## COUNCIL OF THE FACULTY OF SCIENCE



#### NOTICE OF MEETING

September 10, 2024 3pm – 4:30pm via Zoom

#### AGENDA

- 1. Call to Order and Approval of Agenda
- 2. Chair's Remarks
- 3. Approval of May 14, 2024 Minutes
- 4. Business Arising
- 5. Inquiries and Communications
  > June 27, 2024
  > Cyclical Program Reviews (web link)
- 6. Dean's Remarks
- 7. Associate Dean and Head of Bethune College Remarks
- 8. Reports from Science Representatives on Senate Committees
- 9. Report from Student Caucus Representative
- 10. Reports from Standing Committees of Council
  - a) Executive Committee:
    - Ratification and Call for Nominations for Senate and Standing Committee of Council
    - > Vacancies report on the Standing Committees of FSc Council
  - **b)** Appeals Committee:
    - > Annual Report
  - c) Committee on Examinations and Academic Standards:
    - > Annual Report
  - d) Committee on Teaching & Learning:
    - > Annual Report
  - e) Graduate Curriculum Committee:
    - > Annual Report
  - f) Petitions Committee:
    - > Annual Report
  - g) Research and Awards Committee:
    - > Annual Report
  - h) Senate T & P Review Committee:
    - > Annual Report

- i) Undergraduate Curriculum Committee:
  - > Annual Report
  - > Consent agenda items
- 11. Other Business
  - a) Science Recruitment Process Lisa Philipps, Provost & Vice-President Academic
  - **b)** Faculties of the Future Action Plan Lisa Philipps, Provost & Vice-President Academic

## COUNCIL OF THE FACULTY OF SCIENCE



science

#### MINUTES

May 14, 2024 3pm – 4:30pm via Zoom

#### **MINUTES**

1. Call to Order and Approval of Agenda Chair of Council, N. Kovinich, called the meeting to order and a motion was moved, seconded and carried to approve the Agenda.

#### 2. Chair's Remarks

N. Kovinich warmly welcomed the council to their final meeting of the academic year. He announced that his tenure as Chair had concluded, with Muhammad Yousaf set to assume the role for the 2024-25 academic year. N Kovinich expressed his gratitude to Tom Kirchner, Tianna McFarlane, Eva Hughes, and the Executive Committee members for their steadfast support throughout his term.

#### **3.** Approval of April 9, 2024 Minutes A motion was moved, seconded and carried to approve the Minutes.

- 4. Business Arising There was none.
- 5. Inquiries and Communications > April 25, 2024 Senate Synopsis

#### 6. Dean's Remarks

Dean Wang opened the meeting by welcoming the council and acknowledging the high turnout. He extended his gratitude to Nik Kovinich for his dedicated service as Chair of Council and emphasized how the faculty's collegial culture has contributed to the effectiveness and efficiency of Faculty Council meetings. He also recognized Muhammad Yousaf for their commendable leadership as Vice-Chair.

Dean Wang previewed the upcoming Annual Report, which will be released in the next few weeks, sharing some key highlights:

- 1. As of March 16, total enrollment stood at 4,959, marking a historic milestone.
- 2. The faculty raised \$3.92 million in donations.
- 3. Our year-end financial balance resulted in an improvement of \$2.2 million toward the budgeted in-year deficit.

4. Annual research funding reached \$20 million.

He welcomed back all CUPE 3903 members and expressed his appreciation for the dedication and commitment of all CUPE members and faculty members to students during the remediation period. Addressing safety concerns, Dean Wang urged the council to remain alert and vigilant.

He closed by wishing council a great summer.

#### 7. Associate Dean & Head of Bethune College Remarks a) H. Kouyoumdjian:

He shared a recording from the AI workshop co-hosted by Bethune College and the Faculty of Science Committee on Teaching and Learning.

He shared exciting news that the Markham Campus occupancy is tentatively early June.

#### b) Associate Dean, Faculty Affairs

#### G. Audette:

He noted the committee vacancies and encouraged members to help fill memberships.

He thanked Faculty for their support throughout the remediation period and gave an important reminder than the final deadline to upload grades to GAM is May 31 2024 at 4pm.

#### c) Associate Dean, Research & Partnerships

#### V. Saridakis:

She reminded NSERC Discovery grant recipients that renewals need to be submitted by November 1, and that they may still eligible for the one time extension due to COVID 19.

#### d) Associate Dean, Students

#### M. Scheid:

He reminded Faculty to ensure they submit student grades by May 31 2024.

#### e) Head of Bethune College

#### J. Amanatides:

He shared that Academic Orientation for Science students is scheduled for August 28.

Paula Wilson will be returning from Sabbatical on July 1 and will continue as Head of Bethune.

#### 8. Reports from Science Representatives on Senate Committees There was none.

#### 9. Report from Student Caucus Representative

Natalie Moussa thanked Nik Kovinich and the council for their help this academic year and asked faculty to continue providing leadership and support to students during the remediation period.

#### **10.Reports from Standing Committees of Council**

#### a) Executive Committee:

- > Vacancies report on the Standing Committees of FSc Council N. Kovinich noted the vacancies that remain.
- b) Undergraduate Curriculum Committee
- > Consent agenda items

#### **11. Other Business**

- a) Changes to Faculty Council Rules of Council Eva Hughes A motion was moved, seconded and carried to approve the changes.
- b) Decanal Renewal Process Lisa Philipps, Provost & Vice-President Academic & Jessica Wyman, Senior Academic Policy & Recruitment Officer Lisa Philipps & Jessica Wyman send their regrets and a memo indicating that Dean Rui Wang has elected not to pursue renewal for a second term as Dean in the Faculty of Science. They look forward to joining us on September 10 to provide an update on the hiring process for the next Dean



The Senate of York University

## **Meeting Synopsis**

### The 708th Meeting of Senate Held on Thursday, 27 June 2024, via Zoom

### Remarks

The Chair, Poonam Puri, welcomed Senators to the 708<sup>th</sup> meeting of Senate.

This being the final meeting for Senators Andrea Davis and Kim Michasiw, they were acknowledged for their distinguished records of service and thanked for their leadership and contributions to Senate-level governance.

The President provided a year-end report that reflected on progress made in 2023-2024 on each of the priorities of the *2020-2025 University Academic Plan* and the forward-looking focus on addressing the budget deficit through revenue generation and cost savings in each of the next three years.

## **Approvals**

On the recommendation of its Academic Standards, Curriculum and Pedagogy Committee, Senate approved:

- the establishment of the Senate Academic Conduct Policy and recission of the Senate Policy on Academic Honesty, effective FW 2024-2025.
- the extension of the waiver of required attending physician statements to support requests for petitions, appeals and deferred standing for an additional six months beyond the current waiver, from 30 June 2024 to 31 December 2024.
- the recission of the Senate Policy on Pass / Fail Grades and the Senate Credit / No Credit regulation, and establishment of a new, single Senate Policy on Pass/Fail and Credit / No Credit Grades, effective F2025.

A proposed Senate Attending Physician's Statement Policy was referred back to ASCP for further review following the input of Senators.

On recommendation of the Executive Committee, Senate elected the following to serve on Senate committees / sub-committees:

- Theodore Peridis, Professor, Schulich School of Business and Othon Alexandrakis, Professor, Department of Anthropology, LAPS to the Joint Sub-committee on Quality Assurance
- Patricia Lakin-Thomas, Professor, Department of Biology, Science, Mina Singh, Professor, School of Nursing, Health and Paula Wilson, Professor, Department of Biology, Science to the Senate Tenure & Promotions Committee

On the recommendation of its Academic Policy, Planning & Research Committee, Senate approved:

- the chartering of the following Organized Research Units (ORU) for a five-year period, commencing 1 July 2024:
  - Centre for Feminist Research
  - Israel and Golda Koschitzky Centre for Jewish Studies
  - Global Labour Research Centre
  - Institute for Research on Digital Literacies
  - Mad Studies Hub.
- revisions to the Senate Policy on Research Involving Human Participants, effective 1 July 2024.

### **Facilitated Discussions**

Under the auspices of the *Academic Policy, Planning and Research Committee,* Senate provided reflections and input on a draft planning committee structure for the School of Medicine. Senate urged that the proposed *Academic Planning Committee* for the School be formally located under the authority and oversight of Senate consistent with the powers specifically given to Senate over academic policy.

In response to a request from Senators, a discussion was held on the impact of police presence on campus in response to non-violent activity by community members on the University's academic mission, with a focus on any issues of academic policy that need further action through Senate Executive. The dialogue expressed concerns about the intimidating and unprecedented nature of the police presence, particularly its negative impact on academic integrity and the safety of visible minorities; students feeling unsafe with the militarized police presence; the suppression of self-expression and the very quick turn to use the City police. Calls were made for a comprehensive review of the decision-making process behind inviting the police on campus and for the University to rely on security staff with EDI training for managing future campus events.

