them; emphasis on universal design, and the potential for Waterloo to have a charter for accessibility and inclusion; sincere congratulations to all teaching award recipients.

    b. Shannon Kennelly – recipient of the Amit & Meena Chakma Award for Exceptional Teaching by a Student
    The recipient was unable to attend the Senate meeting.

7. **REPORT OF THE PRESIDENT**
    a. President's Update. Goel provided his report and offered the following:
    -   Recent federal budget included $2.4 billion to support AI in Canada, for which it is expected a portion will be accessible to researchers for computation services
    -   Federal parliamentary committees currently have studies underway on the distribution of federal research funding between different types of institutions, and also on Islamophobia and anti-Semitism
    -   Provincially, the government introduced Bill 166 and gives the Minister of Colleges and Universities new directive powers to require universities and colleges to have policies on student mental health, anti-racism/anti-discrimination and tuition/ fee transparency
    -   New Ontario housing bill will exempt publicly-assisted institutions from the Planning Act and allows student housing plans/proposals to be developed on an accelerated basis
    -   Recent event to celebrate Chancellor Dominic Barton, and new podcast hosted by the Chancellor exploring the Global Futures

    Members clarified: Bill 166 would allocate directive powers to compel institutions to have policies in the identified areas; as consultation proceeds on the campus planning process and plans for property developments on all campuses are made, there will be contemplation of potential shared developments with campus stakeholders.

    b. Reporting to follow up from Senators' requests at April Senate Meeting
    Goel noted that the ongoing conflict in Gaza is a significant topic in the Waterloo community and around the world. The University supports individual and collective rights, including the right to protest, while emphasizing the importance of maintaining a safe environment in compliance with the University's policy framework. Toward this end, in January 2024 the University launched a task force to develop the University of Waterloo's Principles for Freedom of Expression and Respectful Engagement. Goel indicated that the University will review its frameworks for research partnerships and will report on this at a future meeting, and that questions pertaining to the specific investments in the University's investment funds will be considered by the Board of Governors and the appropriate committees thereof – there are existing policies and obligations around responsible investment and the consideration of environmental, social and governance (ESG) factors in making investment decisions. He noted that in previous considerations for ESG, the focus was on fossil fuels and that the University may examine ESG again with a focus on social justice issues.

    Dean offered observations re: research partnerships: academic freedom is a grounding principle for research and scholarship, including partnerships, and these activities are subject to the university's policy on ethical conduct of research and also subject to compliance with all relevant policies, procedures, ethical requirements, and legislation; the University has strong processes that guide these partnerships and applies a set of diligence tools for assessments of partnerships; in 2019, 2020 and 2023 Waterloo led initiatives to bring leaders together across Canada to compare best practices on international partnerships and safeguarding research, and it may be useful to consider having a place for such a conversation again; there is an opportunity to develop an integrative set of guidelines and principles on partnership assessment; 21 projects were undertaken under the partnership with Technion, which ran from 2014-2022 and totaling ~$900,000.

Senators discussed: compliance with federal and provincial law does not necessarily consider the issues of research partnerships issues in the context of international law nor in the context of ethical debates; these issues deserve a more robust examination with a broader lens; compliance with the law does not necessarily consider questions of right and wrong.

<u>Representation</u>
Ahmad Nabil addressed the Senate as follows: noted presence of Special Constable Service at recent demonstrations, and concern that this presence unfairly impacts the protests; echoed demand for action from the University to end partnerships with Technion and to divest from companies that supply the Israeli military; question of how said partnership and investments would align with the draft values statement under consideration on the meeting agenda. Members discussed: a case could potentially be made for general divestment from companies involved in defense/armaments; the rationale for questioning partnership with Technion could also be applied to those with US institutions that conduct research in the space of defence.

The delegation circulated materials to Senate with two draft motions. The University Secretary clarified that motions must be put forward by a Senator, and that in light of the meeting agenda having already been approved and the information not previously circulated for consideration, the Senate must first determine whether it is prepared to entertain the motions presented. The substance of the motions would subsequently be debated if first approved for consideration by the body.

Senate heard a motion:

That the following motions be added to the Senate agenda:

i. *The University of Waterloo immediately terminate all partnership agreements, including the Strategic Research Partnership signed on 19/05/2021, with Technion Israel Institute of Technology*

ii. *That Senate recommend the Board of Governors divest from all weapons manufacturers and all organizations that supply military equipment to Israel; and,*

That Senate recommend the Board of Governors terminate all agreements and partnerships with all weapons manufacturers and all organizations that supply military equipment to Israel; and,

The Senate recommend the Board of Governors establish strict policies and procedures for investments, agreements, and partnerships such that they abide by the University of Waterloo Values Statement, International Law, and are publicly disclosed on a quarterly basis.

Pfeifle and Sayed.

Members debated the motion: the first motion could still allow individual faculty to enter into such partnerships; some Senators did not feel there was enough information available to have informed debate on these items at this time; debate could mitigate escalation of protest activity; the topic of Technion had been discussed by Senate in recent meetings and information on the partnership has been provided; a deferral of this item would allow for more information to be gathered; assertion of Technion links to the Israeli military may garner contrary views; in other instances where geopolitical factors impacted international partnerships, those were guided by government policy; there is not currently public disclosure on specific investment assets, as the University invests via pooled funds; a Senate working group could be struck to ascertain the facts for Senate to debate, or Senate could hold a separate session to review the information available; passage of the first motion may have little effect given that no new funds have been expended in recent years; it is unclear what debate occurred at Senate with the initiation of the Technion partnership; in 2002, Canada listed Hamas as a terrorist entity under the Criminal Code and this could be included in a balanced consideration of partnerships and divestment related to the situation in Gaza.

By consensus, Senate considered motions (i) and (ii) separately. For (i), the question was put and the motion was defeated. For (ii), the question was put and the motion was defeated.

8. **REPORT – SENATE GRADUATE AND RESEARCH COUNCIL**
Casello provided an overview of reports (a) and (b).

a. Major Modifications – Civil Engineering Co-Operative Program
A motion was heard to approve the proposed major modifications to the Master of Engineering (MEng) in Civil Engineering – Co-operative Program, effective September 1, 2024, as presented. Casello and Wells. Carried.

b. Major Modifications – Chemical Engineering
A motion was heard to approve the proposed major modifications to the Doctor of Philosophy (PhD) and Master of Engineering (MEng) in Chemical Engineering, effective September 1, 2024, as presented. Casello and Wells. Carried.

9. **REPORTS – SENATE UNDERGRADUATE COUNCIL**
a. Major Modifications – Recreation and Leisure Studies and Recreation and Sport Business
Newell Kelly provided an overview of the report. A motion was heard to approve the proposed major modifications to Honours Recreation and Leisure Studies, and Honours Recreation and Sport Business, effective September 1, 2025, as presented. Newell Kelly and Liu.

Concerns were expressed re: one course which is not in the Waterloo course calendar, as well as discrepancies in the course weightings in the draft, and also on the elimination of languages and humanities courses from the plan. The item was deferred to the next meeting pending further review.

10. **REPORT – SENATE LONG RANGE PLANNING COMMITTEE**
a. Waterloo Values – Review of Draft Values Statement
Michael Dorr and Melanie Will provided a presentation and spoke to the development of the draft statement: consultation was undertaken across the University community; mindful that values set expectations and in so doing drive behaviours; detail on the values as enunciated; plan to establish a working group to set best practices in the coming months. Members noted that some of the terminology used in the draft values statement have been politicized in the public discourse and are used here with the intent of avoiding the exclusion of members from the community. A motion was heard that Senate endorse the Values Statement as presented in the attachment to this report, and further to recommend that the Board of Governors give final approval to the same Values Statement. MacEachen and Porreca. Carried.

11. **REPORT – SENATE EXECUTIVE COMMITTEE**
a. Senate Governance Review Recommendation: Academic Quality Enhancement (AQuE) Committee
Casello provided an overview of the report and recommendation, noting that the committee will help to streamline existing processes. It was noted that the relative lack of availability of student Senators may pose difficulty in fully populating the committee, and that Senate may review this in a year's time. A motion was heard to that Senate approve the creation of the proposed Academic Quality Enhancement Committee of Senate, as presented. Casello and Woudsma. Carried.

12. **REPORT – COU ACADEMIC COLLEAGUE**
In the interest of time, this item was deferred to the next meeting.

13. **REPORT – HONORARY DEGREES COMMITTEE: SPRING 2024 CONVOCATION LIST OF HONORANDS**
This item was received for information.

CONSENT AGENDA
The consent agenda was approved under item 3, with items approved or received for information.

14. **SENATE WORK PLAN**
Received for information.

15.   **REPORT – SENATE GRADUATE AND RESEARCH COUNCIL**
Received for information.

16.   **REPORT – SENATE UNDERGRADUATE COUNCIL**
Received for information.

17.   **REPORT – SENATE LONG RANGE PLANNING COMMITTEE**
Received for information.

18.   **REPORT OF THE VICE-PRESIDENT, RESEARCH & INTERNATIONAL.** Received
for information.

19.   **REPORT OF THE VICE-PRESIDENT, ACADEMIC AND PROVOST**
a.   **Faculty Appointments, Leaves.** Received for information.

20. **OTHER BUSINESS**
There was no other business.

With no further business in open session, Senate convened in confidential session.

May 14, 2024   Mike Grivicic
MG/dg   Associate University Secretary to
                                                  Senate

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UNIVERSITY OF WATERLOO

For Information	**Open Session**

To:	**Senate**
Sponsor/Presenter: **Contact Information**	Scott Kline, Chair Religious Studies; COU Academic Colleague scott.kline@uwaterloo.ca
Date of Meeting:	June 10, 2024
Agenda Item Identification:	**7) Report from COU Academic Colleague**

The following is a summary of meetings since my last report in May 2023 (and is an update from my report in the agenda package of May 6, 2024, which was delayed to this meeting).

Summary of Meetings

1. Academic Colleagues Meeting, August 15-16, 2023

Discussion Theme: Wellbeing of International Students: Solutions from Design Thinking

Dr. Liliane Dionne, Faculty of Education, University of Ottawa, presented research on the Wellbeing of International Students. Using a design-thinking approach, which included peer interviews between graduating BEd students (solution-makers) and international students at the University of Ottawa, Dr. Dionne and her colleagues developed creative solutions to improve the wellbeing of international students on the University campus, including a number of attempts to connect students with their natural environments. This led to initiatives to enhance campus art and to create more opportunities to socialize and study outdoors. During the discussion, Colleagues reflected on how they might contribute to improving the wellbeing of international students and on the recommendations of COU's International Education Working Group, which we had received an update on at the February 2023 meeting.

Updates and Reports—Highlights

COU President Steve Orsini delivered an update on COU's activities in support of the Ontario government's Blue-Ribbon Panel and shared a preview of his presentation on housing for the upcoming Association of Municipalities Ontario (AMO) Conference.

2. 316th Meeting of Council, October 16, 2023

I want to highlight two items in the agenda: 1) The Colleagues led a discussion on the topic of Mitigating Anti-LGBTQ2S+ Movements and Promoting Safe Spaces on Campus. A few Colleagues highlighted practices at their universities and proposed additional actions that would help ensure the campuses are places where members of the university community can express themselves freely without fear of reprisal or physical harm. A few members of Council expressed interest in future discussions related to the role of the university ensuring freedom of expression on their campus. 2) Steven Orsini provided a brief update on COU's increasing activities related to the release of Blue Ribbon Panel report and recommendations.

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3. Academic Colleagues Meeting, December 12-13, 2023

Discussion Theme: Free Expression in Relation to Geopolitical Events

Dr. James L. Turk, Director of the Centre for Free Expression, Toronto Metropolitan University, met with COU Academic Colleagues to discuss freedom of expression and academic freedom on university campus. One focus was on the University of Chicago Kalven Committee's "[Report on the University's Role in Political and Social Action](#) (1967)." Turk notes that the Kalven Report's language of "institutional neutrality" is often mischaracterized as universities should play no role in political and social debates. This mischaracterization, Turk argues, misses the point made in the Kalven Report: "A university has a great and unique role to play in fostering the development of social and political values in a society." The distinction the Kalven Report makes is that the university, as an institution, must remain neutral out of respect for free inquiry on the part of faculty and students. As a result, universities play a central role in political and social change *not* by senior leaders taking formal positions on political and social matters on behalf of their institutions but, rather, by ensuring that universities remain a forum for faculty and students to freely question, challenge, inquire, and take positions on political and social matters. Drawing on a [Stanford University update](#) on freedom of expression, from October 2023, Academic Colleagues discussed instances in which universities, fulfilling their operational responsibilities, sometimes take positions that have political and social ramifications such as decisions regarding investments. When such concerns arise, universities must continue to ensure that faculty and students remain free to exercise their freedom of expression and that faculty remain free to exercise their academic freedom. In all cases, universities must comply with existing laws and government standards (e.g., Criminal Code, labour standards).

Updates and Reports—Highlights

Steve Orsini, the COU President, reported that COU is asking for a timely response from government on the implementation of the Blue-Ribbon Panel report, specifically the recommendations on increasing tuition and operating funding. The President also noted COU recently published an efficiencies report that provides a comprehensive response to the government's request that universities are committed to greater efficiencies. At the same time, it was noted that the government has a role to play in ensuring the financial sustainability of institutions in terms of increasing tuition and operating grants and in reducing costs to the system (e.g., excessive reporting, red tape and unfunded mandates). As a further response, COU is continuing with its escalating advocacy campaign and is working with provincial associations (such as the Ontario University Student Alliance, and the Ontario Chamber of Commerce and Colleges Ontario) on joint advocacy.

4. Academic Colleagues Meeting, February 13-14, 2024

Discussion Theme: Ontario Student Leadership and Advocacy

Vivan Chiem, President, and Malika Dhanani, Executive Director from the Ontario University Student Alliance (OUSA) joined Academic Colleagues for a discussion of pressing matters facing university students. Among the matters highlighted in their presentation were mental health, accessibility, housing, and food insecurity. It was noted that OUSA is also focused on the matter of sector sustainability (e.g., constrained university revenues through tuition and grant freezes) and awaiting the Blue-Ribbon Panel Report. Academic Colleagues took a particularly keen interest in issue of food insecurity, with a number noting that this is a "town and gown" issue that requires shared vision and integrated response.

Updates and Reports—Highlights

Steve Orsini, President of COU, briefed Colleagues on COU increasing efforts to receive a government response on the Blue-Ribbon Panel Report. With a promised end-of-February announcement, COU is continuing to advocate for a response that fully embraces the financial recommendations in the Blue-Ribbon Panel Report. Orsini reported that at least 10 Ontario universities are facing deficit budgets, with a number of them facing serious financial situations without substantial increases in revenue from

government grant, tuition, or both. Orsini acknowledge that any additional revenue would likely not come from tuition but, rather, government grant.

5. Academic Colleagues Meeting, April 3-4, 2024

Discussion Theme: University Governance

Cheryl Foy, the former University Secretary and In-House Counsel at Ontario Tech University, current President of Strategic Governance Consulting Services Ltd., and the author of [An Introduction to University Governance,](#) provided Colleagues with an overview of approaches to university governance and contemporary challenges facing governance. She focused on five themes: 1) the relationship between university governance and institutional autonomy; 2) shared governance as a system and its models; 3) the roles of boards and academic governing bodies; 4) the importance of paying attention to academic governing bodies (senates); and 5) the role of faculty association in governance. The discussion concentrated on the necessity of universities undertaking educational opportunities for their board and senate members to understand the unique roles each plays in collegial governance. Foy made the point that a lack of understanding of members' various roles often provides the basis for a breakdown in communication and trust among boards, senior leadership, and academic governing bodies.

Updates and Reports—Highlights

Steve Orsini, President of COU, briefed Colleagues on COU's response to the Blue-Ribbon Panel Report. On behalf of COU, Orsini expressed concern that the funding recommendations in the Blue-Ribbon Panel Report were not adopted by the Ontario government. Echoing the COU statement "[Ontario's Response Falls Far Short of Blue Ribbon Panel Recommendations](#)" (Feb. 26, 2024), Orsini stated that, while the additional funding provided by Government is welcomed, it does not adequately address the revenue shortfalls created by the multi-year tuition and grant freezes, which will result in further budgetary pressures on a majority of Ontario universities into the future. With the Government of Canada's decision to place a cap on international student study permits, budget pressures will likely become more acute.

6. 317th Meeting of Council, April 4, 2024

The primary focus of the COU Council meeting was the transition of COU to conform with the Ontario Not-For-Profit Corporations Act (ONCA). While the membership on COU Council did not change, the governing structure and members' responsibilities changed to conform with ONCA. Please contact Scott Kline if you would like further information on the changes.

Updates and Reports—Highlights

The Council agenda typically includes a presentation from the Colleagues. This meeting, however, the Colleagues decided to forgo a presentation due to the agenda being full of governance matters related to the COU transition. The Colleagues provided a brief report on their meetings.

Steve Orsini, President of COU, briefed Council on the Blue-Ribbon Panel Report. He reiterated that the funding provided by Government is welcomed, but it does not adequately address the revenue shortfalls created by the multi-year tuition and grant freezes, which will result in further budgetary pressures on most Ontario universities into the future. These shortfalls will likely be exacerbated by the Government of Canada's decision to limit the number of international students permitted to study in Canada.

7. Academic Colleagues Meeting, May 14-15, 2024

Discussion Theme: Safeguarding Research: Update on new Federal Policy on Sensitive Technologies and Research Affiliations of Concern (STRAC).

Dr. Charmaine Dean, Vice President, Research and International at the University of Waterloo, spoke with Colleagues about the Government of Canada recently announced Policy on Sensitive Technology Research and Affiliations of Concern (STRAC Policy). Dr. Dean, along with her colleague Justin Nankivell, stated that this policy is designed to protect Canada's research ecosystem from foreign influence by research institutions connected to military, national defence, or state security entities who pose a risk to Canada's national security. This policy came into effect May 1, 2024. It applies to *all* grant applications submitted to federal funding agencies (NSERC, CIHR, SSHRC) and to the Canadian Foundation for Innovation (CFI) for research that will advance one or more sensitive technology research areas. Further details are available through the University of Waterloo's Research website dedicated to STRAC.

Updates and Reports—Highlights

Steve Orsini, President of COU, briefed Colleagues on COU's response the passage of Ontario Bill 166, "Strengthening Accountability and Student Supports Act, 2024." COU's full position is laid in its document "COU Response to Regulatory Registry Proposal Bill 166, March 2024." In short, COU supports the spirit and intent of Bill 166, including the role of university reporting on its student mental policies, anti-hate policies, and how tuition money is spent; however, the increased regulatory requirements and, in some cases, enhanced service provision resulting from the Bill have not been accompanied by corresponding increased provincial funding, thus placing additional financial burdens on universities already seeking funding consinstent with the Blue-Ribbon Panel recommendations. Moreover, the Bill gives the minister of colleges and universities broad authority to issue directives to institutions regarding their mental health and anti-racism policies, among other matters. A question was raised regarding the Ontario Government's commitment to institutional autonomy and whether a reset between the Government and the universities might be in order to allow for the emergence of a framework that recognizes the importance of institutional autonomy. Suffice it to say that COU will continue to advocate to Government for greater institutional autonomy.

Senate

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Senate Graduate & Research Council

For Approval   **Open Session**

To:	**Senate**
Sponsor:	Charmaine Dean Vice-President, Research & International
	Jeff Casello Associate Vice-President, Graduate Studies and Postdoctoral Affairs
Presenter: **Contact Information:**	Jeff Casello jcasello@uwaterloo.ca
Date of Meeting:	June 10, 2024
Agenda Item Identification:	**8(a) Report – Senate Graduate & Research Council:** **Major Modification – MSc in Physics, MSc in Physics – Quantum Information, & MSc in Physics – Nanotechnology**

Recommendation/Motion:

To approve the proposed major modifications to the Master of Science (MSc) Physics, MSc in Physics – Quantum Information, and MSc in Physics – Nanotechnology, effective September 1, 2024, as presented.

Summary:

Senate Graduate & Research Council met on May 6, 2024 and agreed to forward the following items to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 4.03(e): "Consider, study and review all proposals for new graduate programs, the deletion of graduate programs, major changes to existing graduate programs, arrange for internal appraisals as the council shall see fit, and make recommendations to Senate thereon."

Governance Path:

Science Faculty Council approval date (mm/dd/yy): 03/19/24

Senate Graduate & Research Council approval date (mm/dd/yy): 05/06/24

Highlights/Rationale:

The proposed revisions are to add new transfer entry Internship options to the following MSc programs, MSc in Physics, MSc in Physics – Quantum Information program and MSc in Physics – Nanotechnology program.

Work integrated learning (WIL) options do not currently exist in the Department of Physics and Astronomy graduate programs. In line with the University's strategic plan, the Department would like to offer an internship option for the MSc in Physics Thesis, Master's Research Paper and Coursework study options. The Department of Physics and Astronomy has received feedback from current faculty and current graduate students that opportunities for work experiences outside of coursework or traditional thesis-based research is desirable to enrich students' degrees as well as provide them with many transferrable skills and a variety of experiences in preparation to enter the workplace after graduation. The internship will provide students with the opportunity to apply coursework and research experiences to real-world problems and allow collaboration with industry or other partners. The addition of the internship option continues to align with the programs learning outcomes.

Documentation Provided:

Appendix A – Graduate Studies Program Revision Template – MSc Physics

Appendix B – Graduate Studies Program Revision Template – MSc Physics – Quantum Information

Appendix C – Graduate Studies Program Revision Template – MSc Physics – Nanotechnology

SGRC Appendix A: Graduate Studies Program Revision Template

UNIVERSITY OF WATERLOO

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

Faculty: Science

Program: Master of Science (MSc) in Physics

Program contact name(s): Jan Kycia, Associate Chair

Form completed by: Holly Haig-Brown, Kayla Sutton, Graduate Program Manager(s)

Description of proposed changes:
Note: changes to courses and milestones also require the completion/submission of the <u>SGRC Graduate Studies Course/Milestone Form</u>.

Adding a new transfer entry Internship option to the MSc in Physics program, in addition to keeping the regular existing MSc program.

Is this a <u>major modification</u> to the program? Yes

Rationale for change(s):

Work integrated learning (WIL) options do not currently exist in the Department of Physics and Astronomy graduate programs. In line with the University's strategic plan, we would like to offer an internship option for the MSc in Physics Thesis, Master's Research Paper and Coursework study options. The Department of Physics and Astronomy has received feedback from current faculty and current graduate students that opportunities for work experiences outside of coursework or traditional thesis-based research is desirable to enrich students' degrees as well as provide them with many transferrable skills and a variety of experiences in preparation to enter the workplace after graduation. The internship will provide students with the opportunity to apply coursework and research experiences to real-world problems and allow collaboration with industry or other partners. The addition of the internship option continues to align with the programs learning outcomes.

Proposed effective date: Term: Fall   Year: 2024

Current <u>Graduate Studies Academic Calendar (GSAC)</u> page (include the link to the web page where the changes are to be made):

https://uwaterloo.ca/graduate-studies-academic-calendar/science/department-physics-and-astronomy

Current MSc in Physics Graduate Studies Academic Calendar content:	**Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content**:
Graduate research fields • Astrophysics and Gravitation	**Graduate research fields** • Astrophysics and Gravitation

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:
- Atomic Molecular and Optical Physics - Biophysics - Chemical Physics - Condensed Matter and Materials Physics - Industrial and Applied Physics - Quantum Computing - Subatomic Physics **Graduate specializations** - Quantum Technology **Program information** **Admit term(s)** - Fall - Winter - Spring **Delivery mode** - On-campus **Program type** - Joint - Master's - Research **Registration option(s)** - Full-time - Part-time **Study option(s)** - Thesis - Master's Research Paper - Coursework **Additional program information** - Note: the coursework study option is only open to students at the University of Waterloo. **Admission requirements** **Minimum requirements** - An Honours Bachelor's degree (or equivalent) in Science with at least a 75% standing. **Application materials** - Graduate Record Examination (GRE) Physics subject test scores for all students who have completed their post-secondary education outside of Canada.	- Atomic Molecular and Optical Physics - Biophysics - Chemical Physics - Condensed Matter and Materials Physics - Industrial and Applied Physics - Quantum Computing - Subatomic Physics **Graduate specializations** - Quantum Technology **Program information** **Admit term(s)** - Fall - Winter - Spring **Delivery mode** - On-campus **Program type** ~~Joint~~ - Master's - Research **Registration option(s)** - Full-time ~~Part-time~~ **Study option(s)** - Thesis - Master's Research Paper - Coursework **Additional program information** - Note: the <u>internship</u> option is only open to students at the University of Waterloo. **Admission requirements** **Minimum requirements** - <u>Students in the Master of Science (MSc) in Physics program can apply to transfer into the Master of Science (MSc) in Physics - Internship program option after completing at least one academic term. Admittance will be decided based on the student's progress to date, and is subject to approval by the student's supervisor(s) and the Associate Chair, Graduate</u>

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:

o Supplementary information form
o Transcript(s)
 	
• **References**
  o Number of references: 3
  o Type of references: 2 of which are normally from academic sources
 	
• **English language proficiency (ELP)** (if applicable)
 	
Degree requirements
 	
  Thesis option:
 	
• **Graduate Academic Integrity Module (Graduate AIM)**
 	
• **Courses**
  o Students must complete the following 4 one-term courses (0.50 unit weight):
    ▪ 1 Physics core course
    ▪ 2 graduate level courses
    ▪ 1 graduate level or 300 or 400 level undergraduate course. Undergraduate courses must be approved by the student's supervisor, the Associate Chair of Graduate Studies, Department of Physics and Astronomy and the Associate Dean of Science for Graduate Studies prior to enrolment in the course.
    ▪ Physics core courses:
      ▪ PHYS 701 Quantum Mechanics 1
      ▪ PHYS 703 Introduction to Quantum Field Theory
      ▪ PHYS 704 Statistical Physics 1
      ▪ PHYS 706 Electromagnetic Theory
      ▪ PHYS 767 Quantum Information Processing
      ▪ PHYS 781 Fundamentals of Astrophysics
      ▪ PHYS 782 Fundamentals of Astrophysics II: Observational Techniques and Data Analysis
	<u>Studies in the Department of Physics and Astronomy.</u>
	
	Degree requirements
	
	  Thesis option:
	
	• **Graduate Academic Integrity Module (Graduate AIM)**
	
	• **Courses**
	  o Students must complete the following 4 one-term courses (0.50 unit weight):
	    ▪ 1 Physics core course
	    ▪ 2 graduate level courses
	    ▪ 1 graduate level or 300 or 400 level undergraduate course. Undergraduate courses must be approved by the student's supervisor, the Associate Chair of Graduate Studies, Department of Physics and Astronomy and the Associate Dean of Science for Graduate Studies prior to enrolment in the course.
	    ▪ Physics core courses:
	      ▪ PHYS 701 Quantum Mechanics 1
	      ▪ PHYS 703 Introduction to Quantum Field Theory
	      ▪ PHYS 704 Statistical Physics 1
	      ▪ PHYS 706 Electromagnetic Theory
	      ▪ PHYS 767 Quantum Information Processing
	      ▪ PHYS 781 Fundamentals of Astrophysics
	      ▪ PHYS 782 Fundamentals of Astrophysics II: Observational Techniques and Data Analysis
	  o An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:

o An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the program.
 	
• **Master's Thesis**
    o Students must complete a thesis based on original research. The subject of research must be approved by the candidate's supervisor.
    o Acceptance of the thesis requires the approval by an Examining Committee following an oral defence of the thesis.
 	
• **Other requirements**
    o Advisory Committee meetings: it is required that the student meet formally with their Advisory Committee within the first six months of registration and subsequently at least once per year. If the student receives more than one unsatisfactory evaluation from an Advisory Committee meeting, they may be required to withdraw from the program.
    o The MSc Advisory Committee must consist of at least three members, including:
        ▪ The student's supervisor(s); the primary supervisor acts as the Committee Chair.
        ▪ At least one Committee member that is a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo. Note: This requirement does not apply for MSc students who are supervised by a Perimeter Institute faculty member with ADDS status.
        ▪ At least two Committee members that are regular, adjunct, or cross-listed faculty members of the Department of Physics and Astronomy at the University of Waterloo or the Department of Physics at the University of Guelph.
	program.
	
