York University Senate

Notice of Meeting

Thursday, 24 March 2022, 3:00 pm – 5:00pm

Via Videoconference

AGENDA

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10min

1. **Chair's Remarks** (M. Roy)
2. **Business arising from the Minutes**
3. **Inquiries and Communications**

10min

4. **President's Items (R. Lenton)**
   a. Winter 2022 term progress
   b. School of Medicine planning
   c. Kudos Report 1

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5. **Executive Committee** (C. Brushwood Rose) 4
6. **Academic Standards, Curriculum and Pedagogy** (M. Bunch) 9

25min

   a. Establishment of a Master of Biotechnology Management degree type (Appendix A, Page 17)
   b. Establishment of a Master of Biotechnology Management degree program, Faculty of Science, Markham Campus (Appendix A, Page 17)
   c. Establishment of a Diploma in Biotechnology (Type 3), Faculty of Science, Markham Campus (Appendix B, Page 94)
   d. Changes to degree requirements for Professional LLM in International Business Law (Appendix C, Page 133)
   e. Changes to Faculty-level language requirements for BA programs, Glendon (Appendix D, Page 152)

***Note**:* Notice of motion to establish the new degree type was given at the 17 February 2022 meeting. The ASCP report reflects discussion at that meeting.

York University Senate

10min

7. Appeals (J. Gilbert)

a. 2020-2021 Annual Report on Petitions and Appeals 186

8. Academic Policy, Planning and Research (B. Spotton Visano) 194

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a. Change to Name of Department of Theatre, School of Arts, Media, Performance and Design (Appendix A, Page 198)

b. Facilitated consultation: School of Medicine

5 min

9. Other Business

P. Robichaud, Secretary

Consent Agenda

Consent agenda items are deemed to be approved or received unless, prior to the start of the meeting, one or more Senators ask that they be dealt with as regular business.

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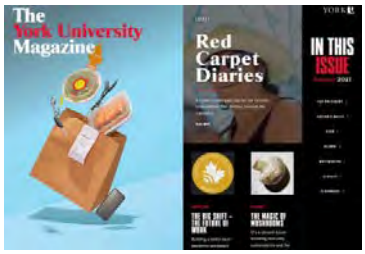
YORK UNIVERSITÉ UNIVERSITY

PRESIDENT'S **KUDOS REPORT**

MARCH 2022

Schulich School of Business Profesor Ivona Hideg received the runner up award in the Responsible Business Education Awards (Academic Research with Impact category) of the Financial Times for her paper "The unintended consequences of maternity leaves" in the *Journal of Applied Psychology*.



The York University Magazine received five Canadian Online Publishing Awards, a recognition of its outstanding achievement in Canada's digital media landscape. The winning awards include:

- Best Multicultural Story (Gold): Bright Spot (Winter 2021)
- Best Industry Feature (Gold): Equity Disparity (Fall 2020)
- Best Digital Edition Publication (Gold) and Best B2B Website (Gold): The Big Shift (Summer 2021)
- Best of Canada (Silver)

Two computer science students from the Lassonde School of Engineering, Adrian Fagarasanu and Thalia Godbout, received this year's Nascent Co-op/Internship Students of the Year Award. The Nascent Co-op/Internship Students of the Year Award is sponsored by Nascent Digital and recognizes two students for their exceptional contributions to their respective host employers, along with their involvement in the Lassonde community.

Associate Professor Greg Thiemann from the Faculty of Environmental & Urban Change received a grant from Environment and Climate Change Canada for his research project with PhD alumnus Paul McCarney, "Knowledge co-production to address human–polar bear conflict in Southern Hudson Bay and James Bays." The research aims to advance polar bear management and conservation, and to explore opportunities for joint knowledge production related to human–polar bear interactions in Ontario.

A team of 2nd, 3rd, and 4th year Schulich BBA students has won their division in the John Molson International Undergraduate Case Competition. The team was comprised of Aaditya Shah, Ananya Kakkar, Ayaan Popatiya and Madeline (Maddi) Yeung. This is the first time Schulich has made it into the finals since being selected for this invitation-only competition in 2017. The virtual competition involved 28 of the strongest business case competition teams from around the world.

Schulich School of Business student Marco Renda was part of the team that took first place during the 2021–22 Maple Leaf Sports & Entertainment (MLSE)'s Global Partnerships Case Competition. Students from across Canada competed for a summer internship opportunity with MLSE's Global Partnerships department by developing a marketing partnership between one of MLSE's team properties and a brand of their choice. The winning team partnered Redfin real estate with the Toronto Raptors.

The Las Nubes Grounded Project recently released a new documentary film titled *Buried Seeds*, which looks at the life experiences of 20 peasants in Southern Costa Rica, their sense of identity, their daily struggles, the threats to their ways of life, and what sustains them. The film is directed by Felipe Montoya, with Mburucuya Marcela Ortiz Imlach as the academic lead, in collaboration with the Faculty of Health, Universidad Técnica Nacional de Costa Rica, San Carlos Campus, and York Libraries.

Faculty of Education Assistant Professor Lesley Wilton has been invited to join the panel of judges for this year's Global Youth Challenge 2022: AI and the Future of Humankind. The Global Youth Challenge is a worldwide competition that consists of public speaking, essay writing, and creative projects that grapple with the topic of artificial intelligence and the impact that it will have on humanity.

Patrick Alcedo, Chair of the Department of Dance in the School of the Arts, Media, Performance & Design, was featured in *The Manila Times* for receiving the 2021 Pamana ng Pilipino Award. The Pamana ng Pilipino Award is conferred on Filipinos overseas, who, in exemplifying the talent and industry of the Filipino, have brought the country honour and recognition through excellence and distinction in the pursuit of their work or profession.

Master of Environmental Studies alumnus and urban planner Elijah Bawuah has been selected for the CivicAction Leadership Foundation's DiverseCity Fellowship. Eli co-founded the Mentoring Initiative for Indigenous and Planners of Colour, where he focuses on establishing a national network among experienced planners and emerging planners from equity-seeking communities.

The Tom Janes Award for Black Scholars awarded $5,000 to 10 Black first-year students who are enrolled in a Liberal Arts & Professional Studies program. The 2021 recipients of the award are:

- Awwal Ayila Abass (Law and Society)
- Muntaha Jamal Ahmed (Speech and Language Sciences)
- Isatu Lamarana Barrie (Political Science)
- Clifton Grant (Law and Society)
- Jasmine Christine Heath (Financial and Business Economics)
- Favour Kayode (Health and Society)
- Joshua Mezgebo (Financial and Business Economics)
- Keziah Umar Samson (Social Work)
- Tigist Yehualawork Solomon (Bachelor of Commerce)
- Hiba Yasin (Law and Society)


Deborah McGregor and Lisa Myers received Canada Foundation for Innovation and Ontario Research Fund awards to renovate the Faculty of Environmental & Urban Change's Wild Garden Media Centre. The centre will build and develop the Faculty's multimedia output and enhance its Indigenous and interdisciplinary research and training.




Four York University researchers were awarded funding from the Canada Foundation for Innovation to advance our understanding in areas related to sustainable materials, honeybee behaviour and health approaches to mitigate disease. The awards include:

- Building infostructure for quasi-experimental analysis in global legal epidemiology: Steven Hoffman (Faculty of Health, Osgoode Hall Law School)
- Multifunctional aerogel innovation platform: Thomas Cooper (Lassonde School of Engineering)
- Novel targets of whole-food dairy products for human musculoskeletal and cardiometabolic health: Andrea Josse (Faculty of Health)
- Research apiary to study honeybee behaviour, genetics and health: Amro Zayed (Faculty of Science)

Team Schulich was selected as the winning team of the 2022 CFA Toronto Ethics Challenge Competition. The team members consisted of five Master of Finance 2022 candidates: Juhi Maru, Rishika Bhatia, Anbochao Wang, Yusuf Jiruwala, and Kaustubh Sharma. The CFA Societies Canada Ethics Challenge is designed to increase students' awareness of the ethical dilemmas and issues they may face when they enter the investment management industry.





Five individuals with affiliations to York University are included in a Maclean's list of 50 Canadians who are "forging paths, leading the debate and shaping how we think and live." The list's influencers with ties to York are:

- **Rachel Notley** (LLB '90 Osgoode) for her contributions to provincial politics in Alberta;
- **Jagmeet Singh** (LLB '05 Osgoode) for his contributions leading a minority party in Canada;
- **Armine Yalnizyan** (BA '83 Glendon) for her ability to analyze Canada's uncertain economic reality during the pandemic;
- **Lisa Raitt** (LLB '96 Osgoode) for her contributions co-leading the Coalition for a Better Future;
- **Murray Sinclair** (LLD '15 Osgoode) for his contributions overseeing high-profile negotiations over federal compensation to Indigenous children.

APPOINTMENTS

Professor Jennifer Steeves, Department of Psychology, has been appointed as Interim Associate Vice-President Research, effective March 1.