### **Committee Information Items**

#### Academic Standards, Curriculum and Pedagogy (ASCP)

ASCP reported on:

- progress on its 2023-2024 priorities.
- implementation of a requirement of a York University photo identification or government issued passport for entrance to write an S1 term examination.
- expression of thanks to colleagues ending terms on the Committee: Kim Michasiw (Chair), Hannah Wong, Pam Millette, Michael Ben, and Abhi Pathak.
- Minor modifications to degree requirements in LA&PS and Schulich, effective FW 2024, and conversion of admission grade requirements by Lassonde and LA&PS to align with the pending new University grading scheme.

## York University Senate

#### **Executive Committee**

Senate Executive reported on:

- results of the May 2024 elections to Senate committees.
- status of its consideration of a motion submitted by Senators to establish a Senate Finance and Budget Advisory Committee.
- approval of revisions to the Rules and Procedures for the Faculty Councils of Environmental and Urban Change and the Faculty of Education.
- addition of candidates to the pool of prospective Honorary Degree recipients.
- approval of individuals nominated by Faculty Councils and other bodies for membership on Senate committees.
- the 2023-24 Senator and Senate Committee Surveys currently being conducted.
- plans for the delivery of Senate meetings for the 2024-25.
- Senate attendance for the 2023-24.
- Senate committees' progress reports on 2023-2024 committee priorities.
- delegation of Senate Authority during the summer in accordance with Senate Rules.
- appreciation to members of Senate Executive whose terms are concluding: Marie-Hélène Budworth (Senator on the Board of Governors), Alison Macpherson (Health), Angela Norwood (AMPD) and Rose Wang (student).

#### Academic Policy, Planning and Research (APPRC)

APPRC's information items included the following:

- an update on the impact of the Summer and Fall 2024 enrolment and tuition revenue on the 2024-2027 University budget.
- a 2023-2024 UAP progress report.
- the report of its Sub-committee on Organized Research Units.
- planning for the Markham Campus, including 2024-2025 admissions data for undergraduate and graduate students.
- Receipt of the 2022-2023 annual reports of three sub-committees supported by the Office of the Vice-President Research and Innovation: Human Participants Review Committee (HPRC), the Animal Care Committee, and the York University BioSafety Committee.

Thanks to its members whose terms are concluding: Burkard Eberlein, Gabriel Levine, Phillip Lynch, Hale Mahon, Michael Moir, Poonam Puri, William van Wijngaarden and Andrea Davis.

## York University Senate

#### Awards

Senators joined the Committee in congratulating the recipients of the 2024 *President's University-Wide Teaching Awards*, the *2024 Honorific Professorship*, and the prestigious awards for graduating students.

## Academic Policy, Planning & Research (APPRC) and Academic Standards, Curriculum & Pedagogy (ASCP)

APPRC and ASCP conveyed a joint report in which the March and May 2024 reports from the Joint Sub-Committee on Quality Assurance were transmitted to Senate.

### **Additional Information about this Meeting**

Please refer to the full Senate <u>agenda</u> of **27 June 2024** for details about the items reported.

Senate's next meeting will be held at **3:00 pm on Thursday, 26 September 2024.** 

# 2024-2025 FSc Report on vacancies for Senate and FSc Standing Committees of Council



#### **RATIFICATION OF NOMINATIONS**

#### Academic Policy and Planning Committee:

W. van Wijngaarden, Department of Physics & Astronomy (term 2024-2025)

#### ASCP (Academic Standards, Curriculum and Pedagogy Committee):

J. Elwick, Department of Science, Technology & Society (2024 - 2027)

#### Committee on Equity, Diversity & Inclusion:

R. Marushia, Department of Science, Technology & Society (2024 – 2027)

B. Schwarz, Department of Biology (2024-2027)

#### Committee on Examinations and Academic Standards:

D. Jackson, Department of Chemistry (term 2024-2025)

A. Hilliker, Department of Biology (term 2024-2027)

#### **Committee on Teaching & Learning:**

C. Rozins, Department of Science, Technology & Society (2024 - 2027)

D. Wilson, Department of Chemistry (term 2024-2025)

L. Adriana Puentes Jacome, Department of Biology (2024-2027)

#### **Executive Committee:**

E. Hyde, Department of Physics & Astronomy (term 2024-2025)

C. Caputo, Department of Chemistry (term 2024-2027)

#### Senate Executive:

T. Kelly, Department of Biology (2024 - 2027)

#### Senate Tenure & Promotion:

P. Wilson, Bethune College (2024 – 2027)

#### **Tenure & Promotion Committee:**

- C. Bergevin, Department of Physics & Astronomy (term 2024-2025) M. George, Department of Physics & Astronomy (term 2024-2025)
- S. Krylov, Department of Chemistry (term 2024-2027)
- Y. Goa, Department of Mathematics & Statistics (2024-2027)

#### Undergraduate Curriculum Committee:

O. Mermut, Department of Physics & Astronomy (term 2024-2025)

#### Graduate Student Representatives for 2023-2024 Faculty Council:

Taylor Cosby Coral Hillel Gaelle Nsamba Luabeya Sihat Salam Aysa Tajeri Joe Tran

Committee	2024 FSc Report on vacancies for Se Rules of Faculty Council - membership	Meeting time / Membership	т,	erm
Committee	Rules of Faculty Council - Membership	meeting time / membership	From	То
	According to the York University Secretariat based on the Senate Rules and Procedures governing the size and composition of Senate, the Faculty of Science shall have twelves members, including a minimum of two Chairs. According to The Rules of Council (Science), Faculty representation shall include the Director of Natural Science, three Dean, Ex officio	As per Senate website	Designated	
	Member at large	G. Audette	Designated	
	Member at large	E. Hamm	2024	2027
Senate	Member at large	EJ Janse van Rensburg, Mathematics & Statistics	2022	2025
	Member at large Member at large	T. Kelly J. Elwick, Science, Technology & Society	2024 2022	2027 2025
	Member at large	T. Kubiseski, Biology	2023	2026
	Member at large	VACANT	2024	2027
	Department Chair	T. Kirchner, Department of Science, Physics & Astronomy	2024	2027
	Department Chair Department Chair	J. van Wijngaarden, Department of Chemistry M. Haslam, Department of Mathematics & Statistics	2024 2023	2027 2026
	Director of NATS	R. Metcalfe, Dvision of Natural Science	Designated	2020
	Student representative	Yuna (Aria) Hwang	2023	2025
	Student representative	Shon Lazarev	2023	2025
Faculty Council	Chair of Council	M. Yousaf	2024	2025
	Vice-Chair of Council	VACANT	2024	2025
Staff Representatives		W. Booth	2024	2025
		D. Hossain	2024	2025
		M. Xu	2024	2025
FSc Reps on Senate Committees				2020
enate Executive	1 member from FSc	T. Kelly	2024	2027
cademic Policy, Planning and Research Committee		11. INOITY	2024	2021
APPRC)	1 member from FSc	G. Monette	2023	2026
SCP (Academic Standards, Curriculum and Pedagogy				
committee)	1 member from FSc	J. Elwick	2024	2027
enate Tenure & Promotion ub-Committee on Honorary Degrees & Ceremonials	1 member from FSc 1 member from FSc	P. Wilson VACANT	2024	2027
ab-committee on nonorary begrees a ceremoniais	The Executive Committee shall be chaired by the Chair of Council and	Executive Committee normally meets the first Tuesday of each month (September to May) from	2024	2021
	Society/Natural Science, the Dean of the Faculty of Science (ex officio), one student member of Council, and one of the staff members elected to Council.			
Executive Committee	Chair of Council	M. Yousaf	2024	2025
	Vice-Chair of Council Dean, Ex officio	VACANT R. Wang	2024 Designated	2025
	Asst. Dean - SEM & SEP	E. Hughes	Designated	
	Staff representative	W. Booth	2024	2025
	Undergraduate Student Rep	VACANT	2024	2025
	Biology	M. Vicari	2023	2026
	Chemistry Math & Stats	C. Caputo E. J Janse Van Rensburg	2024 2022	2027 2025
	Physics & Astronomy	E. Hyde	2022	2025
	Science, Technology & Society	VACANT	2024	2025
	The <u>Academic Policy and Planning Committee</u> shall include the Dean or designate ( <i>ex officio</i> ), the Master of Norman Bethune College and one member elected from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy, and Science, Technology & Society/Natural Science, one student member of Council, and one of the staff members elected to Council.	APPC will normally meet the last Thursday of each month (September to April) from 9:00 am - 10:30 am		
APPC	Associate Dean, Faculty Affairs, Ex officio	G. Audette	Designated	
	Head of Bethune College	P. Wilson	Designated	2004
	Undergraduate Student Representative	Seerat Choudhry	2023	2024 2025
	Elected staff representative	M. Xu R. Schott	2024 2023	2025
	Biology Chemistry	R. Fournier	2023	2026
	Math & Stats	P. Szeptycki	2023	2020
	Physics & Astronomy	W. van Wijngaarden	2024	2025
	Science, Technology & Society	S. Domenikos	2022	2025
	The <u>Curriculum Committee</u> shall include the Dean and an Associate Dean (ex officio), the Chair or nominee from each teaching Division or Department, three members elected by Council and two student members of Council.	The Curriculum Committee will normally meet every last Tuesday of each month (September to April) from 9:00 - 10:30 am	2022	2026
	Member at Large Member at Large	VACANT VACANT	2023	2026
	Dean, Ex officio	R. Wang	Designated	
Undergraduate Curriculum Committee	Assoc Dean, Curriculum & Pedagogy, Ex officio	H. Kouyoumdjian	Designated	
·····	Undergraduate Student Rep	VACANT	2024	2025
	Undergraduate Student Rep	VACANT J. Atallah	2024 2022	2025 2025
		o. radian	2022	
	Biology Chemistry	D. Jackson	2022	2025
	Chemistry Math & Stats	D. Jackson M.W. Wong	2022 2023	2025 2026
	Chemistry Math & Stats Physics & Astronomy	M.W. Wong O. Mermut	2023 2024	2026 2025
	Chemistry Math & Stats	M.W. Wong	2023	2026