	• **Master's Internship**
	    o A Master's internship is available for students to collaborate with a partner in industry or elsewhere.
	    o The internship must be complementary to the student's thesis project.
	    o Requests to undertake an internship must be approved by the student's supervisor and the Associate Chair, Graduate Studies.
	    o It is the student's responsibility to identify potential organizations with which to undertake their internship. Students will prepare an internship proposal, outlining how the work of the organization relates to their thesis and the experience sought through the internship. A letter of support from the organization indicating the role and location of the internship and willingness of the direct supervisor to mentor the intern will be submitted to the Associate Chair, Graduate Studies.
	    o The internship milestone requires the successful completion of a one-term (four-month) full-time work experience with a department approved partner. Internships will normally take place in the 3rd, 4th or 5th term of study. The internship may last for up to two terms (8 months) with approval of the student's supervisor and Associate Chair, Graduate Studies, provided that the internship does not result in the candidate being enrolled past-program time limits.
	    o Students cannot complete their program with the final term as an internship term.
	    o A written report arising out of the internship experience will be required and will be evaluated by the student's supervisor and another reader designated by the Graduate Officer. This report should be used toward the Master's thesis. The report should summarize the work experience and linkages to the student's thesis research, program curriculum, and professional development goals.
	
	• **Master's Thesis**

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:
- o The MSc Defence Committee must consist of a minimum of three voting faculty members, including: ▪ The supervisor(s). ▪ Two other faculty members, of which one must be a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo. **Master's Research Paper option:** • **Graduate Academic Integrity Module (Graduate AIM)** • **Courses** - o Students must complete 7 one-term courses (0.50 unit weight) acceptable for graduate credit. - o At least 4 courses must be PHYS graduate level courses. - o 2 of the courses may be upper level undergraduate courses. The supervisor must submit a memo justifying why the undergraduate course(s) are acceptable for graduate credit, and approval must be received from the Physics and Astronomy Graduate Officer and the Associate Dean of Science for Graduate Studies prior to enrolment in the course. - o An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the program. • **Master's Research Paper** - o The Master's Research Paper will have to be approved by the candidate's Supervisory Committee. • **Other requirements** - o Progress report: At least once per academic year, students must compete an activity progress report. The report will contain an account of past achievements, and an outline of the	- o Students must complete a thesis based on original research. The subject of research must be approved by the candidate's supervisor. - o Acceptance of the thesis requires the approval by an Examining Committee following an oral defence of the thesis. • **Other requirements** - o Advisory Committee meetings: it is required that the student meet formally with their Advisory Committee within the first six months of registration and subsequently at least once per year. If the student receives more than one unsatisfactory evaluation from an Advisory Committee meeting, they may be required to withdraw from the program. - o The MSc Advisory Committee must consist of at least three members, including: ▪ The student's supervisor(s); the primary supervisor acts as the Committee Chair. ▪ At least one Committee member that is a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo. Note: This requirement does not apply for MSc students who are supervised by a Perimeter Institute faculty member with ADDS status. ▪ At least two Committee members that are regular, adjunct, or cross-listed faculty members of the Department of Physics and Astronomy at the University of Waterloo or the Department of Physics at the University of Guelph. - o The MSc Defence Committee must consist of a minimum of three voting faculty members, including: ▪ The supervisor(s). ▪ Two other faculty members, of which one must be a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo.

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:

work to be completed in the period between this and the subsequent submission. The activity report is reviewed and evaluated by the student's supervisor and the Graduate Officer.
 	
Coursework option:
 	
• **Graduate Academic Integrity Module (Graduate AIM)**
 	
• **Courses**
  o At this time, the only MSc in Physics coursework option includes a Graduate Specialization in Quantum Technology.
  o A Graduate Specialization is a University credential that is recognized on the student's transcript but not on the diploma and is intended to reflect that a student has successfully completed a set of courses that together provide an in-depth study in the area of the Graduate Specialization. Students must complete the following 8 one-term courses (0.50 unit weight) acceptable for graduate credit in order to obtain the Graduate Specialization in Quantum Technology on their transcript:
    ▪ PHYS 701 Quantum Mechanics 1
    ▪ PHYS 760/QIC 860 Laboratory on Control of Quantum Technology
    ▪ PHYS 761/QIC 861 Laboratory on Photonic Quantum Technology
    ▪ PHYS 762/QIC 862 Laboratory on Low Temperature Quantum Technology and Nanofabrication
    ▪ PHYS 763/QIC 863 Independent Project in Quantum Technology or 1 QIC 800 level elective
    ▪ PHYS 767/QIC 710 Quantum Information Processing
    ▪ QIC 750 Quantum Information Processing Devices
    ▪ 1 PHYS 700 level or QIC 800 level elective
	Master's Research Paper option:
	
	• **Graduate Academic Integrity Module (Graduate AIM)**
	
	• **Courses**
	  o Students must complete 7 one-term courses (0.50 unit weight) acceptable for graduate credit.
	  o At least 4 courses must be PHYS graduate level courses.
	  o 2 of the courses may be upper level undergraduate courses. The supervisor must submit a memo justifying why the undergraduate course(s) are acceptable for graduate credit, and approval must be received from the Physics and Astronomy Graduate Officer and the Associate Dean of Science for Graduate Studies prior to enrolment in the course.
	  o An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the program.
	
	• **Master's Internship**
	  o A Master's internship is available for students to apply theory in practice with an industry or other partner.
	  o Requests to undertake an internship must be approved by the student's supervisor and the Associate Chair, Graduate Studies.
	  o It is the student's responsibility to identify potential organizations with which to undertake their internship. Students will prepare an internship proposal, outlining how the work of the organization relates to the Master of Science in Physics program and the professional experience sought through the internship. A letter of support from the organization indicating the role and location of the internship and willingness of the direct supervisor to mentor the intern will be submitted to the Associate Chair, Graduate Studies.
	  o The internship milestone requires the successful completion of a one-term

Current MSc in Physics Graduate Studies Academic Calendar content:	**Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content**:
- o Substitutions of courses are possible subject to approval from the Graduate Officer. - o It is recommended that students who wish to go on to PhD programs choose the PHYS 763/QIC 863 Independent Project in Quantum Technology course to develop their research capabilities. - o An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. No more than 2 courses, of the first 4 taken, can have averages of less than 70%. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the program.	(four-month) full-time work experience with a department approved partner. The internship may last for up to two terms (8 months) with approval of the student's supervisor and Associate Chair, Graduate Studies, provided that the internship does not result in the candidate being enrolled past-program time limits. Internships will normally take place in the 3rd, 4th or 5th term of study. - o Students cannot complete their program with the final term as an internship term. - o A written report arising out of the internship experience will be required and will be evaluated by the student's supervisor and another reader designated by the Graduate Officer. This report is distinct from the Master's Research Paper. The report should summarize the work experience and linkages to the student's research, program curriculum, and professional development goals. • **Master's Research Paper** - o The Master's Research Paper will have to be approved by the candidate's Supervisory Committee. • **Other requirements** - o Progress report: At least once per academic year, students must compete an activity progress report. The report will contain an account of past achievements, and an outline of the work to be completed in the period between this and the subsequent submission. The activity report is reviewed and evaluated by the student's supervisor and the Graduate Officer. **Coursework option:** • **Graduate Academic Integrity Module (Graduate AIM)** • **Courses** - o At this time, the only MSc in Physics coursework option includes a Graduate Specialization in Quantum Technology.

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:
	o A Graduate Specialization is a University credential that is recognized on the student's transcript but not on the diploma and is intended to reflect that a student has successfully completed a set of courses that together provide an in-depth study in the area of the Graduate Specialization. Students must complete the following 8 one-term courses (0.50 unit weight) acceptable for graduate credit in order to obtain the Graduate Specialization in Quantum Technology on their transcript: ▪ PHYS 701 Quantum Mechanics 1 ▪ PHYS 760/QIC 860 Laboratory on Control of Quantum Technology ▪ PHYS 761/QIC 861 Laboratory on Photonic Quantum Technology ▪ PHYS 762/QIC 862 Laboratory on Low Temperature Quantum Technology and Nanofabrication ▪ PHYS 763/QIC 863 Independent Project in Quantum Technology or 1 QIC 800 level elective ▪ PHYS 767/QIC 710 Quantum Information Processing ▪ QIC 750 Quantum Information Processing Devices ▪ 1 PHYS 700 level or QIC 800 level elective o Substitutions of courses are possible subject to approval from the Graduate Officer. o It is recommended that students who wish to go on to PhD programs choose the PHYS 763/QIC 863 Independent Project in Quantum Technology course to develop their research capabilities. o An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. No more than 2 courses, of the first 4 taken, can have averages of less than 70%. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:
	program.
	• **<u>Master's Internship</u>**
	○ <u>A master's internship is available for students to apply theory in practice with an industry or other partner.</u>
	○ <u>Requests to undertake an internship must be approved by the student's supervisor and the Associate Chair, Graduate Studies.</u>
	○ <u>It is the student's responsibility to identify potential organizations with which to undertake their internship. Students will prepare an internship proposal, outlining how the work of the organization relates to the Master of Science in Physics program and the professional experience sought through the internship. A letter of support from the organization indicating the role and location of the internship and willingness of the direct supervisor to mentor the intern will be submitted to the Associate Chair, Graduate Studies.</u>
	○ <u>The internship milestone requires the successful completion of a one-term (four-month) full-time work experience with a department approved partner. The internship may last for up to two terms (8 months) with approval of the student's supervisor and Associate Chair, Graduate Studies, provided that the internship does not result in the candidate being enrolled past-program time limits.</u>
	○ <u>Students cannot complete their program with the final term as an internship term.</u>
	○ <u>Internships will normally take place after the 2nd term of study and may only take place after students have successfully completed the following courses: PHYS 701, PHYS 767/QIC 710, QIC 750, and at least two of the three required laboratory courses: PHYS 760/QIC 860, PHYS 761/QIC 861, PHYS 762/QIC 862.</u>
	○ <u>A written report arising out of the internship experience will be required and will be evaluated by the student's supervisor and another reader designated by the Graduate Officer. The report should summarize the work experience and linkages to the</u>

Current MSc in Physics Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Internship Graduate Studies Academic Calendar content:
	<u>student's program curriculum, and professional development goals.</u>

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

Students currently enrolled in a program with an optional internship milestone will have the option to partake in an internship under the same guidelines as indicated in the Graduate Studies Academic Calendar.

Department/School approval date (mm/dd/yy): 12/13/23
Reviewed by GSPA (for GSPA use only) ☒ date (mm/dd/yy): 11/14/23
Faculty approval date (mm/dd/yy): 03/19/2024
Senate Graduate & Research Council (SGRC) approval date (mm/dd/yy):
Senate approval date (mm/dd/yy) (if applicable):

SGRC Appendix B: Graduate Studies Program Revision Template

UNIVERSITY OF WATERLOO

Graduate Studies
Program Revision Template

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

Faculty: Science

Program: Master of Science (MSc) in Physics – Quantum Information

Program contact name(s): Jan Kycia, Associate Chair

Form completed by: Kayla Sutton, Graduate Program Manager

Description of proposed changes:
Note: changes to courses and milestones also require the completion/submission of the <u>SGRC Graduate Studies Course/Milestone Form</u>.

> *Adding a new transfer entry Internship option to the MSc in Physics – Quantum Information program, in addition to keeping the regular existing MSc in Physics – Quantum Information program.*

Is this a <u>major modification</u> to the program? Yes

Rationale for change(s):

Work integrated learning (WIL) options do not currently exist in the Department of Physics and Astronomy graduate programs. In line with the University's strategic plan, we would like to offer an internship option for the MSc in Physics – Quantum Information program. The Department of Physics and Astronomy has received feedback from current faculty and current graduate students that opportunities for work experiences outside of coursework or traditional thesis-based research is desirable to enrich students' degrees as well as provide them with many transferrable skills and a variety of experiences in preparation to enter the workplace after graduation. The internship will provide students with the opportunity to apply coursework and research experiences to real-world problems and allow collaboration with industry or other partners. The addition of the internship option continues to align with the programs learning outcomes.

Proposed effective date: Term: Fall   Year: 2024

Current <u>Graduate Studies Academic Calendar (GSAC)</u> page (include the link to the web page where the changes are to be made):

https://uwaterloo.ca/graduate-studies-academic-calendar/science/department-physics-and-astronomy

Current MSc in Physics – Quantum Information Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Quantum Information – Internship Graduate Studies Academic Calendar content:
Program information	**Program information**

Current MSc in Physics – Quantum Information Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Quantum Information – Internship Graduate Studies Academic Calendar content:
Admit term(s) - Fall - Winter - Spring **Delivery mode** - On-campus **Program type** - Collaborative - Master's - Research **Registration option(s)** - Full-time - Part-time **Study option(s)** - Thesis **Admission requirements** **Minimum requirements** - An Honours Bachelor's degree (or equivalent) in Science with at least a 75% standing. **Application materials** - Graduate Record Examination (GRE) Physics subject test scores for all students who have completed their post-secondary education outside of Canada. - Supplementary information form - Transcript(s) **References** - Number of references: 3 - Type of references: 2 of which are normally from academic sources **English language proficiency (ELP)** (if applicable) **Degree requirements** **Thesis option:** **Graduate Academic Integrity Module (Graduate AIM)**	**Admit term(s)** - Fall - Winter - Spring **Delivery mode** - On-campus **Program type** - Collaborative - Master's - Research **Registration option(s)** - Full-time ~~Part-time~~ **Study option(s)** - Thesis **Admission requirements** **Minimum requirements** - <u>Students in the Master of Science (MSc) in Physics – Quantum Information program can apply to transfer into the Master of Science (MSc) in Physics – Quantum Information - Internship program option after completing at least one academic term. Admittance will be decided based on the student's progress to date, and is subject to approval by the student's supervisor(s) and the Associate Chair, Graduate Studies in the Department of Physics and Astronomy.</u> **Degree requirements** **Thesis option:** **Graduate Academic Integrity Module (Graduate AIM)** **Courses** - Students must complete the following 4 one-term courses (0.50 unit weight): - PHYS 767 Quantum Information Processing (cross-listed with QIC 710)

Current MSc in Physics – Quantum Information Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Quantum Information – Internship Graduate Studies Academic Calendar content:
Courses - Students must complete the following 4 one-term courses (0.50 unit weight): - PHYS 767 Quantum Information Processing (cross-listed with QIC 710) - QIC 750 Quantum Information Processing Devices 1 graduate level course 1 graduate level or 400 level undergraduate course. Undergraduate courses must be approved by the student's supervisor and the Associate Chair of Graduate Studies, Department of Physics and Astronomy and the Associate Dean of Science for Graduate Studies prior to enrolment in the course. - An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the program. **Master's Thesis** - Students must complete a thesis based on some original research in quantum information. The subject of research must be approved by the candidate's supervisor. - Acceptance of the thesis requires the approval by an Examining Committee following an oral defence of the thesis. **Other requirements** - Advisory Committee meetings: it is required that the student meet formally with their Advisory Committee within the first six months of registration and subsequently at least once per year. If the student receives more than one unsatisfactory evaluation from an Advisory Committee meeting, they may be required to withdraw from the program. - The MSc Advisory Committee must consist of at least three members, including:	- QIC 750 Quantum Information Processing Devices 1 graduate level course 1 graduate level or 400 level undergraduate course. Undergraduate courses must be approved by the student's supervisor and the Associate Chair of Graduate Studies, Department of Physics and Astronomy and the Associate Dean of Science for Graduate Studies prior to enrolment in the course. - An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the program. **Master's Internship** - A Master's internship is available for students to collaborate with a partner in industry or elsewhere. - The internship must be complementary to the student's thesis project in quantum information. - Requests to undertake an internship must be approved by the student's supervisor and the Associate Chair, Graduate Studies. - It is the student's responsibility to identify potential organizations with which to undertake their internship. Students will prepare an internship proposal, outlining how the work of the organization relates to their thesis and the experience sought through the internship. A letter of support from the organization indicating the role and location of the internship and willingness of the direct supervisor to mentor the intern will be submitted to the Associate Chair, Graduate Studies. - The internship milestone requires the successful completion of a one-term (four-month) full-time work experience with a department approved partner. Internships will normally take place in the 3rd, 4th or 5th term of study. The

Current MSc in Physics – Quantum Information Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Quantum Information – Internship Graduate Studies Academic Calendar content:
- The student's supervisor(s); the primary supervisor acts as the Committee Chair. - At least one Committee member that is a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo. Note: This requirement does not apply for MSc students who are supervised by a Perimeter Institute faculty member with ADDS status. - At least two Committee members that are regular, adjunct, or cross-listed faculty members of the Department of Physics and Astronomy at the University of Waterloo or the Department of Physics at the University of Guelph. o The MSc Defence Committee must consist of a minimum of three voting faculty members, including: - The supervisor(s). - Two other faculty members, of which one must be a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo.	internship may last for up to two terms (8 months) with approval of the student's supervisor and Associate Chair, Graduate Studies, provided that the internship does not result in the candidate being enrolled past-program time limits. o Students cannot complete their program with the final term as an internship term. o A written report arising out of the internship experience will be required and will be evaluated by the student's supervisor and another reader designated by the Graduate Officer. This report should be used toward the Master's thesis. The report should summarize the work experience and linkages to the student's thesis research, program curriculum, and professional development goals. **Master's Thesis** o Students must complete a thesis based on some original research in quantum information. The subject of research must be approved by the candidate's supervisor. o Acceptance of the thesis requires the approval by an Examining Committee following an oral defence of the thesis. **Other requirements** o Advisory Committee meetings: it is required that the student meet formally with their Advisory Committee within the first six months of registration and subsequently at least once per year. If the student receives more than one unsatisfactory evaluation from an Advisory Committee meeting, they may be required to withdraw from the program. o The MSc Advisory Committee must consist of at least three members, including: - The student's supervisor(s); the primary supervisor acts as the Committee Chair. - At least one Committee member that is a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo. Note: This

Current MSc in Physics – Quantum Information Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Quantum Information – Internship Graduate Studies Academic Calendar content:
	requirement does not apply for MSc students who are supervised by a Perimeter Institute faculty member with ADDS status. ▪ At least two Committee members that are regular, adjunct, or cross-listed faculty members of the Department of Physics and Astronomy at the University of Waterloo or the Department of Physics at the University of Guelph. o The MSc Defence Committee must consist of a minimum of three voting faculty members, including: ▪ The supervisor(s). ▪ Two other faculty members, of which one must be a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo.

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

Students currently enrolled in a program with an optional internship milestone will have the option to partake in an internship under the same guidelines as indicated in the Graduate Studies Academic Calendar.

Department/School approval date (mm/dd/yy): 12/13/23
Reviewed by GSPA (for GSPA use only) ☒ date (mm/dd/yy): 11/14/23
Faculty approval date (mm/dd/yy): 03/19/2024
Senate Graduate & Research Council (SGRC) approval date (mm/dd/yy):
Senate approval date (mm/dd/yy) (if applicable):

SGRC Appendix C: Graduate Studies Program Revision Template

Graduate Studies Program Revision Template

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

Faculty: Science

Program: Master of Science (MSc) in Physics - Nanotechnology

Program contact name(s): Jan Kycia, Associate Chair

Form completed by: Kayla Sutton, Graduate Program Manager

Description of proposed changes:
Note: changes to courses and milestones also require the completion/submission of the <u>SGRC Graduate Studies Course/Milestone Form</u>.

Adding a new transfer entry Internship option to the MSc in Physics - Nanotechnology program, in addition to keeping the regular existing MSc in Physics - Nanotechnology program.

Is this a <u>major modification</u> to the program? Yes

Rationale for change(s):

Work integrated learning (WIL) options do not currently exist in the Department of Physics and Astronomy graduate programs. In line with the University's strategic plan, we would like to offer an internship option for the MSc in Physics - Nanotechnology program. The Department of Physics and Astronomy has received feedback from current faculty and current graduate students that opportunities for work experiences outside of coursework or traditional thesis-based research is desirable to enrich students' degrees as well as provide them with many transferrable skills and a variety of experiences in preparation to enter the workplace after graduation. The internship will provide students with the opportunity to apply coursework and research experiences to real-world problems and allow collaboration with industry or other partners. The addition of the internship option continues to align with the programs learning outcomes.

Proposed effective date: Term: Fall   Year: 2024

Current <u>Graduate Studies Academic Calendar (GSAC)</u> page (include the link to the web page where the changes are to be made):

https://uwaterloo.ca/graduate-studies-academic-calendar/science/department-physics-and-astronomy

Current MSc in Physics – Nanotechnology Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Nanotechnology – Internship Graduate Studies Academic Calendar content:
Program information	**Program information**

Current MSc in Physics – Nanotechnology Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Nanotechnology – Internship Graduate Studies Academic Calendar content:
Admit term(s) - Fall - Winter - Spring **Delivery mode** - On-campus **Program type** - Collaborative - Master's - Research **Registration option(s)** - Full-time - Part-time **Study option(s)** - Thesis **Admission requirements** **Minimum requirements** - An Honours Bachelor's degree (or equivalent) in Science with at least a 75% standing. **Application materials** - Graduate Record Examination (GRE) Physics subject test scores for all students who have completed their post-secondary education outside of Canada. - Supplementary information form - Transcript(s) **References** - Number of references: 3 - Type of references: 2 of which are normally from academic sources **English language proficiency (ELP)** (if applicable) **Degree requirements** **Thesis option:** **Graduate Academic Integrity Module (Graduate AIM)** **Courses**	**Admit term(s)** - Fall - Winter - Spring **Delivery mode** - On-campus **Program type** - Collaborative - Master's - Research **Registration option(s)** - Full-time ~~Part-time~~ **Study option(s)** - Thesis **Admission requirements** **Minimum requirements** - <u>Students in the Master of Science (MSc) in Physics - Nanotechnology program can apply to transfer into the Master of Science (MSc) in Physics – Nanotechnology Internship program option after completing at least one academic term. Admittance will be decided based on the student's progress to date, and is subject to approval by the student's supervisor(s) and the Associate Chair, Graduate Studies in the Department of Physics and Astronomy.</u> **Degree requirements** **Thesis option:** **Graduate Academic Integrity Module (Graduate AIM)** **Courses** - Students must complete the following 4 one-term courses (0.50 unit weight): - NANO 600 Introduction to Nanotechnology 1 nanotechnology core course 1 of PHYS 701, PHYS 704 or PHYS 706

Current MSc in Physics – Nanotechnology Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Nanotechnology – Internship Graduate Studies Academic Calendar content:
- Students must complete the following 4 one-term courses (0.50 unit weight): - NANO 600 Introduction to Nanotechnology 1 nanotechnology core course 1 of PHYS 701, PHYS 704 or PHYS 706 1 graduate level or 300 or 400 level undergraduate course. Undergraduate courses must be approved by the student's supervisor, the Associate Chair of Graduate Studies, Department of Physics and Astronomy and the Associate Dean of Science for Graduate Studies prior to enrolment in the course - Nanotechnology core courses: - NANO 601 Characterization of Nanomaterials - NANO 602 Structure and Spectroscopy of Nanoscale Materials - NANO 603 Nanocomposites - NANO 604 Nanomechanics and Molecular Dynamics Simulations - NANO 605/SYDE 683 Design of MEMS & NEMS - NANO 606/SYDE 682 Advanced MicroElectroMechanical Systems: Physics, Design & Fabrication - Core courses are designed to provide the base knowledge and skill set required to prepare students for more specialized courses and to conduct interdisciplinary nanoscale research. - Students who have completed their Bachelor of Applied Science (BASc) degree in Nanotechnology Engineering at the University of Waterloo can not take NANO 600. Instead, they can choose any 1 course from the list of nanotechnology core courses. - An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may	1 graduate level or 300 or 400 level undergraduate course. Undergraduate courses must be approved by the student's supervisor, the Associate Chair of Graduate Studies, Department of Physics and Astronomy and the Associate Dean of Science for Graduate Studies prior to enrolment in the course - Nanotechnology core courses: - NANO 601 Characterization of Nanomaterials - NANO 602 Structure and Spectroscopy of Nanoscale Materials - NANO 603 Nanocomposites - NANO 604 Nanomechanics and Molecular Dynamics Simulations - NANO 605/SYDE 683 Design of MEMS & NEMS - NANO 606/SYDE 682 Advanced MicroElectroMechanical Systems: Physics, Design & Fabrication - Core courses are designed to provide the base knowledge and skill set required to prepare students for more specialized courses and to conduct interdisciplinary nanoscale research. - Students who have completed their Bachelor of Applied Science (BASc) degree in Nanotechnology Engineering at the University of Waterloo can not take NANO 600. Instead, they can choose any 1 course from the list of nanotechnology core courses. - An average of at least 70% must be obtained in the required courses. A minimum grade of 65% is required for a pass in each course. If a student does not meet these minimum grade requirements, or receives a failing grade in any course, the student may be required to withdraw from the program. **• Master's Internship** - A Master's internship is available for students to collaborate with a partner in industry or elsewhere.

Current MSc in Physics – Nanotechnology Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Nanotechnology – Internship Graduate Studies Academic Calendar content:

be required to withdraw from the program.
 	
• **Nanotechnology Seminar**
  o This seminar is a forum for student presentation of research results or proposals. Invited speakers from academia and industry will also present results of research from time to time. The range of topics that will be addressed in the seminar crosses all areas of research in the collaborative program. Each student is required to present at least 1 research seminar. To receive credit, students are required to attend at least 8 seminars other than their own before completing their program.
  o The seminar is graded on a Credit/Non-Credit basis.
 	
• **Master's Thesis**
  o Students must complete a thesis based on original research. The subject of research must be approved by the candidate's supervisor.
  o Acceptance of the thesis requires the approval by an Examining Committee following an oral defence of the thesis.
 	
• **Other requirements**
  o Advisory Committee meetings: it is required that the student meet formally with their Advisory Committee within the first six months of registration and subsequently at least once per year. If the student receives more than one unsatisfactory evaluation from an Advisory Committee meeting, they may be required to withdraw from the program.
  o The MSc Advisory Committee must consist of at least three members, including:
    ▪ The student's supervisor(s); the primary supervisor acts as the Committee Chair.
    ▪ At least one Committee member that is a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo. Note: This requirement does not apply for MSc students who are
	o <u>The internship must be complementary to the student's thesis project.</u>
	  o <u>Requests to undertake an internship must be approved by the student's supervisor and the Associate Chair, Graduate Studies.</u>
	  o <u>It is the student's responsibility to identify potential organizations with which to undertake their internship. Students will prepare an internship proposal, outlining how the work of the organization relates to their thesis and the experience sought through the internship. A letter of support from the organization indicating the role and location of the internship and willingness of the direct supervisor to mentor the intern will be submitted to the Associate Chair, Graduate Studies.</u>
	  o <u>The internship milestone requires the successful completion of a one-term (four-month) full-time work experience with a department approved partner. Internships will normally take place in the 3rd, 4th or 5th term of study. The internship may last for up to two terms (8 months) with approval of the student's supervisor and Associate Chair, Graduate Studies, provided that the internship does not result in the candidate being enrolled past-program time limits.</u>
	  o <u>Students cannot complete their program with the final term as an internship term.</u>
	  o <u>A written report arising out of the internship experience will be required and will be evaluated by the student's supervisor and another reader designated by the Graduate Officer. This report should be used toward the Master's thesis. The report should summarize the work experience and linkages to the student's thesis research, program curriculum, and professional development goals.</u>
	
	• **Nanotechnology Seminar**
	  o This seminar is a forum for student presentation of research results or proposals. Invited speakers from academia and industry will also present results of research from time to time. The range of topics that will be

Current MSc in Physics – Nanotechnology Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Nanotechnology – Internship Graduate Studies Academic Calendar content:
- supervised by a Perimeter Institute faculty member with ADDS status. - At least two Committee members that are regular, adjunct, or cross-listed faculty members of the Department of Physics and Astronomy at the University of Waterloo or the Department of Physics at the University of Guelph. - The MSc Defence Committee must consist of a minimum of three voting faculty members, including: - The supervisor(s). - Two other faculty members, of which one must be a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo.	addressed in the seminar crosses all areas of research in the collaborative program. Each student is required to present at least 1 research seminar. To receive credit, students are required to attend at least 8 seminars other than their own before completing their program. - The seminar is graded on a Credit/Non-Credit basis. **Master's Thesis** - Students must complete a thesis based on original research. The subject of research must be approved by the candidate's supervisor. - Acceptance of the thesis requires the approval by an Examining Committee following an oral defence of the thesis. **Other requirements** - Advisory Committee meetings: it is required that the student meet formally with their Advisory Committee within the first six months of registration and subsequently at least once per year. If the student receives more than one unsatisfactory evaluation from an Advisory Committee meeting, they may be required to withdraw from the program. - The MSc Advisory Committee must consist of at least three members, including: - The student's supervisor(s); the primary supervisor acts as the Committee Chair. - At least one Committee member that is a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo. Note: This requirement does not apply for MSc students who are supervised by a Perimeter Institute faculty member with ADDS status. - At least two Committee members that are regular, adjunct, or cross-listed faculty members of the Department of Physics and Astronomy at the University of Waterloo or the

Current MSc in Physics – Nanotechnology Graduate Studies Academic Calendar content:	Proposed MSc in Physics – Nanotechnology – Internship Graduate Studies Academic Calendar content:
	Department of Physics at the University of Guelph. o The MSc Defence Committee must consist of a minimum of three voting faculty members, including: ▪ The supervisor(s). ▪ Two other faculty members, of which one must be a regular faculty member of the Department of Physics and Astronomy at the University of Waterloo.