Executive Committee – Report to Senate

At its meeting of 24 March 2021

FOR ACTION

1. Candidate for Senate-elected Position

Senate Executive recommends that Senate confirm the following candidate for the position of Vice-Chair of Senate for the term of 1 April 2022 – 31 December 2022, to be followed by a term as Chair of Senate of 1 January 2023 – 30 June 2024. The interim call for nominations to fill the mid-term vacancy was issued on 9 February 2022. Two nominations were received. In preparing its recommendation to Senate, Executive was guided by the *Senate Nominations Rules and Procedures* (Appendix C, Rules of Senate) and determined that the recommended candidate meets the criteria for the position and aligns with the current and historical gender balance between the Vice-Chair and Chair, the latter defined as a criterion in the *Procedures* (Section 1.5, Paragraph e).

Nominations are also accepted by Senators at a Senate meeting if the nominee has consented and is available to take up the role and attend the published meeting time of the relevant committee. Under the Rules of Senate, nominators must report prospective nominees to the Secretary prior to the start of the Senate meeting in order to determine their eligibility. If prospective additional candidates are nominated in advance of the Senate meeting, Executive's decision to sustain the current and historical gender balance between the Vice-Chair and Chair of Senate will guide the determination of a nominee's eligibility.

I. Vice-Chair of Senate

(Full-time faculty member; 1 vacancy; Vice-Chair term of 9 months from 1 April 2022 – 31 December 2022, followed by 18 months as the Chair of Senate between 1 January 2023 – 30 June 2024; Senate meets the fourth Thursday of each month from September to June except earlier in December and February; Senate Executive meets on the third Tuesday of each month except earlier in December and February):

Poonam Puri, Professor, Osgoode Hall Law School

Professor Puri has served as Chair of Faculty Council, Osgoode Hall Law School several times, Acting Associate Dean Research and Acting Associate Dean Academic at Osgoode, among many other Faculty-level roles. She has considerable experience at the Senate-level, having been a member of the Academic Policy, Planning & Research (APPRC) and Awards committees, and a current member of the Tenure and Promotions Committee (from which she will step down coincident with her appointment to the Vice-Chair position). She has also provided support to academic units at York to enhance their governance processes.

Professor Puri is one of Canada's leading experts in corporate governance, and she has significant experience on Boards of Directors for public and private organizations. She is an experienced and effective meeting chair with a strong understanding of governance rules and how to apply them in a collegial and fair fashion.

FOR INFORMATION

2. Monitoring the Pandemic Disruption

The Provost advised Executive that the in-person return to campuses this term is proceeding well, with the bulk of courses having resumed planned in-person delivery. Amid the shifting landscape of public health regulations in the province, the University's vaccination and mask mandates continue to be in effect to the end of the Winter 2022 term. The health and safety arrangements for the Summer 2022 session are under discussion and are being informed by conversations with other Ontario universities.

Faculties' plans for remote delivery of courses for the Summer and FW'22 sessions are being prepared. Approximately 3% of summer courses are planned for remote delivery, with early indications for the fall term of approximately 10% of courses in virtual mode.

Many instructors have adopted a flexible learning approach to course delivery coincident with the return to in-person activities in the winter term, implementing elements of the hybrid model of in-person and virtual to meet students' needs. The quick take-up of employing virtual delivery options in the classroom for courses in progress surfaced unanticipated student privacy issues which, in turn, created unfortunate challenges for instructors to navigate. The Provost confirmed that a solution to address the privacy matter has been identified and will be implemented going forward, commencing with the Summer 2022 terms. The development of fuller administrative arrangements that support the expanding modes of course delivery is also in progress (e.g., specific course coding) and are expected to be implemented for Fall 2022. As plans are developed to support the Hy-flex option as a mode of course delivery, feedback will be sought from the Senate Academic Standards, Curriculum & Pedagogy Committee in alignment with its mandate for oversight of curriculum, academic standards and pedagogy.

At is regular in meeting in April, the Committee will turn its mind to defining the criteria to inform the decision to be taken by Executive on when to declare that the disruption of academic activities caused by the COVID-19 pandemic has ended. In in the interim, in accordance with the *Senate Policy on the Academic Implications of Disruptions or Cessations of University Business Due to Labour Disputes or Other Causes* the Committee will continue to monitor the availability of physical and instructional resources, and the impact on the attendance of students and instructors amid the circumstances of the pandemic.

Executive Committee – Report to Senate

3. Sub-Committee on Equity

The Sub-committee advised Executive that it recently met to discuss the draft *Equity, Diversity and Inclusivity Strategy* being developed for the University by the President's Advisory Council on Equity, Diversity and Inclusivity. The Vice-President, Equity, People and Culture, Sheila Cote-Meek, who chairs the President's Advisory Council, met with the Equity Sub-committee to speak to and receive feedback on the draft Strategy. Members engaged in a thorough discussion of the document, sharing reflections and suggestions with the Vice-President for consideration as work and consultation on the Strategy continues. Impressions of the document were positive, finding it comprehensive, thoughtful, and reflective of the ethos of the University.

The Sub-committee appreciated the opportunity to provide input on this important pan-university plan. It was pleased to observe that many of the initiatives articulated in the Sub-committee's workplan dovetail nicely with the priorities identified in the plan. It looks forward to the Strategy coming to fruition and supporting collectively the achievement of its goals.

4. Communication to Senate Executive

The Executive Committee received a communication from the Vice-President, Equity, People and Culture on the Anti-Black Racism Framework and the associated Action Plan advising of the actions being taken following the hortative motion pertaining to the plans passed by Senate in January. The communication from Vice-President Cote-Meek is attached for reference as Appendix A to the Executive report.

Mario Roy, Chair
Chloë Brushwood Rose, Vice-Chair

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Memorandum

VICE-PRESIDENT EQUITY, PEOPLE AND CULTURE

Office of the Vice-President

Dr. Sheila Cote-Meek
Vice-President Equity,
People and Culture

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To: Chair of Senate

From: Sheila Cote-Meek, Vice-President Equity, People and Culture

Date: March 14, 2022

Subject: Response to Hortative Motion of January 27, 2022

At the January 27, 2022 meeting, York University's Senate voted in favour of the following hortative motion related to the *Addressing Anti-Black Racism: A Framework on Black Inclusion* and the *Action Plan on Black Inclusion* (https://www.yorku.ca/abr/):

> "Senate hereby expresses its view that, a combination of a bottom-up, community-led, research-based and data driven process with strong leadership, commitment, and action from York's administration is required to enact a robust Framework to Address Anti-Black Racism and an accompanying Draft Action Plan on Black Inclusion that challenge the structural inequities, power imbalances, and ideologies of white supremacy that are at the root of systemic racism. Senate expresses concern that such a commitment to substantial change, working closely with the affected communities, has yet to emerge, nor is it evident in the Draft Action Plan on Black Inclusion or in other actions taken so far."

This memo is a response to the motion as well as accompanying text to support the motion.

The Framework and Action Plan on Black Inclusion are a result of significant community consultations which took place over the course of June 2020 – September 2021. The input from these consultations were significant drivers of both documents. Many members of the Black community at York shared deeply personal experiences of being Black in Canada and in the York community as part of these consultations and expressed specific ideas for action, many of which can be found in the Action Plan.

Nevertheless, I propose as a way forward, to have the suggestions covered in the Rationale, Major gaps, and Action (and inaction) sections of the Motion taken up with the newly formed Advisory Council on Black Inclusion, which held its first meeting on February 17, 2022. This group will be a key connection point between

Black communities at York and the work of the University community in implementing the Framework and Action Plan.

In closing I want to acknowledge that while considerable work has been done to date on implementing the Action Plan, it is the collective responsibility of us all to dismantle systems of oppression[1]. While the Action Plan including an annual progress report on the actions to be taken are responsive to the 7 action items outlined in the rationale of the Motion, the section pertaining to the role of Senate is outside the purview of the EPC Division. I do hope that Senate will consider how it will take up the Framework and Action Plan within its powers and scope of responsibilities.

[1] A more fulsome accounting of activities undertaken across the university community will be shared in the first Annual Report on Black Inclusion, which will be published in March 2022.