2023-2024 FSc Report on vacancies for Senate and FSc Standing Committees					
Committee	Rules of Faculty Council - membership	Meeting time / Membership	Те		
	The <u>Committee on Examinations and Academic Standards</u> shall consist of an Associate Dean ( <i>ex officio</i> ), five members elected by Council from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy and Science, Technology & Society/Natural Science, and one	CEAS will normally meet every alternate Wed / Thurs from 1:00 - 3:00 pm year round.	From	То	
	student member of Council.				
CEAS	In addition to the above membership of the committee, Council shall elect an alternate member from each of the Departments specified above. The alternate member shall be the person polling the next highest number of votes to those elected to the committee from each Department. The alternate for the student member will be selected by the Science Student				
	Caucus from one of its Members at Large. An alternate can only vote in the event that first elected members are not in attendance. Associate Dean - Students, Ex officio Undergraduate Student Rep Undergraduate Student Rep Biology	M. Scheid VACANT VACANT A. Hillike / ALT. VACANT	Designated 2024 2024 2023/2024	2025 2025 2026/2027	
	Chemistry Math & Stats Physics & Astronomy Science, Technology & Society	P. Johnson & D. Jackson / ALT T. Mirkovic VACANT, N.Purzitsky / ALT, Y. Gao C. Storry & F. Hyde / ALT, VACANT J. Webb / ALT. S. Domenikos	2023/2023 2021/2022 2023/2023 2023/2023	2026/2026 2025/2025 2025/2025 2026/2026	
	The <u>Petitions Committee</u> for the purpose of hearing student petitions shall consist of an Associate Dean ( <i>ex officio</i> ), six members of Council, and two student members of Council. The Committee may divide the workload by splitting the Committee membership into two panels of four people each. A quorum shall consist of either (a) two faculty voting faculty members and one student member or (b) three voting faculty members. Associate Dean, Ex officio	Each panel meets once a month on Wednesday or Thursday from 2:30 pm - 4:00 pm M. Scheid	Designated		
Petitions	Undergraduate Student Rep Undergraduate Student Rep Member at Large	VACANT VACANT S. Morin	2024 2024 2023	2025 2025 2026	
	Biology Chemistry Physics & Astronomy Math & Stats	C. Jang R. Fournier S. Jerzak D. Liana	2022 2022 2023 2022	2025 2025 2025 2025	
	Science, Technology & Society Member at Large	J. Rogerson A. Mills	2022 2022 2023	2025 2025 2026	
	The <u>Committee on Tenure and Promotions</u> shall consist of one currently tenured member from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy and Science, Technology & Society/Natural Science elected by Council, and one student member of Council. No member of the Committee shall be a member of another Tenure and Promotions Committee at any time during their tenure on this <u>committee</u> . In addition to the above membership of the committee, Council shall elect an alternate member from each of the Units mandated above. The	SRC T & P Committee will normally meet the last Friday of each month (September to May) from 9:00 am - 11:00 am in LUM 305B			
SRC T & P Committee	alternate member shall be the person polling the next highest number of votes to those elected to the committee from each Department. The alternate for the student member shall be selected by the Science Student Caucus from one of its Members-at-Large on an annual basis. An alternate can only vote in the event that existing members are not in attendance.				
	Associate Dean - Faculty, Ex officio Undergraduate Student Biology Chemistry Physics & Astronomy	G. Audette VACANT M. Baylield/ ALT. VACANT A. Oreilana' ALT. S. Krylov C. Bergevin / ALT. M. George	Designated 2023 2023/2023 2023/2024 2024/2024	2024 2026/2026 2026/2027 2025/2025	
	Math & Stats	Y.Gao / ALT Jianhong Wu	2024/2022	2027/2025	
	Science, Technology & Society Currently, the Committee on Teaching and Learning shall consist of a minimum of two Faculty members from each department, the Associate Dean – Students, one Librarian, one staff member, one undergraduate student, and two graduate students, in addition to other members invited as provided for by the Rules. Graduate students and staff nominees will indicate their interest in serving on the committee in writing to the committee, who will then approve by majority vote.	E. Harm / ALT. D. Lungu CoTL normally meets every third Thursday of each month (September to May) from 10:00 am - 11:30 am	2023	2026	
	Associate Dean - Students, Ex officio Assodiate Dean - Curriculum & Pedagogy	M. Scheid H. Kouyoumdjian	Designated Designated	0005	
CoTL	Graduate Student Representative Graduate Student Representative Undergraduate Student Representative Stacie Science Library, Designated	Taylor Cosby           Sihat Salam           VACANT           VACANT	2024 2024 2024 Designated	2025 2025 2025	
	IT Representative Teaching Commons Rep	V. Gotcheva Y. Su	Designated Designated		
	Staff representative, Elected Biology Biology	D. Hossain L. Adriana Puentes Jacome J. Atallah	2024 2023 2023	2025 2026 2026	
	Chemistry Chemistry Physics & Astronomy	D. Vilison D. Wilson N. Blinov	2023 2024 2023	2026 2025 2025	
	Physics & Astronomy Math & Stats Math & Stats	C. Boukaré J. Cao VACANT	2023 2022 2023	2025 2025 2026	
	Science, Technology & Society The <u>Committee on Research and Awards</u> shall consist of one member elected by Council from each of Biology, Chemistry, Mathematics and Statistics, Science, Technology & Society/Natural Science, and Physics and Astronomy, one student member of Council and an Associate Dean (ex officio).	C. Rozins The Research & Awards Committee will meet when grants and awards need to be adjudicated.	2024	2027	
Committee on Research & Awards	Associate Dean - Research & Partnerships, ex officio Undergraduate Student Representative Graduate Student	V. Saridakis VACANT Aysa Tajeri	Designated 2024 2024	2025 2025	
	Biology Chemistry Physics & Astronomy Math & Stats	D. Golemi-Kotra S. Morin R. Kannan H. Zhu	2023 2022 2023 2023	2026 2025 2025 2026	
	Science, Technology & Society The Appeal Committee for the purpose of hearing student appeals shall consist of four elected faculty members from Science units, an Associate Dean (ex officio) and two student members of Council. A quorum shall consist of einter (a) two faculty members and one student member or (b) three faculty members.	H. Mialet Meeting is held once a month and times are polled by the Committee Secretary.	2023	2026	
Appeals Committee	Associate Dean - Faculty, ex officio Undergraduate Student Representative Undergraduate Student Representative Members et Jose	G. Audette VACANT VACANT VACANT	Designated 2024 2024 2022	2025 2025 2026	
	Member at Large           Biology           Chemistry           Physics & Astronomy           Wath & Original	VACANT L Donaldson L Hébert S. Tulin M.M. Marca	2023 2023 2023 2023 2023	2026 2026 2026 2025	
	Math & Stats Science, Technology & Society	M.W. Wong D. Monaldi	2023 2023	2026 2026	