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

Students currently enrolled in a program with an optional internship milestone will have the option to partake in an internship under the same guidelines as indicated in the Graduate Studies Academic Calendar.

Department/School approval date (mm/dd/yy): 12/13/23
Reviewed by GSPA (for GSPA use only) ☒ date (mm/dd/yy): 11/14/23
Faculty approval date (mm/dd/yy): 03/19/2024
Senate Graduate & Research Council (SGRC) approval date (mm/dd/yy):
Senate approval date (mm/dd/yy) (if applicable):

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Senate Graduate & Research Council

For Approval   **Open Session**

To:	**Senate**
Sponsor:	Charmaine Dean Vice-President, Research & International
	Jeff Casello Associate Vice-President, Graduate Studies and Postdoctoral Affairs
Presenter: **Contact Information:**	Jeff Casello jcasello@uwaterloo.ca
Date of Meeting:	June 10, 2024
Agenda Item Identification:	**8(b) Report – Senate Graduate & Research Council:** **Regulation Revisions - Approved Doctoral Dissertation Supervisors (ADDS)**

Recommendation/Motion:

To approve the proposed academic regulation revisions to the Approved Doctoral Dissertation Supervisors (ADDS) section of the Graduate Studies Academic Calendar (GSAC) and the addition of the new Graduate students' supervisors and committees section of the GSAC, effective September 1, 2024, as presented.

Summary:

The following item had been withdrawn from the April 8, 2024 Senate following concerns raised regarding the text and the consultation process that preceded the Senate meeting. Subsequently, conversations were had with FAUW leadership, including both the FAUW President and the Chair of FAUW's lecturer committee. As a result of those discussion, revisions were made. These changes have been vetted by FAUW's Lecturers' Committee on April 23, 2024 and were endorsed unanimously at the Faculty Relations Committee on May 2, 2024. Senate Graduate & Research Council then met on May 6, 2024 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Graduate & Research Council   **1**

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 4.03(a): "Make recommendations to Senate with respect to the governance, direction and management of, or any changes in rules, regulations or policies for graduate studies and research in the university."

Governance Path:

Senate Graduate & Research Council approval date (mm/dd/yy): 02/04/24

Senate approval date (mm/dd/yy): 04/08/2024 (withdrawn)

Senate Graduate & Research Council approval date (mm/dd/yy): 05/06/2024 (revised)

Highlights/Rationale:

Graduate Studies and Postdoctoral Affairs (GSPA) continues the review of GSAC to ensure that the information presented is complete, clear and consistent with current practice.

The proposed revisions include:

- renaming ADDS status – Approved Doctoral Dissertation Supervisory status – to Sole-Supervisory Privilege Status (SSPS);
- introducing a new stand-alone section to the Graduate Studies Academic Calendar which will replace program page references to ADDS status;
- eliminating the listing of faculty with ADDS, currently linked to at the end of every PhD program page.

The included appendix contains for information to Senate web content which provides further context around SSPS.

SSPS is to be divided into two categories: SSPS1 and SSPS2. Faculty members who hold SSPS1 may sole-supervise Master's students. Faculty members who have SSPS2 may sole-supervise Master's students and PhD students. Previously, the university had no oversight on the sole-supervision of Master's students which motivates the creation of the disaggregate permission structure.

The changes to the designation will have no impact on those who currently hold ADDS status. Their permissions will remain the same.

For new faculty hires, the following holds:

- New tenure stream faculty will normally be granted SSPS1 at the time of appointment. Such status should be included in the letter of appointment.
- The processes by which tenure stream faculty can obtain SSPS2 remains the same.
- New teaching stream faculty may co-supervise PhD students with a tenure stream faculty who holds SSPS2 status, and with the arrangement approved by the Associate Dean Graduate Studies in the Faculty.

- New teaching stream faculty may co-supervise Master's students with a tenure stream faculty who holds SSPS (1 or 2) status, and with the arrangement approved by the Graduate Officer in the Department / School.
- In exceptional cases, other supervisory structures may be granted for PhD and Master's students by the AVP GSPA on the recommendation of the Associate Dean Graduate Studies in the student's home faculty.

Item 12a in the Senate Consent Agenda, "Report – Senate Graduate & Research Council: Regulation Revisions – Graduate Studies Academic Calendar", includes proposed new section of the GSAC for approval, titled "Graduate students' supervision and committees" to be found under the heading: Graduate academic roles and program requirements | Graduate students' supervisors and committees.

Column 3 in the table of this new section, indicates that a tenure stream faculty member who has not been granted SSP status (at level 1 or 2) may co-supervise, at the discretion of the Associate Dean for PhDs and the Associate Chair for Master's. This condition is necessary because if a faculty colleague has their SSPS2 revoked, and are therefore without SSPS, they may be permitted to work towards regaining SSPS2 status by co-supervising.

The decision makers, the ADG or Graduate Officer, would evaluate the circumstances surrounding the revocation of SSPS and the potential benefits to the student / co-supervisor in making the decision about whether this is permitted.

Revisions to the proposal:

The following revisions have been made since previously being presented to Senate:

1. Editorial changes have been made to replace "Lecturers" with "Teaching Stream faculty" and "Tenure Track" faculty with "Tenure Stream" faculty for consistency with other University guidelines or Policies.

2. Notes have been added to the summary table on Page 11 of this submission in order to:
   a. Make clear that existing, non-conforming privileges for sole supervision will remain permitted, as appropriate;
   b. Make explicit that pathways exist for new and existing Teaching Stream Faculty who have an active research program and a familiarity with supervisory best practices to sole-supervise Master's students.

3. The process for Teaching Stream faculty to seek SSPS1 is made explicit.

4. There is an obligation on behalf of the University to provide faculty members whose SSPS has been revoked with guidance on how to rectify gaps in their supervisory practices in order to reacquire SSPS privilege.

5. The roles of Advisory Committees have been updated to include:
   a. A requirement that they meet and report on a student's progress annually;
   b. An acknowledgement that these committees can be places where concerns about supervisory performance are identified and communicated to Graduate Officers or Associate Deans.

6. Allows for faculty members who do not hold SSPS2, but are in graduate leadership positions (e.g., as a program director for a course-based master's program) to be part of a Faculty Graduate Studies Committee.

Documentation Provided:

Appendix A – Approved Doctoral Dissertation Supervisor (ADDS) renamed Sole-supervisory privilege status (SSPS) and Graduate students' supervisors and committees

SGRC Appendix A

Approved Doctoral Dissertation Supervisor (ADDS) renamed Sole-supervisory privilege status (SSPS)

The following is a **new stand-alone section to be added to the Graduate Studies Academic Calendar** which will replace program page references to ADDS status, and listing of faculty with ADDS, currently linked to at the end of every PhD program page.

Current content:	Proposed content:
Approved Doctoral Dissertation Supervisors (ADDS) The reputation and quality of an established Faculty depends in large measure on the quality of its PhD programs. In turn, this quality is very sensitive to the qualifications of the individuals to whom the Faculty delegates the responsibility for supervising PhD students. Identification as an Approved Doctoral Dissertation Supervisor (ADDS) is the personal accreditation of an individual faculty member and is based on their activity. The individuals so identified constitute the ADDSs in each Faculty. Other faculty members may co-supervise PhD students along with a faculty member with ADDS status, and may serve on PhD Committees. Information on recent changes in the availability of ADDS can be obtained from the Graduate Officer of the particular department. The Graduate Studies Academic Calendar lists the ADDS status faculty members below. A complete list of all University of Waterloo faculty members appears on the university departmental websites.	**Sole-supervisory privilege status (SSPS)** The University of Waterloo recognizes the integral roles that supervisors and graduate students play in advancing the research mission of the University. The University also acknowledges its responsibility in ensuring that faculty members who sole-supervise graduate students are well-prepared to be successful in that role. The granting of the privilege to sole-supervise graduate students (SSPS1 or SSPS2) is the accreditation of an individual faculty member and is based on their demonstrated ability to successfully meet the expectations articulated in the guide to graduate research and supervision. Faculty members who hold SSPS1 may sole-supervise Master's students. Faculty members who have SSPS2 may sole-supervise Master's students and PhD students. Normally, SSPS1 is granted to tenure stream faculty members at the time of appointment or subsequently, at the discretion of the Associate Dean Graduate Studies in the faculty member's home Faculty. The ways in which a tenure stream faculty member can achieve SSPS2 for PhD students, can be found in the Organization of Graduate Studies section of the GSPA website.

The following ADDS status content appears on the GSPA site and is **being shared with SGRC for information**, as it relates to the calendar content above: https://uwaterloo.ca/graduate-studies-postdoctoral-affairs/about/organization-graduate-studies#ADDS

Web information.	**Sole Supervisory Privilege Status (SSPS)**
Approved Doctoral Dissertation Supervisor (ADDS)	Preamble
Preamble	The <u>Sole Supervisory Privilege Status (SSPS1</u> or SSPS2<u>) is a regulation for which authority is</u> vested in the Senate, and any changes to this governance are to be discussed at Faculty Relations Committee, Graduate Student Relations Committee and the Faculties, and then approved by Senate Graduate and Research Council and by Senate.
The Approved Doctoral Dissertation Supervisor (ADDS) status is governed by a series of regulations governing how faculty members gain the privilege of sole-supervising PhD students. As such, they are regulations whose authority is vested in the Senate, and any changes to them are to be discussed at Faculty Relations Committee, Graduate Student Relations Committee and the Faculties, and then approved by Senate Graduate and Research Council and by Senate.	
Introduction	**Introduction**
These regulations set out the qualifications necessary for faculty members to supervise PhD students. Faculty members who demonstrate the qualifications set out in these regulations will receive Approved Doctoral Dissertation Supervisor (ADDS) status, and only they will be:	These regulations set out the qualifications necessary for faculty members to <u>sole</u> supervise PhD <u>and Master's students</u>.
	Faculty members who demonstrate the qualifications set out in these regulations will receive <u>S</u>ole Supervisory Privilege Status <u>(SSPS1 or SSPS2)</u>. <u>A Faculty member who holds SSPS2 status will be:</u>
• permitted to independently supervise PhD students; • eligible for membership on the Graduate Studies Committee of a Faculty; • eligible for membership on the University of Waterloo Senate Graduate and Research Council; • eligible to be Graduate Officers, Faculty Associate Deans, Graduate Studies, or Associate Vice-President, Graduate Studies and Postdoctoral Affairs. • eligible to chair PhD Examining Committees.	• permitted to independently supervise PhD students; • <u>permitted to independently supervise Master's students;</u> • eligible for membership on the Graduate Studies Committee of a Faculty; • eligible for membership on the University of Waterloo Senate Graduate and Research Council; • eligible to be Graduate Officers, Faculty Associate Deans, Graduate Studies, or Associate Vice-President, Graduate Studies and Postdoctoral Affairs. • eligible to chair PhD Examining Committees.
	<u>Normally, a tenure stream faculty member will be granted the privilege to sole supervise</u>

Qualification for ADDS Status

Faculty members who qualify for ADDS status must:

- Be a faculty member at the professorial rank at the University of Waterloo (this includes clinical faculty);
- Normally hold a PhD degree or a terminal degree in their field;
- Demonstrate continuing competence and achievement in research or scholarship appropriate for the discipline;
- Demonstrate appropriate familiarity with University of Waterloo policies and procedures on PhD supervision. This is preferably achieved by the faculty member attending a University-provided workshop or receiving training on supervisory procedures at the Faculty level;
- Demonstrate appropriate supervisory experience: this can be achieved by the faculty member choosing one of the following:
  - Successfully completing a workshop series organized by the office of the Associate Vice-President, Graduate Studies and Postdoctoral Affairs, and facilitated by CTE on graduate supervision, over the course of one year;
  - ~~Successfully supervising to completion at least one Master's thesis;~~
  - Having co-supervised or supervised a PhD thesis to completion (see Guidelines for Best Practice in Co-Supervision).

The above criteria are meant to ensure that faculty members have acquired the appropriate knowledge to facilitate becoming

Master's students, or SSPS1, at the time of the faculty member's appointment . Tenure stream faculty members who do not hold SSPS1 may, at the discretion of the Associate Dean Graduate Studies, sole-supervise Master's students.

Qualification for SSPS2

Faculty members who qualify for SSPS2 must:

1. Be a tenure stream faculty member at the University of Waterloo (this includes clinical faculty);
2. Normally hold a PhD degree or a terminal degree in their field;
3. Demonstrate continuing competence and achievement in research or scholarship appropriate for the discipline;
4. Demonstrate appropriate familiarity with University of Waterloo policies and procedures on graduate student supervision. This is preferably achieved by the faculty member attending a University-provided workshop or receiving training on supervisory procedures at the Faculty level;
5. Demonstrate appropriate supervisory experience: this can be achieved by the faculty member choosing one of the following:

   a. Successfully completing a workshop series organized by the office of the Associate Vice-President, Graduate Studies and Postdoctoral Affairs, and facilitated by CTE on graduate supervision;
   b. Having co-supervised or supervised a PhD thesis to completion (see Guidelines for Best Practice in Co-Supervision).

The above criteria are meant to ensure that faculty members have acquired the appropriate knowledge to facilitate

excellent PhD supervisors at Waterloo. For new faculty, ADDS status is to be awarded on potential excellence since building a proven track record of successful graduate supervision requires many years, numerous students and, depending on the discipline, can extend beyond the granting of tenure.

Acquiring ADDS Status

The process of acquiring ADDS status for a faculty member in the tenure-stream at the University of Waterloo is defined as follows:

- Faculty members satisfying all 5 criteria for qualification listed above can request consideration for ADDS status by their Department Chair;
- ~~The Chair must confirm all 5 criteria are met and then pass along the request and any written comments to the Faculty Associate Dean, Graduate Studies for approval;~~
- ~~If the Chair deems that any of the 5 criteria are not met, s/he will provide the faculty member in writing information as to which criteria are not met and guidance as to how to satisfy those criteria in order to become eligible. Faculty members can appeal the Chair's negative decision to the Faculty Associate Dean, Graduate Studies and (in the event of a negative decision from the Faculty Associate Dean) to the Associate Vice-President, Graduate Studies and Postdoctoral Affairs~~
- ~~Individual Faculties may opt to constitute an appropriate advisory committee to the Associate Dean, Graduate Studies to adjudicate ADDS status requests;~~
- ~~After the application is approved by the Faculty Associate Dean, Graduate Studies the recommendation for the granting of ADDS status will be forwarded to the Associate Vice-President, Graduate Studies and Postdoctoral Affairs for approval;~~

satisfactory graduate student supervision at Waterloo.

For new tenure stream faculty, SSPS2 is to be awarded on potential excellence since building a proven track record of successful graduate supervision requires many years, numerous students and, depending on the discipline, can extend beyond the granting of tenure.

Acquiring SSPS2

The process of acquiring SSPS2 for a faculty member in the tenure stream at the University of Waterloo is defined as follows:

- Faculty members satisfying all five criteria for qualification listed above can request consideration for SSPS2 by their Department Chair;
- The Chair will evaluate the candidate's having satisfied all five criteria and, when those criteria are deemed to be met, recommend the approval with any written comments to the Faculty Associate Dean, Graduate Studies;
- The Faculty Associate Dean, or (at the discretion of the Associate Dean) an appropriate advisory committee, will evaluate the candidate's SSPS2 qualifications and, when the qualifications are deemed to be satisfied, will recommend the granting of SSPS2 by the Associate Vice President Graduate Studies and Postdoctoral Affairs;
- The Associate Vice-President, Graduate Studies and Postdoctoral Affairs will vet the request and determine if SSPS2 will be granted; If either the Faculty Associate Dean, Graduate Studies or the Associate Vice-President, Graduate Studies and Postdoctoral Affairs does not approve SSPS2 at the present time, s/he will provide in writing guidance as to what is needed for the faculty member to become eligible. Faculty members can appeal denial of SSPS2 status by the Faculty Associate Dean to the Associate Vice-

- ~~If either the Faculty Associate Dean, Graduate Studies or the Associate Vice-President, Graduate Studies and Postdoctoral Affairs does not approve ADDS status at the present time, s/he will provide in writing guidance as to what is needed for the faculty member to become eligible. Faculty members can appeal denial of ADDS status by the Faculty Associate Dean to the Associate Vice-President, Graduate Studies and Postdoctoral Affairs.~~

President, Graduate Studies and Postdoctoral Affairs.

Retired Faculty

Those faculty members who are supervising doctoral students when they retire may continue to sole-supervise these students until these students complete their degrees.

Retired Faculty

Those faculty members who are sole-supervising graduate students when they retire may continue to sole-supervise these students until these students complete their degrees. A retired faculty member may not begin a new sole-supervisory role.

~~Adjunct Faculty and Research Professors~~

~~Co-supervision with a regular faculty member with ADDS status is normally a requirement for Adjunct Faculty and Research Professors. The Faculty Associate Deans, Graduate Studies, have the authority to waive the co-supervision requirement for a specific student, on the recommendation of the Department/School.~~

Revoking ADDS Status

When circumstances appear to warrant the revocation of ADDS status of a faculty member; the process for doing so is as follows:

- The Chair/Director of the faculty member's unit will recommend revocation of ADDS status to the Faculty Associate Dean, Graduate Studies. Justification for the recommendation should be provided in writing, along with information on efforts that have been made for remediation, and the faculty member in question should be notified in

Revoking SSPS

When circumstances appear to warrant the revocation of SSPS1 or SSPS2 of a faculty member, the process for doing so is as follows:

- The Chair/Director of the faculty member's unit will recommend revocation of SSPS (SSPS1, SSPS2 or both) to the Faculty Associate Dean, Graduate Studies. Justification for the recommendation should be provided in writing, along with information on efforts that have been made for remediation, and the faculty member in question should be notified in

advance of the recommendation and the reasons for it; • The Faculty Associate Dean, Graduate Studies may reject the recommendation but must provide a written explanation for doing so; • In some cases information may come to the attention of the Faculty Associate Dean, Graduate Studies, suggesting that revocation of ADDS status should be considered. In such circumstances, s/he should approach the Chair/Director to investigate, and if appropriate initiate the process; • If the Faculty Associate Dean, Graduate Studies accepts the Chair/Director's recommendation, the faculty member may appeal the decision to the Associate Vice-President, Graduate Studies and Postdoctoral Affairs , whose decision is final; the Associate Vice-President, Graduate Studies and Postdoctoral Affairs shall provide reasons for his/her decision in writing; • If ADDS status is revoked/ the Faculty Associate Dean, Graduate Studies will notify Graduate Studies and Postdoctoral Affairs to update the University list; • Faculty members whose ADDS status has been revoked have the opportunity to requalify for ADDS status, if they can demonstrate the appropriate competencies required.	advance of the recommendation and the reasons for it; • The Faculty Associate Dean, Graduate Studies may reject the recommendation but must provide a written explanation for doing so; • In some cases, information may come (normally from members of a student's advisory committee) to the attention of the Graduate Officer in the student's home program, or the Faculty Associate Dean, Graduate Studies in the student's home Faculty, suggesting that revocation of SSPS should be considered. In such circumstances, they should approach the Chair / Director to investigate, and if appropriate initiate the process; • If the Faculty Associate Dean, Graduate Studies accepts the Chair/Director's recommendation, the faculty member may appeal the decision to the Associate Vice-President, Graduate Studies and Postdoctoral Affairs, whose decision is final; the Associate Vice-President, Graduate Studies and Postdoctoral Affairs shall provide reasons for the decision in writing; • If SSPS2 is revoked, the Faculty Associate Dean, Graduate Studies will notify Graduate Studies and Postdoctoral Affairs to update the University list; • A faculty member who has had their SSPS2 revoked shall not be eligible to sole-supervise PhD students; • A faculty member who has had their SSPS1 revoked shall not be eligible to sole supervise Master's students; • Faculty members whose SSPS has been revoked have the opportunity to requalify for SSPS. The necessary steps to have SSPS reinstated, including possible pathways to address the unsatisfactory competencies which led to the revocation, shall be communicated to the faculty member at the time of the revocation.
Other • All faculty members of a Faculty Graduate Studies Committee should hold ADDS status.	

~~(Departments/Schools not offering PhD programs would be exempt.)~~ • ~~Faculty members from departments that do not have a PhD program may acquire ADDS status and supervise graduate students from other departments within their Faculty where departmental regulations permit.~~ • An interim supervisor, who supports a graduate student during a supervisor's absence during a planned (e.g., sabbatical) or unplanned (e.g., medical) leave, is not required to hold ADDS status.	**Other** • All faculty members of a Faculty Graduate Studies Committee should normally hold <u>SSPS2</u> <mark>or serve as a Graduate Program Director</mark>. • An interim supervisor, who supports a graduate student during a supervisor's absence during a planned (e.g., sabbatical) or unplanned (e.g., medical) leave, is not required to hold <u>SSPS2</u>.

Graduate students' supervisors and committees

This is a new calendar section found under the heading:

Graduate academic roles and program requirements
> • <mark>Graduate students' supervisors and committees</mark>

Graduate students' supervisors and committees

The University of Waterloo strongly encourages regular and productive engagements between graduate students, their supervisors and committees that are purposefully constituted to promote students' attainment of their goals. The University recognizes the value of diverse areas of scholarship and lived experiences of those who support graduate students' research. This section of the calendar defines and provides the regulatory frameworks for graduate student research committees.

The University defines the following roles in support of graduate students:

> **A Supervisor** is the primary point of contact for a graduate student. The supervisor meets or exceeds the expectations articulated in the [roles and responsibilities of supervisors typically a combination of academic, administrative, funding, and personal supports for the graduate student.](#)

> **A Co-supervisor**, when appropriate, may share the responsibilities of the Supervisor. Co-supervisory arrangements are desirable when the co-supervisors have complementary knowledge, skills, academic training, professional networks, or other attributes that benefit the student. Co-supervisory relationships may

also provide more timely administrative support for graduate students. No more than two co-supervisors are permitted.

Normally, the supervisor's or one of the co-supervisor's faculty appointment will be in the academic unit administering the student's program.

An Advisory Committee is formed to provide academic, professional and personal support to graduate students and their supervisors. Because of the broad mandate of the Advisory Committee, membership may be purposefully large, including members internal and external to the University with disparate training and experience, provided that a proposed member can contribute meaningfully to the student's academic endeavors.

The advisory committee (as a whole or select members) may also play roles in evaluating a graduate student's academic progress related to their research.

An Examining Committee evaluates a graduate student's performance on major academic milestones which, at the PhD level, may include comprehensive or qualifying exams, research proposals, and thesis defenses.

At the Master's level, an Examining Committee may be constituted, typically to evaluate a student's proposal or thesis.

In many instances, there will be common membership between a student's advisory committee and the student's examining committee, though examining committees are typically composed of those with academic credentials that are equivalent to the student's degree program.

Summary of Supervisory Roles and Advisory Committee Membership [6]

Role	Tenure Stream faculty			Teaching Stream Faculty		External member with adjunct faculty status [4]	Research Professor	Post-doctoral Scholar
	With SSPS2 status	With SSPS1 status	Without SSP status	With SSPS1 status [5]	Without SSP1 status			
PhD sole supervisor	YES	NO	NO	No	NO	NO	NO	NO
PhD co-supervisor	YES	YES [1]	YES [1]	YES [1] [2]	YES [1] [2]	YES [1] [2]	YES [1] [2]	NO
Master's sole supervisor	YES	YES	YES [2]	YES	NO	NO	NO	NO
Master's co-supervisor	YES	YES	YES [2]	YES	YES [3]	YES [3]	YES [3]	YES [3]
PhD and Masters Advisory	YES	YES	YES	YES	YES	YES – adjunct status rec-ommended	YES	YES
	[1] with co-supervisor with SSPS2 status [2] with Associate Dean (Graduate Studies) approval [3] with Graduate Officer approval [4] including retired faculty members who maintain adjunct status [5] Teaching Stream faculty who can demonstrate an active research program and knowledge of the university's administrative structures associated with graduate studies, may apply for SSPS1 following the process outlined for Tenure Stream Faculty seeking SSPS2. [6] non-conforming, existing privileges held by faculty members prior to the adoption of these regulations will be retained, as appropriate.							

In unique circumstances, the Associate Dean Graduate Studies in the student's home Faculty may recommend to the Associate Vice President Graduate Studies and Postdoctoral Affairs (AVP-GSPA) a supervisory or advisory relationship that differs from the regulations presented here. The AVP-GSPA shall make the decision to approve or reject the proposed relationship.

The following section provides the regulatory framework for graduate supervision at Waterloo.

PhD Supervisors

In order to sole-supervise PhD students, the proposed supervisor must be a tenure stream member of the University faculty with Sole Supervisory Privilege (SSP2) status.

When a proposed supervisor does not have SSPS2 status they may co-supervise with a colleague who satisfies the requirements for sole-supervision.

Similarly, colleagues external to the University of Waterloo who hold adjunct positions at the University may, at the discretion of the Associate Dean Graduate Studies in the student's home Faculty, co-supervise with a colleague who satisfies the requirements for sole-supervision when:

- The adjunct holds a PhD in a related discipline; and
- The adjunct remains active in research.

Research Professors and Teaching Stream faculty are permitted to serve as co-supervisors for PhD students. Postdoctoral scholars may not serve as supervisors or co-supervisors for PhD students.

A faculty member who is sole-supervising PhD students at the time of their retirement may continue to sole-supervise those students to completion. Following their retirement, faculty members may not begin sole-supervising new students.

Masters Supervisors

Any tenure stream faculty member who holds SSPS1 status at the University of Waterloo may sole-supervise research master's students. Faculty members without SSPS1 status may only sole-supervise Research Master's students with approval from the Associate Dean, Graduate Studies, in the student's home Faculty.

Teaching stream Faculty who wish to sole supervise Master's students may seek SSPS1. Teaching Stream Faculty seeking SSPS1 will follow the process outlined for Tenure Stream Faculty pursuing SSPS2. To qualify, Teaching Stream faculty shall demonstrate an active research program and knowledge of the university's administrative structures associated with graduate studies.

Co-supervision by other members of the university community (e.g., postdocs, research associate professors, adjunct faculty) is permitted at the discretion of the Graduate Officer in the student's home unit when:

- the co-supervision adds value to the student's learning outcomes (e.g., research or professional development) and
- for internal members of the university, the role of co-supervisor is permitted by the terms of the proposed co-supervisor's appointment.

Advisory Committee

Purpose and Functions

A student's Advisory Committee acts as a partner with the student and the supervisor(s) in guiding and advising the student on research and assisting supervisor(s) in their monitoring functions. Advisory committee members provide the student with expert guidance or advice in specific areas of the student's research work; for the supervisor(s), advisory committee members provide critical and constructive feedback on the student's research. Procedures for appointing and confirming advisory committees will vary between Faculties.

Collectively, advisory committees are intended to be sources of support to supervisors and students in promoting the resolution of issues and promoting positive academic outcomes. As such, advisory committees can and should play a role in identifying and communicating shortcomings in faculty members' supervisory practices.