Academic Standards, Curriculum and Pedagogy Committee

Report to Senate

At its meeting of 24 March 2022

FOR ACTION

a. Establishment of the Degree of Master of Biotechnology Management • Markham Campus • Faculty of Science

At the Senate meeting of 17 February 2022, ASCP provided notice of its intention to propose the establishment of a new Master of Biotechnology Management degree. Accordingly, ASCP recommends,

> **That Senate approve the establishment of the degree of Master of Biotechnology Management.**

Rationale:

As set out in Appendix A, the Master of Biotechnology Management is designed as a Combined Degree Program[1]. It is a course-based professional graduate program that will see its graduates awarded two credentials upon successful completion of the program requirements, a Master of Biotechnology Management degree and a Graduate Diploma in Management. The degree program is designed to provide students who hold a Bachelor of Science degree in Biology, Biological Sciences, Biotechnology, Life Science, or related discipline, and have little/no work experience in Biotechnology, with practical interdisciplinary training in Biotechnology and Management to enhance their competitiveness and employability in the biotechnology management related sectors. Typically, a professional master's degree is a terminal degree that does not lead to entry into a doctoral program. Such programs are designed to help students to prepare for a career in specific fields, such as occupational therapy, physical therapy, finance or business, among others. A professional master's degree often puts a great deal of focus

[1] A program of study involving two programs of different types in which successful completion of the requirements is confirmed by a separate and different degree document being awarded by each program. The combination may comprise two graduate programs, two undergraduate programs or a graduate and an undergraduate program. For Combined Degree Programs that involve a graduate program, the combination typically involves at least one "professionally" oriented program. Combined Degree Programs may be structured such that students pursue the two programs concurrently or consecutively.

on real-world application, with many requiring students to complete internships or projects in their field of study before graduation.

The curriculum adopts courses also offered through the Graduate Diploma in Biotechnology (being proposed in Item 6c below) to address biotechnology learning outcomes and, as such, meets the spirit of the Quality Assurance Framework definition of a Combined Degree Program. It also adopts courses offered through the Graduate Diploma in Management to establish a foundation in management. As such, this program will be a distinct program for York University, as the only program where students earn both a Master's degree in Biotechnology and Graduate Diploma in Management in 20 months. The curriculum is also designed so that students may opt to leave the program with the Graduate Diploma in Management upon completion of an integrated capstone course offering. The program will be housed in the Faculty of Science and offered at the Markham Campus.

Decanal statements from the Faculty of Liberal Arts & Professional Studies and the Faculty of Science confirm consultation on and support for the proposed degree. Statements from the Provost confirm the resources for the new program.

Approvals: Faculty of Science Faculty Council on 10 November 2021 and ASCP on 26 January 2022. The proposal received concurrence from APPRC on 10 February 2022.

Supporting documentation provided in ASCP Appendix A.

b. Establishment of the Master of Biotechnology Management degree program • Markham Campus • Faculty of Science

That Senate approve the establishment of the Master of Biotechnology Management degree program at Markham Campus housed in the Faculty of Science as set out in Appendix A, effective FW2023-2024.

See Item a. above.

c. Establishment of the Graduate Diploma (Type 3) program in Biotechnology • Markham Campus • Faculty of Science

Academic Standards, Curriculum and Pedagogy Committee Report to Senate

ASCP recommends that,

> **Senate approve the establishment of the Graduate Diploma (Type 3) program in Biotechnology at Markham Campus, housed in the Faculty of Science as set out in Appendix B, effective FW2023-2024.**

Rationale:

The proposed new Graduate Diploma in Biotechnology (GDB) as set out in Appendix B is a graduate certification designed for students who hold a Bachelor of Science degree in Biology, Biological Sciences, Biotechnology, Life Science, or related discipline, and have little/no work experience in Biotechnology, to enhance their competitiveness and employability in the biotechnology sector. This program represents a subset of the courses taken by students in the Professional Master's in Biotechnology Management program, but unlike the Master's students, GDB students will not take the Graduate Diploma in Management (GDM) and the program will not include a work placement.

The Graduate Diploma in Biotechnology is intended to appeal to students that seek training and education in the field of Biotechnology, especially as this relates to industry and the private sector. This program will be a distinct program for York University and will be completed over 8 months (two terms). The Graduate Diploma in Biotechnology is designed to increase the available pool of trained talent for the biotechnology industry and strengthen the biotechnology eco-system. Overall, the main objectives of the Graduate Diploma in Biotechnology are to provide students with insight in the latest biotechnology theories, discoveries, and laboratory techniques as well as a practical foundation in the biotechnology industry. As a result, the program is designed to enhance their competitiveness for employment, in a variety of biotechnology related industries, whether in private, public, or non-profit organizations. The program is designed to appeal to students who hold a Bachelor of Science degree in Biology, Biological Sciences, Biotechnology, Life Science, or related discipline, and have little/no work experience in Biotechnology.

To develop the Graduate Diploma in Biotechnology, a Task Force was established that obtain input from faculty deans, faculty members from the Faculty of Science, faculty members from the Faculty of Liberal Arts and Professional Studies, staff from the School of Continuing Studies, prospective students via a detailed focus group, and

undertook a survey, and interviews with past alumni working in the Biotechnology field, and industry leaders. Further, feedback from EAB: Education Technology, Services, and Research, an independent advisory board company who specializes in the higher education industry, helped shape the development of this program.

Statements from the anchor Dean and Provost confirm the resource support for the new program. Requisite letters of support were also obtained from the relevant administrative units.

Approvals: Faculty of Science Faculty Council on 10 November 2021 and ASCP on 26 January 2022. The proposal received concurrence from APPRC on 10 February 2022.

Supporting documentation provided in ASCP Appendix B.

d. Changes to the Degree Requirements for the Professional LLM in International Business Law • Department of Osgoode Professional Development • Osgoode Hall Law School

ASCP recommends that,

> **Senate approve changes to the degree requirements for the Professional LLM in International Business Law in the Department of Osgoode Professional Development at Osgoode Hall Law School as set out in Appendix C, effective W2023.**

Rationale:

The major modification proposal as set out in Appendix C outlines changes to the Professional LLM in International Business Law. Primary modifications include changes to the program requirements, changes to the graduate calendar description of courses, and the addition of a parttime option within the existing programs.

The first element of the modification is to change the current required courses of the program, which are currently BLIS 6513 Introduction to Canadian Law and BLIS 6508 Legal Research and Writing for International Students. These courses no longer reflect the needs of students in the program or the intended business law focus of the program. BLIS 6501 Comparative Legal Studies in International Business will become

the required course for the program and will be taken by students in their first term of the program.

GNRL 6209 Graduate Legal Research and Writing (Online), an existing Professional LLM course, will be imposed as an admission condition on a case- by-case basis for students for whom it will be beneficial to ensure academic success. This modification also proposes to change the categorization of courses in the program from "Core" to "Elective" in the Graduate calendar, in line with other Professional LLM specializations.

The requirement that students must complete at least 21 credits of courses listed as "Core" courses will change to a requirement that students must complete at least 18 credits of BLIS "Elective" courses. Finally, the addition of a part-time option for the International Business Law specialization is proposed.

Supporting documentation is provided as ASCP Appendix C.

Approvals: Osgood Hall Law School's Faculty Council on 7 February 2022 and ASCP on 2 March 2022.

e. Changes to the Faculty Language Requirements for Bachelor's Degree Programs
- **Glendon College**

ASCP recommends that,

> **Senate approve changes to the Faculty language requirements for Bachelor's degree programs at Glendon College, set out as Appendix D, effective FW2022-2023.**

Rationale:

The documentation as set out in Appendix D is a major modification proposal. The modification in the faculty requirement proposed is part of a set of parallel initiatives and processes that emerged at Glendon since 2019, aimed at refocusing Glendon's academic mission as a liberal arts college and improving recruitment and retention figures. The data and contexts informing the Faculty Council's decision to authorize the changes to the language requirements were presented in a report from a Recruitment

and Retention Working Group's presented to Glendon Faculty Council in September, 2020.

The proposal was a direct response to what the Working Group considered a crisis in recruitment and student retention; it aimed to diversify the profiles of students recruited for programs at Glendon, and also to improve the retention of students for whom the present Bilingual BA/iBA,BSc/iBSc language requirements might have proven too challenging. The overall aim of the proposal is primarily to serve as a long-term academic strategy aiming to diversify and enrich Glendon's degree offerings in order to attract greater student interest.

The revised faculty-level language requirement will be available to students enrolled in the following programs, in two forms:

a) EN-Eligible: Business Economics, Economics, English, Gender and Women's Studies, Hispanic Studies, History, International Studies, Philosophy, Political Science, Psychology, Sexuality Studies, and Sociology;

and

b) FR-Eligible: Political Science.

The Glendon Bilingual BA/BSc iBA/iBSc currently requires a minimum of 6 credits of second language learning (L2) at the 2000-level regardless of the level of placement assessed by an entrance language exam, the proposed Glendon BA stipulates 6 credits of L2 at the level of placement.

The proposed Glendon Bachelor of Arts entails two forms available to students depending on the L2 for which they will take a language placement exam before enrolment. All participating programs will offer at least one version (EN-Eligible or FR-Eligible), while one program will offer both. Students with French as L2 will have the option to enroll in the EN-Eligible stream, in which 6 credits of French as a Second Language (FSL) at their level of placement will meet the minimum requirement for this form of the BA. The Glendon BA FR-Eligible will be available to those students who declared English as L2. In their case, 6 credits of English as a Second Language (ESL) at their level of placement will meet the minimum requirement for this form of the BA.