2023-2024 FSc Report on vacancies for Senate and FSc Standing Committees					
Committee	Rules of Faculty Council - membership	Meeting time / Membership		erm	
Graduate Curriculum Committee	To provide broad review and commendation to Council via the Academic Policy and Planning Committee of all proposals received from Graduate Prognams with respect to: New Course Proposals, Monro Changes to Program/Graduate Diploma Academic Requirements, Major Modifications to Program/Graduate Diploma Academic Requirements, Wew Graduate Fields, New Graduate Education Committee shall consist of: Academic Requirements, New Graduate Fields, New Graduate Diploma Academic Requirements, New Graduate Fields, New Graduate Diploma, New Graduate Education Committee shall consist of: - Associate Dean – Research & Graduate Education (ex officio) - Graduate Education Committee shall consist of: - Associate Dean – Research & Graduate Program in the Faculty of Science - one graduate student member from any Graduate Program within the Faculty of Science - one full-time faculty member from the Faculty of Health or Lassonde School of Engineering who is sponiented to teach in any FSc graduate program - A member at large with knowledge of graduate programming, and experience with curriculum approvals at the Faculty-level. The Chair of the Committee is selected by the voting members of the Committee for a one-year term.	Meeting is held based on availability.	From	То	
	Associate Dean – Associate Dean Students (ex officio) Biology Chemistry Physics & Astronomy Math & Stats Science, Technology & Society Member from Faculty of Health OR Lassonde Member at Large Graduate student	M. Scheid J. Paluzzi R. Hili A. Muzzin P. Ingram VACANT VACANT D. Golemi-Kotra Jo Germi-Kotra Jo Germa	Designated 2023 2023 2023 2023 2023 2023 2023 202	2026 2026 2026 2026 2026 2026 2026 2026	
Committee on Equity, Diversity & Inclusion	The purpose of the Committee on Equity, Diversity & Inclusivity is to provide broad review and leadership to Council on matters of Equity, Diversity and Inclusivity issues with respect to: • Tenure and Promotions • Hring and Retention of members form EDI groups • Approaches to addressing gender bias in the workplace • Research engaging equity recognized groups • Workload and service contributions of EDI members • EDI experiences in Teaching and Learning The Equity, Diversity and Inclusivity committee shall consist of: • Associate Dean, Faculty Affairs (ex officio) • One primary and one alternate member from each of Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy and Science, Technology & Society. • Two graduate students or postdoctoral fellow/visitors (one primary and one alternate) from any graduate student. • Associate Dean, Research & Partnerships (ex officio) • Associate Dean - Faculty, ex officio Associate Dean - Faculty, ex officio Chemistry, Mathematics & Statistics, Physics & Astronomy and Science, Technology & Society. • Two graduate student student • Associate Dean - Faculty, ex officio Associate Dean - Faculty, ex officio Associate Dean - Faculty, ex officio Lindergraduate Student Representative Graduate Student Representative	Meeting is held the last Wednesday of every month. G. Audette V. Sardakis VACANT Coral Hilel	Designated Designated 2024 2024	2025 2025	
	Math & Stats	Gaelle Nsamba Luabeya B. Schwarz C. Young P. Scholz A. Woldegerima ALT A. Lumley R. Marushia	2024 2024 2023 2023 2022 2022 2024	2025 2027 2026 2026 2025 2025 2027	

## 2024-2025 Science Appeals Commitee Report to Faculty of Science Council



Petition Type	Reason	GRANTED	DISMISSED	TOTAL
	Enrol In Course(s) After The			
Course Add	Faculty Deadline			
	Drop Course(s) After Faculty			
Course Drop	Deadline	4	14	18
	Partially granted with W	1	0	1
Credit				
Departmental/Program	Advanced Standing: Course			
me Waiver	Substitute			
	Advanced Standing: Course			
	Waiver			
	Advanced Standing: Course			
	Transfer			
	Course Substitution for Major			
	or Minor Req. (s)	1	1	2
	Other			
	Waiver Of Degree Credit			
	Exclusion Legislation	0	2	2
	Waiver with replacement	0	1	1
	Take courses out of sequence -	-		
	Schulich			
	Promotion without satisfying			
	year requirements - Schulich			
	Reduced course load -			
	Schulich			
Exemptions	Degree Exemption(s)			
	Deferred Standing, extension			
Extension	of deferred standing	1	1	2
	Course extension			
	Program extension			
Grade Reappraisal	Grade Reappraisal	0	1	1
Leave	Leave of Absence			
	LOA Medical/compassionate			

## 2024-2025 Science Committee on Examinations and Academic Standards Report to Faculty of Science Council



FACULTY COUNTIL ON ACADEMIC HO	NESTY JULY 2023 - JULY 2024
Year Level:	
1st Year Level	76
2nd Year Level	52
3rd Year Level	51
4th Year Level	35
TOTAL	214
	These numbers will not match
	with the year level or decision
	level because some students
	has multiple charges eg Cheating
Policy Sections:	and AA
CHEATING	115
UNAUTHORIZED Collaboration	37
AIDING AND ABETTING	18
PLAGIARISM	62
FALSIFICATION	11
CHEATING and PLAGIARISM	20
Cheating and AA	5
Impersonation	6
TOTAL	274
Decision Level:	
HEARING	59
PENALTY HEARING	33
RATIFICATION	122
Dismissed	70
TOTAL	284

To: Faculty of Science Council From: FSE Committee on Teaching and Learning (CoTL) Date: August 2 2024 Re: Annual Report for 2023-2024

Dear Council,

CoTL successfully adjudicated a number of new Leadership Awards this year, in addition to promoting and sharing evidence-based teaching and learning practices through events and reading groups. CoTL met virtually 9 times to discuss CoTL business and adjudicate the FSc teaching awards. We would like to thank S. Siyakatshana for administrative support, as well as our outgoing committee members for their service.

- 1. **Membership:** The membership\* consisted of the following.
  - M. Scheid, Associate Dean Students, Designated
  - H. Kouyoumdjian, Associate Dean Curriculum & Pedagogy, Designated
  - V. Gotcheva, ITC Director, Office of the Dean, Designated

Y. Su, Teaching Commons Representative, Designated (Sabbatical as of Dec. 2023)

Kirti Vaswani, Undergraduate Student Representative, (term until 2024)

- M. Wang, Stacie Science Library, Designated
- J. Atallah, Department of Biology, (term until 2026)
- VACANT, Department of Biology, (term until 2026)
- T. Mirkovic, Department of Chemistry, (term until 2026)
- T. Zeng, Department of Chemistry, (term until 2025)
- N. Blinov, Department of Physics & Astronomy, (term until 2024)
- C. Boukaré, Department of Physics & Astronomy, (term until 2024)
- J. Cao, Department of Mathematics & Statistics, (term until 2025)
- A. McEachern, Department of Mathematics & Statistics, (term until 2026)
- R. Marushia, Department of Science, Technology and Society (term until 2025)
- D. Hossain, Staff Representative (term until 2024)
- J. MacPherson, Graduate Student Representative (term until 2024)

Aysa Tajeri, Graduate Student Representative (term until 2024)

- A. Nahornick, Educational Development Specialist, (term until 2024)
- T. Kelly, Pedagogical Innovation Chair, (term until 2024)

Chair: R. Marushia

Secretary: S. Siyakatshana

Each meeting was conducted under quorum and members were active in all discussions and initiatives.

2. **Awards:** CoTL administered both the Excellence in Teaching Awards and the new Excellence in Educational Leadership Awards in the Fall based on completed packages. CoTL selected the following recipients for the Awards.

#### **Excellence in Teaching Awards:**

- a) Teaching Assistants
  - i. Richard Jarrell Excellence in Teaching: Amanvir Virdi (Biology)
- b) Faculty
  - i. Contract Stream: Dr. Charlotte De Araujo (Biology)
  - ii. Junior Tenure Stream: Dr. Stephanie Domenikos (Division of Natural Science, Science, Technology & Society)
  - iii. Senior Tenure Stream: no nominees

#### Excellence in Educational Leadership Awards

- a) Graduate Level
  - i. Yohana Solomon (Mathematics & Statistics)
  - ii. Laura Keene (Mathematics & Statistics)
- b) Faculty
  - i. Dr. Amenda Chow (Mathematics & Statistics)
  - ii. Dr. Vera Pavri (Science, Technology & Society)
- 3. **Speaker Series and Events:** The CUPE strike in Winter 2024 impacted CoTL's ability to offer events for much of the Winter term. However, CoTL hosted or partnered with others in the FSC to provide several Teaching and Learning Events, including:
  - a) Dr. Andrew Skelton, York University: "Empowering Educators: Strategies for Enhancing Mathematical Literacy among Students." Online, 2:30 3:30 pm , Sept. 11, 2023.
  - b) Stephanie Quail, York University Libraries: "Exploring Open Education in the Sciences." Online, 2:00 – 4:00 pm, Sept. 28, 2023.
  - c) Dr. Marcel Pinheiro, University of Waterloo: "Developing diverse study skills in our students: Reflecting on changes." Online, 12:00 1:00 pm, Nov. 29, 2023.
  - d) Jennifer Peter, Western University: "Courage in the time of Alt(ernative) Grading: Successes and failures in specs grading, flexibility, and other strange stories." Online, 12:00 – 1:00 pm, Feb. 21, 2024.
  - e) Robin Sutherland Harris and Angela Clark, York University: "GenAI: Friend or Foe?" Hybrid, in cooperation with the York University Teaching Commons and Bethune College. 12:00 – 2:00 pm, April 15, 2024.
  - f) Imtiaz Damji, York Region District School Board: "Understanding Math Pre-Requisites for Science Programs at York University." <u>Upcoming</u> – Online, 10:30 – 11:30 am, August 27, 2024.
- 4. Hosting the EdSci Book Club: CoTL partnered with Tamara Kelly (PICSE) to host monthly reading groups. The Book Club read *Grading for Growth: A Guide to Alternative Grading Practices that Promote Authentic Learning and Student Engagement in Higher Education*, by David Clark and Robert Talbot. The Book Club had attendance from FSc members on all dates and stimulating, thoughtful conversations.
- 5. **Drop In Sessions:** CoTL members hosted teaching and learning-related drop-in sessions from 12:00 1:00 pm on Dec. 8, 2023, Feb. 29, 2024, and in cooperation with the Assoc.