Advisory committees (in full or in part) in some Faculties provide regular (at least once per year), formal assessments on students' academic progress, the successful attainment of which is necessary for a student to remain in Good Standing.

Advisory committees are mandatory for PhD students and are recommended for research Master's students.

Membership and Voting

Advisory committees must include the student's supervisor(s) and at least two other full-time faculty members from the University of Waterloo whose complementary fields of expertise will support the planning and execution of the student's research work.

Advisory Committees may include additional members, internal or external to the University, who possess expertise that will add value to the student's research work. Adjunct status is recommended for external members of an advisory committee but is not required.

When an Advisory committee is performing an evaluative role for the student, such as assessing academic progression through committee meetings, additional members (other than the supervisor(s) and two Waterloo faculty members) will normally not be voting members of the committee. Exceptions can be made by the Associate Dean Graduate Studies in the student's home Faculty, on the recommendation of the student and the supervisor(s).

The role(s) of advisory committees should be made clear to both the committee members and the student, including the role in supporting and evaluating academic progression.

The minimum membership of a PhD student's advisory committee shall be the supervisor(s) plus two regular members of the University faculty, at least one of whom will have their primary appointment in the student's home academic program.

The University recommends the formation of the advisory committee as soon as is practical. For PhD students, the committee shall be established not later than the month following the student's successful completion of the Comprehensive or Qualifying exam.

Jurisdiction on Membership

Normally, the composition of a PhD student's advisory committee shall be jointly decided by the student and the supervisor(s) and communicated to the Graduate Officer in the student's home unit.

In some Faculties, membership of the Advisory Committee is at the discretion of the Associate Dean Graduate Studies.

Distinction between Advisory and Examining Committees

The primary role of the advisory committee is to provide support/feedback to the student throughout their research progression.

The primary role of the examining committee is to serve as evaluators of graduate students' research work at defined points coinciding with PhD comprehensive exams, PhD thesis defenses and where appropriate, Master's defenses.

The examining committee evaluates the suitability of the student's research relative to the discipline and the stated degree level expectations of the student's level of study. In many cases, there will be overlap in membership of these committees. However, there may be members of the advisory committee who do not meet the requirements for membership on the examining committee.

A member of a student's advisory committee, who is not part of the examining committee, is not required to be a part of an examination. However, it is recognized that there may be value in the participation of all advisory committee members and thus, members are encouraged, where possible and appropriate, to play an active role in a student's examination (as a non-voting participant). This may include asking questions of the candidate during oral components of a comprehensive exam or a defense.

The membership of Examining Committees for PhD students is defined for [comprehensive exams](#) and for [defenses](#). For Master's programs, see [Master's degree with thesis.](#)

Where applicable, the membership of Examining Committees for master's students is specified by the Faculty or the Academic Unit delivering the student's academic program.

UNIVERSITY OF WATERLOO | Senate

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Senate Undergraduate Council

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For Approval   **Open Session**

To:	**Senate**
Sponsor:	David DeVidi Associate Vice-President, Academic
Presenter: **Contact Information:**	David DeVidi david.devidi@uwaterloo.ca
Date of Meeting:	June 10, 2024
Agenda Item Identification:	**9(a) Report – Senate Undergraduate Council:** **Major Modification – Recreation and Leisure Studies & Recreation** **and Sport Business**

Recommendation/Motion:

To approve the proposed major modifications to Recreation and Leisure Studies (Bachelor of Arts - Honours), and Recreation and Sport Business (Bachelor of Arts - Honours), effective September 1, 2025, as presented.

Summary:

Senate Undergraduate Council met on April 9, 2024 and agreed to forward the following items to Senate for approval as part of the regular agenda. These items were presented at the May 6, 2024 Senate for approval, and following questions that could not be answered in the meeting, the items were withdrawn. These items are being brought forwarded again to Senate, as part of the regular agenda, with responses to the questions and comments from the May 6, 2024 Senate meeting, provided in Appendix C.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(b): "Make recommendations to Senate with respect to new undergraduate programs/plans, the deletion of undergraduate programs/plans, and major changes to undergraduate programs/plans."

Governance Path:

Health Faculty Council approval date (mm/dd/yy): 03/22/24

Senate Undergraduate Council approval date (mm/dd/yy): 04/09/24

Senate approval date (mm/dd/yy): 05/06/2024 (withdrawn)

Highlights/Rationale:

These proposed is revisions are to 1. revise plan name and requirements for Honours Recreation and Leisure Studies, and 2. Revise the plan name for Honours Recreation and Sport Business, as presented in Appendices A and B.

1. <u>Recreation and Leisure Studies</u>

   To change the plan title to Recreation, Leadership, and Health, and revise the requirements as presented in Appendix A.

   Through alumni and student surveys, coop consultation, and interviews with various partners, the Department of Recreation and Leisure Studies has revised their recreation and leisure studies program. Through this revision, they are highlighting the ways in which recreation and leisure can enhance the wellbeing and health of communities and its members. Graduates from the program will be well positioned to become leaders in recreation and community organizations, and make their respective communities more inclusive spaces for all people.

   Students currently enrolled in the Recreation and Leisure Studies program will have the option to follow the existing or the revised curriculum. Consultation has been conducted with current students, alumni, cooperative education and community organization.

   Approvals have been granted by the following University of Waterloo units – Political Science, Social Development Studies, Faculty of Environment, Peace and Conflict Studies, School of Public Health Sciences, English. The Faculties of Arts, Math and Science have been informed of the change to remove our Restricted Electives.

2. <u>Recreation and Sport Business</u>

   To change the plan title to Sport and Recreation Management, as presented in Appendix B.

   The revised name better reflects the curriculum and the evolution of the field in theory and practice. The revised name also reflects a wider scope of sectors (public, non-profit, and business) that their students study and work. Current students and alumni have also been consulted and have demonstrated support for this change. Current students can choose to switch to the revised plan name and calendar rules after September 1, 2025, or remain with the previous plan name.

Documentation Provided:

Appendix A – Recreation and Leisure Studies

Appendix B - Recreation and Sport Business

Appendix C – Responses to questions and comments from the May 6, 2024 Senate Meeting

SUC Appendix A: Recreation and Leisure Studies

H-Recreation & Leisure Studies
Recreation, Leadership, and Health (Bachelor of Arts - Honours)

Under Review | Fall 2025

General Program/Plan Information

Faculty ❓
Faculty of Health

Academic Unit ❓
Department of Recreation and Leisure Studies

Field of Study ❓
Recreation and Leisure Studies

Faculty ❓
Faculty of Health

Undergraduate Credential Type ❓
Major

Program Type
Honours

Degree ❓
Bachelor of Arts (Health)

Proposed
Program/Plan Name ❓
Recreation, Leadership, and Health (Bachelor of Arts - Honours)

Existing
Program/Plan Name ❓
Recreation and Leisure Studies (Bachelor of Arts - Honours)

Systems of Study
Co-operative
Regular

Online Degree/Diploma ❓

Admissions

Admissions Entry Point ❓
Direct Entry

Admission Requirements: Minimum Requirements ❓

Requirements Information

Invalid Combinations ❓
No

Average Requirement ❓
Yes

Minimum Average(s) Required ❓

- A minimum cumulative overall average of 65.0%.
- A minimum cumulative major average of 70.0%.

Proposed
Graduation Requirements ❓

- See Bachelor of Arts (Health) degree-level requirements.
- Complete a total of 20.0 units:
    - 11.5 units of required courses.
    - 2.5 units of additional REC courses.
    - 6.0 units of elective courses.

Existing
Graduation Requirements ❓

- See Bachelor of Arts (Health) degree-level requirements.
- Complete a total of 20.0 units:
    - 5.0 units of required courses.
    - 6.5 units of additional REC courses.
    - 2.0 units of approved courses.
    - 6.5 units of elective courses.

Co-operative Education Program Requirements ❓

For students in the co-operative system of study, see Bachelor of Arts co-operative education program requirements.

Course Requirements (units) ❓

Required Courses

0
Units to Complete

No Rules

Course Requirements (no units) ❓

~~Approved Courses List~~

- Complete **4 all** of the following
    - ~~Complete at least 1 course from: ACTSC, AMATH, CO, COMM, MATBUS, MATH, MTHEL, PMATH, STAT~~
    - ~~Complete at least 1 course from: ANTH, ECON, GSJ, LS, PACS, PSCI, SDS, SMF, SOCWK, STV~~
    - ~~Complete at least 1 course from: ARABIC, ASL, CHINA, CI, CROAT, DUTCH, EASIA, FR, GER, GRK, INDENT, INDG, ITAL, ITALST, JAPAN, JS, KOREA, LAT, MOHAWK, PORT, REES, RUSS, SI, SPAN~~
    - ~~Complete at least 1 course from: BIOL, CHEM, EARTH, MNS, PHYS, SCI~~
    - ~~Complete at least 1 course from: CLAS, COMMST, HIST, HUMSC, INDG, MEDVL, PHIL, RS, VCULT~~
    - ~~Complete at least 1 course from: CS~~
    - ~~Complete at least 1 course from: ENBUS, ENVS, ERS, GEOG, INDEV, INTEG, PLAN~~
    - ~~Complete at least 1 course from: ENGL~~
    - ~~Complete at least 1 course from: FINE, MUSIC, THPERF~~
    - ~~Complete at least 1 course from: GERON, HEALTH, HLTH, KIN~~
    - ~~Complete at least 1 course from: PSYCH (excluding PSYCH101/PSYCH101R)~~
    - ~~Complete at least 1 course from: SOC~~

Required Courses

- Complete all of the following
    - Complete all the following:
        - **ENVS205 - Sustainability: The Future We Want (0.50)**

- HEALTH107 - Sociology of Activity, Health, and Well-Being   (0.50)
- REC100 - Introduction to the Study of Recreation and Leisure   (0.50)
- REC101 - Introduction to Recreation and Leisure Services   (0.50)
- REC120 - Experience Design and Delivery   (0.50)
- REC201 - Introduction to Leisure, Equity, Diversity, and Inclusion for Just Communities   (0.50)
- **REC215 - Marketing Recreation, Sport, and Events   (0.50)**
- **REC219 - Introduction to Event Studies   (0.50)**
- **REC230 - Outdoor Recreation, Tourism, and the Natural Environment   (0.50)**
- **REC280 - Introduction to Tourism   (0.50)**
- **REC256 - Foundations of Community Engagement in Recreation and Leisure   (0.50)**
- **REC318 - Leadership Theory and Practice in Recreation, Sport and Leisure Organizations   (0.50)**
- **REC356 - Leisure and Community   (0.50)**
- REC371 - Quantitative Data Analysis and Mobilization   (0.50)
- REC373 - Qualitative Approaches to Leisure Research   (0.50)
- REC405 - Leisure and Well-Being   (0.50)
- REC420 - Advanced Program Evaluation in Leisure Services   (0.50)
- **REC456 - Innovative Solutions for Healthy Communities   (0.50)**

- **Complete 1 of the following:**
  - **ENGL210F - Genres of Business Communication   (0.50)**
  - **ENGL210G - Genres of Fundraising Communication   (0.50)**

- **Complete 1 of the following:**
  - **GSJ260 - Social Determinants of Health   (0.50)**
  - **HLTH260 - Social Determinants of Health   (0.50)**

- **Complete 1 of the following:**
  - **LS271 - Conflict Resolution   (0.50)**
  - **PACS202 - Conflict Resolution   (0.50)**
  - **PACS313 - Community Conflict Resolution   (0.50)**

- **Complete 1 of the following:**
  - **PSCI100 - Power, Politics, and Policy: An Introduction   (0.50)**
  - **SDS231R - Introduction to Social Policy Processes   (0.50)**

- Complete 1 of the following:
  - PSYCH101 - Introductory Psychology   (0.50)
  - PSYCH101R - Introductory Psychology   (0.50)

Course Lists ❓

Required Courses

No Rules

Are there cross-listed courses listed in requirements?
Yes

Cross-Listings Options ❓

All cross-listings to be displayed

Proposed
Additional Constraints ❓

1. MUSIC353W can be used towards the 2.5 units of REC courses.

Existing

Additional Constraints ❓

      1. MUSIC353W can be used towards the 6.5 units of REC courses.

Notes ❓

- See Faculty of Health for recommended course sequences.

Specializations

Specializations for this Major ❓

No

Workflow Information

Change to Undergraduate Communication Requirement

No

Workflow Path ❓	**Faculty/AFIW Path(s) for Workflow** ❓	**Senate Workflow**
Committee approvals	Faculty of Health	Senate Regular

Dependencies

Dependent Courses and Programs/Plans

PREREQUISITES

⌄ REC 371 - Quantitative Data Analysis and Mobilization   View Courses ❯

⌄ REC 215 - Marketing Recreation, Sport, and Events   View Courses ❯

⌄ REC 401 - Advanced Seminar on the Socio-Cultural and Behavioural Dimensions of Leisure   View Courses ❯

⌄ REC 373 - Qualitative Approaches to Leisure Research   View Courses ❯

⌄ AFM 123 - Accounting Information for Managers   View Courses ❯

⌄ REC 120 - Experience Design and Delivery   View Courses ❯

⌄ REC 475 - Independent Study: Translating Research for Practice   View Courses ❯

⌄ REC 471A - Honours Thesis Proposal   View Courses ❯

⌄ REC 405 - Leisure and Well-Being   View Courses ❯

⌄ REC 151 - Foundations of Therapeutic Recreation Practice   View Courses ❯

⌄ REC 312 - Practicum in Recreation, Sport, and Tourism   View Courses ❯

SUC Appendix B: Recreation and Sport Business

H-Recreation & Sport Business
Sport and Recreation Management (Bachelor of Arts - Honours)

Under Review | Fall 2025

General Program/Plan Information

Faculty ❓

Faculty of Health

Academic Unit ❓

Department of Recreation and Leisure Studies

Field of Study ❓

Recreation and Sport Business

Faculty ❓

Faculty of Health

Undergraduate Credential Type ❓

Major

Program Type

Honours

Degree ❓

Bachelor of Arts (Health)

Proposed
Program/Plan Name ❓

Sport and Recreation Management (Bachelor of Arts - Honours)

Existing
Program/Plan Name ❓

Recreation and Sport Business (Bachelor of Arts - Honours)

Systems of Study

Co-operative
Regular

Online Degree/Diploma ❓

Admissions

Admissions Entry Point ❓

Direct Entry

Admission Requirements: Minimum Requirements ❓

Requirements Information

Invalid Combinations ❓

Yes

List of Invalid Combinations ❓

Management Studies Minor

Average Requirement ❓

Yes

Minimum Average(s) Required ❓

- A minimum cumulative overall average of 65.0%.
- A minimum cumulative major average of 70.0%.

Graduation Requirements ❓

- See Bachelor of Arts (Health) degree-level requirements.
- Complete a total of 20.0 units:
    - 10.5 units of required courses.
    - 4.0 units of additional REC courses.
    - 2.5 units of approved courses.
    - 3.0 units of elective courses.

Co-operative Education Program Requirements ❓

For students in the co-operative system of study, see Bachelor of Arts (Health) co-operative education program requirements.

Course Requirements (units) ❓

Required Courses

0

Units to Complete

No Rules

Course Requirements (no units) ❓

Required Courses

- Complete all of the following
    - Complete all the following:
        - BET100 - Foundations of Entrepreneurial Practice (0.50)
        - HEALTH107 - Sociology of Activity, Health, and Well-Being (0.50)
        - HRM200 - Basic Human Resources Management (0.50)
        - REC100 - Introduction to the Study of Recreation and Leisure (0.50)
        - REC101 - Introduction to Recreation and Leisure Services (0.50)
        - REC120 - Experience Design and Delivery (0.50)
        - REC201 - Introduction to Leisure, Equity, Diversity, and Inclusion for Just Communities (0.50)
        - REC213 - The Business of Professional Sport (0.50)
        - REC215 - Marketing Recreation, Sport, and Events (0.50)
        - REC219 - Introduction to Event Studies (0.50)
        - REC313 - Amateur Sport from Playground to Podium (0.50)
        - REC371 - Quantitative Data Analysis and Mobilization (0.50)
        - REC373 - Qualitative Approaches to Leisure Research (0.50)
        - REC405 - Leisure and Well-Being (0.50)
        - REC413 - Innovative Solutions in Recreation and Sport Business (0.50)
        - REC420 - Advanced Program Evaluation in Leisure Services (0.50)

- Complete 1 of the following:
    - AFM123 - Accounting Information for Managers   (0.50)
    - ARBUS102 - Accounting Information for Managers   (0.50)
- Complete 1 of the following:
    - AFM131 - Introduction to Business in North America   (0.50)
    - ARBUS101 - Introduction to Business in North America   (0.50)
    - BUS111W - Introduction to Business Organization (WLU)   (0.50)
- Complete 1 of the following:
    - ARBUS302 - Principles of Marketing   (0.50)
    - BUS252W - Introduction to Marketing Management (WLU)   (0.50)
    - MGMT244 - Principles of Marketing   (0.50)
- Complete 1 of the following:
    - BUS288W - Organizational Behaviour 1 (WLU)   (0.50)
    - MSE211 - Organizational Behaviour   (0.50)
    - PSYCH238 - Organizational Psychology   (0.50)
- Complete 1 of the following:
    - PSYCH101 - Introductory Psychology   (0.50)
    - PSYCH101R - Introductory Psychology   (0.50)

Course Lists ❓

Approved Courses List

- Choose any of the following:
    - AFM231 - Business Law   (0.50)
    - ARBUS202 - Professional and Business Ethics   (0.50)
    - BET300 - Foundations of Venture Creation   (0.50)
    - BUS121W - Functional Areas of the Organization (WLU)   (0.50)
    - BUS208W - Interpersonal Communication (WLU)   (0.50)
    - BUS231W - Business Law (WLU)   (0.50)
    - BUS311W - Entrepreneurship and New Ventures (WLU)   (0.50)
    - BUS362W - Applied Marketing (WLU)   (0.50)
    - BUS412W - Services Marketing Management (WLU)   (0.50)
    - BUS432W - Consumer Behaviour (WLU)   (0.50)
    - BUS452W - Marketing Strategy (WLU)   (0.50)
    - BUS462W - Business-to-Business Marketing (WLU)   (0.50)
    - BUS472W - Marketing Communications (WLU)   (0.50)
    - BUS482W - Sales Management (WLU)   (0.50)
    - COMMST100 - Interpersonal Communication   (0.50)
    - COMMST101 - Theories of Communication   (0.50)
    - COMMST223 - Public Speaking   (0.50)
    - COMMST225 - Interviewing   (0.50)
    - COMMST226 - Introduction to Race, Culture, and Communication   (0.50)
    - COMMST227 - Leadership   (0.50)
    - COMMST228 - Public Communication   (0.50)
    - COMMST324 - Small Group Communication   (0.50)
    - COMMST432 - Conflict Management   (0.50)
    - COMMST433 - The Organizational Consultant   (0.50)
    - ECON101 - Introduction to Microeconomics   (0.50)
    - ECON102 - Introduction to Macroeconomics   (0.50)

- ECON254 - Economics of Sport (0.50)
- ENGL210F - Genres of Business Communication (0.50)
- ENGL295 - Social Media (0.50)
- GSJ207 - Entrepreneurship, Gender, and Social Justice (0.50)
- HRM301 - Strategic Human Resources Management (0.50)
- HRM303 - Compensation (0.50)
- HRM305 - Health and Safety (0.50)
- HRM307 - Labour Relations (0.50)
- LS206 - Canadian Government and Politics (0.50)
- LS271 - Conflict Resolution (0.50)
- LS283 - Business Law (0.50)
- MGMT220 - Entrepreneurship and the Creative Workplace (0.50)
- PACS202 - Conflict Resolution (0.50)
- PHIL206 - Philosophy of Sport (0.50)
- PHIL215 - Professional and Business Ethics (0.50)
- PSCI100 - Power, Politics, and Policy: An Introduction (0.50)
- PSCI231 - Government and Business (0.50)
- PSCI252 - Global South (0.50)
- PSCI260 - Canadian Government and Politics (0.50)
- PSCI283 - International Political Economy (0.50)
- PSCI331 - Public Administration (0.50)
- PSCI334 - Public Policy (0.50)
- REC206 - Philosophy of Sport (0.50)
- REC218 - Social Entrepreneurship for Change (0.50)
- REC312 - Practicum in Recreation, Sport, and Tourism (0.50)
- REC319 - Event Planning and Design (0.50)
- REC419 - Event Implementation and Evaluation (0.50)
- SOC241 - Sociology of Work and Occupations (0.50)

Are there cross-listed courses listed in requirements?
Yes

Cross-Listings Options ❓
All cross-listings to be displayed

Proposed
Additional Constraints ❓
1. MUSIC353W can be used towards the 4.0 units of REC courses.
2. For the approved courses:
    1. Registration in HRM courses will require declaration of the Human Resources Management Minor.
    2. Students should contact the Mathematics Business and Accounting unit for information regarding Laurier Business courses.
3. Students are permitted to pursue a double major in Honours Sport and Recreation Management and Honours Therapeutic Recreation, by meeting the requirements of each plan.

Existing
Additional Constraints ❓
1. MUSIC353W can be used towards the 4.0 units of REC courses.
2. For the approved courses:
    1. Registration in HRM courses will require declaration of the Human Resources Management Minor.
    2. Students should contact the Mathematics Business and Accounting unit for information regarding Laurier Business courses.
3. Students are permitted to pursue a double major in Honours Recreation and Sport Business and Honours Therapeutic Recreation, by meeting the requirements of each plan.

Notes ❓
- See Faculty of Health for recommended course sequences.

Specializations

Specializations for this Major ❓

No

Workflow Information

Workflow Path ❓	**Faculty/AFIW Path(s) for Workflow** ❓	**Senate Workflow**
Committee approvals	Faculty of Health	Senate Regular

Dependencies

Dependent Courses and Programs/Plans

PREREQUISITES

❯ REC 413 - Innovative Solutions in Recreation and Sport Business	View Courses ❯
❯ REC 371 - Quantitative Data Analysis and Mobilization	View Courses ❯
❯ REC 215 - Marketing Recreation, Sport, and Events	View Courses ❯
❯ REC 401 - Advanced Seminar on the Socio-Cultural and Behavioural Dimensions of Leisure	View Courses ❯
❯ REC 373 - Qualitative Approaches to Leisure Research	View Courses ❯
❯ REC 313 - Amateur Sport from Playground to Podium	View Courses ❯
❯ AFM 123 - Accounting Information for Managers	View Courses ❯
❯ REC 120 - Experience Design and Delivery	View Courses ❯
❯ REC 475 - Independent Study: Translating Research for Practice	View Courses ❯
❯ REC 471A - Honours Thesis Proposal	View Courses ❯
❯ REC 405 - Leisure and Well-Being	View Courses ❯
❯ REC 151 - Foundations of Therapeutic Recreation Practice	View Courses ❯
❯ REC 213 - The Business of Professional Sport	View Courses ❯
❯ REC 312 - Practicum in Recreation, Sport, and Tourism	View Courses ❯

SUC Appendix C: Responses to questions and comments from the May 6, 2024 Senate Meeting

The following responses are provided to the questions and comments from the May 6, 2024 Senate meeting concerning the Major Modifications to Recreation and Leisure Studies & Recreation and Sport Business.

1. **Question about including a course that covers Indigenous themes. Recommendation to have some Indigenous-based course content (e.g. INDG 201).**

   Much consideration and thought were put into the development of Recreation, Leadership, and Health. It represents the only Bachelor of Arts program at the University of Waterloo which requires all the following thematic areas: Indigeneity, Diversity and Inclusion, Sustainability, and wellness of individuals and society.

   The Recreation, Leadership and Health program is proud to include REC 230 as one of its required courses. After much consultation, REC 230 has been revised to include Indigenous-led land-based learning initiatives. It integrates experiential learning with critical thinking and applied skills to explore how ideas and practices of Indigenization, reconciliation, and decolonization relate to the community and health benefits often associated with outdoor leisure, sport, tourism, and events.

2. **Question about the number of Laurier business courses listed in the plan. A number of the themes covered in the WLU courses are also offered by UW courses (either by MGMT, BET or ENBUS courses). For example, BUS452W Marketing Strategy (WLU) is listed as an approved course but MGMT 345/ARBUS 303 Marketing Strategy is not listed as an option.**

   The University has a long-standing agreement with Wilfrid Laurier University that provides Recreation and Sport Business students with the opportunity to take Laurier business courses. In 2021, the Department of Recreation and Leisure Studies removed the only required WLU course, BUS 121W, from the Recreation and Sport Business program. All other WLU courses were and are optional. This permits flexibility in scheduling for our students. Many of the BET courses are offered in the evening hours, which is problematic for many of our student athletes, student commuters, and students who work at night to support themselves in their studies.

3. **There is no required or suggested course relating to sustainability or indigenous content. I would say that this is a missed opportunity to integrate these themes into the program given the importance both will hold in future decision making and planning of sport; ENBUS 211 Principles of Marketing for Sustainability Professionals is an example of a course that would be relevant to this program and would cover but business and sustainability issues. ENBUS 314 (Sustainable Business Models) is another example.**

   The Recreation and Leisure Undergraduate Studies Committee decided to take a phased approach with the review of the Sport and Recreation Management degree program. The title was prioritized so that students would be able to recognize the focus of the program. Phase two of the revision will focus on updates to the restricted electives list and exploration of any new courses to be added as required content. Sustainability is a key theme that can be strengthened throughout the program. Sustainability content is currently included in REC 219, which is a required course in the Sport and Recreation Management program. Revisions to an existing 4th-year course will have a direct tie to sustainability and sport content, as well as the SDGs. ENBUS 211 Principles of Marketing for Sustainability Professionals is an antirequisite to MGMT 244 and ARBUS 302. The program requires that a student completes one of the courses from that list.

4. **The MUSIC353W appears 3 times in the proposal distributed with the May 2024 Senate agenda, once corresponding to 2.5 credits (p.35 of the May package), another as 4.0 credits (p.40 of the May package), and another as 6.5 credits (p.36 of the May package), and yet the course itself doesn't (yet?) appear in the academic calendar.**

    MUSIC 353W is titled Inclusive Arts for Children. Wilfrid Laurier's Music Therapy program offers this course in partnership with KidsAbility Centre for Child Development. The course combines theoretical and practical learning in the creative arts, culminating in students' provision of leadership at an inclusive creative arts day camp with KidsAbility. The course focuses on important elements within the field of Recreation, including programming, evaluation, youth, inclusion, diversity, and fostering community. It has been recognized for over 25 years as an important community partnership and an academic experience worthy of a 0.50 REC elective credit. This course is incredibly impactful for students who wish to apply to graduate or professional programs, such as teacher education, occupational therapy, child life specialist, etc.

5. **My other concern is that all the language and humanities requirements are being removed (p.34 of the package), which will lead students in this program to have less breadth in their academic experience, and more broadly, represents another manifestation of the not-so-slow erosion of UW away from being a comprehensive university, and closer to being a technical training college.**

    The Recreation, Leadership, and Health degree program is interdisciplinary. It includes content that covers the humanities, specifically with respect to the philosophy of leisure, the social history of leisure provision, and the culture of leisure communities. Currently, students in Recreation and Leisure Studies must complete a total of four courses from 12 subject categories, with only one course per category. With 12 subject categories, it is possible that students may opt to take four courses in subject categories other than languages and humanities. With the Recreation, Leadership, and Health degree proposal, students will be required to take ENGL 210F or ENGL 210G; one of LS 271, PACS 202, or PACS 313; PSCI 100 or SDS 231R, and PSYCH 101/101R. In addition, there are 6.5 units of elective course. Ultimately, this degree reflects Recreation and Leisure Studies' commitment to a liberal education.

UNIVERSITY OF WATERLOO | Senate

<div align="right">

Honorary Degrees Committee

</div>

For Approval   **Open Session**

To:	**Senate**
Sponsors:	Vivek Goel President and Vice-chancellor James W.E. Rush Vice-President, Academic and Provost
Presenter: **Contact Information:**	Vivek Goel president@uwaterloo.ca
Date of Meeting:	June 10, 2024
Agenda Item Identification:	**10(a) Report – Senate Honorary Degrees Committee:** **Revision to the Distinguished Professor Emeritus/a Guidelines**

Recommendation/Motion:

To approve the revisions to the *Distinguished Professor Emeritus/a Guidelines*, as presented.