The proposal does not create new programs nor duplicate any existing program at York University. All the programs eligible for the BA are already in existence, and no changes to their requirements are being proposed. The proposal does not change the Bilingual BA which has been a distinguishing feature of Glendon as a faculty at York for decades. Rather, by instituting the revised language requirements, the proposal aims to provide a common starting point for each student's personalized pathway to variable plurilingual competencies—a "pillar" of Glendon's mission articulated in the Academic Plan for 2020-2025 as "Bilingualism and Beyond." The modification thus also corresponds to York University's "Six Priorities for Action" for 2020-2025, "Advancing Global Engagement," in which Glendon is considered "a unique environment for cross-linguistic and cross-cultural teaching, research, and dialogue." The proposal includes the requisite letters of support from academic and administrative units.

Supporting documentation is provided as ASCP Appendix D.

Approvals: Glendon College's Faculty Council on 26 January 2022 and ASCP on 26 February 2022.

For Information

a. Deferral of the Implementation of the New Grading Scheme

The University Registrar reported to ASCP that in November 2021, the Institutional Portfolio Project Management (IPPM) Committee approved a joint recommendation from the Office of the University Registrar (OUR) and University Information Technology (UIT) that prioritized the allocation of resources for projects considered mission critical, including the Markham Campus Systems project, support for Student Systems Renewal Program (SSRP), and several crucial Student Information System (SIS) architecture projects. IPPM also approved the deferral of several other projects, including the realigning the Grading Scheme implementation by at least one year. The University Registrar provided ASCP with a detailed background and rationale for this recommendation that clearly indicates that it will not be possible to implement the grading scheme in 2023-2024. The recommendation would require an amendment to the new grading schemes policy to reflect a new effective date that is yet to be determined.

Academic Standards, Curriculum and Pedagogy Committee
Report to Senate

ASCP agreed that an analysis of other projects and initiatives at the University that may be impacted by the deferral would need to be undertaken before a firm revised effective date can be determined. The Committee further agreed to inform Senate that there will be a delay and that an updated timeline for implementation will be confirmed by June. ASCP will also discuss an appropriate communication strategy for the wider University Community on this matter.

b. Regulation Changes

Faculty of Graduate Studies

Changes to the FGS Registration Legislation

c. Minor Modifications to Curriculum

All of the curriculum changes are effective FW2022-2023:

School of the Arts, Media, Performance and Design

Changes to the degree requirements for the Specialized Honours BFA program in Cinema and Media Arts – Screenwriting

Minor changes to the Degree Requirements for Specialized Hons BFA in Cinema and Media Arts – Production

Minor changes to the Degree Requirements for the BFA program in Integrative Arts

Minor changes to the Degree Requirements for the for Specialized Hons BFA in Cinema and Media Arts – Media Arts

Faculty of Science

Changes to the core program requirements for the Physics and Astronomy BSc, BSc Hons and Streams

Changes to the core program requirements for the Chemistry BSc, BSc Hons and Streams

Martin Bunch, Chair

YORK UNIVERSITY
Faculty of Science

Proposal for a Master's in Biotechnology Management (Combined Degree)

Intended start date: Fall 2023
Location: Markham Campus

Table of Contents

Note: Appendices D to I are not included but can be obtained upon request.

1. Introduction

1.1 Brief Statement of the Program

The **Master's in Biotechnology Management** is a course-based professional graduate program designed to provide students who hold a Bachelor of Science degree in Biology, Biological Sciences, Biotechnology, Life Science, or related discipline, and have little/no work experience in Biotechnology, with practical interdisciplinary training in Biotechnology and Management to enhance their competitiveness and employability in the biotechnology management related sectors. Typically, a professional master's degree is a terminal degree that does not lead to entry into a doctoral program. Such programs are designed to help students to prepare for a career in specific fields, such as occupational therapy, physical therapy, finance, or business, among others. A professional master's degree often puts a great deal of focus on real-world application, with many requiring students to complete internships or projects in their field of study before graduation. Students that complete this program are awarded two credentials upon completion of the program requirements, a Master's in Biotechnology Management, and a Graduate Diploma in Management.

The program provides students with:

- Master's in Biotechnology Management students will receive the Graduate Diploma in Management in addition to the Master's in Biotechnology Management.
- Graduate courses in Biotechnology designed in collaboration with industry leaders.
- Practical laboratory training in Biotechnology
- Graduate studies in Management offered through the Graduate Diploma in Management.
- Two paid internships in Biotechnology Management
- A culminating capstone experience with the opportunity to propose solutions and implementation plans bridging Biotechnology and Management
- Course content in science writing and communication
- Interactions with Biotechnology professionals

The Master's in Biotechnology Management is a much-needed addition to York University's program offerings. The curriculum adopts courses also offered through the Graduate Diploma in Biotechnology to address biotechnology learning outcomes. It also adopts courses offered through the Graduate Diploma in Management to establish a foundation in management. As such, this program will be a distinct program for York University, as the only dual program where students earn both a Master's degree in Biotechnology and Graduate Diploma in Management in 20 months (5 semesters; Master's in Biotechnology Management students do not also receive the Graduate Diploma in Biotechnology). The curriculum is also designed so that students may opt to leave the program with the Graduate Diploma in Management upon completion of an integrated capstone course offering. Since the Master's in Biotechnology Management combines coursework from the Graduate Diploma in Biotechnology and the Graduate Diploma in Management, it aligns in spirit with that of a combined program.

Furthermore, the Master's in Biotechnology Management is designed to address an unfilled need in the Canadian Biotechnology Industry. Throughout the COVID-19 pandemic, an enormous stress

has been put onto to Canadian society, and the biotechnology industry has been leaned on heavily to bring forward high value strategies and pharmaceutical options with many job openings remaining unfilled (BioTalent Canada, 2020). The Master's in Biotechnology Management is designed to increase the available pool of trained talent for the biotechnology industry and strengthen the biotechnology eco-system.

1.2 **Method Used to Develop the Program**

Development of Medical Biotechnology as a research and teaching discipline at York University has been a steady focus over the years. A Biotechnology Bachelor of Science has been in existence for many years at York University.

During 2015, a working group consisting of faculty members from the departments of Biology and Chemistry met to explore the possible organization and curriculum for a master's program in biotechnology. After discussions and informal polling with members of the Faculty of Science, a steering committee composed of members from various departments of the Faculty of Science reported on planning for the development of a biotechnology program. The positive response from the steering committee has resulted in a Task Force being established by the Dean of Science to develop this program.

To develop this Master's in Biotechnology Management, the Task Force obtained input from faculty deans, faculty members from the Faculty of Science, faculty members from the Faculty of Liberal Arts and Professional Studies, staff from the School of Continuing Studies, prospective students via a detailed focus group and a survey, interviews with past alumni working in the Biotechnology field, and industry leaders. Further, feedback from the Education Technology, Services, and Research (EAB), an independent advisory board company who specializes in the higher education industry, has helped shape the development of this program.

1.3 **Faculty in which the Program is Housed**

The program will be housed in the Faculty of Science and offered at the Markham Campus, York University.

2. General Objectives of the Program

2.1 **Brief Overview**

The program requires students to complete 30-credits and two (2) paid internships. Full-time studies will take 5 semesters over 20 months. At this point, a part-time option is not being offered, due the nature of the scheduling of sequential coursework, the desire to retain students in cohorts for the capstone course experience and the two consecutive paid internships. As the program grows and the possibility of offering courses more than once a year becomes more likely, the program committee plans to re-visit the option of part-time studies as part of program reflection efforts.

The program is structured to develop knowledge and skills in biotechnology and management during the first two semesters, and then extend their knowledge and understanding through two

paid internships and an experiential capstone experience in their final three semesters. The course load in semesters 3-5 are kept to a minimum so that students can focus on their paid internships and build interactions with industry and potential employers.

Overall, the main objectives of the Master's in Biotechnology Management are to provide students with insight into the latest biotechnology theories, discoveries, and laboratory techniques, while also developing managerial competencies and a practical foundation in the biotechnology industry. As a result, the program is designed to enhance their competitiveness for employment, in a variety of biotechnology related industries, whether in private, public, or non-profit organizations.

The program is designed to appeal to students who hold a Bachelor of Science degree in Biology, Biological Sciences, Biotechnology, Life Science, or related discipline, and have little/no work experience in Biotechnology.

2.2 **Alignment with University and Faculty Missions**

This program will support the University's goals as outlined in the 2020-2025 UAP as follows:

21st Century Learning: The program's design aims to increase the University's profile as a provider of innovative academic programs and strengthen York University's comprehensiveness and cross-disciplinary offerings. Currently, there are no Canadian universities offering a dual program where students can earn a professional master's degree in Biotechnology and a graduate diploma in management with a focus on career readiness. The Master's in Biotechnology Management is designed to provide professional preparation for our graduates to fill current labor needs in the biotechnology sector and strengthen the Canadian economy, which have been heavily leaned on during the COVID-19 pandemic (Canada's Biotechnology Industry, Driving Economic Growth, 2021[i]; Growing the Bioeconomy, 2021[2]).