Dean Curriculum & Pedagogy, an End of Term Connect session from 12:00 – 1:30 pm on May 2, 2024. These casual, online meetings were attended by various FSc faculty.

6. Various Cooperative Initiatives: CoTL also initiated, facilitated or cooperated with other leadership in Teaching and Learning on various initiatives, such as a future repository of all event recordings and slides open to FSc members, potential improvements to CoTL's Award policies, making Kritik available to FSc faculty after the unexpected cancelation of York's subscription, and planning events for Fall 2024, among others.

It has been an honour and a pleasure to lead the Committee on Teaching and Learning for the Faculty of Science.

Sincerely, R. Marushia FSc CoTL Chair

## **Graduate Curriculum Committee**



science

### Report to Council 2023 - 24

#### Mandate:

To provide broad review and commendation to Council via the Academic Policy and Planning Committee of all proposals received from Graduate Programs with respect to: New Course Proposals, Course Change Proposals, Minor Changes to Program/Graduate Diploma Academic Requirements, Major Modifications to Program/Graduate Diploma Academic Requirements, New Graduate Diplomas, New Graduate Degree Programs.

#### Committee composition:

P. Ingram (Chair), D. Golemi-Kotra, A. Muzzin, R. Hili, J.P. Paluzzi, Farnaz Mansouri-Noori (Graduate Student Representative), M. Scheid (ex-officio)

#### ITEM FOR INFORMATION

The major items that was considered by the Graduate Curriculum Committee was the Change to Existing Courses – Markham campus courses.

P. Ingram, Chair July 26, 2024

# 2024-2025 Science Petition Committee Report to Faculty of Science Council



#### Report to council 2023/24 - July 1, 2023 - June 30, 2024

Report to council 2023/24 - July 1 FACULTY-LEVEL PETITIONS BY					
Petition Type	Reason	DENIED	GRANTED	PARTIALLY GRANTED	Grand Total
Course Add	Enrol In Course(s) After The Faculty Deadline	DENIED			0
Course Drop	Drop Course(s) After Faculty Deadline	54	37	38	129
Credit		54	57	50	0
Departmental/Programme Waiver	Advanced Standing: Course Substitute				0
Departmental/Programme waiver					
	Advanced Standing: Course Waiver				0
	Advanced Standing: Course Transfer Course Substitution for Major or Minor Req. (s)				0
	Other Waiver Of Degree Credit Exclusion Legislation				0
	Waiver with replacement				0
	Take courses out of sequence - Schulich Promotion without satisfying year requirements - Schulich				0
	Reduced course load - Schulich				0
Exemptions		1			1
Extension	Degree Exemption(s) Deferred Standing, extension of deferred standing	8		3	172
	Course extension				0
	Program extension				0
Grade Reappraisal	Grade Reappraisal	2			2
Leave	Leave of Absence				0
	LOA Medical/compassionate				0
	LOA No course available				0
	Maternity leave				0
					0
Letter of Permission	Credit For Course(s) Taken Elsewhere Without LOP				0
Other	Other	6		1	7
Overload	Course Overload	9	28		37
Readmission					0
Repeat	Repeat Failed Course				0
	Repeat Passed Course				0
Status	Change degree stream				0
	Change to full-time				0
	Change to part-time				0
	Reinstatement				0
	Withdrawal (con't w/o interupt)	11	11		22
	Study at a location other than York				0
Stop-out	Education only				0
Strike-related	FGS only				0
	Graduate Without Min. Req'd G.P.A.				0

# 2024-2025 Science Petition Committee Report to Faculty of Science Council



Request For Waiver Of Req. Withdrawal	6	4	1	11
Request For Waiver Of Req.Debarment				0
Upgrade G.P.A. In Attempt To Graduate				0
Waiver Of Degree Credit Exclusion				0
Waiver Of General Education				0
				0
				0
				0
Waiver Of Upper Level Course				0
				0
	07	241	12	381
	Request For Waiver Of Req.Debarment Upgrade G.P.A. In Attempt To Graduate Waiver Of Degree Credit Exclusion Legislation Waiver Of General Education Requirement Waiver Of Honours Standing Regulations Waiver Of In-Faculty Requirement Waiver Of Major Requirement(s)	Request For Waiver Of Req.Debarment         Upgrade G.P.A. In Attempt To Graduate         Waiver Of Degree Credit Exclusion         Legislation         Waiver Of General Education         Requirement         Waiver Of Honours Standing Regulations         Waiver Of In-Faculty Requirement         Waiver Of Major Requirement(s)         Waiver Of Upper Level Course         Requirements	Request For Waiver Of Req.Debarment         Upgrade G.P.A. In Attempt To Graduate         Waiver Of Degree Credit Exclusion         Legislation         Waiver Of General Education         Requirement         Waiver Of Honours Standing Regulations         Waiver Of In-Faculty Requirement         Waiver Of Major Requirement(s)         Waiver Of Upper Level Course         Requirements         Other	Request For Waiver Of Req.Debarment         Upgrade G.P.A. In Attempt To Graduate         Waiver Of Degree Credit Exclusion         Legislation         Waiver Of General Education         Requirement         Waiver Of Honours Standing Regulations         Waiver Of In-Faculty Requirement         Waiver Of Major Requirement(s)         Waiver Of Upper Level Course         Requirements         Other

## **RESEARCH & AWARDS COMMITTEE ANNUAL REPORT 2023 – 24**



#### Committee composition:

A. Angelucci (Chair & Graduate Student Representative), S. Morin, D. Golemi-Kotra, H. Zhu, H. Mialet, Sara Jazaeihaghighi, (Undergraduate Student Representative), H. Zhu, and V. Saridakis (AD – Research & Partnerships, Ex-officio)

#### Mandate:

It is the mandate of the Committee to make recommendations and provide advice to Council on policy matters related to research. In addition, the Committee's functions and responsibilities include:

- 1. To adjudicate the following Faculty competitions/programs and recommend awardees/recipients to the Dean:
  - Junior Faculty Fund and Minor Research Grant
  - Specific Research Grants (leave and non-leave)
  - York Research Chair
- 2. To ratify NSERC's Undergraduate Student Research Awards (USRA) and Dean's Undergraduate Research Awards (DURA) that are adjudicated at the departmental level;
- 3. To provide advice to the Dean or individual departments on faculty research related awards, particularly prestigious awards
- 4. To liaise with the Science Librarians on matters related to Library collections and services.

All committee members are required to complete the Unconscious Bias / EDI workshops offered by the Office of the Vice-President Equity, People & Culture. Additionally, all committee members are required to complete the training modules <u>Bias in Peer Review</u>, produced by the Tri-Agencies, and one of the <u>Sex and Gender</u> training modules, produced by CIHR. When required, sub-committees can be created or additional colleagues may be invited to participate in the activities of the committee to adjudicate awards and grants should too many regular committee members find themselves in conflict of interest and quorum cannot be reached.

#### Committee Work:

During the past academic year, the committee met regularly to adjudicate and formulate policies surrounding adjudication of awards. Here is a summary of the committees work during the 2023 – 24 academic year:

- the committee ranked and recommended to the Dean candidates for the 2023 YRC competition by evaluating files submitted to the Dean's office. The nomination files recommended were that of Eric Hessels YRC tier 1 and Sandra Rehan YRC tier 2.
- the committee evaluated the annual Faculty of Science research awards. The committee received two
  nomination files each for the FSc Early Career Researcher Award & FSc Graduate Mentorship Award, and one
  nomination file for the FSc Established Researcher Award. The awardees are:
  - o Elizabeth Clare Early Career Researcher Award
  - o Randy Lewis Established Researcher Award (acclaimed)
  - Iain Moyles Graduate Mentorship Award
- Applications were adjudicated and funds were dispersed from the Junior Faculty Fund and YUFA Minor Research Grant.
- The Summer 2024 USRA / ENURA applications were ratified as adjudicated and recommended by our science departments.

A. Angelucci AA

Chair - Research & Awards Committee July 26, 2024



#### FSC SENATE REVIEW COMMITTEE (T&P) ANNUAL REPORT

#### 2023-24 Academic Year

#### 1. In the 2023-24 academic year, the FSc Senate Review Committee (SRC) reviewed eighteen files.

- Twelve files for tenure and promotion to Associate Professor
- Six files for promotion to Full Professor, also included
- Nine files for Advancement to Candidacy 1

#### 2. Three files were referred back.

2.1 File #1 Application for promotion to Associate Professor with Tenure Candidate made amendments recommended by the SRC T&P committee. SRC T&P Committee concurred with Adjudicating Committee.