Summary:

The Honorary Degree Committee met on May 17, 2024 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Proposed revisions to the Distinguished Professor Emeritus/a Guidelines are being brought forward for consideration by Senate. The revisions are presented in Appendix A and include:
- Limiting the number of distinctions awarded each year to 10% of the annual number of full-time regular faculty member retirements, averaged over the past five years;
- Introducing guidance on selection criteria relative to "distinguished record of service in teaching and research"; and
- Introducing a nomination form.

Dean's Council (DC+) has been consulted on these revisions.

Jurisdictional Information:

As provided for in its [Terms of Reference](), the Senate Nominating Committee for Honorary Degrees is empowered:

> 2. To consider and make recommendations to Senate for the conferring of the title "Distinguished Professor Emeritus" on those candidates who meet the established criteria."

Governance Path:

Honorary Degree Committee (mm/dd/yy): 05/17/2024

Background:

The guidelines were introduced in 1994 and have been revised three times as follows:
- To delegate authority to the President to grant the designation on Senate's recommendation (1996);
- To remove listing of names in University Calendars (2003); and
- To provide clarification on timing (2009).

Current criteria for the designation are as follows:
- The faculty member shall have a distinguished record of service in teaching and research in the University for a period of time, normally 15 years;
- The faculty member is recommended for the designation by their Chair, their Dean, the Honorary Degrees Committee, and Senate; and
- That the designation shall normally be granted upon or shortly after retirement, regardless of rank.

To preserve the prestige of the designation, a limitation on the number of awards is proposed, with a specific number to be determined by the Committee. There are currently no limits, but Waterloo has awarded an average of six DPE's annually within a range of 1 to 15 as the most awarded in a given year. None were awarded in 2020 due to convocation being postponed. This year, 11 have already been approved with three additional nominations being submitted for consideration. Introducing the 10% of the annual number of full-time regular faculty member retirements, averaged over the past five years limit will result in fewer number of awards. Based on the previous years' retirement numbers, the Waterloo would average 2-3 awards annually. The word normally is used to allow for exceptions as necessary. As the number is reduced, the Committee would only consider nominations once a year.

The Distinguished Professor Emeritus/a designation is relatively rare among Canadian universities as Waterloo provides Professor Emeritus to everyone if they meet 15 years of service and the recognition then becomes 'Distinguished Professor Emeritus'. Other comparators have competitive processes for Professor Emeritus and most provide more selection criteria for their distinction. The proposed detailed selection criteria are drawn from the UW University Professor criteria and other institutions' selection criteria identified in an environmental scan.

They are designed to assist both nominators in writing their nominations, and approvers in assessing which nominations to recommend for approval, and to support consistency and preserve the prestige of the honour.

The Committee has recently introduced a [nomination form](#) for Honorary Degree Nominations which has been useful in simplifying the process for nominators and standardizing the nominations to ensure that each nomination has a base level of comparable information for the Committee to review. The proposed nomination form (see Appendix B) is based on the Honorary Degree form and hopes to achieve similar results for Distinguished Professor Emeritus/a nominations.

Documentation Provided:

Appendix A – Proposed Revisions to the Distinguished Professor Emeritus/a Guideline

Appendix B – Proposed Nomination Form

APPENDIX A

Distinguished Professor Emeritus/a Designation
~~*October 2009*~~ *[Date of approved revisions]*

The award of Distinguished Professor Emeritus/a is made to individuals under the following conditions:

1. The honorary award shall normally be granted upon or shortly after retirement, regardless of rank, and continue for life. The award shall carry no duties or obligations on the part of the individual or on the part of the University.
2. The faculty member shall have had a distinguished record ~~of service~~ in teaching and research in the University for a period of time, normally 15 years.

Those who are awarded Distinguished Professor Emeritus/a will continue to receive the services and privileges extended to all retired faculty members. Additional privileges are at the discretion of the appropriate Department Chair and Faculty Dean, to be determined on a case-by-case basis.

Nomination Process

The recommendation for this honour shall rest with the Department which, through its Chair, will submit to the Dean a nomination form with the proposal that a retired or retiring member of faculty be given the honour. Having approved the recommendation, the Dean shall forward it to the Faculty's Honorary Degree Committee which will, in turn, forward it to the Senate Nominating Committee for Honorary Degrees. If the Senate Committee accepts the recommendation, the Committee shall forward it to the Senate; if Senate approves, it will recommend to the President that the Distinguished Professor Emeritus/a award be granted. The designation of a person as "Distinguished Professor Emeritus/a" will normally be conferred at Convocation.

The number of individuals honored with this distinction in any one year should not normally exceed 10% of the annual number of full-time regular faculty member retirements, averaged over the past five years.

Selection Criteria

The following criteria will be used when assessing nominees' "distinguished record in teaching and research":

- Remarkable impact on the University of Waterloo;
- Exceptional scholarly achievement and international pre-eminence in a particular field or fields of knowledge, sustained over a substantial career;
- Excellence and/or innovation in teaching and learning, and an outstanding reputation in student supervision, mentorship and educational leadership; and
- Exemplary commitment to the mission, vision and values of the University of Waterloo.

It is not expected that every nominee meets all of the selection criteria listed above, this list is meant to serve as a guide for nominators and assessors.

Awards of Honour in Absentia

Normally, an individual invited to a Convocation ceremony to receive an honorary degree, the distinction "Distinguished Professor Emeritus/a" or the title "Honorary Member of the University" is expected to be present. However, under truly exceptional circumstances where an individual is prevented from

present. However, under truly exceptional circumstances where an individual is prevented from attending because of accident or infirmity and where it is not practicable for the award to be made at a subsequent Convocation, the honour may be awarded *in absentia*.

Approved by Senate, March 21, 1994
Delegation of authority to President approved by the Board of Governors, March 18, 1996
Listing of names in University Calendars removed, July 2003
Clarification to nomination timing approved by Senate, October 2009

...

DISTINGUISHED PROFESSOR EMERITUS/A NOMINATION FORM

Please complete this form and submit it with the required attachments to secretariat@uwaterloo.ca by **November 1, 2024 at 4:30pm at the latest**. See the Criteria for Distinguished Professor Emeritus/a for information on what to include in the nomination package, the selection guideline, and criteria. A nomination package checklist is included at the end of this form.

Nominee Information

Full name:

Position/Title:

Home Department:

Retirement Date:

# of Years at the University:

Contact Information:
(including email address)

Convocation Ceremony to be Recognized at (select one)

☐ Arts

☐ Engineering

☐ Environment

☐ Health

☐ Mathematics

☐ Science

Distinguished Professor Emeritus/a Nomination Form

| **1

Nomination Summary (up to 300 words)

Please include the following: a clear statement introducing who the nominee is and a brief history of their distinguished record of service in Teaching and Research in the University.

Nomination Package Checklist

Please ensure the following is attached with when you submit this form:

☐   Nomination Letter signed by Department Chair/School Director (2-3 pages)

☐   Letter of Support from Faculty Dean

☐   CV of the nominee.

☐   Any other materials such as news articles, literature, etc. deemed appropriate.

For Approval   **Open Session**

To:	**Senate**
Sponsors:	Vivek Goel President and Vice-chancellor
	James W.E. Rush Vice-President, Academic and Provost
Presenter: **Contact Information:**	Vivek Goel president@uwaterloo.ca
Date of Meeting:	June 10, 2024
Agenda Item Identification:	**10(b) Report – Senate Honorary Degrees Committee:** **Revision of the Criteria Honorary Member of the University**

Recommendation/Motion:

To approve the revisions to the *Criteria for Honorary Member of the University*, as presented.

Summary:

The Honorary Degree Committee met on May 17, 2024 and, on the recommendation of the Honorary Member of the University Committee, agreed to forward the following item to Senate for approval as part of the regular agenda. The following revisions to the *Criteria for Honorary Members of the University* are proposed:

Propose:
The Committee proposes providing more clarity and guidance for faculty member nominations, specifying that the Committee will consider a broad range of faculty members' service.

Criteria:
To ensure that individuals are recognized closer to their date of retirement, the Committee proposes that the criteria be revised to allow nominations to be submitted and considered ahead of retirement, once it is known that the nominee is set to retire. The designation would not be granted or recognized until the nominee has retired. This would also bring the criteria in line with the *Criteria for Distinguished Professor Emeritus* in which nominations can be submitted and considered prior to retirement. The Committee also proposes to limit nominations for those who have retired to be submitted within 1 year of their retirement. The word normally is used to allow for exceptions as necessary.

<u>Nomination Package:</u>
Following recent changes to the Honorary Degree Nomination Process, the Committee proposes that the Honorary Members to the University nominations also introduce a nomination form to help standardize the nominations. A proposed nomination form is attached as Appendix B. The nomination form is based on the nomination form for Honorary Degree nominations and is designed to simplify the process for nominators and ensure that each nomination has a base level of comparable information for the Committee to review.

The Committee would also like to acknowledge that not all staff members who are retiring maintain an updated resume and proposes updating the criteria to reflect this by adding the alternative of 'a summary of work history' as a requirement for the nomination package. The Committee's current practice is to accept resume alternatives but feels that the current language might be a deterrent for potential nominators who are unable to obtain the resume of the nominee and are unaware of this practice.

<u>Annual Maximum Individual Honored</u>
The Committee proposes to increase the maximum number of individuals honored annually from four to six. The word normally is used to allow for exceptions as necessary. The number of employees has significantly grown since the honour was established in the 1970's, however, the maximum number of individuals to be honored annually has not. The Committee feels strongly that this maximum should be increased to ensure that deserving individuals are not disregarded due to this limit. The Committee reviewed employee data from HR and IAP and felt increasing the maximum to six was a good compromise to accommodate the growth of the university while keeping this honour prestigious.

Jurisdictional Information:

This item is being submitted in accordance with the Honorary Degrees Committee's Terms of Reference, section 3: "To consider and make recommendations to Senate for the conferring of the title "Honorary Member of the University" on those candidates who meet the established criteria. Nominations will be forwarded to the Senate Committee from the Honorary Member of the University Committee. The Senate Committee will also be responsible for appointing members to the Honorary Member of the University Committee."

Governance Path:

Honorary Member of the University Committee (mm/dd/yy): 04/03/24

Honorary Degree Committee (mm/dd/yy): 05/17/2024

Documentation Provided:

Appendix A – Proposed Revisions to the Criteria for Honorary Members to the University

Appendix B – Proposed Nomination Form

Honorary Degree Committee 2

Criteria for Honorary Member of the University
Guidelines for Awarding the Honorary Member of the University Designation

Purpose
The Honorary Member of the University designation recognizes employees for outstanding service to the University as a whole. It is the highest honour a staff member can attain at the University of Waterloo. For faculty members, it recognizes distinctive administrative or other broadly considered service to the University (as distinguished from Distinguished Professor Emeritus, which recognizes academic excellence).

Criteria
Staff and faculty of the University and of the Affiliated and Federated Institutions of Waterloo who are retiring or are within one year of retirement are normally eligible for nomination upon retirement. The designation shall normally be granted at the first convocation following retirement.

The designation is intended to recognize staff who, in addition to excellent departmental work, have contributed distinctive and distinguished service to the University as a whole and/or have made contributions beyond the University that have brought credit to the University. Involvements on multi-disciplinary efforts or university-wide collaborations and committee work or significant contributions to outside associations would be examples.

Members of the faculty should meet a higher standard than staff, in part because they are expected normally to assume a share of service activities on a regular basis. While the Distinguished Professor Emeritus designation is a higher award based on academic criteria, the Honorary Member designation for faculty is intended to recognize outstanding administrative or other service.

Nomination Process and Package
All nominations for "Honorary Member of the University" must be considered by the Honorary Member of the University Committee which will forward the names of those individuals whom it feels are qualified for the designation to the Senate Nominating Committee for Honorary Degrees for consideration. The Senate committee will then recommend to Senate that the individual(s) be awarded the title "Honorary Member of the University." Senate is responsible for approving the title; convocation recognizes the award as described below.

Any staff or faculty member can initiate a nomination process within their units/departments/schools/faculties. All nominations must be submitted in writing; the nomination package should include:
- A nomination form.
- A letter of nomination signed by the senior executive/dean/department head/director of the nominee's unit with particular reference to the stated criteria.
- A work resume or a summary of work history for staff nominees or a curriculum vitae for faculty nominees.
- Normally, a minimum of two (2) letters of support from colleagues or associates.
- Any other materials such as news articles, literature, etc. deemed appropriate.

Completed nomination packages should be sent to the secretary of the Honorary Member of the University Committee, c/o Secretariat, NH 3060. All information received by the committee is held in confidence.

Appendix A – Proposed Revisions to the Criteria for Honorary Members to the University

The number of individuals honored with this distinction should not ~~normally~~ exceed ~~four~~six in any one year.

Award Presentation

The investiture ceremony will typically take place during a convocation ceremony and will consist of a citation and the placing of a green silk stole embellished with the University of Waterloo crest at each end. Unless there are extenuating circumstances, the recipient is expected to attend the ceremony.

Revised February 7, 2018
Revised,,,

HONORARY MEMBER OF THE UNIVERSITY NOMINATION FORM

Please complete this form and submit it with the required attachments to secretariat@uwaterloo.ca by **October 25, 2024 at 4:30pm at the latest**. See the Criteria for Honorary Member of the University for information on what to include in the nomination package, the selection guideline, and criteria. A nomination package checklist is included at the end of this form.

Nominee Information

Full name:

Position/Title:

Home Unit:

Retirement Date:

# of Years at the University:

Contact Information:
(including email address)

Convocation Ceremony to be Recognized at (select one)

☐ Arts ☐ Engineering ☐ Environment

☐ Health ☐ Mathematics ☐ Science

Lead Nominator (senior executive/dean/department head/director of the nominee's unit)

Full name:

Position/Title:

Unit:

Contact Information:

Additional Nominators (Colleague or associates who have written letters of support)

Please include full name, title/position, unit, and email address.

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Nominations Summary (up to 300 words)

Please include the following: a clear statement introducing who the nominee is; a brief history of their service to and impact on the University; an explanation of why their service has been distinctive and distinguished; and examples of multi-disciplinary efforts or university-wide collaborations and committee work or significant contributions beyond the University that have brought credit to the University.

Nomination Package Checklist

Please ensure the following is attached with when you submit this form (* indicates required component):

☐ Nomination Letter signed by the senior executive/dean/department head/director of the nominee's unit (2-3 pages).*

☐ A work resume or a summary of work history for staff nominees or a curriculum vitae for faculty nominees.*

☐ A minimum of two (2) letters of support from colleagues or associates.*

☐ Any other materials such as news articles, literature, etc. deemed appropriate.

UNIVERSITY OF WATERLOO

University of Waterloo

2024-2025 Senate Work Plan

Secretariat

Senate Agenda Items · expected *as needed	May 6, 2024	June 10, 2024	September 23, 2024	October 21, 2024 Strategic Plan Annual Update / Waterloo at 100	November 25, 2024	January 27, 2025	March 3, 2025	April 7, 2025
REGULAR AGENDA (including items for information and discussion)								
Minutes	·	·	·	·	·	·	·	·
Business Arising	·	·	·	·	·	·	·	·
LEADERSHIP UPDATES[6]								
Report of the Vice-President, Academic & Provost	*	*	*	*	*	*	*	*
Report of the Vice-President, Research and International	*	*	*	*	*	*	*	*
COMMITTEE/COUNCIL REPORTS								
Executive Committee	*	*	*	*	*	*	*	*
Graduate & Research Council (GRC)	·	·	·	·	·	·	·	·
Undergraduate Council (UC)	·	·	·	·	·	·	·	·
Long Range Planning Committee				·		·		·
Fall Update, University Operating Budget				·				
Joint Report of GRC & UC, Academic Calendar Dates[1]					·			
University Committee on Student Appeals Annual Report[1] (Policy 72)					·			
University Appointment Review Committee Annual Report[1] (Policy 76)								·
Finance Committee - Budget Update[3]							·	
Finance Committee - Budget recommendation[2, 3]								·
OTHER SENATE AGENDA ITEMS								
New Senator Orientations (before meeting)	·							
Teaching Awards Committee, appointment of members							·	
Delegation of Roster of Graduands								·
Report of Roster of Graduands			·		·			
Convocation Report – summary of this years' ceremonies					·			
Undergraduate and Graduate Admissions Update						·		
Conduct Self-Assessment Survey[1]							·	
Appointment of COU Academic Colleague	Current appointment runs to April 30, 2025							
SENATE PRESENTATIONS								
Presentations from the Presidents of the Faculty Association, Waterloo Undergraduate Association and Graduate Student Association[1]							·	
Strategic Plan Accountability Update[1] (June)		·						
PART Annual Update		·						
Faculty Updates		SCI						

[1] Annual item
[2] Board of Governors approval
[3] Presented by the Vice-President Academic and Provost
[4] Presented by the President and Vice-Chancellor, and Chair of Senate
[5] Presented by the University Secretary
[6] Leadership updates may include such topics as: Talent, We Accelerate Report, Communities (EDI, Sustainability), Waterloo International, etc.

Senate Agenda Items · expected *as needed	May 6, 2024	June 10, 2024	September 23, 2024	October 21, 2024 *Strategic Plan Annual Update / Waterloo at 100*	November 25, 2024	January 27, 2025	March 3, 2025	April 7, 2025
CONSENT AGENDA								
Reports from Faculties (e.g., appointments, administrative appointments, sabbaticals)[2]	·	·	·	·	·	·	·	·
Tenure and Promotion Report[4]			·					
University Professor Designation[3]								·
Call for Nominations for University Professor[3]			·					
Call for Nominations for Honorary Degree Recipients[4]						·		
Report of the COU Academic Colleague[1]	·							am
Senate Committee Appointments[5]	*	*	·	*	*	*	*	*
CLOSED AGENDA								
Minutes	·	·	·	·	·	·	·	·
Business Arising	·	·	·	·	·	·	·	·
Reports from Committees and Councils	*	*	*	*	*	*	*	*
Honorary Degree Recommendations	*	*	*	*	·	·	*	*
Reports from Search and Review Committees for Policy-based Senior Leadership Appointments and Reappointments	*	*	*	*	*	*	*	*
Report of VP Advancement on Policy 7[1]		·						

Special Topics for 2024-2025 to be Scheduled:

- President's Anti-racism Task Force Update (PART)

For more information: secretariat@uwaterloo.ca
 uwaterloo.ca/secretariat, NH 3060

[1] Annual item
[2] Board of Governors approval
[3] Presented by the Vice-President Academic and Provost
[4] Presented by the President and Vice-Chancellor, and Chair of Senate
[5] Presented by the University Secretary
[6] Leadership updates may include such topics as: Talent, We Accelerate Report, Communities (EDI, Sustainability), Waterloo International, etc.

Senate Graduate & Research Council

For Information   **Consent Agenda**   **Open Session**

To:	**Senate**
Sponsor:	Charmaine Dean Vice-President, Research & International Jeff Casello Associate Vice-President, Graduate Studies and Postdoctoral Affairs
Presenter: **Contact Information:**	Jeff Casello jcasello@uwaterloo.ca
Date of Meeting:	June 10, 2024
Agenda Item Identification:	**12) Report – Senate Graduate & Research Council**

Summary:

Senate Graduate & Research Council met on May 6, 2024 and agreed to forward the following items to Senate for information as part of the consent agenda. On behalf of Senate, the following items were approved:

1. Research Ethics

   Council approved the updates to the Human Research Ethics Board (HREB) and Clinical Research Ethics Board (CREB) Term of References.

2. Graduate Awards

   Council approved the following graduate awards:

   a. Samit & Reshma Sharma Graduate Scholarship in Quantum Information [endowment]

   b. Samit & Reshma Sharma Graduate Scholarship in Mathematics [endowment]

   c. Samit & Reshma Sharma Graduate Scholarship in Optometry and Vision Science [endowment]

   d. L'OEUF Massive Impact Graduate Award [trust]

Undergraduate Council   **1**

3. Curricular Submissions

   Council approved course changes for:

   a. Faculty of Science (Biology; Earth Science)

Jurisdictional Information:

As provided for in Senate Bylaw 2, section 4.03, council is empowered to make approvals on behalf of Senate for a variety of operational matters:

   c. Receive, consider, study and review briefs on any aspect of graduate studies and research from members of the university.

   f. On behalf of Senate, consider and approve all new graduate courses, the deletion of graduate courses, and proposed minor changes to existing graduate courses and programs, and provide Senate with a brief summary of council's deliberations in this regard. Any matter of controversy that might arise may be referred to Senate.

   i. On behalf of Senate, consider and approve all new graduate scholarships and awards. Any matter of controversy that might arise may be referred to Senate.

Senate Undergraduate Council

For Information   **Consent Agenda**   **Open Session**

To: **Senate**

Sponsor: David DeVidi
                              Associate Vice-President, Academic

Presenter: David DeVidi
Contact Information: david.devidi@uwaterloo.ca

Date of Meeting: June 10, 2024

Agenda Item Identification: **13)   Report – Senate Undergraduate Council**

Summary:

Senate Undergraduate Council met on May 14, 2024 and agreed to forward the following items to Senate for information as part of the consent agenda. On behalf of Senate, the following items were approved:

1. Academic Program Reviews

    Following the review of the report and presentation from the programs, Council approved the following report:

    a. Final Assessment Report: Computing and Financial Management

    There were no issues noted in the report.

2. Curricular Submissions

    Council approved new courses, course changes, course inactivations, and minor program and plan modifications for:

    a. Faculty of Mathematics: (Mathematical Finance; Computational Mathematics; Computer Science; Computer Science and Software Engineering - Business Specialization; Data Science; Finance Specialization; Information Technology Management; Mathematical Business; Mathematics; Mathematics/Business Administration; Mathematics/Chartered Professional Accountancy; Mathematics/Financial Analysis and Risk Management - Chartered Financial Analyst Specialization; Mathematics/Financial Analysis and Risk Management - Professional Risk Management Specialization; Pure Mathematics)

Undergraduate Council   **1**

Return to Agenda

Jurisdictional Information:

As provided for in Senate Bylaw 2, section 5.03, council is empowered to make approvals on behalf of Senate for a variety of operational matters:

c.   On behalf of Senate; consider and approve all new undergraduate courses; the deletion of undergraduate courses; and proposed changes to existing undergraduate courses and minor changes to programs and/or plans; and provide Senate with a summary of council's deliberations in this regard. Any matter of controversy that might arise may be referred to Senate.

For Information   **Open Session**

To:	**Senate**

Sponsor: James W.E. Rush, Vice-President, Academic and Provost
Contact Information: provost@uwaterloo.ca

Presenter: James W.E. Rush, Vice-President, Academic and Provost
Contact Information: provost@uwaterloo.ca

Date of Meeting: **June 10, 2024**

Agenda Item Identification: **14) Report from Senate Long Range Planning Committee**

Summary:

Senate Long Range Planning Committee met on June 3, 2024. A summary of the items discussed is provided for the information of Senate.

1.   Annual 2023-24 Institutional Performance and Priorities for 2024-25

The committee received a presentation from the President on the institution's key performance indicators from the previous year, along with an overview of the institution's priorities for the current 2024-25 year. Members discussed areas where the University is in a leading position among peers as well as areas where improvement is warranted, and commenting on the interconnected nature of integrated planning with space planning and utilizing, workforce planning, and fostering a stronger culture in the campus community. Specific areas of discussion included factors around remote work and workforce planning, collaborations within the institution, student admissions, and campus community and culture.

A copy of the detailed key performance indicators report is attached to this report, along with the slides from the President's presentation.

2.   Review of Senate Self-Evaluation Survey Results and Planning for the Next Cycle of Meetings

Through discussion during various portions of the meeting, and through the committee's review of the survey results from the most recent iteration of the Senate's self-evaluation exercise, the commitment was made to solicit feedback from members in advance of the September meeting to best identify relevant topics and a framework for the next cycle of meetings where the committee's engagement will be useful in formulating the approach and planning for said topics.

Attachment:
-       2023-2024 Key Performance Indicators Report
-       Copy of slide presentation "2023-24 KPI REPORT and Priorities for 2024-25"

2023-2024 Key Performance Indicators Report

Notes: A variety of data sources are used for the KPIs. Sources for each indicator are conveyed in square brackets. Data sources have differing years and reporting frequencies (i.e., not all align to shared time periods such as 2020-2021, 2021-2022, and 2022-2023). To account for this variability, the specific period for each indicator is noted below each data point from older to the most recent. The trend column shows Waterloo's performance in the most recent period compared to the oldest with either a positive (green), undesirable (red), or a dash (static). The trend column offers an "at a glance" view and does not indicate significance of change. Comparator data is not available for indicators that use internal data sources (e.g. Waterloo's student experience survey (SES)). Values presented for the peer groups are the average of the group unless otherwise noted. This report, now completed in May for reporting in June, reflects our transition from fall to spring reporting. As a result, several indicators that were provided in fall 2023 do not yet have new data available and have the same data as reported in fall 2023.