Knowledge for the Future: The program aims to establish York as an innovation hub in Biotechnology. Faculty for this program will focus on knowledge mobilization and advancement of exploration, innovation, and growing the bioeconomy in the ever growing $19 billion Biotechnology Canadian market of healthcare. Moreover, key components of the program are the two paid internships with industry, which will provide the student with the opportunity to be immersed in the Biotechnology industry and integrated management capacity.

From Access to Success: Paid internships will be coordinated with the centralized Markham Center Campus experiential education resources and will focus their efforts to achieve positive change for our students by providing timely and reliable paid internship offerings and assist with their career advising.

Advancing Global Engagement: The program will be housed in the Faculty of Science in the Markham Campus. The Markham Campus will be offering students innovative, relevant job-ready academic programing, and the Master's in Biotechnology Management will do just this. Additionally, we plan to have a robust recruitment of international students from a multitude of countries and continue to be long-term partners in learning.

Working in Partnership: This program is built around developing interdisciplinary partnerships in the Markham region and serving the needs of a growing region, one of York University's top priorities, by including two work paid internships with local industry. Over the course of two paid internships, students will work with organizations to help them review, analyze, solve, and implement biotechnology problems through their two paid internships.

Living Well Together: In searches for teaching staff for the Master's in Biotechnology Management, we will also pay close attention to mentorship, effective teaching, and curricula skills of hires to ensure the faculty complement has the depth and breadth necessary to deliver a program embracing a culture of service excellence.

University Goals

York University's Strategic Mandate Agreement (2020-2025) identifies Science as a specific target area of strength and growth. Additionally, York University's Strategic Mandate Agreement articulates a continued focus on providing unique interdisciplinary programs that respond to the needs of the global knowledge economy. This program will contribute to York University's growth at the graduate level. Biotechnology is truly interdisciplinary in nature with the intersection of biology, chemistry, physiology, genetics, therapeutic strategies, and the scientific method, and aims to fill employment gaps in the biotechnology industry responding to the COVID-19 crisis. This program is the sole program in Canada offering a rich learning experience with: (1) training in practical biotechnology theories, skills, and practices, (2) a graduate diploma in management, (3) two paid internships, and (4) an interdisciplinary capstone experience of biotechnology and management. As such, it is expected to drive demand and interest for the program.

Faculty Goals

York University's Faculty of Science Strategic Plan (2021-2025) calls for the Faculty of Science to offer distinctive and appealing programs to reflect the aspirations of students. This new program exhibits all these calls to action. The program has been specifically built around providing a unique educational offering in Biotechnology and addressing the increasing number of employment opportunities in biotechnology careers in a $19 billion industry currently employing 13 000 people directly and 30 000 people indirectly (BioTalent Canada, 2018), and under a lot of pressure due to the COVID-19 pandemic. At the same time, the Faculty of Science Strategic Plan calls for increased focus on enhanced opportunities for research and experiential learning for students. The Master's in Biotechnology Management program includes two work internships in biotechnology, and the opportunity to participate in an interdisciplinary capstone experience.

3. Need and Demand

3.1 Similar Programs Offered Elsewhere

Our Master's in Biotechnology Management would be the only one offered in Canada. There are at least eight graduate programs in biotechnology related fields across Canada. Of these programs, five (5) are offered in Ontario and three (3) outside of Ontario as shown in **Appendix A**.

Only the University of Toronto Mississauga (UTM) and Northeastern University-Toronto offer a master's level program in biotechnology in the GTA. The program at UTM is focused on both health and agriculture biotechnology, while our program would be explicitly focused on combining biotechnology and management. The program at Northeastern University-Toronto offers a solely online course-based master's in biotechnology without providing an internship/co-op/placement option. Additionally, the York program will be offered as a hybrid-learning program, emphasizing program flexibility. This includes face to face courses in addition to online learning, allowing for student flexibility and community connections. This distinguishes our program from the UTM and Northeastern programs. Furthermore, in the GTA, Ryerson, Ontario Tech, University of Toronto-St. George, University of Toronto-Scarborough, and York University do not currently offer a master's in biotechnology or related fields.

Outside of the GTA, biotechnology is a growing program of study, with McGill University, McMaster University, University of Calgary, University of Guelph, University of Lethbridge, and University of Windsor all offering masters level program in biotechnology related fields. Each of the programs differ significantly from the York program. For example, University of Guelph offers a 12-month Master's in Biotechnology with a focus on commercializing biotechnology innovations, while McGill University offers a 24-month Master's in Applied Science in Biotechnology with 15 courses and an in-house internship. On the other hand, University of Windsor offers a solely course-based program. No other program includes a strong focus on biotechnology, a graduate diploma management and two paid internships with external partners in a 20-month time. As such, this program has a stronger focus on interdisciplinary industry skill development, compared to the other programs across Canada.

The programs in Biotechnology offered at various institutions vary in scope and focus. For example: three out of eight programs (3 out 8) are focused on commercialization of biomedical science, while another two of eight (2 out 8) programs are focused on agricultural biotechnology, while another three of the eight (3 out 8) programs are focused on general biotechnology. This program is focused on general biotechnology, coupled with a strong foundation in management. Moreover, our program will emphasize its data analysis and statistical course work, as the only other program offering coursework in biotechnology related data analysis is the University of Guelph.

Additionally, the types of experiences offered to students in the biotechnology related programs vary from program to program. We have identified six (6) programs that offer work-placement/internships in biotechnology related fields, however, only two (2) of the programs offer internships with an external partner placed by the University, and one (1) program offers an in-housework-internships. Furthermore, we identified two (2) programs that are solely course-based and do not offer an internship. Of these programs, this program would be a distinctive offering as there are no programs which have a specific focus in Biotechnology and Management while offering two paid internships with external partners.

3.2 **Need and Demand**

The Master's in Biotechnology Management is designed to address an unfilled need in the Canadian Biotechnology Industry. Throughout the COVID-19 pandemic the biotechnology

industry has been leaned on heavily to bring forward high value strategies and pharmaceutical options with many job openings remaining unfilled (BioTalent Canada, 2020). The demand for health-care related biotechnology expertise has been growing in Canada. The Canadian biotechnology sector employs approximately 13 000 Canadians directly and is growing. This Master's in Biotechnology Management is designed to increase the available pool of trained talent for the biotechnology industry and strengthen the biotechnology eco-system.

Employers in industry are looking to fill many different types of jobs in health-care related biotechnology. The program emphases on the mid-level positions focusing on health-care related biotechnology. **Appendix B** contains 28 job descriptions at the mid-level from BioTalent Canada in Biotechnology. More specifically, BioTalent Canada reports that positions in manufacturing, quality control/assurance, distributions and research and development remain unfilled due a lack of trained employees. Additionally, BioTalent Canada reports that skills shortages remain a large issue in the biotechnology sector with 33.2% of companies reporting skills shortages among employees. More specifically, significant numbers of biotechnology companies are based in Ontario, with 22.4% of newly formed biotechnology companies originating from Ontario. The program in Biotechnology Management is planned to be offered at the new Markham campus, and as such training individuals living in Ontario who would be in geographic proximity to many biotechnology companies looking to hire.

Beyond the above data, the Task Force carefully examined demand for a Master's in Biotechnology Management. Specifically, we examined demand in five ways:

1. Commissioned a Program Feasibility study
2. Survey of future students
3. Focus group with potential students
4. Interview with biotechnology executive
5. Consultations with Industry Leaders

Findings from these five endeavors indicated that there is significant interest and enthusiasm for the program.

The Task Force commissioned a program feasibility study from EAB: Education Technology, Services, and Research, an independent higher education consultation firm. EAB's consultation revealed increasing employer demand alongside increasing employment opportunities, suggesting a growing market and a strong need for our program. Furthermore, other profiled academic institutions offer a curriculum in general biotechnology skills, while our program will emphasize data analytics differentiating ourselves from our competitors. Based on EAB's analysis, our Master's in Biotechnology Management would provide students with theoretical and practical training in Biotechnology and a graduate diploma in management to enhance their competitiveness and employability in Biotechnology related employment opportunities.

A survey of first-year science students was conducted regarding the Markham based Master's in Biotechnology program. Overall, there was strong interest in our program. One hundred and twenty-four science undergraduate students from the Faculty of Science responded to a survey about their intentions regarding continuing their education at the master's level in Biotechnology. The majority were interested. In fact, 67% of students stated they are very interested or somewhat interested in a professional graduate program in Biotechnology.

In addition to the survey, the task force conducted a focus group with undergraduate students at York University on April 7, 2019. Respondents showed strong interest in the program. Students were especially pleased that our program would have a management component. Furthermore, these individuals thought our program would give "students more options for what to do with their degree." Additionally, students explained "a lot of science students do not consider taking business courses as electives, a business course would be a great opportunity."