2.2 File #2 – Application for promotion to Associate Professor with Tenure Candidate made amendments recommended by the SRC T&P committee. SRC T&P Committee concurred with Adjudicating Committee.

2.3 File #3 – Application for promotion to Associate Professor with Tenure Candidate made amendments recommended by the SRC T&P committee. SRC T&P Committee will re adjudicate the file in September.

#### 3. One file was dissented.

# 3.1 File #1 – Application for promotion to Full Professor Candidate's file was referred back and after re adjudication the SRC T&P Committee voted to dissent. Candidate is appealing the decision, file has been sent to Senate T&P Appeals.

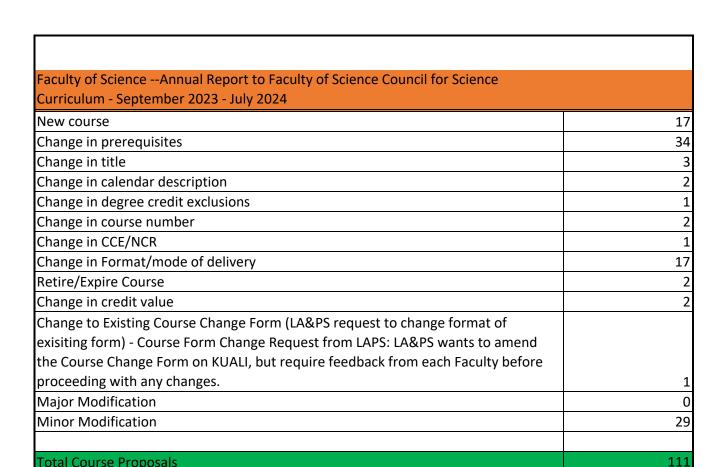
#### 4. Brief comment on the Review Committee's Correspondence with Adjudicating Committees and File Preparation Committees

The SRC processed most of these files without any major concerns. However, this year members noted the department of Mathematics & Statistics submitted files that were missing very important information, forcing two files to be referred back. These concerns were addressed in memos and we hope to see an improvement.

UNIT STANDARDS							
Department Last reviewed by Last reviewed by Status SRC T&P Senate							
Biology	January 28, 2020	2019	In Accord				
Chemistry	January 27, 2023	2014	Pending Senate Approval				
Mathematics & Statistics	November 26, 2019	2019	In Accord				
Physics & Astronomy	June 23, 2020	2014	In Accord				
Department of Science, Technology and Society	September 27, 2022	2010	Pending Senate Approval				

Thank you.

### 2024-2025 Science Undergraduate Commitee Report to Faculty of Science Council



YORK

UNIVERSIT UNIVERSIT

science

**Fotal Course Proposals** 

## CURRICULUM COMMITTEE REPORT



#### JULY 2024

The Faculty of Science Curriculum Committee has reviewed proposals for changes to course information and degree requirements and recommends to the Executive Committee that the following changes be submitted to Council for approval.

Details regarding these proposals (and other minor changes to Calendar/Repository course descriptions and prerequisites which were approved by the Committee but are not reported here) are included in the working papers of July 30, 2024 meeting of the Curriculum Committee, which are on file for your inspection in the Office of the Dean, with all members of the Curriculum Committee or by contacting the Secretary of the Committee at <u>scicurri@yorku.ca</u>

#### 1.1 PHYSICS & ASTRONOMY

**1.1.1** Change in Program name: Biophysics to Biomedical Physics

#### **Non-Major Modification Program Changes**

- 1. Program: Biophysics- Bachelor of Science- Specialized Honours
- 2. Degree Designation: B.Sc.
- 3. Type of Modification: change of program name<sup>1</sup>
- 4. Effective Date: Fall 2025
- 5. State what the changes are (Example: increase / decrease to the number of major credits)

Change the program name from Biophysics to Biomedical Physics.

6. Provide the rationale for the proposed changes that is rooted in the program learning outcomes.

We propose to rename the program to Biomedical Physics, to more appropriately reflect content already present in BPHS and other required courses in the program and to emphasize applications of physics principles in medicine, which is highly desirable in Medicine and Medical Physics graduate programs and coveted MD-PhD programs. In addition to aligning with the goals of a future York School of Medicine, this change aims to emphasize the usefulness of the program to careers in medical fields and to reassure students and their parents about future career opportunities.

Students in the Biomedical Physics program will take the three existing BPHS courses as part of their degree (BPHS 2090, BPHS 4080, and BPHS 4090). These courses include coverage of medical applications of biophysics, so we feel that this name change is both a good reflection of existing content and a way to raise the profile of the program to incoming applicants. 'Medical physics' content is already covered in the Biophysics Program courses. For example, topics include the following.

- (1) Radiation Medical Physics and Nuclear Medicine: CT/X-ray diagnostic imaging, nuclear medicine, radiotherapy in cancer, radiation DNA damage, radiation bunker design, radiation dosimetry and safety, Gamma radiation, radioactive decay, linear energy transfer, radioisotopes, Positron Emission tomography, Proton therapy.
- (2) Biomedical Optics Non-ionizing radiation for therapeutics and diagnostics for medicine including photodynamic therapy, photothermal therapy, photocoagulation, optical coherence tomography imaging, fluorescence biomedical imaging, functional near infrared spectroscopy (cerebral blood oxygen and flow, and other blood oximetry). Biophotonic laser for treatment of vision diseases (selective retinal therapy, age related macular degeneration, retinoblastoma, glaucoma laser trabeculoplasty, cataract surgery, refractive surgery, etc.).
- (3) Neuro-medical Physics: MRI and functional MRI imaging (i.e. BOLD), non-invasive

<sup>1</sup> confirmed to be a Non-major Modification by Emily Rush, Director, Academic Programs and Policy, Vice Provost's Office

neuromodulation methods (i.e. Transcranial Magnetic Stimulation) for the treatment of mental diseases, Electroencephalography, Magnetoencephalography.

- (4) Other imaging modalities and medical sensors/analyzers in laboratory/clinical testing: Ultrasound image, acoustic impedance, flow cytometry/hematology immunophenotyping for evaluation of infectious diseases, autoimmune disorders or immunodeficiencies, hemodynamics measurements in sepsis, atherosclerosis, vascular stenosis, sickle cell anemia, other cardiovascular diseases, and fluid dynamics in arthritis, ear barotrauma, anaphylactic shock, etc.)
- (5) Furthermore, the existing program courses in PHYS, BPHS, and BIOL teach core concepts and train students in techniques which underpin medical applications.

Future structural changes to this program will be influenced by this name change and will further enhance the "Medical" component of the program.

7. Provide an updated mapping of the program requirements to the program learning outcomes to illustrate how the proposed requirements will support the achievement of program learning objectives.

There is no change to the mapping of the program requirements.

8. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

We have also received support from the Biology Dept. The FSc Dean's Office are also in full, and active support of this name change.

BC

 $\odot \ \leftarrow \ \ll \ \rightarrow \ \boxplus \ \cdots$ 

To: PHAS Chair

**Biology** Chair

Tue 2024-05-14 10:49 AM

Cc: Ozzy Mermut; PHAS Undergraduate Program Director

Good morning Pat, Ozzy, and Matt,

I shared your document with the Biology Executive Committee as well as two former Biology UPDs. There was unanimous support for the name change.

9. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

There are no resource implications associated with this name change.

10. Provide a summary of how students currently enrolled in the program will be impacted.

There is no impact on currently enrolled students.

11. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

Biophysics- Bachelor of Science-	Biomedical Physics- Bachelor of
Specialized Honours	Science- Specialized Honours

## CURRICULUM COMMITTEE REPORT



#### AUGUST 2024

The Faculty of Science Curriculum Committee has reviewed proposals for changes to course information and degree requirements and recommends to the Executive Committee that the following changes be submitted to Council for approval.