Key performance indicator		Waterloo				Comparator			
		Older ➡	**Most recent**	**Trend**	**Peer group**	**Older** ➡	**Most recent**		
Community, campus, and culture (C)									
Student experience **1**. Students feel like they are part of the Waterloo community [NSSE]	First year	N/A	74.6% 2020	73.6% 2023	↓	U15	N/A	70.7% 2020	70.4% 2023
	Graduating year	N/A	63.9% 2020	68.5% 2023	↑	U15	N/A	63.1% 2020	64.7% 2023
2. Students feel that they belong at Waterloo [SES]		64.0% Fall 2022	64.0% Fall 2023	64.2% Winter 2024	↑	No peer comparison			
3. Students feel that their instructors care about their wellbeing [SES]		55.0% Fall 2022	54.8% Fall 2023	52.8% Winter 2024	↓	No peer comparison			
Knowledge, graduates, and co-op (K)									
Academics **4**. Percentage of students with entering average >90% [OUAC]		69.5% 2020	75.7% 2021	72.0% 2022	↑	U6	60.1% 2020	69.8% 2021	65.9% 2022
5. First to second year student retention [CSRDE]		93.2% 2021	92.5% 2022	93.6% 2023	↑	U6	91.8% Returned Fall 2021	91.1% Returned Fall 2022	92.1% Returned Fall 2023
6. Graduation rates [UW and U15]	Undergraduate (six years after start)	84.3% 2021	85.2% 2022	85.1% 2023	↑	U6	79.9% 2021	80.6% 2022	81.6% 2023
	Masters (four years after start)	88.2% 2019	90.4% 2020	90.7% 2021	↑	U6	91.4% 2019	92.2% 2020	92.7% 2021
	Doctoral (six years after start)	60.5% 2020	63.3% 2021	65.4% 2022	↑	U6	54.8% 2020	54.4% 2021	55.5% 2022

2023-2024 Key Performance Indicators Report

Key performance indicator		Waterloo				Comparator			
		Older	→	Most recent	Trend	Peer group	Older	→	Most recent
7. Graduate employment rate two years after graduation by survey year [OUGS]		94.9% 2020	95.5% 2021	96.3% 2022	↑	ON	92.7% 2020	94.3% 2021	95.1% 2022
8. Graduates' employment related to skills developed at university two year after graduation by survey year [OUGS]		92.7% 2020	92.6% 2021	95.2% 2022	↑	ON	87.4% 2020	87.5% 2021	87.9% 2022
9. Graduates earning above $60K two years after graduation by survey year [OUGS]		55.9% 2020	63.8% 2021	68.3% 2022	↑	U6	41.2% 2020	46.5% 2021	52.6% 2022
10. Percentage of full-time co-op enrolment [UW and U15]	Undergraduate	73.8% 2021-2022	75.8% 2022-2023	76.2% 2023-2024	↑	U15	12.3% 2021-2022	12.6% 2022-2023	12.9% 2023-2024
	Graduate	5.8% 2021-2022	7.9% 2022-2023	8.3% 2023-2024	↑	U15	1.1% 2021-2022	0.9% 2022-2023	0.9% 2023-2024
11. Participation in two or more engaging learning practices – excluding WIL [SES]		88.5% Fall 2022	N/A	92.5% Winter 2024	↑		No peer comparison		

Fundamental and applied research (R)

	Key performance indicator	Older	→	Most recent	Trend	Peer group	Older	→	Most recent
Research	**12**. Annual research revenue ($M) [CAUBO]	$211.2 2019-2020	$221.0 2020-2021	$196.3 2021-2022	↓	U15	$420.9 2019-2020	$479.5 2020-2021	$461.9 2021-2022
						CND comprehensive[1]	$94.2 2019-2020	$100.4 2020-2021	$96.4 2021-2022
	13. Research revenue from industry / non-governmental sources ($M) [CAUBO]	$48.2 2019-2020	$45.8 2020-2021	$39.9 2021-2022	↓	U15	$149.0 2019-2020	$154.5 2020-2021	$156.6 2021-2022
						CND comprehensive[1]	$21.6 2019-2020	$21.4 2020-2021	$22.3 2021-2022

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[1] Canadian comprehensive comparators (based on Maclean's ranking, see page 7)

2023-2024 Key Performance Indicators Report

Key performance indicator	Waterloo				Comparator			
	Older		**Most recent**	**Trend**	**Peer group**	**Older**		**Most recent**
14. Publications among top 10% most interdisciplinary indexed [Elsevier]	10.4% 2017-2021	10.3% 2018-2022	10.4% 2019-2023	—	U15	3rd 2017-2021	3rd 2018-2022	3rd 2019-2023
					Intl comparators[2] (n=22)	9th 2017-2021	9th 2018-2022	9th 2019-2023
15. Publications with international collaborators [Leiden]	57.6% 2016-2019	59.4% 2017-2020	60.3% 2018-2021	↑	U15	56.5% 2016-2019	57.7% 2017-2020	58.4% 2018-2021
Innovation and entrepreneurship (E)								
16. Universities globally producing investment-backed undergraduate entrepreneurs [PitchBook]	22nd 2021	21st 2022	21st 2023	↑	U15	1st 2021	1st 2022	1st 2023
					Intl comparators[2] (n=38)	20th 2021	20th 2022	21st 2023
17. Universities globally producing investment-backed undergraduate female entrepreneurs [PitchBook]	N/A	37th 2022	33rd 2023	↑	U15	N/A	3rd 2022	3rd 2023
					Intl comparators[2] (n=38)	N/A	19th 2022	19th 2023
18. Universities globally producing investment-backed graduate entrepreneurs - [PitchBook]	N/A	96th 2022	64th 2023	↑	U15	N/A	5th 2022	4th 2023
					Intl comparators[2] (n=38)	N/A	20th 2022	19th 2023
19. Research-backed startup intensity: number of startups / $100M in annual research funding (ten-year average) [AUTM]	6.2 2011-2020	6.5 2012-2021	6.2 2013-2022	—	U15 (median)	1.1 2011-2020	1.0 2012-2021	1.0 2013-2022

[2] International comparators (see page 7)

2023-2024 Key Performance Indicators Report

Key performance indicator	Waterloo				Comparator			
	Older ➡️		Most recent	Trend	Peer group	Older ➡️		Most recent
20. Academic-corporate collaboration: number and percentage of outputs that have been co-authored by researchers from both academic and corporate affiliations. [SciVal]	4.6% 2017-2021	4.8% 2018-2022	4.6% 2019-2023	—	U15	8th 2017-2021	7th 2018-2022	6th 2019-2023
					CND comprehensive[1] (n=14)	1st 2017-2021	1st 2018-2022	1st 2019-2023
					Intl comparators[2] (n=22)	20th 2017-2021	20th 2018-2022	20th 2019-2023
21. Policy cited scholarly output (e.g., publications), normalized[3]; world average expected value = 1 [SciVal and Overton]	1.8 2021	1.9 2022	2.0 2023	↑	U15	15th 2021	15th 2022	12th 2023
					Intl comparators[2] (n=26)	12th 2021	15th 2022	14th 2023

Operational indicators

	Key performance indicator	Waterloo				Comparator			
Staff	**22**. Staff[4] turnover rate [UW]	7.8% 2021	10.0% 2022	7.6% 2023	↓	No peer comparison			
Alumni	**23**. New funds raised ($M)[5] [CASE]	$30.2 2020-2021	$36.9 2021-2022	$39.3 2022-2023	↑	Participating comprehensive institutions[6]	$18.6 2020-2021	$19.9 2021-2022	$14.4 2022-2023
	24. Engaged alumni as a percentage of contactable alumni [CASE]	32.3% 2020-2021	22.5% 2021-2022	21.1% 2022-2023	↓	Participating CDN institutions	24.8% 2020-2021	7.4% 2021-2022	15.0% 2022-2023
	25. Alumni donors as a percentage of contactable alumni [CASE]	2.5% 2020-2021	2.7% 2021-2022	2.2% 2022-2023	↓	Participating comprehensive institutions	1.0% 2020-2021	1.1% 2021-2022	1.7% 2022-2023

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[3] This indicator is calculated by taking the percentage of Waterloo's policy cited scholarly output and dividing it by the average global policy cited scholarly output. The global average is the expected value of 1.0. Values greater than 1.0 are higher than expected and less than 1.0 are lower than expected.
[4] More specific results to questions addressing staff engagement available in the Insights report
[5] Advancement funds raised includes pledges, stock / property, cash, recurring gift (five-year value), gift-in-kind, private sector research grants, and other funds.
[6] Maclean's University Rankings: Canada's comprehensive universities – participation in CASE is not mandatory and therefore peer group may change each year

2023-2024 Key Performance Indicators Report

Key performance indicator	Waterloo				Comparator			
	Older ➡		Most recent	Trend	Peer group	Older ➡		Most recent
Environmental Sustainability — **26**. Greenhouse gas emissions percentage change from 2015 base year [UW]	-5.8% 2020	-2.1% 2021	-8.8% 2022	↓	*No peer comparison*			
Financial — **27**. Net operating revenues ratio [COU][7] (Cash flow from operating activities as a proportion of revenues)	18.8% 2020-2021	10.8% 2021-2022	7.7% 2022-2023	↓	ON universities with full-time enrolment >30K	19.6% 2020-2021	9.2% 2021-2022	8.3% 2022-2023
28. Net income / loss ratio [COU] (Total revenues - total expenses / total revenues)	9.8% 2020-2021	4.8% 2021-2022	4.2% 2022-2023	↓		10.5% 2020-2021	3.9% 2021-2022	5.0% 2022-2023
29. Primary reserve ratio (days) [COU] (Expendable net assets / total expenses * 365)	214 2020-2021	234 2021-2022	236 2022-2023	↑		236 2020-2021	234 2021-2022	227 2022-2023
30. Viability ratio [COU] (Expendable net assets / long-term debt)	No external long-term debt					219.8% 2020-2021	212.0% 2021-2022	227.0% 2022-2023

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[7] Compiled by COU from institutional audited financial statements based on the Ministry of Colleges and Universities (MCU) financial indicator definitions

2023-2024 Key Performance Indicators Report

Definitions of acronyms (alphabetically)

AUTM	Association of University Technology Managers	NSSE	National Survey of Student Engagement
CASE	Council for Advancement and Support of Education	OUAC	Ontario University Application Centre
CAUBO	Canadian Association of University Business Officers	OUGS	Ontario University Graduate Survey
COFO	Council of Ontario Finance Officers	SES	Student Experience Survey
COU	Council of Ontario Universities	UW	Waterloo data (internal)
CSRDE	Consortium for Student Retention Data Exchange		

Peer group references

ON — All Ontario universities (Algoma, Brock, Carleton, Guelph, Lakehead, Laurentian, Laurier, McMaster, Nipissing, OCAD, Ontario Tech University, Ottawa, Queen's, Toronto, Metropolitan (formerly Ryerson), Trent, Waterloo, Western)

U15 — U15 Canada is an association of fifteen leading research universities across Canada (UBC, Calgary, Alberta, Saskatchewan, Manitoba, Waterloo, Western, McMaster, Toronto, Queens, Ottawa, McGill, Laval, Montreal, Dalhousie)

U6 — U15 members who are in Ontario (Waterloo, Western, McMaster, Toronto, Queens, Ottawa)

Comprehensive — Universities classified as comprehensive in Maclean's university ranking (Concordia, Carleton, Regina, Guelph, Memorial, New Brunswick, Windsor, Université du Québec à Montréal, Toronto Metropolitan University, Laurier, Brock, Simon Fraser University, Victoria, York, Waterloo)

ON universities with full-time enrolment >30K — McMaster, Ottawa, Toronto Metropolitan, Toronto, Waterloo, Western, York

Core international comparators: — Carnegie Mellon University, Chalmers University of Technology, Delft University of Technology, Georgia Institute of Technology, Hong Kong University of Science and Technology, KAIST, Karlsruhe Institute of Technology, Leiden (has a University Medical Centre) University, MIT, Princeton, Purdue University, Stockholm University, Swiss Federal Institute of Technology at Zurich, Technical University of Berlin, University of California at Berkeley, University of California at Santa Barbara, University of Colorado Boulder, University of Strathclyde, University of Technology Sydney, University of Twente, Virginia Polytechnic Institute and State University (**Relevant indicators**: Publications among top 10% most interdisciplinary indexed, Academic-Corporate Collaboration)

Additional international comparators:

- **Universities globally producing investment-backed undergraduate, female, and grad entrepreneurs**: Core international comparators (see above) plus Stanford University, Harvard University, University of Pennsylvania, Cornell University, Tel Aviv University, University of Michigan, University of Texas, University of California, Los Angeles (UCLA), Yale University, University of Southern California (USC), Columbia University, University of Illinois, Technion - Israel Institute of Technology, Indian Institute of Technology, Bombay, New York University, Duke University, Brown University

- **Policy cited scholarly output**: Core international comparators (see above) plus Technical University of Denmark, KTH Royal Institute of Technology, Polytechnic University of Milan, Hong Kong Polytechnic University

2023-2024 Key Performance Indicators Report

Insight Report: Employee engagement survey

	Employee Engagement Survey question	% favorable responses (agree, strongly agree)		
		2019	**2023**	**Relative to previous year**
Engagement	1. Overall employee engagement	75	70	↓
	2. The university motivates me to do more than is required.	57	50	↓
	3. I would recommend the university as a good place to work.	82	77	↓
	4. I feel proud to work for the university.	83	77	↓
	5. I feel motivated to do more than is required of me.	75	68	↓
	6. Given your choice, how long would you plan to continue working for the university? (favourable response indicates five years or more)	77	79	↑
Enablement	7. Overall enablement	69	71	↑
	8. My job makes good use of my skills and abilities.	84	84	—
	9. My job provides opportunities to do challenging and interesting work.	83	83	—
	10. Conditions in my job allow me to be about as productive as I can be.	59	62	↑
	11. There are no significant barriers at work to doing my job well.	51	54	↑

Effectiveness profile

2019	**Low Engagement**	**High Engagement**
High Enablement	**11%** Detached Not engaged but enabled	**51%** Most effective Both engaged and enabled
Low Enablement	**22%** Least effective Neither engaged nor enabled	**17%** Frustrated Engaged but not enabled

2023	**Low Engagement**	**High Engagement**
High Enablement	**17%** Detached Not engaged but enabled	**46%** Most effective Both engaged and enabled
Low Enablement	**24%** Least effective Neither engaged nor enabled	**13%** Frustrated Engaged but not enabled

2023-2024 Key Performance Indicators Report

Employee engagement survey dimensions

Dimensions are created by combining related survey questions. The score for each dimension is the average of the % favourable responses (agree, strongly agree) for the questions included. For example, the training dimension included questions 61, 62 and 63; the per cent favourable for each question was averaged to 48%.

2019 Employee engagement survey dimensions		**% favourable responses** (agree, strongly agree)
Lowest scoring	Training	48%
	Work, structure, and process	48%
	Communication and Collaboration	52%
Highest scoring	Authority and empowerment	77%
	Performance management	74%
	Development opportunities	73%

2023 Employee engagement survey dimensions		**% favourable responses** (agree, strongly agree)
Lowest scoring	Work, structure, and process	46%
	Pay and benefits	47%
	Training	48%
Highest scoring	Performance management	74%
	Authority and empowerment	73%
	Development opportunities	71%

**2023-24
KPI REPORT**

and Priorities for 2024-25

June 3, 2024

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2023-2024 UPDATE

Waterloo at 100 Goals

- Community, campus, and culture

- Knowledge, graduates, and co-op

- Fundamental and applied research

- Innovation and entrepreneurship

- Operational indicators

Key Performance Indicators update 2023-2024

Notes: A variety of data sources are used for the KPIs. Sources for each indicator are conveyed in square brackets. Data sources have differing years and reporting frequencies (i.e., not all align to shared time periods such as 2020-2021, 2021-2022, and 2022-2023). To account for this variability, the specific period for each indicator is noted below each data point from older to the most recent. The trend column shows Waterloo's performance in the most recent period compared to the oldest with either a positive (green), undesirable (red), or a dash (static). The trend column offers an "at a glance" view and does not indicate significance of change. Comparator data is not available for indicators that use internal data sources (e.g. Waterloo's student experience survey (SES)). Values presented for the peer groups are the average of the group unless otherwise noted. This report, now completed in May for reporting in June, reflects our transition from fall to spring reporting. As a result, several indicators that were provided in fall 2023 do not yet have new data available and have the same data as reported in fall 2023.

	Key performance indicator		Waterloo			Comparator			
			Older	Most recent	Trend	Peer group	Older		Most recent
Community, campus, and culture (C)									
Student experience	1. Students feel like they are part of the Waterloo community [NSSE]	First year	N/A	74.6% 2020 / 73.6% 2023	↓	U15	N/A	70.7% 2020	70.4% 2022
		Graduating year	N/A	63.9% 2020 / 68.5% 2023	↑	U15	N/A	63.1% 2020	64.7% 2023
	2. Students feel that they belong at Waterloo [SES]		64.0% Fall 2022	64.0% Fall 2023 / 64.2% Winter 2024	↑		No peer comparison		
	3. Students feel that their instructors care about their wellbeing [SES]		55.0% Fall 2022	54.8% Fall 2023 / 52.8% Winter 2024	↓		No peer comparison		
Knowledge, graduates, and co-op (K)									
Academics	4. Percentage of students with entering average >90% [OUAC]		69.5% 2020	75.7% 2021 / 72.0% 2022	↑	U6	60.1% 2020	69.8% 2021	65.9% 2022
	5. First to second year student retention [CSRDE]		93.2% 2021	92.5% 2022 / 93.6% 2023	↑	U6	91.8% Returned Fall 2021	91.1% Returned Fall 2022	92.1% Returned Fall 2023
	6. Graduation rates [UW and U15]	Undergraduate (six years after start)	84.3% 2021	85.2% 2022 / 85.1% 2023	↑	U6	79.9% 2021	80.6% 2022	81.6% 2023
		Masters (four years after start)	88.2% 2019	90.4% 2020 / 90.7% 2021	↑	U6	91.4% 2019	92.2% 2020	92.7% 2021
		Doctoral (six years after start)	60.5% 2020	63.3% 2021 / 65.4% 2022	↑	U6	54.8% 2020	54.4% 2021	55.5% 2022

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WATERLOO AT A GLANCE

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ENROLMENT

Full-time equivalent (FTE enrolment)

- Undergraduate and graduate enrolment relatively steady.
- Since 2019/20:
    - 3.2% ⬆ in undergraduate FTE enrolment
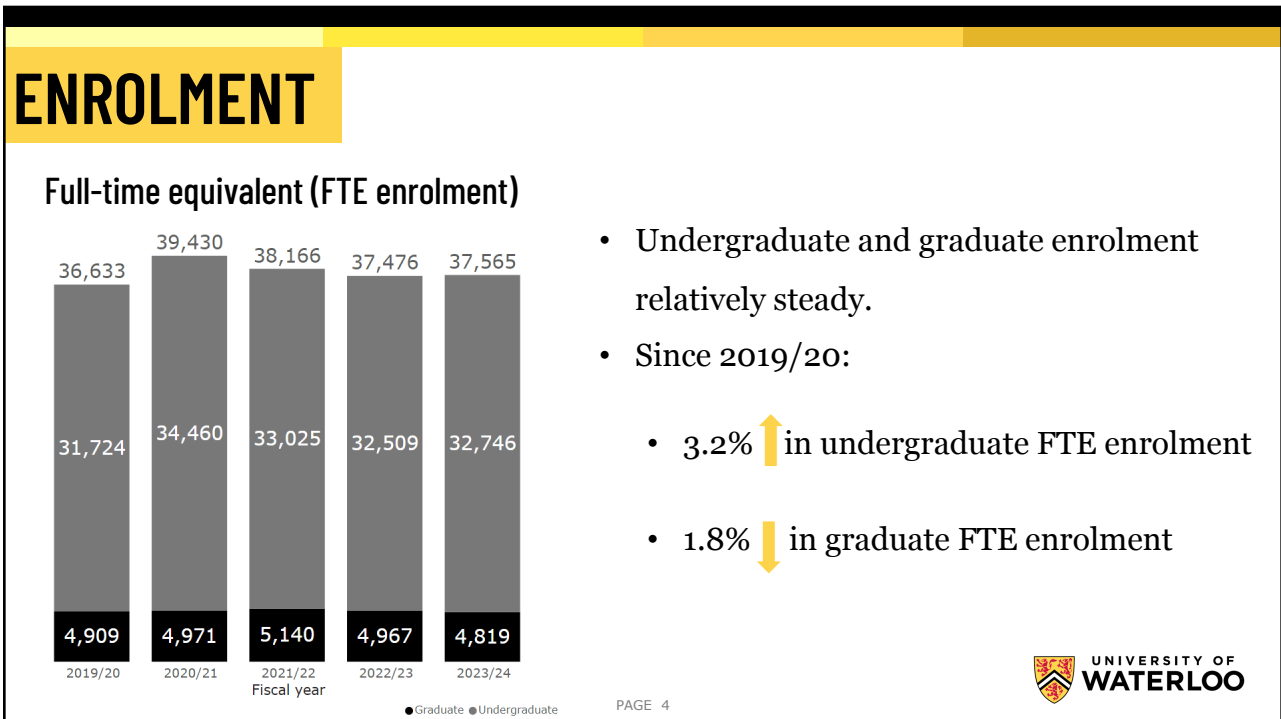   - 1.8% ⬇ in graduate FTE enrolment

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INTERNATIONAL STUDENTS

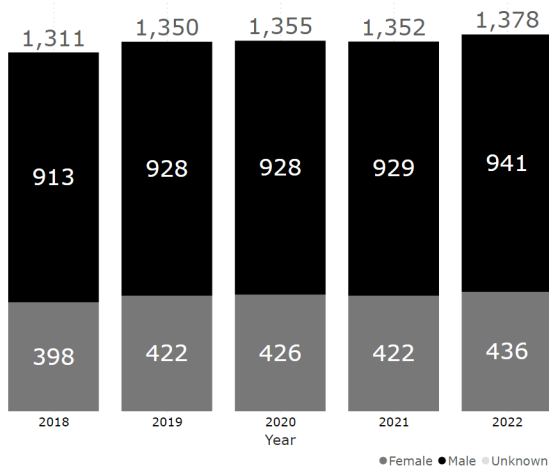**International full-time equivalent (FTE enrolment) and % of respective population**

Bar chart values:
- 2019/20: 1,949 (40%) Graduate; 6,895 (22%) Undergraduate
- 2020/21: 1,843 (37%) Graduate; 7,567 (22%) Undergraduate
- 2021/22: 2,053 (40%) Graduate; 6,832 (21%) Undergraduate
- 2022/23: 2,044 (41%) Graduate; 6,318 (19%) Undergraduate
- 2023/24: 2,008 (42%) Graduate; 5,739 (18%) Undergraduate

Fiscal year

● Graduate ● Undergraduate

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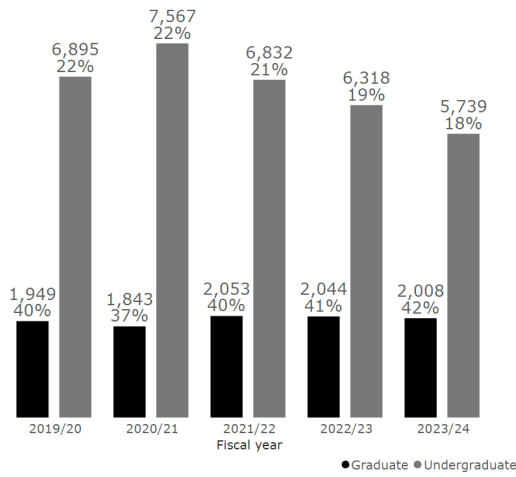
- In 2022/23:
  - One out of five undergraduate students were international students
  - Two out of five graduate students were international students
- ~15% decline in international UG students since 2019/20

UNIVERSITY OF WATERLOO

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FACULTY

Count of full-time faculty

Stacked bar chart (Female / Male):
- 2018: 398 Female, 913 Male — 1,311
- 2019: 422 Female, 928 Male — 1,350
- 2020: 426 Female, 928 Male — 1,355
- 2021: 422 Female, 929 Male — 1,352
- 2022: 436 Female, 941 Male — 1,378

Year

● Female ● Male ● Unknown

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Since 2018:
- ↑ 5% in faculty
- ↑ 9.5% increase in female faculty
- ↑ 3.1% in male faculty

In 2022, 31.6% are female

UNIVERSITY OF WATERLOO

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STAFF

Academic support staff in operating complement
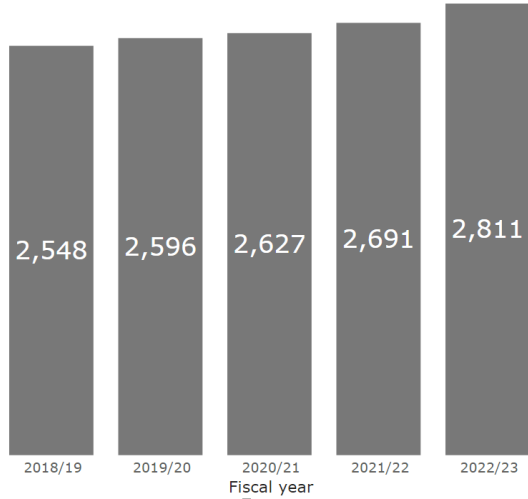
- ⬆ 10% in academic support staff since 2018

2018/19	2019/20	2020/21	2021/22	2022/23
2,548	2,596	2,627	2,691	2,811

Fiscal year

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COMMUNITY, CAMPUS, AND CULTURE

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STUDENT EXPERIENCE

1. Students feel like they are part of the Waterloo community

NSSE
national survey of student engagement

- 2020: 63.9% / 63.1%
- 2023: 68.5% / 64.7%
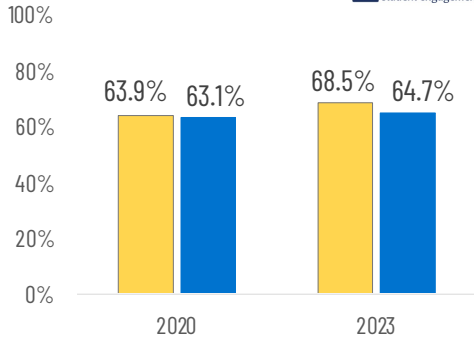
NSSE, SES

2. and 3. Student experience survey – winter 2024

Almost two thirds (65%) report that they feel that they belong at Waterloo

More than half (53%) report their instructors care about their wellbeing

UNIVERSITY OF WATERLOO

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KNOWLEDGE, GRADUATES, AND CO-OP

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STUDENT SUCCESS

ATTRACT	RETAIN	GRADUATE

4. Entering average 90%+

69.5%   75.7%   72.0%

2020   2021   2022
Fall term
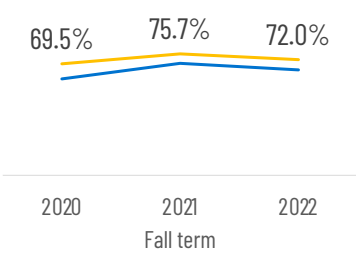
5. Year 1 to Year 2 retention rate

93.2%   92.5%   93.6%

2021   2022   2023
2nd year
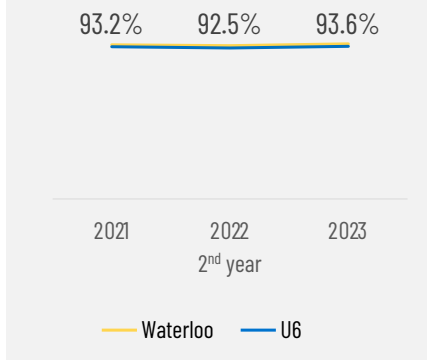
— Waterloo   — U6

6. Graduation rate, undergraduate

84.3%   85.2%   85.1%

2021   2022   2023
Graduation year

OUAC, CSRDE

UNIVERSITY OF WATERLOO
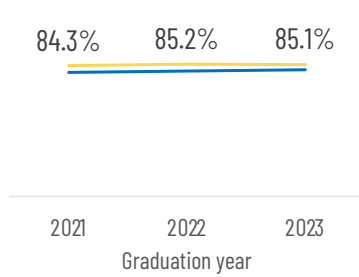
PAGE 11

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STUDENT SUCCESS

7. Graduate employment rate 🎓

94.9%   95.5%   96.3%

2020   2021   2022

9. Percentage of graduates earning above $60K

55.9%   63.8%   68.3%

41.2%   46.5%   52.6%

2020   2021   2022
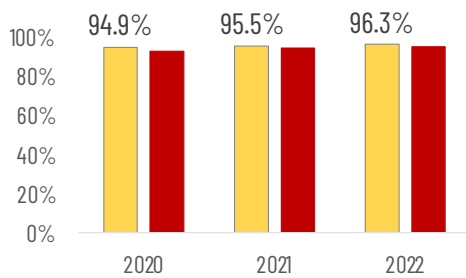
— Waterloo   — U6   — ON

OUGS, two years after graduation

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6
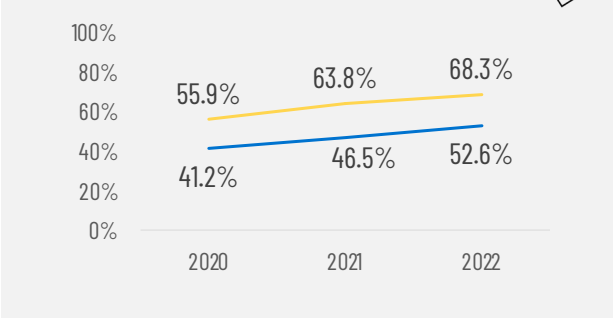
STUDENT SUCCESS

76%
of undergraduate students in co-op (2023/24)

93%
of students participated in 2+ engaging learning practices other than co-op (Winter 2024)

OUGS

95%
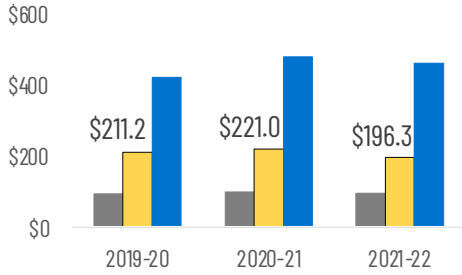of graduates' say employment was related to skills developed at university

U15, OUGS, SES

UNIVERSITY OF WATERLOO

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FUNDAMENTAL AND APPLIED RESEARCH

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7

RESEARCH REVENUE

12. Annual research revenue ($M)

$211.2 (2019-20)
$221.0 (2020-21)
$196.3 (2021-22)

13. Research revenue from industry / non-governmental sources ($M)

$48.2 (2019-20)
$45.8 (2020-21)
$39.9 (2021-22)
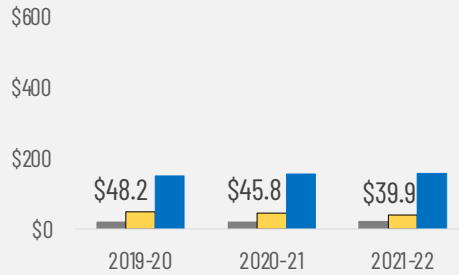
— Waterloo   — U15 Average   — Comprehensive

CAUBO

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RESEARCH OUTPUTS

14. Publications among top 10% most interdisciplinary, indexed, 2019-2023

10.4% (University of Waterloo)