Furthermore, we interviewed a biotechnology executive to provide feedback on the program. The executive had great enthusiasm for the program and explained a balance of biotechnology and industry skills were a must. Their recommendation was to ensure that our program provided training on moving from academia to industry by including coursework on Phase 1-4 clinical trials, general terms/principles of regulations (FDA, Health Canada) phases from R&D to manufacturing and sales terms. We have incorporated this feedback into the curricula of the program.

Finally, consultations were conducted with industry leaders. Industry leaders including Sanofi, DNALabs Canada Inc., Gilead Science Inc., and BIOTECH Canada.

Overall, the Master's in Biotechnology Management is a much-needed program to position York University as a provider of innovative biotechnological programming to train the next generation of leaders.

*Statistics from: Bio HR Facts-https://www.biotalent.ca/en/bio-economy-facts

4. **Program Content and Curriculum**

4.1 **Program Requirements**

The program focuses on developing theoretical and practical training in biotechnology, laboratory techniques, managerial competencies, and practical industry skills in biotechnology through two paid internships.

The program consists of 14 required courses: 6, 3 credit courses, and 8, 1.5 credit courses, for a total of 30 credits. Students are also required to complete two paid internships in the program.

Figure 1 presents an overview of the program structure.

Figure 1: **Master's in Biotechnology Management Program Overview**

Fall Term 1

Weeks 1-6			**Week 7-12**	
Organizational Theory and Strategic Management (1.5 cr)	Manufacturing and Service Operations Management (1.5 cr)	Organizational Behavior (1.5 cr)	Management Information Systems (1.5 cr)	Financial and Management Accounting (1.5 cr)
Introduction to Biotechnology Practice (3cr)				
Science Communication and Writing (3 cr)				

Term Credit total: 13.5 credits

Winter Term 1

Weeks 1-6			**Week 7-12**
Law and Corporate Governance (1.5 cr)	Introduction to Financial Management (1.5 cr)	Principles of Marketing Management (1.5 cr)	
Research and Development in Biotechnology (3cr)			
Laboratory Skills in Biotechnology (3cr)			
Data Analysis, Product Development and Commercialization in Biotechnology (3cr)			

Term Credit total: 13.5 credits

Summer Term 1

Week 1-12
Paid Internship A

Term Credit total: 0 credits

Fall Term 2

Week 1-12
Paid Internship B
Capstone Experience (3 credits)

Term Credit total: 3 credits

Winter Term 2

Week 1-12
Paid Internship B

Term Credit total: 0 credits

Program Total: 30 credits

The program is structured to develop knowledge and skills in biotechnology and management during the first two semesters, and then extend the students' knowledge and understanding through two paid internships, and a capstone experience in their final semesters.

The two paid internships are developmental in nature. Paid Internship A is designed for students to gain relevant work experience in the biotechnology sector, while Paid Internship B is designed for students to solidify their skills and commitment to the biotechnology sector. In most cases, students will continue with the same employer from Paid Internship A to Paid Internship B to allow for a deeper dive into the work, and further develop industry relations. Together Paid Internships A & B are scheduled to be 12 months long. However, the length of the paid internship may vary depending on employer terms but shall not be less than 8 months. If a paid internship is to be less than 12 months, this will be reviewed on a case-by-case basis.

If a situation arises, where the employer or student wishes to change the placement for Paid Internship B, efforts will be made to make alternative paid internships.

Opportunities for paid internships may be with external stakeholders such as industry, non-profits, government agencies, or on-campus opportunities with internal stakeholders. We will strongly recommend our students to complete their paid internships with industry partners.

The paid internship is designed to enable students to extend their work experience in the biotechnology sector. It aims to help students expand their knowledge, analytical and professional capacity skills, as well as build industry connections for future employment in the biotechnology industry.

Exact job titles, duties and hours of work may vary. During the paid internship, students are encouraged to solidify their knowledge of the main concepts and methods in Biotechnology, integrate management competencies, communicate their work, work effectively in an industry setting and demonstrate ethical behavior, social responsibility, and professional capacity.

Topics may vary from paid internship to paid internship.

By the end of the paid internships' students are expected to:

- Integrate and apply theoretical/academic knowledge in the workplace setting.
- Integrate management competencies within the biotechnology industry
- Propose solutions and implementation plans during industry paid internships
- Develop career goals.
- Develop a professional network with employers and peer employees.
- Communicate strategically in professional contexts using a range of modes, genres, and media
- Determine strengths and weaknesses in communication and enhance interpersonal skills.

Students will be assigned a Faculty Liaison as an external supervisor, as well as an industry setting advisor (Industry Supervisor) at the place of employment. The roles of the Faculty Liaison are to coordinate the internships for the program; to assist in the matching of student candidates to their

paid internship partners; to meet with the student and the industry supervisors to ensure progress is on track; to liaise with the industry supervisors regarding their expectations, the expectations of the program and the correct submission of the Paid Internship Reports; and to compile the grades (pass/fail) for the students in the paid internships.

The role of the Industry Supervisor is supervise the paid interns they are hosting for the internships; to meet with the Faculty Liaison and the intern to ensure the nature of the internships are appropriate for the program and that they are progressing in a satisfactory manner; to assess the student's proficiency in the form of an Industry Supervisor's report and (with input from the Faculty Liaison) the intern's Paid Internship Report; and to (with input from the Faculty Liaison) grade the internships (pass/fail). The grade and the experience are acknowledged on the transcript.

The Faculty Liaison position can be filled by any faculty member who is currently associated with the Master's in Biotechnology Management York University at Markham Campus, or if appropriate, faculty members with expertise in the relevant field from the Keele Campus. At the end of the academic term, the student will submit a Paid Internship Report. This experience is understood to be an out of classroom industrial experience. As such, the course has minimal faculty oversight except for the Faculty Liaison.

4.2 **Courses**

Appendix C contains course descriptions, all of which are at the graduate level. Of the 14 required courses, 8 courses are management courses being offered as part of the Graduate Diploma in Management in conjunction with the Faculty of Liberal Arts and Professional Studies, and 6 are unique to the program in Biotechnology, which include a curated capstone Biotechnology Management course that integrates the management and biotechnology learning outcomes.

No electives are available as the program is very targeted and comprehensive and will serve the students well.

The program has adopted an interdisciplinary course structure. Starting in Term 1 (Fall 1) students will be provided with coursework on the fundamental theories of biotechnology science, latest biotechnology practices, science communication, and managerial concepts. Term 2 (Winter 1) is a deep dive into further biotechnology and management coursework. Term 2 provides training in research and development practices in the Canadian biotechnology industry, a comprehensive introduction to data analysis, product development and commercialization in biotechnology, practical laboratory skills in biotechnology, and further management training. Students will then extend their knowledge and skills through two work paid internships. This will create conditions for the students to participate in and reflect upon a paid internship that contributes to a capstone project in their final semester.

Course scheduling was carefully considered in designing this program. Courses that teach fundamentals in biotechnology, management and statistics are scheduled for the first two terms of the program. In the subsequent terms students will further develop these skills in addition to practicing these skills in industry through two work paid internships, and a capstone experience.

4.3 **Course Level**

All courses are at the graduate level.

4.4 **Calendar Copy**

Calendar copy is provided in **Appendix D.**

5. **Program Learning Outcomes and Assessment**

5.1 **Learning Outcomes**

The Master's in Biotechnology Management program learning outcomes were developed through extensive discussions with Faculty of Science faculty, staff, industry experts, an independent higher educational consultation firm, prospective students, and curriculum specialists. The Task Force used the results of this data-gathering to help us develop the learning outcomes for this degree.

The specific learning outcomes for the Master's in Biotechnology Management are shown below. **Table 4** provides a detailed map showing how program learning outcomes map to the Ontario University Graduate Degree Level Expectations (UGDLEs). **Appendix E** provides a detailed map showing how individual courses support the learning outcomes. **Appendix F** provides a detailed map showing how individual courses support program learning outcomes and Ontario University Graduate Degree Level Expectations (UGDLEs).

Detailed Program Learning Outcomes:

Graduates of the Master's in Biotechnology Management program will be able to:

1. Describe the fundamental role of biotechnology in science within a management context
2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant biotechnology practices, their alternatives, as well as industry developments and trends.
3. Recognize major fields of management and key theories informing management decisions and apply them to advance organizational goals.
4. Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research.
5. Integrate management competencies within the biotechnology industry setting
6. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis.
7. Apply practical statistics and data analysis to biotechnology data sets.
8. Propose solutions and implementations plans for biotechnology case studies.
9. Communicate clearly and effectively through written articles, reports, oral presentations, business documents, online platforms, and interviews with varied audiences.
10. Employ appropriate strategies to work independently and in diverse teams.

11. Demonstrate initiative in new working environments relevant to Biotechnology management.
12. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology management.