Details regarding these proposals (and other minor changes to Calendar/Repository course descriptions and prerequisites which were approved by the Committee but are not reported here) are included in the working papers of August 27, 2024 meeting of the Curriculum Committee, which are on file for your inspection in the Office of the Dean, with all members of the Curriculum Committee or by contacting the Secretary of the Committee at <u>scicurri@yorku.ca</u>

#### 1.1 CHEMISTRY

- **1.1.1** Change in Calendar Description: SC/CHEM 1500 4.0, Introduction to Chemistry. Submitted by Prof. Derek Jackson
- **1.1.2** Change in Pre-requisite: SC/CHEM 2000 3.0, Chemical Biology. Submitted by Prof. Derek Jackson
- **1.1.3** Change in Title: SC/CHEM 3010 3.0, Physical Chemistry. Submitted by Prof. Derek Jackson
- **1.1.4** Change in Title: SC/CHEM 3011 3.0, Physical Chemistry. Submitted by Prof. Derek Jackson
- **1.1.5** Change in Title: SC/CHEM 4010 3.0, Quantum and Computational Chemistry. Submitted by Prof. Derek Jackson.
- **1.1.6** Change in Pre-requisite: SC/CHEM 4052 3.0, Chemical Biology. Submitted by Prof. Derek Jackson

#### 1.2 <u>SCIENCE, TECHNOLOGY & SOCIETY</u>

**1.2.1** Change in Title: SC/STS 3725 3.0, Science and Exploration. Submitted by Prof. Jill Lazenby

## **Changes to Existing Course**

Facu	ulty:					
Department:		Chemistry		Date of Submission:	August 2024	
Course Number:		CHEM 1500 4.0		Effective Session:	FW25	
Course Title: Introdu		Introduction to Chemistry				
Тур	e of Change:					
	in pre-requisite(s	s)/co-requisite(s)		in cross-listing		
	in course numbe	er/level		in degree credit exclusion(s)		
	in credit value			regularize course (fror	n Special Topics)	
in title (max. 40 characters for short title)			in course format/mode	e of delivery *		
X	in Calendar description (max. 40 words or 200 characters)			retire/expire course		
	other (please specify):					

### Change From:

To:

#### Course Description:

An introductory course in chemistry for students needing an adequate preparation for SC/CHEM 1000 3.00 and SC/CHEM 1001 3.00. Topics include basic atomic theory, stoichiometry, the periodic table, chemical bonding, equilibria, acids and bases, oxidation-reduction and organic chemistry. Each student is counselled by a faculty adviser to enrol either in this course or in SC/CHEM 1000 3.00 and SC/CHEM 1001 3.00 depending on previous chemistry experience. Note: May not be taken by any student who has taken or is currently taking another university course in chemistry.

#### Course Description:

An introductory course in chemistry for students needing an adequate preparation for SC/CHEM 1000 3.00 and SC/CHEM 1001 3.00. Topics include basic atomic theory, stoichiometry, the periodic table, chemical bonding, equilibria, acids and bases, oxidation-reduction and organic chemistry. Each student is counselled by a faculty adviser to enrol either in this course or in SC/CHEM 1000 3.00 and SC/CHEM 1001 3.00 depending on previous chemistry experience. Note: May not be taken by any student who has passed CHEM 1000 or CHEM 1001 with a grade of C or higher.

Rationale:CHEM 1500 is a bridging preparatory course for students who either lack high school<br/>chemistry or need further instruction to the basics of chemistry prior to taking CHEM<br/>1000 or 1001.Currently, any student who has previously taken CHEM 1000 or 1001 is not eligible to<br/>take CHEM 1500 and receive credit. However, we believe many students over the<br/>years take 1000 or 1001 without adequate preparation and fail. This then excludes<br/>them from being able to take CHEM 1500 to receive the preparation they likely need.

This proposal will change the course description of CHEM 1500 to allow students who previously took CHEM 1000 or 1001 and failed the chance to take CHEM 1500 for credit. We are also including students who marginally passed CHEM 1000/1001 with a "D" or "D+" since those grades correspond to GPA values below that required to graduate. These students may also benefit from taking CHEM 1500.

Note: For course proposals involving cross-listings, integrations and degree credit exclusions, approval from all of the relevant Faculties/department is required.

Note: Since one change (such as a change in year level or credit value) may result in several other changes (e.g., to the course description, evaluation, instruction, bibliography, etc.), please submit as many details as possible. If there are several changes, please feel free to use a New Course Proposal Form in order to ensure that all the required information is included.

<sup>\*</sup> Note: If there is a technology component to the course, a statement is required from ATS indicating whether resources are adequate to support the course. Courses converted from face-to-face to an on-line delivery mode should follow the instructions provided on page 4 of the New Course Proposal Form to provide revised 'Course Design' and 'Method of Instruction" information.

## **Changes to Existing Course**

Faci	ulty:					
Department:		Chemistry	C	Date of Submission:	August 2024	
Course Number:		CHEM 2000 3.0		Effective Session:	FW25	
Course Title: Chemical Biology		Chemical Biology				
Тур	e of Change:					
X	in pre-requisite(s)/co-requisite(s)			in cross-listing		
	in course number/level			in degree credit exclusion(s)		
	in credit value			regularize course (from Special Topics)		
in title (max. 40 characters for short title)			in course format/mode of delivery *			
in Calendar description (max. 40 words or 200 characters)			retire/expire course			
other (please specify):						

### Change From:

#### To:

#### **Course Description:**

This course introduces students to fundamental methods and techniques that are needed to view and solve problems in chemistry. The instructor first gives a brief overview and introduction of mathematical knowledge that is needed in solving general chemistry problems. The knowledge is then applied to develop concepts of a variety of fields in chemistry. The concepts include: (1) thermodynamic state functions and their analyses; (2) numerical analysis in experiments; (3) evolution of material quantities in chemical kinetics; (4) linear algebra application in chemistry; (5) vector analysis in chemistry Overall, the purpose of this course is to prepare students for the more advanced third- and fourth-year chemistry courses. Prerequisites: SC/CHEM 1000 3.00, SC/CHEM 1001 3.00, SC/MATH 1013 3.00. Prerequisite or Corequisite: SC/MATH 1014 3.00.

#### **Course Description:**

This course introduces students to fundamental methods and techniques that are needed to view and solve problems in chemistry. The instructor first gives a brief overview and introduction of mathematical knowledge that is needed in solving general chemistry problems. The knowledge is then applied to develop concepts of a variety of fields in chemistry. The concepts include: (1) thermodynamic state functions and their analyses; (2) numerical analysis in experiments; (3) evolution of material quantities in chemical kinetics; (4) linear algebra application in chemistry; (5) vector analysis in chemistry Overall, the purpose of this course is to prepare students for the more advanced third- and fourth-year chemistry courses. Prerequisites: SC/CHEM 1000 3.00, SC/CHEM 1001 3.00, (SC/MATH 1013 3.00 OR MATH 1506 3.0 with a minimum grade of B) Prerequisite or Corequisite: SC/MATH 1014 3.00 or MATH 1507 3.0.

CHEM 2000 3.0 is required for all students majoring in a chemistry program.

All our chemistry programs require MATH 1013 and MATH 1014 as well, except for the Specialized Honours Program Stream in Pharmaceutical and Biological Chemistry (CHEM-PB), which also accepts MATH 1506 3.0 and MATH 1507 3.0 with a minimum grade of "B" in both courses.

Hence, we are proposing to update the prerequisites/corequisites for CHEM 2000 to include MATH 1506 and MATH 1507 to include students who may have taken those courses instead of MATH 1013 and MATH 1014.

Note: For course proposals involving cross-listings, integrations and degree credit exclusions, approval from all of the relevant Faculties/department is required.

Note: Since one change (such as a change in year level or credit value) may result in several other changes (e.g., to the course description, evaluation, instruction, bibliography, etc.), please submit as many details as possible. If there are several changes, please feel free to use a New Course Proposal Form in order to ensure that all the required information is included.

\* Note: If there is a technology component to the course, a statement is required from ATS indicating whether resources are adequate to support the course. Courses converted from face-to-face to an on-line delivery mode should follow the instructions provided on page 4 of the New Course Proposal Form to provide revised 'Course Design' and 'Method of Instruction" information.

## **Changes to Existing Course**

Fac	Faculty:				
Department:		Chemistry	<b>_</b> C	Date of Submission:	August 2024
Course Number:		CHEM 3010 3.0		Effective Session:	FW25
Course Title:		Physical Chemistry			
Type of Change:					
	in pre-requisite(s	s)/co-requisite(s)		in cross-listing	
in course number/level			in degree credit exclus	sion(s)	
in credit value			regularize course (fror	n Special Topics)	
X in title (max. 40 char		racters for short title)		in course format/mode	e of delivery *
in Calendar description (max. 40 words or 200 characters)			retire/expire course		
other (please specify):					

## Change From:

#### To:

Physical Chemistry	Quantum Chemistry

Rationale:	We have two courses in our department (CHEM 3010 and CHEM 3011) that have the same title (Physical Chemistry).
	In this proposal, we are renaming CHEM 3010 to "Quantum Chemistry" to distinguish it from CHEM 3011 and better reflect the material covered in the course.

Note: For course proposals involving cross-listings, integrations and degree credit exclusions, approval from all of the relevant Faculties/department is required.

Note: Since one change (such as a change in year level or credit value) may result in several other changes (e.g., to the course description, evaluation, instruction, bibliography, etc.), please submit as many details as possible. If there are several changes, please feel free to use a New Course Proposal Form in order to ensure that all the required information is included.

\* Note: If there is a technology component to the course, a statement is required from ATS indicating whether resources are adequate to support the course. Courses converted from face-to-face to an on-line delivery mode should follow the instructions provided on page 4 of the New Course Proposal Form to provide revised 'Course Design' and 'Method of Instruction" information.