Dalhousie University, University of Saskatchewan, University of Waterloo, University of British Columbia, Université Laval, University of Calgary, Western University, University of Alberta, McGill University, University of Ottawa, Queen's University, University of Manitoba, University of Toronto, McMaster University, University of Montreal

15. Publications with international collaborators

57.6% (2016-2019)
59.4% (2017-2020)
60.3% (2018-2021)

— Waterloo   — U15

Elsevier, Leiden ranking

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8
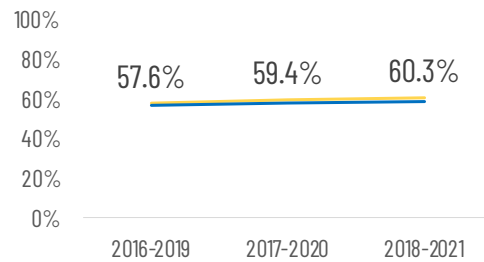
INNOVATION AND ENTREPRENEURSHIP

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INNOVATION

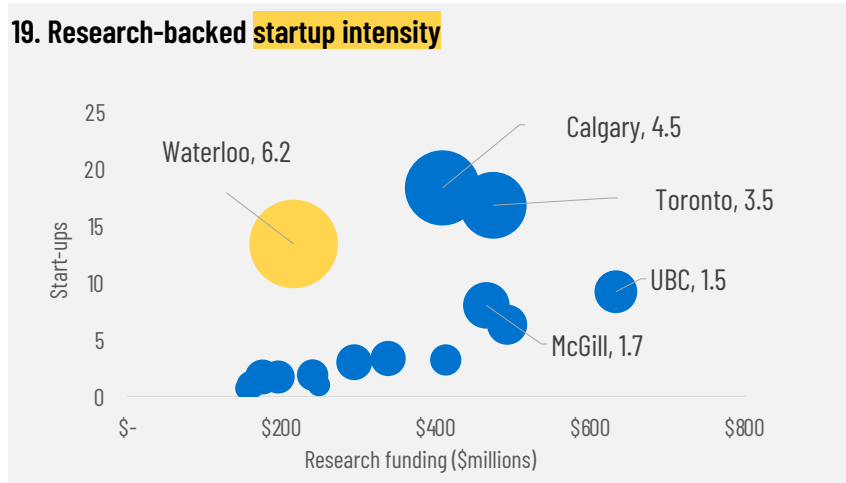**16.-18. Universities globally producing investment-backed entrepreneurs** PitchBook

Overall
21st
in world and top among U15 in 2023

Female entrepreneurs
3rd
among U15 in 2023

Grad entrepreneurs
4th
among U15 in 2023

PitchBook

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INNOVATION

19. Research-backed startup intensity

Start-ups (y-axis) vs Research funding ($millions) (x-axis)

- Waterloo, 6.2
- Calgary, 4.5
- Toronto, 3.5
- UBC, 1.5
- McGill, 1.7

Legend: Waterloo — U15
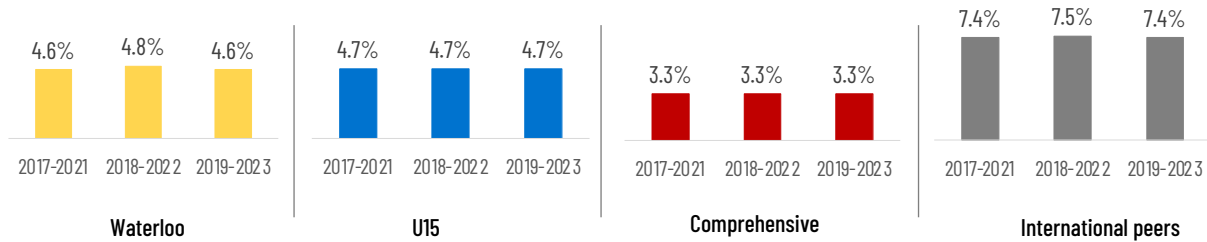
AUTM

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INNOVATION

20. Academic corporate collaboration

Percentage of publications that have been co-authored by researchers with academic and corporate affiliations

Waterloo
2017-2021	2018-2022	2019-2023
4.6%	4.8%	4.6%

U15
2017-2021	2018-2022	2019-2023
4.7%	4.7%	4.7%

Comprehensive
2017-2021	2018-2022	2019-2023
3.3%	3.3%	3.3%

International peers
2017-2021	2018-2022	2019-2023
7.4%	7.5%	7.4%

SciVal

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10
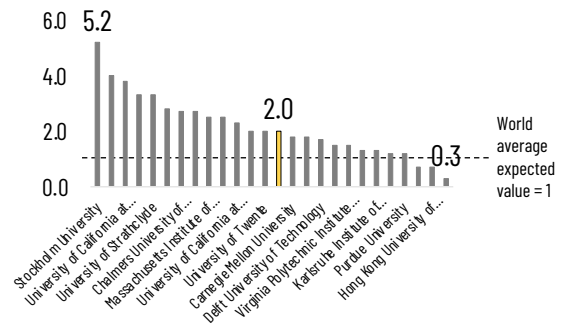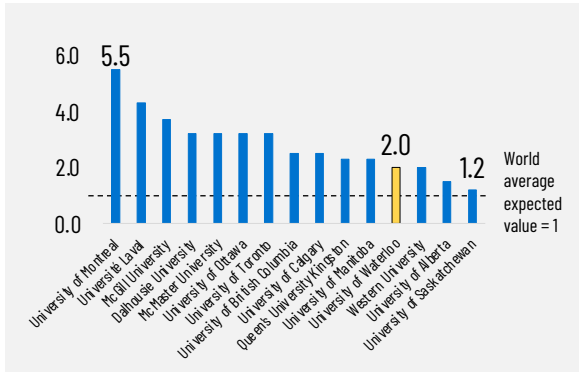
INNOVATION

21. Policy cited scholarly output (e.g., publications), normalized (2023)

Waterloo — U15 — International peers

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OPERATIONAL INDICATORS

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STAFF

22. Staff turnover rate
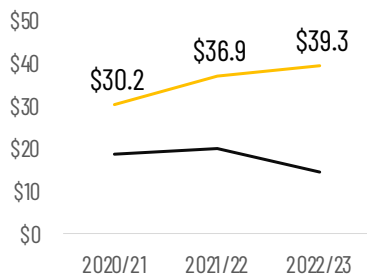
UNIVERSITY OF WATERLOO
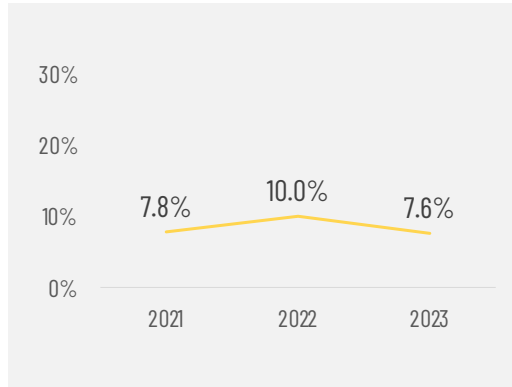
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23

ADVANCEMENT AND ALUMNI

23. New funds raised ($M)

24. Engaged alumni as a % of contactable alumni
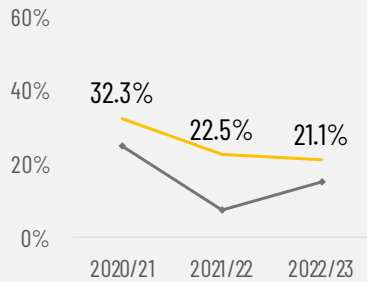
25. Alumni donors as a % of contactable alumni
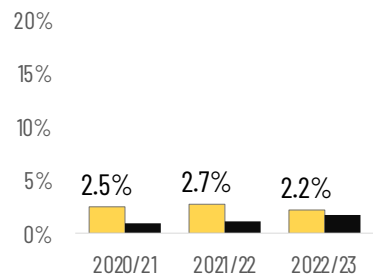
Waterloo —◆— Comprehensive —— CASE CDN peers

CASE

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ENVIRONMENTAL SUSTAINABILITY

26. Greenhouse gas emissions percentage change from 2015 base year
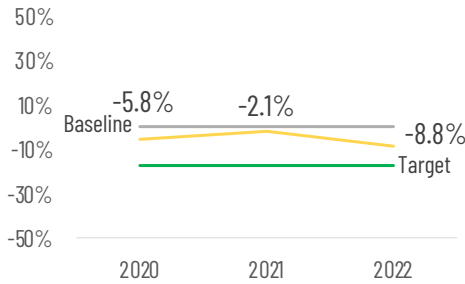
STARS certification

Waterloo
SILVER
(2018, 2021)

U15:
1 platinum
7 gold
2 silver

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Sustainability office

25

NET REVENUE AND INCOME

27. Net operating revenues ratio

18.8% 10.8% 7.7%

2020-21 2021-22 2022-23

28. Net income / loss ratio

9.8% 4.8% 4.2%

2020-21 2021-22 2022-23

—— Waterloo   —— ON universities with full-time enrolment >30K

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COU

26

13
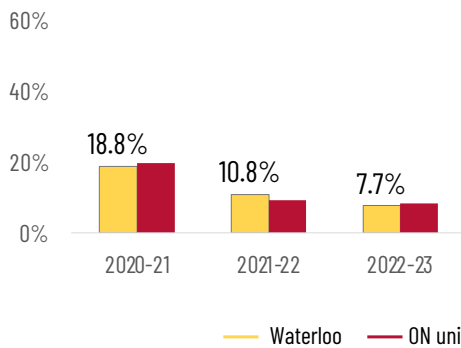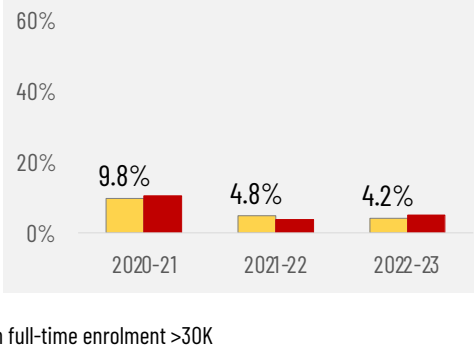
FINANCIAL SUSTAINABILITY

29. Primary reserve ratio (days)

	2020-21	2021-22	2022-23
Waterloo	214	234	236

30. Viability ratio

300% 219.8%   212.0%   227.0%
200%
100%   Waterloo has no external long-term debt
0%
      2020-21   2021-22   2022-23

—— Waterloo —— ON universities with full-time enrolment >30K

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COU

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INSIGHTS

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EMPLOYEE ENGAGEMENT SURVEY

	Detached enabled but not engaged			Most effective engaged and enabled	
2023		17%	2023		46%
2019		11%	2019		51%
	Least effective neither engaged nor enabled			Frustrated engaged but not enabled	
2023		24%	2023		13%
2019		22%	2019		17%

Enablement (y-axis) **Engagement** (x-axis)

Human resources

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EMPLOYEE ENGAGEMENT SURVEY

LOWEST SCORING DIMENSIONS

	2019	2023
Training	▢	▢
Work, structure, and process	▢	▢
Communication and collaboration	▢	
Pay and benefits		▢

HIGHEST SCORING DIMENSIONS

	2019	2023
Authority and empowerment	▢	▢
Performance management	▢	▢
Development opportunities	▢	▢

> Lowest and highest scoring dimensions were mostly consistent across survey years with pay and benefits emerging new in 2023.

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Human Resources

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INSTITUTIONAL PRIORITIES
2024-25

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31

GUIDING DIRECTION & PRINCIPLES

PROVOST'S ADVISORY COMMITTEE ON BUILDING A RESILIENT UNIVERSITY OF WATERLOO

WATERLOO AT 100
UNIVERSITY OF WATERLOO STRATEGIC VISION

REDISCOVER UNCONVENTIONAL

LEAD GLOBALLY, ACT LOCALLY

CO-ORDINATE AND COLLABORATE

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WATERLOO AT 100 GOALS

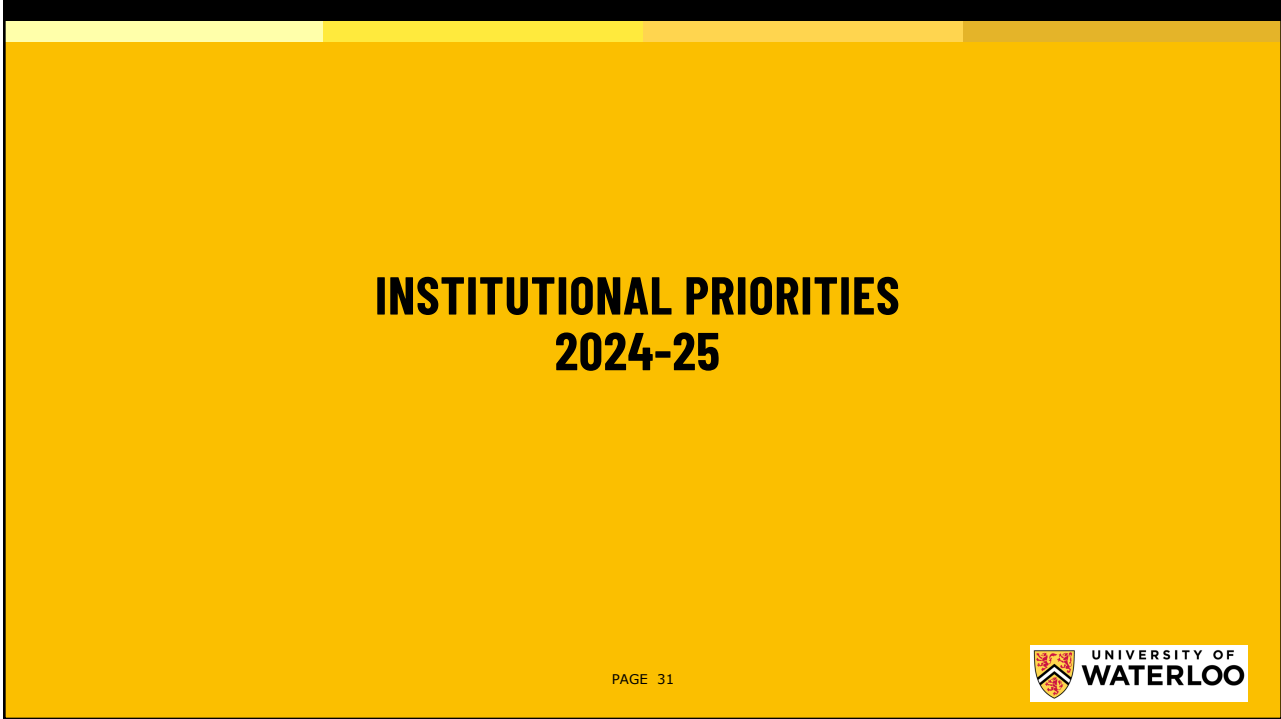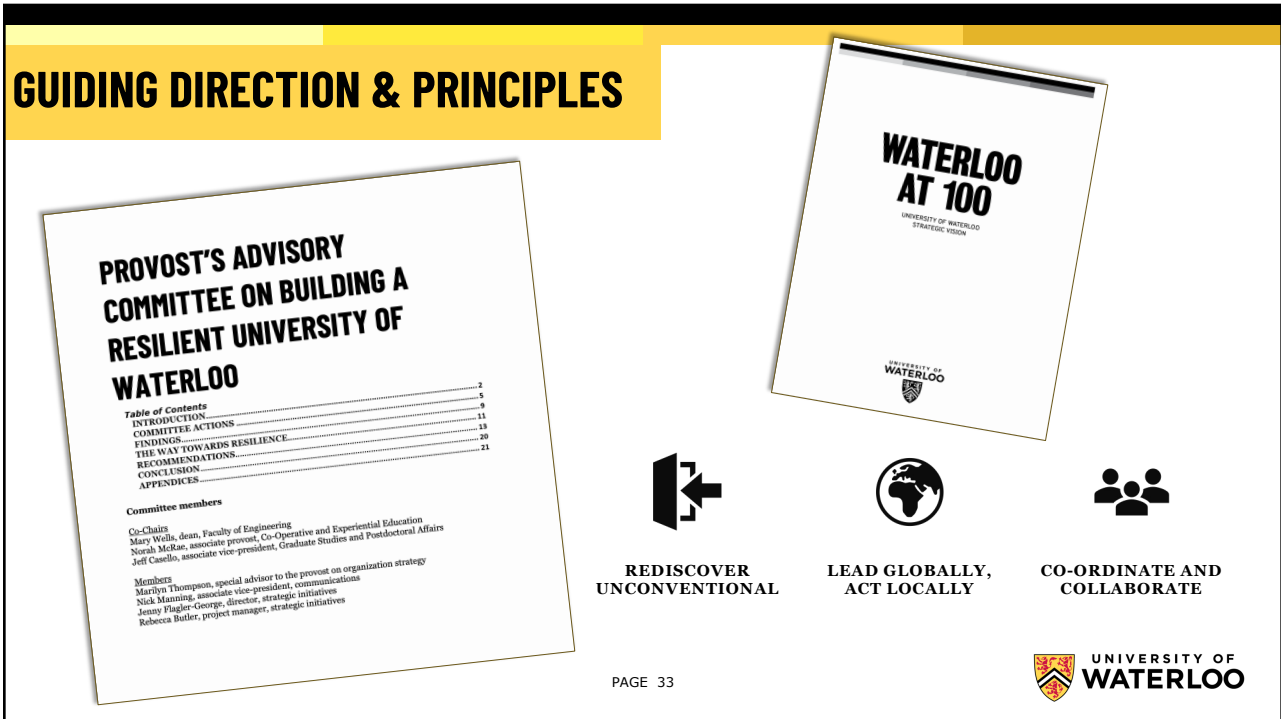## 1. Community, Campus and Culture (Goal C)

Create a decolonized, equitable University of Waterloo community that supports health and well-being and contributes to the region's communities

Includes all University of Waterloo campuses: main campus, Stratford, Cambridge and Kitchener

2. Knowledge, Graduates and Co-op (Goal K)

Develop graduates and alumni who advance Global Futures, embrace life-long learning, and contribute locally

3. Fundamental and Applied Research (Goal R)

Be a world leader through the Global Futures in impactful research that's connected

4. Innovation and Entrepreneurship (Goal I)

Create the conditions that enable innovation for the Global Futures...

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WATERLOO VALUES

The values and culture initiative is grounded by the following imperatives:
- Uphold Waterloo's leadership and excellence in education, scholarship, innovation, and entrepreneurship
- Ensure the physical and mental health and well-being of our students and employees
- Embrace decolonization, Indigenization, inclusivity, equity, anti-oppression, and antiracism
- Co-ordinate and collaborate across disciplinary and organizational boundaries

At the University of Waterloo, we...

Think Differently	Act with Purpose	Work Together
unconventional | bold | innovative	*positive impact | responsible | we get things done*	*collaborative | community | "One Waterloo"*
Great ideas are born when we **challenge the status quo,** ask **bold questions** and **embrace risks**	We **make a positive impact** in the Waterloo community and around the world	We are at our best when we **work together** – which results in fresh thinking, inspiration, and innovative breakthroughs

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INSTITUTIONAL PRIORITIES 24-25

1. **Institutional Values**
   to Shape Culture and Inform Operational Principles

2. **Holistic Campus Wellness**
   for Employee Engagement, Student Thriving, Belonging, Safety, Expression and Engagement

3. **Global Futures Networks**
   to Facilitate Interdisciplinary Activity Across UW's Mission

4. **Integrated Planning and Budget**
   for Enhanced Coordination and Collaboration

5. **Effectiveness, Efficiency, and Revenue Generation Initiatives**
   to Enhance Mission and Financial Sustainability

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INSTITUTIONAL PRIORITIES

1. **Institutional Values to Shape Culture and Inform Operational Principles**

   - Implementation plan with strategic communications for enhanced cohesion
   - Talent and leadership development for faculty and staff
   - Connecting more explicitly into performance management
   - Task Force on Principles for Freedom of Expression and Inclusive Engagement
   - Task forces for revisiting partnerships and investments

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INSTITUTIONAL PRIORITIES

2. **Holistic Campus Wellness for Employee Engagement, Student Thriving, Belonging, Safety, Expression, and Engagement**

- Engage with results from assessments/surveys (incl. through actions taken at the PVP level)
- Assess, revisit, and bolster coherence of student experience, wellness, and thriving frameworks
- Strategic talent and performance development
- Student and employee wellness, burn-out, and mental health
- Board Committee on Community and Culture
- Space utilization and flexible work strategy

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INSTITUTIONAL PRIORITIES
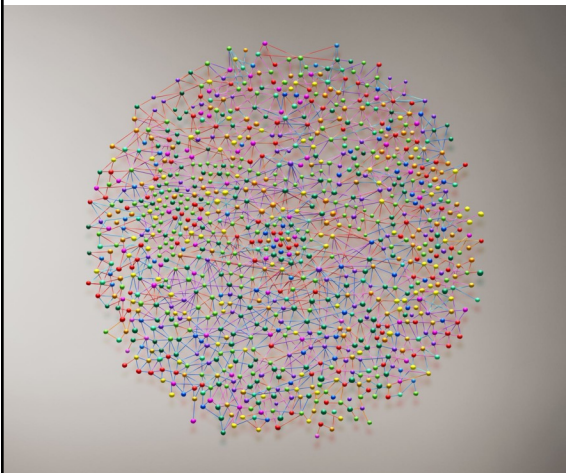
3. **Global Futures Networks to Facilitate Interdisciplinary Activity Across UW's Mission**

- Continue to expand what Global Futures can do for UW across the board (co-op, industry partnerships, GR, etc.)
- Global Futures Office, governance and leadership
- Transitioning Centres and Institutes, Policy 44
- Consolidated and shared resources
- Expanding the pool of funding sources
- Continue to build and expand awareness: Global Futures Talks, Events, and Engagement

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INSTITUTIONAL PRIORITIES

Image generated by ChatGPT

4. **Integrated Planning and Budget for Enhanced Coordination and Collaboration**

- For transparency, coordination, and collaboration across institutional portfolios, Faculties, and ASUs
- Mapping activities to institutional priorities and longer-term W100 goals
- Strengthening connection between planning and budgeting
- Leveraging plans to support individual and team performance development

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INSTITUTIONAL PRIORITIES

5. **Effectiveness, Efficiency, and Revenue Generation Initiatives to Enhance Mission and Strengthen Financial Sustainability**

Possible ideas
- Campaign – leveraging Waterloo at 100 and Futures for priority setting
- Executive education and professional development
- Monetize events
- Online and flexible professional masters, curriculum management, stackable credentials
- Industry sponsored capstone projects
- Expand youth engagement
- Streamlining interdisciplinary practices
- Leveraging technology and AI for disruptive and transformational change
- Land use development
- Address flexible work, free up space for value-added in-person activity
- Alignment and coordination of support services; more matrix models to support collaboration

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Office of the Vice President, Research and International
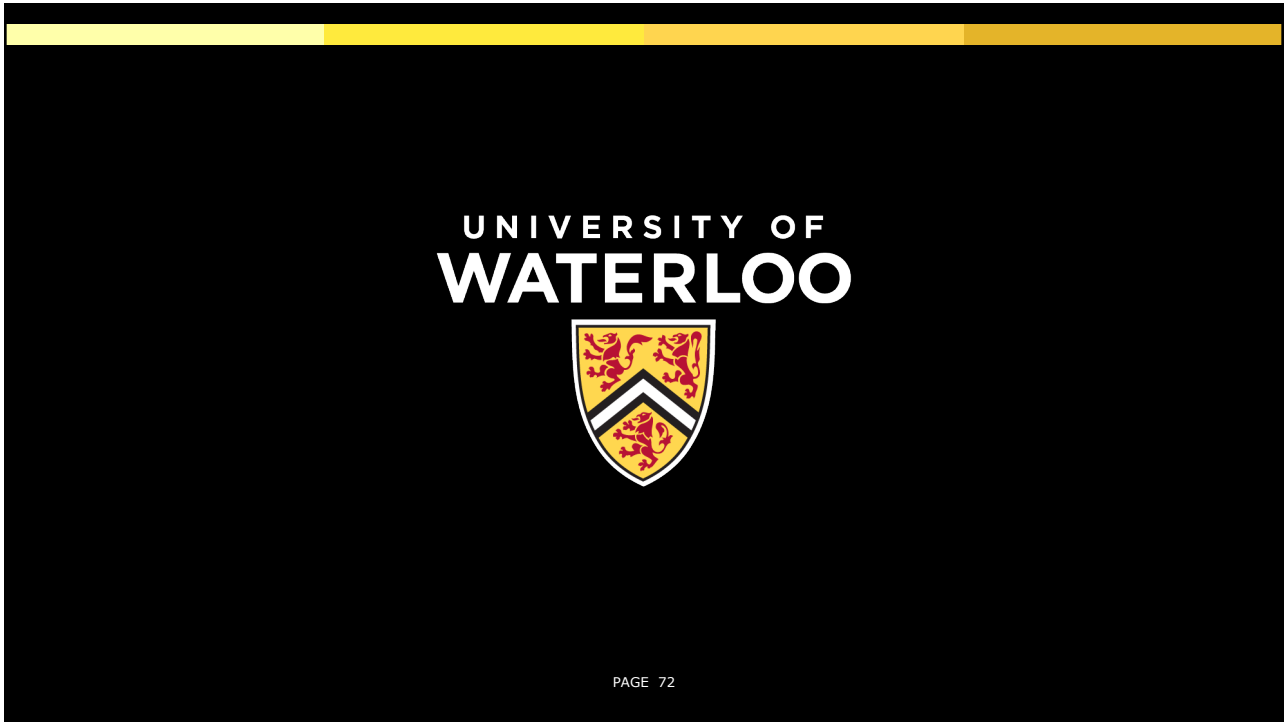
For Discussion   **Open Session**

To: **Senate**

Sponsor: Charmaine B. Dean, Vice President Research and International
Contact Information: vpri@uwaterloo.ca

Presenter: Charmaine B. Dean, Vice President Research and International
Contact Information: vpri@uwaterloo.ca

Date of Meeting: **June 10, 2024**

Agenda Item Identification:

15) Report - Vice-President, Research & International - Awards, Distinctions, Grants, Waterloo International Engagements

Summary:

Presenting the Vice-President, Research and International Report to Senate for June 2024. This report to Senate highlights successful research, international and entrepreneurial outputs and outcomes for the period April 2024 by the thematic areas as outlined in Waterloo's Strategic Plan 2020-25.

Documentation Provided:

- Vice-President, Research and International June 2024 Report to Senate

Vice-President, Research & International
Report to Senate
June 2024

Introduction
This report to Senate highlights successful research and international outputs and outcomes for the period April 2024.

Velocity Highlights:

Darren Baine (BASc. - Biology and bioinformatics – in progress)
Young Eye International
Darren is a student in the BASc program with a focus on Biology and Bioinformatics. He has been on the Top 40 Under 40 list in Uganda as a social entrepreneur, speaker, mentor and author. In April, Darren launched the second season of his podcast *Young Eye International*, aimed at creating a socially connected world (watch the utube video of the latest podcast) where he interviews Daria Margarit.

Daria Margarit (BA, Mathematics – Waterloo and BBA, Business Administration - WLU– in progress)
Safi
Daria is the co-founder of Safi and is currently working on a double degree at the University of Waterloo and Wilfrid Laurier University. She was featured in April as a Velocity student success story. Her team provides farmers with a solution for safe milk production in East Africa. At Velocity Digital and Science spaces, the team built and tested the pasteurization handles and received advisory from staff. They expanded their vision beyond the fully mechanical model, and prototyped battery-operated and corded models that heat the milk for the user directly instead of simply monitoring temperature while paired with an external heat source (watch the utube video of the latest podcast).

Andrew Pundsack (BASc '19 – Mechanical Engineering), Ashley Keefner (PhD '17, MBET '18) and Shane Kilpatrick (MASc '17, MBET '18)
Membio Inc.
Membio was featured in April as a Velocity story. The three co-founders joined Velocity after winning the Pitch Competition in 2018 when they were students in Engineering. The company's tech is to manufacture cells in a more efficient way by replicating the human body with technology. Through assistance from Velocity science and winning the Velocity pitch competition they built prototypes to test their idea. Recently, ABEC- a global biomanufacturing company acquired Membio's technology.