Table 4: Ontario Graduate Degree Level Expectations (UGDLEs) Mapped to Master's in Biotechnology Management Program Learning Outcomes

	Master's in Biotechnology Management
PROGRAM GOAL:	Upon completion of this program, students should be ready to take on positions in biotechnology management.
EXPECTATIONS:	Graduates of the Master's in Biotechnology Management program will:
1. Depth and breadth of knowledge	• PLO1.Describe the fundamental role of biotechnology in science within a management context • PLO2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant biotechnology practices, their alternatives, as well as industry developments and trends. • PLO3.Recognize major fields of management and key theories informing management decisions and apply them to advance organizational goals.
2. Research and Scholarship	• PLO3.Recognize major fields of management and key theories informing management decisions and apply them to advance organizational goals. • PLO6. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis. • PLO7. Apply practical statistics and data analysis to biotechnology data sets.
3. Level of application of knowledge	• PLO4.Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research. • PLO5.Integrate management competencies within the biotechnology industry setting • PLO6. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis.

	• PLO7. Apply practical statistics and data analysis to biotechnology data sets. • PLO 8. Propose solutions and implementations plans.
4. Professional capacity/autonomy	• PLO8. Propose solutions and implementations plans. • PLO11. Demonstrate initiative in new working environments in biotechnology management. • PLO10. Employ appropriate strategies to work independently and in diverse teams. • PLO12. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology management.
5. Level of communications skills	• PLO9. Communicate clearly and effectively through written articles, reports, oral presentations, business documents, online platforms, and interviews with varied audiences.
6. Awareness of limits of knowledge	• PLO 2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant biotechnology practices, their alternatives, as well as industry developments and trends. • PLO 12. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology management.

5.2 **Achieving the Program Learning Outcomes**

The expected learning outcomes are supported via a program structure that develops students' skills and knowledge in a scaffolded manner. **Appendix E** demonstrates the learning progression by mapping how program learning outcomes are introduced, developed, achieved, and individually assessed throughout the master's degree. **Table 5** summarizes the relationship between graduate degree learning expectations, program learning outcomes and program courses. In brief, students will develop comprehensive knowledge of the Canadian biotechnology industry, emerging industry developments, roles of alternative practices in biotechnology, latest laboratory techniques in biotechnology, key theories informing management, practical statistical and data analysis skills, and professional capacity starting in the first semester of the program. Emphasis will be placed on deep learning, higher order skills such as critical thinking, and the evaluation of techniques and advances in the field. These learning outcomes will be applied, further consolidated, and extended through robust experiential learning components consisting of two internships, a practical laboratory course, and an interdisciplinary capstone experience in Biotechnology and business management.

The two paid work internships and the capstone experience provide foundational training grounded in real-world biotechnology needs. Paid Internship A is a four-month placement designed to enable students to gain relevant work experience in the biotechnology management sector, in a corporate, industrial, or academic setting. Students are encouraged to develop knowledge of the main concepts and methods in Biotechnology, integrate management competencies within the biotechnology industry, communicate their work, work effectively in an industry setting and demonstrate ethical behavior, social responsibility, and professional capacity. Paid Internship B is the concluding eight-month paid internship course in the program. It is designed to enable students to extend their experience in the biotechnology management sector and consolidate their knowledge, analytical and professional capacity skills. As such, this collaborative approach to employer and partner engagement will not only enhance the graduates' competitiveness for future employment, but also strengthen York's relationships within the community and encourage the type of innovative, interdisciplinary connections required to solve todays and tomorrow's most complex challenges.

The capstone experience encourages students to re-visit and draw upon program content as they solve complex management problems in biotechnology. A highlight of the capstone experience is that students will collaboratively identify, design, and lead their own management consulting project in biotechnology, based on the real-time needs of the organizations who visit the program or their paid internships.

Throughout both paid internships and capstone project, students will be supervised and assessed according to leading practices in work-integrated learning and experiential education. These practices will be heavily informed by a dedicated team of Work Integrated Learning and Experiential Education leadership at the Markham and Keele Campus. The programming and delivery of the M. Biotech Management degree will also be informed and revised through consultation of a M. Biotech Management Advisory Board, which will be made up of the full-time faculty delivering the courses, a group of York research-stream faculty with expertise in biotechnology, as well as leading biotechnology industry experts. The role of the board might

also involve providing an industry perspective to certain topics upon student requests. Consultations of willing members to serve on the board have been initiated.

Further integrated into the structure of each of the biotechnology courses are experiential learning opportunities such as cases studies, analyzing scientific literature, writing exercises, and

problem-solving. For all the new biotechnology courses being proposed, please see the course design section in the new course proposals for detailed information on experiential learning in each course.

Table 5: Summary of Achieving the Program Learning Outcomes: Ontario Graduate Degree Level Expectations (UGDLEs) Mapped to Master's in Biotechnology Management Program Learning Outcomes and Program Courses.

UGDLEs	**Master's in Biotechnology Management**	
PROGRAM GOAL:	Upon completion of this program, students should be ready to take on positions in biotechnology management.	**Program Courses**
Depth and breadth of knowledge	• PLO1.Describe the fundamental role of biotechnology in science within a management context • PLO2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant biotechnology practices, their alternatives, as well as industry developments and trends. • PLO3.Recognize major fields of management and key theories informing management decisions and apply them to advance organizational goals.	• Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Managerial Concepts and Organization • Organizational Theory • Manufacturing and Service Operations • Organizational Behavior • Financial and Management Accounting • Law and Corporate Governance • Introduction to Financial Management • Management • Principles of Marketing • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Strategic Planning • Paid Internship A

		• Paid Internship B • Capstone Experience
Research and Scholarship	• PLO3.Recognize major fields of management and key theories informing management decisions and apply them to advance organizational goals. • PLO6. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis. • PLO7. Apply practical statistics and data analysis to biotechnology data sets.	• Laboratory Skills in Biotechnology • Organizational Theory • Manufacturing and Service Operations • Organizational Behavior • Management Information Systems • Financial and Management Accounting • Law and Corporate Governance • Introduction to Financial Management • Principles of Marketing • Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing • Paid Internship A • Paid Internship B • Capstone Experience
Level of application of knowledge	• PLO4.Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research. • PLO5.Integrate management competencies within the	• Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing • Paid Internship A

	biotechnology industry setting • PLO6. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis. • PLO7. Apply practical statistics and data analysis • to biotechnology data sets. • PLO 8. Propose solutions and implementations plans.	• Paid Internship B • Capstone Experience
Professional capacity/autonomy	• PLO8. Propose solutions and implementations plans. • PLO11. Demonstrate initiative in new working environments in biotechnology management. • PLO10. Employ appropriate strategies to work independently and in diverse teams. • PLO12. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology management.	• Organizational Theory • Manufacturing and Service Operations • Organizational Behavior • Management Information Systems • Financial and Management Accounting • Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Introduction to Financial Management • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing • Paid Internship A • Paid Internship B • Capstone
Level of communications skills	• PLO9. Communicate clearly and effectively through written articles, reports, oral presentations, business documents, online platforms,	• Organizational Theory • Manufacturing and Service Operations • Organizational Behavior

	and interviews with varied audiences.	• Management Information Systems • Financial and Management Accounting • Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing • Paid Internship A • Paid Internship B • Capstone Experience
Awareness of limits of knowledge	• PLO 2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant biotechnology practices, their alternatives, as well as industry developments and trends. • PLO 12. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology management.	• Organizational Theory • Manufacturing and Service Operations • Organizational Behavior • Management Information Systems • Financial and Management Accounting • Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Law and Corporate Governance • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing • Strategic Planning • Paid Internship A • Paid Internship B • Capstone Experience

5.3 **Assessment of Learning Outcomes**

The program has established a detailed assurance of learning (AoL) plan for the purposes of demonstrating and documenting students' achievement of the program's expected learning outcomes DLEs. Each program-level learning outcomes will be measured through constructively aligned course assessments (see **Appendix E**).

Overall, assessment in a course will be based on students' performance on various elements of the course including laboratory and simulation reports, examinations, written assignments, literature reading presentations, project presentations, group-work, and in-class participation. Student performance on these assessments will be evaluated against pre-established performance benchmarks, success criteria and rubrics. These assessment methods will be heavily informed by a dedicated team of Work Integrated Learning and Experiential Education leadership at the Markham and Keele Campus. **Table 6** maps the program learning outcomes to courses where students are individually assessed.

Documentation of students' achievement of learning outcomes will be performed through York University's learning management site, e-class. This system allows our program to grade students' work while automatically collecting data on student progress, tracking at-risk students, flagging courses where student performance is an issue, and tracking students' success (pass/fail) in their paid internships. Student progress during paid internships will also be monitored through communication with the relevant industry partners. Collectively, this performance data will guide subsequent timely educational interventions and will hence serve as our assurance of learning plan. Furthermore, we aim to engage registered students in a yearly survey on their learning to improve the designed learning experiences. The same will apply to relevant industry partners whose feedback on their experiences with our students will be key in informing the optimization of our program. To add to this, we plan to send out a yearly survey to our alumni investigating the type of work they are doing, how the program prepared them for their work, and what they recommend for the program to teach. With all these initiatives, we hope to identify student performance and curricular gaps in relation to the expected learning outcomes in an evidence-based manner and "close the loop" on continuous curricular improvement initiatives.