## **Changes to Existing Course**

Fac	Faculty:				
Department:		Chemistry	_	Date of Submission:	August 2024
Course Number:		CHEM 3011 3.0		Effective Session:	FW25
Course Title:		Physical Chemistry			
Type of Change:					
	in pre-requisite(s	s)/co-requisite(s)		in cross-listing	
in course number/level			in degree credit exclus	sion(s)	
in credit value			regularize course (fror	n Special Topics)	
X in title (max. 40 char		racters for short title)		in course format/mode	e of delivery *
in Calendar description (max. 40 words or 200 characters)			retire/expire course		
other (please specify):					

## Change From:

#### To:

Physical Chemistry	Chemical Kinetics

Rationale:	We have two courses in our department (CHEM 3010 and CHEM 3011) that have the same title (Physical Chemistry).
	In this proposal, we are renaming CHEM 3011 to "Chemical Kinetics" to distinguish it from CHEM 3010 and better reflect the material covered in the course.

Note: For course proposals involving cross-listings, integrations and degree credit exclusions, approval from all of the relevant Faculties/department is required.

Note: Since one change (such as a change in year level or credit value) may result in several other changes (e.g., to the course description, evaluation, instruction, bibliography, etc.), please submit as many details as possible. If there are several changes, please feel free to use a New Course Proposal Form in order to ensure that all the required information is included.

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## **Changes to Existing Course**

Facu	Faculty:				
Department:		Chemistry		Date of Submission:	August 2024
Course Number:		CHEM 4010 3.0		Effective Session:	FW25
Course Title:		Quantum and Computational	Chemi	stry	
Type of Change:					
	in pre-requisite(s	s)/co-requisite(s)		in cross-listing	
	in course numbe	r/level		in degree credit exclus	sion(s)
in credit value			regularize course (from	n Special Topics)	
X in title (max. 40 char		acters for short title)		in course format/mode	e of delivery *
	in Calendar des	cription (max. 40 words or 200 characters)		retire/expire course	
	other (please sp	ecify):			

## Change From:

To:

Quantum and Computational Chemistry	Computational Chemistry

**Rationale:** We have submitted a proposal to rename CHEM 3010 to "Quantum Chemistry".

CHEM 4010 currently has the title "Quantum and Computational Chemistry" which we are proposing to rename to "Computational Chemistry" to avoid possible confusion with CHEM 3010. Nothing about the course content will be changed, and in any case, modern computational methods in chemistry all use quantum mechanical principles.

Note: For course proposals involving cross-listings, integrations and degree credit exclusions, approval from all of the relevant Faculties/department is required.

Note: Since one change (such as a change in year level or credit value) may result in several other changes (e.g., to the course description, evaluation, instruction, bibliography, etc.), please submit as many details as possible. If there are several changes, please feel free to use a New Course Proposal Form in order to ensure that all the required information is included.

\* Note: If there is a technology component to the course, a statement is required from ATS indicating whether resources are adequate to support the course. Courses converted from face-to-face to an on-line delivery mode should follow the instructions provided on page 4 of the New Course Proposal Form to provide revised 'Course Design' and 'Method of Instruction" information.

## **Changes to Existing Course**

Fac	Faculty:				
Department:		Chemistry	<b>_</b> C	Date of Submission:	August 2024
Course Number:		CHEM 4052 3.0		Effective Session:	FW25
Course Title:		Chemical Biology			
Type of Change:					
X	in pre-requisite(s	s)/co-requisite(s)		in cross-listing	
in course number/level			in degree credit exclus	sion(s)	
in credit value				regularize course (fron	n Special Topics)
in title (max. 40 char		acters for short title)		in course format/mode	e of delivery *
	in Calendar des	cription (max. 40 words or 200 characters)		retire/expire course	
	other (please sp	ecify):			

### Change From:

#### To:

#### **Course Description:**

This course introduces students to the fundamentals of chemical biology, which focuses on the use of chemistry to study, probe, reengineer, and exploit biological systems. The course explains how chemistry can be used in biological applications, including the profiling of the transcriptome and proteome; the interference of genes, transcripts and protein function; the tracking of transcripts and proteins in vivo using bioconjugation technologies; the measurement of protein activity in vivo; the synthesis of large libraries of chemicals and their screening for function using state-of-the-art technologies such as combinatorial chemistry and DNA-encoded synthesis; the use of chemical probes to determine biomolecular interaction in cells; the use and re-engineering of biosynthetic machinery to synthesize new drugs; the re-engineering of biological systems to generate proteins bearing unnatural amino acids; and the use of CRISPR-cas9 machinery to edit the genome, transcriptome, and epitranscriptome. The course will introduce students to critical evaluation of literature in chemical biology, and familiarize students with recent advances in the field. Prereguisites: SC/CHEM 3021 3.00, and SC/CHEM 2050 4.00 or SC/BCHM 2020 3.00 or SC/BIOL 2020 3.00. NCR Note: Not open to students who have passed CHEM 4051 3.00 in FW 2018 or FW 2019.

#### **Course Description:**

This course introduces students to the fundamentals of chemical biology, which focuses on the use of chemistry to study, probe, reengineer, and exploit biological systems. The course explains how chemistry can be used in biological applications, including the profiling of the transcriptome and proteome; the interference of genes, transcripts and protein function; the tracking of transcripts and proteins in vivo using bioconjugation technologies; the measurement of protein activity in vivo; the synthesis of large libraries of chemicals and their screening for function using state-of-the-art technologies such as combinatorial chemistry and DNA-encoded synthesis; the use of chemical probes to determine biomolecular interaction in cells; the use and re-engineering of biosynthetic machinery to synthesize new drugs; the re-engineering of biological systems to generate proteins bearing unnatural amino acids; and the use of CRISPR-cas9 machinery to edit the genome, transcriptome, and epitranscriptome. The course will introduce students to critical evaluation of literature in chemical biology, and familiarize students with recent advances in the field.

Prerequisites: SC/CHEM 2021 3.0, and (SC/CHEM 3051 3.0 or SC/BCHM 3051 3.0 or SC/BIOL 3051 3.0)

NCR Note: Not open to students who have passed CHEM 4051 3.00 in FW 2018 or FW 2019.

Rationale:	The original prerequisites for the course were chosen before the course was offered for the first time. Now that the course has been running for several years, our department has a much better sense of what courses would constitute appropriate prerequisites.		
		are proposing to remove CHEM 3021 3.0 as a prerequisite and replace it with M 2021 3.0 since the reactions covered in second-year organic chemistry are cient.	
		. 2020 3.0 as a prerequisite and replace with it 2 requires more in-depth knowledge of the	

Note: For course proposals involving cross-listings, integrations and degree credit exclusions, approval from all of the relevant Faculties/department is required.

Note: Since one change (such as a change in year level or credit value) may result in several other changes (e.g., to the course description, evaluation, instruction, bibliography, etc.), please submit as many details as possible. If there are several changes, please feel free to use a New Course Proposal Form in order to ensure that all the required information is included.

<sup>\*</sup> Note: If there is a technology component to the course, a statement is required from ATS indicating whether resources are adequate to support the course. Courses converted from face-to-face to an on-line delivery mode should follow the instructions provided on page 4 of the New Course Proposal Form to provide revised 'Course Design' and 'Method of Instruction" information.

## **Changes to Existing Course**

## Faculty:

Department:		Science and Technology Studies		Date of Submission:	July 29, 2024
Course Number:		STS 3725 3.0		Effective Session:	2025-26
Course Title:		Science and Exploration			
Type of Change:					
	in pre-requisite(s)/co-requisite(s)		in cross-listing		
	in course number/level			in degree credit exclus	ion(s)
	in credit value			regularize course (from	n Special Topics)
X in title (max. 40 cha		racters for short title)		in course format/mode	of delivery *
	in Calendar description (max. 40 words or 200 characters)			retire/expire course	
	other (please specify):				

### Change From:

To:

Science and Exploration	Science, Technology and Exploration

Rationale:	The change in title reflects the interrelationship between science and technology, and the significant technological contributions to the development of knowledge that are addressed by this course. It also allows the course to be identified more clearly with the Science, Technology and Society undergraduate program, and with other courses in the program (ex. STS 1411 Introduction to Science, Technology and Society; STS 2411 Exploring Science, Technology and Society; STS 3730 Science, Technology and War; STS 3790 Science and Technology in Global Development).

Note: For course proposals involving cross-listings, integrations and degree credit exclusions, approval from all of the relevant Faculties/department is required.

Note: Since one change (such as a change in year level or credit value) may result in several other changes (e.g., to the course description, evaluation, instruction, bibliography, etc.), please submit as many details as possible. If there are several changes, please feel free to use a New Course Proposal Form in order to ensure that all the required information is included.

\* Note: If there is a technology component to the course, a statement is required from ATS indicating whether resources are adequate to support the course. Courses converted from face-to-face to an on-line delivery mode should follow the instructions provided on page 4 of the New Course Proposal Form to provide revised 'Course Design' and 'Method of Instruction" information.