Emma Collington (BSc '19, MSc '22, PhD in progress - Biology) and Samantha Fowler (BSc '19 - Biology)
Emma and Samantha were featured in April as Velocity advocates for inclusivity in STEM. They have launched, and lead, the project *STEM with Disabilities*, amplifying the visibility of scientists, engineers and others with disabilities in technology and math. Stemming from personal experiences as disabled students and scientists, their initiative began as a visibility campaign but has evolved into a community-building platform.

Rastin Rassoli (BA - in progress - Psychology)

Rastin was featured in April as a Velocity co-founder. His company - Colorful Zone - is a Velocity company that has developed an AI-powered app to support well-being and stress management for young adults. The Joyi app presents game-like features and bite-sized psychology lessons to cultivate skills for managing everyday stressors. It tailors content to individual users, offering personalized psychoeducational experiences to boost resilience.

Funded Research Awards:

Provincially funded Early Researcher Awards

Five Waterloo researchers will receive funding through the Early Researcher Awards program — a program that gives research funds to new researchers working at publicly funded Ontario research institutions to build a research team. Each award is valued at $100,000, and is matched by an additional $50,000 from Waterloo.

Karla Boluk – Associate Professor, Recreation and Leisure Studies

Understanding the Supports Required by Minority Tourism Social Entrepreneurs in COVID-19 Recovery and the Implementation of the Sustainable Development Goals.

Equity-deserving groups have been under-represented in the entrepreneurial ecosystems in Ontario and COVID-19 has exacerbated this. The proposed study uses a feminist intersectional and care lens employing case study and grounded theory methodologies focused on the Toronto-Waterloo Technology Corridor

Paolo Dominelli– Assistant Professor, Kinesiology and Health Sciences

Understanding the impact of sex-differences in the pulmonary system on exercise

Chronic illness is a major financial and societal burden to Ontario, estimated at more than 55 per cent of the province's total health care costs. Dominelli's team seeks to further understand how sex-differences in the respiratory system impact the response to exercise to address the long-standing bias in exercise physiology where females are underrepresented in research, despite growing evidence of known differences that can impact exercise training and rehabilitation.

Logan Mac Donald – Associate Professor, Fine Arts
Longhouse Labs (LLabs)

The Longhouse Labs (LLabs) is a research-creation hub aimed at facilitating long-term engagement with Indigenous artists, curators, conservators and researchers through the creation of yearly residencies (or Fellowships) within fine arts.

Mahla Poudineh – Assistant Professor, Electrical and Computer Engineering

A new transdermal patch to continuously and without pain track and treat diabetes

Diabetes, if left unchecked, can cause serious illnesses leading to healthcare burden in Ontario. Patients with diabetes often require injecting insulin to balance their blood glucose level. Poudineh is developing a small, painless, wearable patch for people with type 1 diabetes which sends informative readings to their smartphones.

2

Yaoling Yu – Professor, School of Computer Science
Pushing-forward Deep Generative Models
Deep generative AI models are difficult and expensive to train because they require much data and computing power. In fact, training has become so expensive that often it is not possible to fix a bug discovered after a model has been trained. Professor Yu and his students will address these issues by creating lightweight generative models that require significantly less data, storage and computing power, by developing distributed systems that enable training on low-cost smart devices, and by accounting explicitly for concerns about trustworthiness.

Awards and Distinctions:

Ramon Aravena - Professor Emeritus, Earth and Environmental Sciences
[Vernadsky Medal of the International Association of Geochemistry](#)
The IAGC Vernadsky Medal is awarded biennially to a single person for a distinguished record of scientific accomplishment in geochemistry over the course of a career.

Hans De Sterck – Professor, Applied Mathematics
[Fellow - the Society for Industrial and Applied Mathematics](#)
De Sterck was recognized "for contributions to scientific computing methods including multilevel and nonlinear solvers, and for exemplary scientific leadership and service to SIAM."

Ken Hirschkop - Professor, English Language & Literature
[Sebeok-Love Award for Best Article in Language Sciences 2023 (awarded in 2024)](#)
The editorial board and the publisher of Language Sciences confer the Sebeok-Love Award for the Best Article in Language Sciences on an annual basis. The award is given to the author of the best article from the journal's six issue for the relevant year, as judged by the editors and editorial board.

Jenine McCutcheon – Assistant Professor, Earth and Environmental Sciences
[Young Scientist Award - Mineralogical Association of Canada's (MACs)](#)
This award is given to a young scientist who has made a significant international research contribution in a promising start to a scientific career.

Tizazu Mekonen – Associate Professor, Chemical Engineering
[MSED Early Career Investigator Award, NOVA Chemicals](#)
This honour is bestowed upon researchers who have made substantial contributions to the polymer industry, aligning perfectly with Mekonnen's disruptive research in polymer engineering and sustainability.

Alfred Menezes – Professor, Combinatorics and Optimization
[Fellow - the International Association for Cryptologic Research](#)
The Fellows program is awarded to no more than 0.25% of the IACR's 3000 members each year and recognizes "outstanding IACR members for technical and professional contributions to cryptologic research."

3

Carol Ptacek – Professor, Earth and Environmental Sciences
[Fellow - International Association GeoChemistry](#)
The honorary title of IAGC Fellow is bestowed annually to scientists who have made significant contributions to the field of geochemistry.

Sherman Shen – Professor, Electrical and Computer Science
[International Fellow - Engineering Academy of Japan](#)
The Engineering Academy of Japan is composed of leading experts from academia, industry, and government institutions who possess a wide range of knowledge and have made outstanding contributions in engineering and technological sciences, and closely related fields.

Four Engineering Professors are awarded [Fellows of the Canadian Academy of Engineering](#)
Canadian Academy of Engineering Fellows are selected for their outstanding contributions to engineering in Canada and around the world and for their service as role models in their fields and to their communities.

Ladan Tahvildari – Professor, Electrical and Computer Engineering
Ehsan Toyserkani – Professor, Mechanical and Mechatronics Engineering
Costas Tzoganakis – Professor, Chemical Engineering
Alfred Yu – Professor – Professor, Electrical and Computer Engineering

Alexander Wong – Professor, Systems Design Engineering
[Fellow - Royal Society for the Encouragement of Arts, Manufactures and Commerce (commonly known as the Royal Society of Arts, or RSA).](#)
RSA is one of the oldest learned societies in the world comprised of "entrepreneurs, educators and innovators working together for the advancement of society, the economy and the environment." Their mission is to "embolden enterprise, enlarge science, refine art, improve our manufacturers and extend our commerce".

International Agreements:

Memorandums of Understanding (MOUs)

One new MOU and one MOU renewal were signed. These MOUs will enable the institutions to continue to explore collaboration across a range of areas including joint research projects, staff and graduate student exchange, seminars and conferences:

NEW - University of Jordan (Jordan) - This is a new institution-wide MOU.
RENEWED - Korea Advanced Nano Fab Center, Gyeonggi Provincial Government, and Sungkyunkwan University (South Korea) -This MOU renewal involves Waterloo Institute of Nanotechnology (WIN).

NEW- Funding agreement - Directorate General of Higher Education of the Ministry of Education, Culture, Research, And Technology of the Republic of Indonesia for the Indonesia International Student Mobility Award. This agreement provides funding to students from Indonesia to study for a term at Waterloo.

International delegations hosted at the University of Waterloo:

Birla Institute of Technology & Science, Pilanai, India (BITS) – Waterloo International hosted a delegation from BITS regarding the exploration of collaborative activities with key stakeholders in the Faculty of Engineering, Faculty of Science, Waterloo Artificial Intelligence Institute (Waterloo.AI) and Waterloo Institute for Nanotechnology (WIN).

VPRI Senate Report: June 2024

Office of the Vice-President, Academic and Provost

For Information   **Open Session**

To: **Senate**

Sponsor: James W.E. Rush, Vice-President, Academic and Provost
Contact Information: provost@uwaterloo.ca

Presenter: James W.E. Rush, Vice-President, Academic and Provost
Contact Information: provost@uwaterloo.ca

Date of Meeting: **June 10, 2024**

Agenda Item Identification: **16 (a). Report of the Provost – Faculty Appointments, Leaves**

Summary:

The Faculty Reports for Senators' information regarding the variety of appointments, reappointments, special appointments, leaves, and other matters of interest about individuals in the Faculties are available at the Senate agenda page[1].

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[1] https://uwaterloo.ca/secretariat/sites/default/files/uploads/documents/all-faculty-june.pdf

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For Information   **Open Session**

To:	**Senate**
Sponsor: **Contact Information:**	James W. E. Rush, Vice-President, Academic & Provost provost@uwaterloo.ca
Presenter: **Contact Information:**	Gerry Schneider, Chair, UARC gerry.schneider@uwaterloo.ca
Date of Meeting:	**June 10, 2024**
Agenda Item Identification:	**16(b) Report of the Provost: University Appointments Review Committee**

SUMMARY:

Annual UARC Report

Members of the University Appointments Review Committee (UARC), appointed by the Vice-President, Academic & Provost in consultation with Deans' Council and the President of the Faculty Association, advise on regular faculty appointments with a duration of more than two years. UARC members review hiring processes and provide advice to the Dean before a hiring recommendation is sent to the Vice-President, Academic & Provost for approval. Generally, UARC monitors the hiring process to ensure that positions were properly advertised, that both the letter and the spirit of the hiring procedure were followed and that there was a thorough search for candidates with attention to equity. In accordance with Policy 76 – Faculty Appointments, the committee reports to Senate annually, via the Vice-President, Academic & Provost, on its activities and operations. As of July 1, 2024 UARC is overseen by the Associate Vice-President, Faculty Planning and Policy.

From 1 September 2022 to 31 August 2023, UARC reviewed a total of 91 proposals for regular faculty appointments. For comparison purposes, the total number of proposals reviewed in years past was as follows:

YEAR	NUMBER OF PROPOSALS
1 September 2009 – 31 August 2010	58
1 September 2010 – 31 August 2011	79
1 September 2011 – 31 August 2012	87
1 September 2012 – 31 August 2013	68
1 September 2013 – 31 August 2014	70
1 September 2014 – 31 August 2015	85
1 September 2015 – 31 August 2016	69
1 September 2016 – 31 August 2017	90

1

1 September 2017 – 31 August 2018	102
1 September 2018 – 31 August 2019	87
1 September 2019 – 31 August 2020	50
1 September 2020 – 31 August 2021	66
1 September 2021 – 31 August 2022	135

POINTS OF INTEREST:

Of the files reviewed, the following information can be extracted (with figures from the last cycle (2021-2022) provided):

CATEGORY	2022-2023	2021-2022
Female candidates	35 (of 91)	63 (of 135)
Male candidates	54 (of 91)	68 (of 135)
Gender unknown	2 (of 91)	4 (of 135)
Tenured	3 (of 91)	17 (of 135)
Probationary Appointments	72 (of 91)	93 (of 135)
Definite Term Appointments	16 (of 91)	25 (of 135)
Total Candidates	91	135

Length of the Review Process
Appointment proposals from academic units and faculties were generally timely, and department chairs/schools directors have been very helpful in providing any additional information requested. Advance notice of proposals continues to be important to ensure speedy turnaround. Policy 76 specifies five working days for the review process. During the past year, UARC members were able to complete most reviews within five working days unless there was some missing information and discussions with the chair/director or dean were required.

Administration
Administrative information concerning UARC can be found at: https://uwaterloo.ca/faculty-planning- policy/recruitment/university-appointments-review-committee

UARC Membership
Chair: Gerry Schneider (until May 2025)
Secretary: Nadia Singh, Director, Policy Planning and Decision Support

Faculty of Arts:
Anna Esselment (until May 2024)
Julia Roberts (until May 2025)

Faculty of Engineering:
Marianna Polak (until May 2026)
Catherine Rosenberg (until May 2024)

Faculty of Environment:
Prateep Nayak (until May 2024)
Johanna Wandel (until May 2024)

Faculty of Health:
Lora Giangregorio (until May 2025)
Scott Leatherdale (until May 2025)

Faculty of Mathematics:
Kevin Hare (until May 2027)
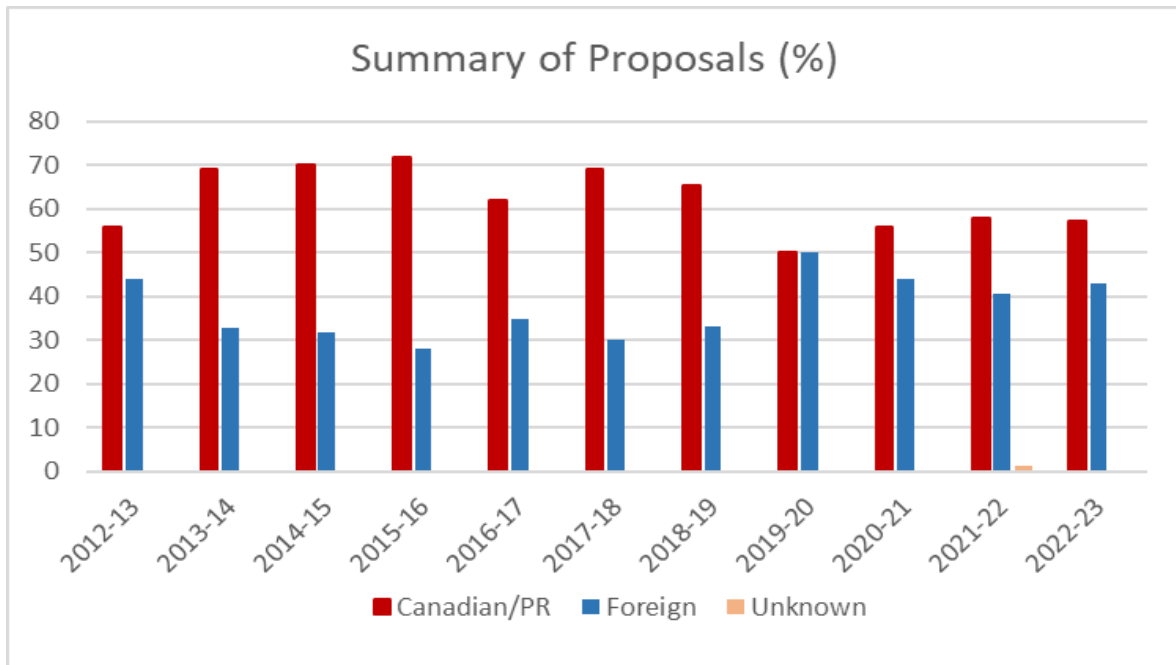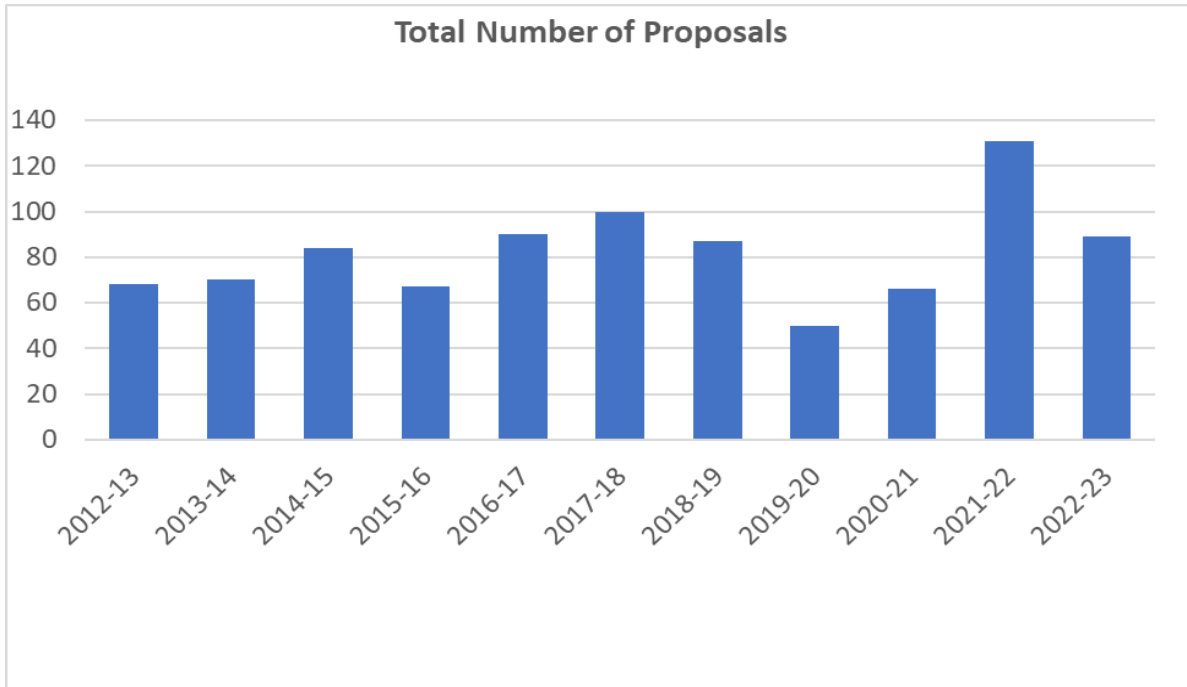Pengfei Li (until May 2026)

Faculty of Science:
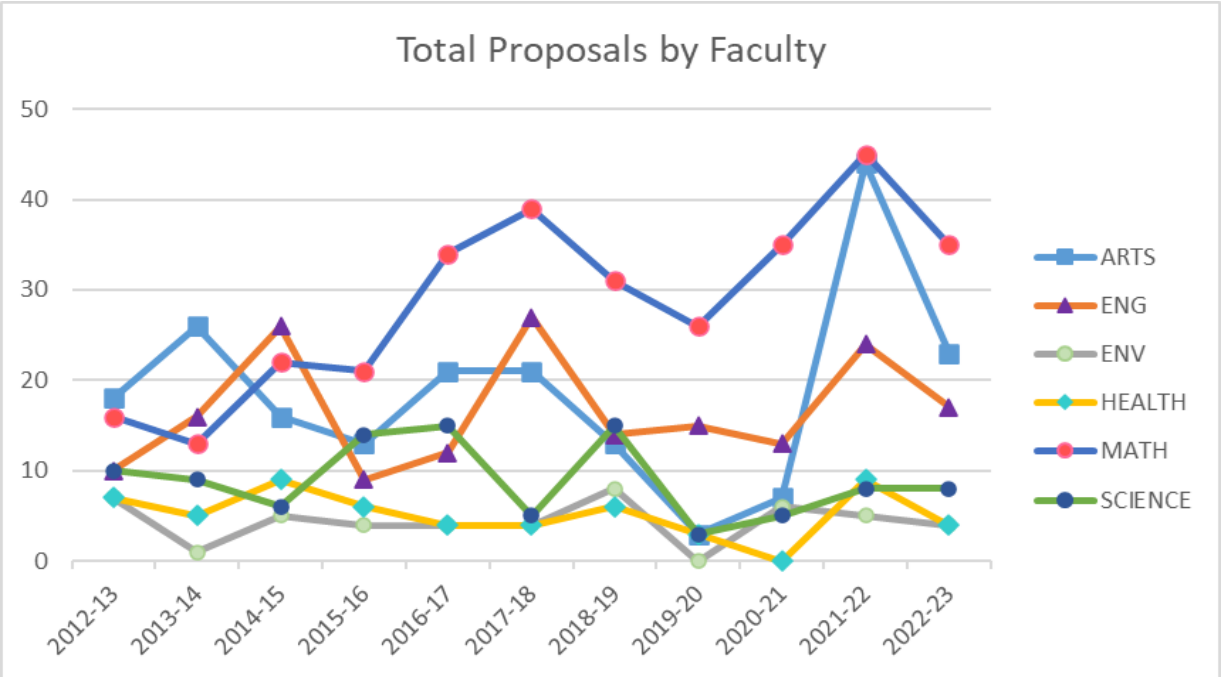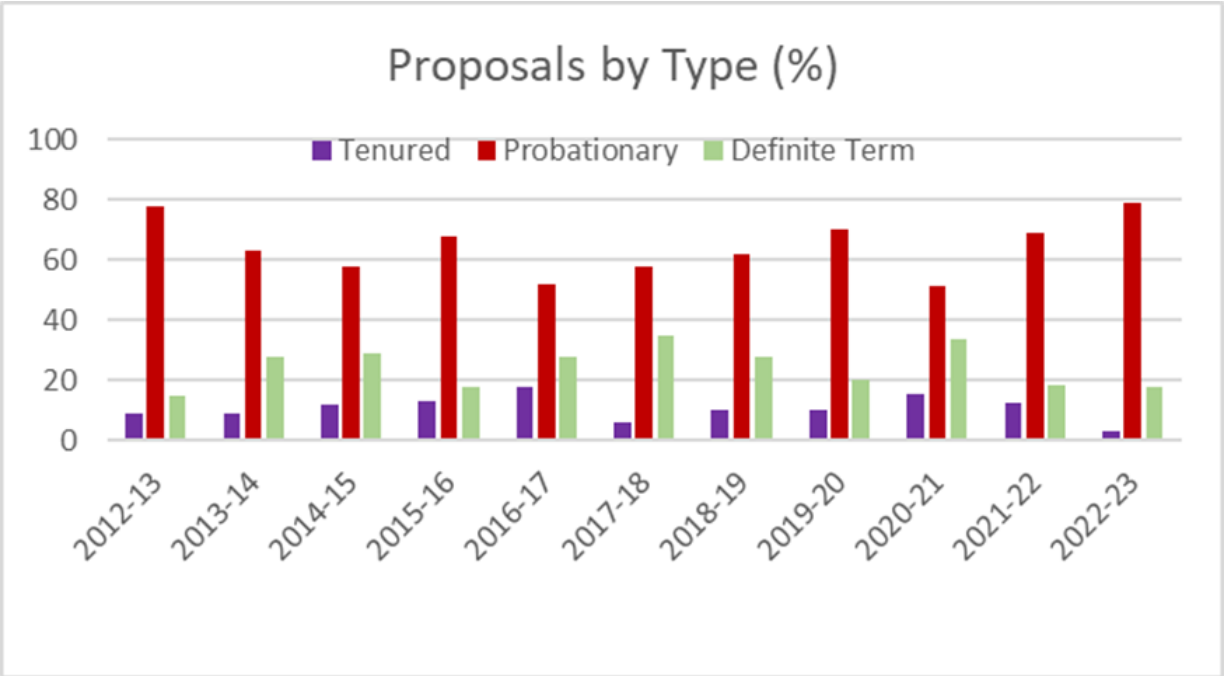Brian Dixon (until May 2025)
Shaun Frape (until May 2025)

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Return to Agenda

Summary of Proposals for Regular Faculty Appointments for Two Years or More
Reviewed by UARC
September 2022 – August 2023

Faculty	Files	Gender			Residency				Appointment Type										
									Tenure			Probationary				Definite Term			
		Female	Male	Unknown	Canadian	Permanent Resident	Foreign Academic	Unknown		F	M		F	M	U		F	M	U
ARTS	23	11	12	0	16	0	7	0	1	1	0	16	7	9	0	6	3	3	0
ENG	17	3	12	2	8	0	9	0	0	0	0	14	2	10	2	3	1	2	0
ENV	4	3	1	0	1	2	1	0	0	0	0	4	3	1	0	0	0	0	0
HEALTH	4	2	2	0	3	0	1	0	0	0	0	3	1	2	0	1	1	0	0
MATH	35	13	22	0	14	2	19	0	1	1	0	30	9	21	0	4	3	1	0
SCIENCE	8	3	5	0	5	1	2	0	1	0	1	5	2	3	0	2	1	1	0
TOTAL	91	35	54	2	47	5	39	0	3	2	1	72	24	46	2	16	9	7	0

Faculty	Professorial Rank0																Results			
	Lecturer				Assistant Professor1				Associate Professor			Full Professor					Offers	Accepted	Declined	Pending
		F	M	U		F	M	U		F	M		F	M						
ARTS	6	3	3	0	16	7	9	0	0	0	0	1	1	0			23	21	2	0
ENG	3	1	2	0	13	1	10	2	5	1	4	0	0	0			17	16	1	0
ENV	0	0	0	0	4	3	1	0	0	0	0	0	0	0			4	4	0	0
HEALTH	1	1	0	0	3	1	2	0	0	0	0	0	0	0			4	4	0	0
MATH	4	3	1	0	29	9	20	9	1	0	1	1	1	0			35	16	19	0
SCIENCE	2	1	1	0	5	2	3	0	1	0	1	0	0	0			8	6	2	0
TOTAL	16	9	7	0	70	23	45	2	3	1	2	2	2	0			91	67	24	0

Total Number of Proposals

Summary of Proposals (%)

■ Canadian/PR   ■ Foreign   ■ Unknown

Senate

5

Proposals by Type (%)

Total Proposals by Faculty

Senate

6

For Approval   **Open Session**

To: **Senate**

Sponsor/Presenter: Secretariat
Contact Information: secretariat@uwaterloo.ca

Date of Meeting: **June 10, 2024**

Agenda Item Identification: **17(a) Composition of the Dean of Mathematics Nominating Committee**

Motion:

On the recommendation of the Faculty of Mathematics Faculty Council, that Senate approve increasing the membership of the 2024 Nominating Committee for the Dean of Mathematics by one, to provide a total of seven (7) regular faculty members.

Summary:

The exception requested would provide sufficient faculty representatives on the nominating committee to allow for the at-large member, plus one faculty representative from the five departments/schools (applied mathematics, combinatorics and optimization, computer science, pure mathematics, statistics and actuarial science), and further to have a faculty representative drawn from either the Centre for Education in Mathematics and Computing or the Mathematics Undergraduate Group. The latter two units have each grown in recent years such that the overall size is comparable to the other departments/schools, and those units are composed almost entirely of teaching stream faculty which would help to ensure that constituency is represented on the nominating committee.

Senate has regularly approved similar exceptions to the policy on a case-by-case basis to facilitate department/school representation within the Faculties.

Governance Path:

Faculty of Mathematics Faculty Council – May 28, 2024

Senate – June 10, 2024

Jurisdictional Information:

Section 4.A of Policy 45 [reproduced below] sets out the composition of decanal search committees. For the Faculty of Mathematics, the policy as written specifies that there are to be a total of six regular faculty members, including at least one elected at-large.

Senate approval of exceptions to the committee composition is a longstanding practice with instances of said exceptions going back to at least 2006.

Excerpt from Policy 45 – The Dean of a Faculty

...

4. Appointment and Reappointment Procedures

A. Appointment of a Nominating Committee

When nominations for the Dean of a Faculty are required, as through notice of resignation, death, or the approaching end of a term, a nominating committee shall be formed by the Vice-President, Academic & Provost. The nominating committee shall normally be formed no earlier than 18 months and no later than one full calendar year prior to the end of the term of office of the incumbent.

The Committee Chair shall vote only to break a tie. The majority of the other voting members of the Committee shall be elected by and from the regular faculty members of the Faculty. The nominating committee shall consist of:

• The Vice-President, Academic & Provost, who shall chair the committee.

• Seven regular faculty members in Arts and Engineering, and six in the other Faculties. At least one committee member shall be elected at-large; the others are to be selected by a procedure approved by the Faculty Council and distributed to each regular faculty member. Where some of the members are to be elected by Department by and from the regular faculty members in the Department, those elections shall be conducted prior to the at-large Faculty-wide election. If both genders are not represented on the Committee as a result of departmental elections, then the at-large election shall be conducted so as to ensure that both genders are represented.[1]

• In the Faculty of Arts, one faculty member from and appointed by the Federated & Affiliated Colleges.

• One senior regular faculty member from outside the Faculty concerned, selected by the Vice-President, Academic & Provost in consultation with the President.

• One staff member elected by and from the regular staff of the Faculty, and one appointed by the Staff Association, normally from the Faculty concerned.

• One undergraduate student from the Faculty concerned, appointed by the Federation of Students, in consultation with the appropriate student society.

• One graduate student from the Faculty concerned, appointed by the Graduate Student Association, in consultation with the appropriate student society.

A reasonable gender balance should be maintained on nominating committees, whenever feasible.

...

[1] In the unlikely event that no candidate from the unrepresented gender is willing to stand for election as an at-large member, the Vice-President, Academic & Provost shall appoint a candidate from the unrepresented gender in that Faculty.