Table 6: Program-level Learning Outcomes and Assessments

Program Learning Outcome	Course Assessed in Individually	Assessment (Individually Completed)
• PLO1.Describe the fundamental role of biotechnology in science within a management context	Introduction to Biotechnology Practices Research and Development in Biotechnology Data Analysis, Product Development and Commercialization in Biotechnology Capstone	Midterm Final Exam Midterm Final Exam Midterms Project on biotechnology project development Live Case Exercise
• PLO2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant biotechnology practices, their alternatives, as well as industry developments and trends.	Introduction to Biotechnology Practices Research and Development in Biotechnology Capstone Experience	Report on development on new and emerging practices In-class case studies Project on selected topic in biotechnology research and development Live Case Exercise
• PLO3. Recognize major fields of management and key theories informing management decisions and apply them to advance organizational goals.	Organizational Theory Manufacturing and Service Operations Organizational Behavior Law and Corporate Governance Principles of Marketing Management Financial and Management Accounting	Midterm Class Participation Midterm Final Exam Midterm Class Participation Midterm Class Participation In-class tests Class Participation Midterm Cases and problems

	Introduction to Financial Management Capstone Experience	In-class tests Assignments Live Case Exercise
• PLO4. Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research.	Introduction to Biotechnology Practices Research and Development in Biotechnology Capstone Experience	Report on development on new and emerging practices In-class case studies Project on selected topic in biotechnology research and development Live Case Exercise
• PLO5. Integrate management competencies within the biotechnology industry setting	Paid Internship A Paid Internship B Capstone	Internship report Internship report Live Case Exercise Personal Reflection
• PLO6. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis.	Introduction to Biotechnology Practices Laboratory Skills in Biotechnology	Report on development on new and emerging practices In-class case studies Laboratory modules Final Exam
• PLO7. Apply practical statistics and data analysis to biotechnology data sets.	Introduction to Financial Management Data Analysis, Product Development and Commercialization in Biotechnology Capstone	In-class tests Assignments Problem-solving project Tutorial assignments Live Case Exercise
• PLO8. Propose solutions and implementations plans for biotechnology case studies.	Paid Internship A Paid Internship B Capstone	Internship report Internship report Live Case Exercise Personal Reflection

• PLO9. Communicate clearly and effectively through written articles, reports, oral presentations, business documents, online platforms, and interviews with varied audiences.	Management Information Systems Financial and Management Accounting Research and Development in Biotechnology Science Communication and Writing	Class Presentation Cases and problems prepared for the class and/or solved in class Project on selected topic in biotechnology research and development Responses to in-class case study/simulations Student created science-based newspaper story or press-release
• PLO10. Employ appropriate strategies to work independently and in diverse teams.	Laboratory Skills in Biotechnology Capstone Experience	Peer and self-evaluation of collaboration experience Self-reflection of collaboration experience
• PLO11. Demonstrate initiative in new working environments in biotechnology management.	Paid Internship A Paid Internship B Capstone Experience	Internship Report Internship Report Personal Reflection
• PLO12. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology management.	Laboratory Skills in Biotechnology Introduction to Biotechnology practices Research and Development in Biotechnology Science Communication and Writing Paid Internship A Paid Internship B Capstone Experience	Laboratory modules Report on development on new and emerging practices In-class case studies Responses to In-class case study/simulations Completion of cases-studies Internship Report Internship Report Personal Reflection

5.4 **Normal Program Length**
The normal program length is 20 months of full-time study.

5.5 **Delivery Modes**
This is a course-based, professional graduate program consisting of coursework and two paid internships. We plan to offer a hybrid-learning program, emphasizing program flexibility. Our program would offer face to face courses in addition to online learning, allowing for student flexibility and community connections. We plan on mounting Science Communication and Writing and Data Analysis, Product Development and Commercialization in Biotechnology as hybrid or online courses.

In general, the other courses will be face to face lectures and laboratories with a focus on scientific exploration, scientific literature, case studies, discussions, and teamwork. The two paid internships will occur in semesters 3-5 of the program. The paid internships are a total of 12 months in duration but can be as short as 8 months depending on employer terms. Paid internships could be in-person or remote, based on industry needs. Students will engage in various experiential learning throughout the program, particularly through the intensive laboratory course, paid internships and capstone experience. The paid internships aim to help students solidify and integrate their learning and expand their knowledge, analytical and professional capacity skills and build industry connections for future employment. Additionally, mentorship is a key attribute of the program with students receiving mentorship from lab demonstrators, course instructors, supervisors (university and industry) from the paid internships.

6. **Admission Requirements**

6.1 **Program Admission Requirements**

Program Entry:

The Master's in Biotechnology Management can be completed on a full-time basis. Entry is fall term.

Program Length:

The expected degree completion time for full-time master's students is 5 terms. Students must register and pay fees for a minimum of the equivalent of 5 terms of full-time study. All requirements for a master's degree must be fulfilled within 12 terms (4 years) of registration as a full-time student in accordance with Faculty of Graduate Studies' registration policies.

The minimum admission requirements are as follows:

- An undergraduate degree in any area of biology, biological science, biochemistry, chemistry, life sciences or related field from a recognized post-secondary institution with a B+ average in the last two years (or equivalent) of academic work. Undergraduate degrees must include at least one course in statistics at the second-year level or above, as

well as three courses in molecular biology, cell biology, biochemistry, genetics or equivalent at the second-year level or above.

- ☐ Work experience is not required, but internships or prior work experience is encouraged.
- ☐ Alternate admission requirement: Graduates with other Science degrees or 3-year degrees may be admitted as well with at least one year of post-graduation work experience in a sector relevant to the program.
- ☐ Proof of English language proficiency if prior studies were not completed in English: a minimum TOEFL score of 577 (paper-based), or 90-91 (internet-based); and a minimum IELTS score of 7 (Academic Module).
- ☐ Two letters of recommendation. Letters can be from previous professors, employers, or other persons with whom the applicant has had interactions and who can attest to their professional and/or academic qualifications. It is recommended that one of these letters should be from a professor if you graduated in the last 3 years.
- ☐ A supplementary application form with a statement of interest providing evidence of commitment to advanced work in the biotechnology sector. The statement should include a discussion of the applicant's background, interests, skills, and career goals.
- ☐ and an up-to-date résumé or CV

Students are expected to remain in good academic standing as per Faculty of Graduate Studies (FGS) guidelines to remain in the program. Students must also have passed courses that precede the internships with a minimum grade of C+ before becoming eligible for their paid internship. FGS guidelines on academic standing are available at: https://www.yorku.ca/gradstudies/students/current-students/regulations/graduate-courses-and-grading/.

Degree Requirements:

Candidates for the Master's in Biotechnology Management must successfully complete all coursework and internships in good standing in accordance with FGS minimum grade requirements.

6.2 **Alternative Requirements**

See above.

7. **Resources**

7.1 **Areas of Faculty Strength and Expertise**

The Master's degree in Biotechnology Management at Markham Campus is a new program at a new campus. In July, 2021 the Faculty of Science hired a full-time, teaching stream faculty member that is planned to administrate the program as well as teach the Laboratory Skills in Biotechnology course. A search for a second full-time teaching stream hire that will teach the Introduction to Biotechnology Practice, the Research and Development in Biotechnology, the Data Analysis, Product Development and Commercialization in Biotechnology and the Science Communication and Writing courses is slated for 2021/22. The capstone Biotechnology/Management course will be delivered by both full-time hires in consultation with

instructors from ADMS responsible for delivering the modules for the Graduate Diploma in Management.

The hiring of these faculty members will be designed to the match the needs of the Biotechnology program and meet the program offerings in Biotechnology. For example, we will pay special attention to prospective faculty members with a strong background in pharmaceutical related biotechnology methods with a focus on pharmaceutical, diagnostic, and therapeutic strategies. We will also pay close attention to mentorship, effective teaching, and curricula skills of hires to ensure the faculty complement has the depth and breadth necessary to deliver an innovative and effective program in Biotechnology. The design and mounting of these courses have been and will be done in consultation with existing full-time faculty on the Keele campus as well as in consultation with industry stakeholders. Faculty delivering the programming will have opportunities to keep up to date with the biotechnology field and for pedagogical development through a professional expense reimbursement fund, sabbatical leaves and industry-coupled training/development opportunities accessed through the M. Biotech Management advisory board and internship relationships.

The Graduate Diploma in Management (GDM) component of the degree is already being offered by ADMS and the relevant GDM modules will be offered from their relevant faculty members.

7.2 **Role of Retired and Contract Instructors**

The program in Biotechnology Management will be a new program and as such there will be no retirees. There are no currently anticipated roles for contract teaching instructors except for filling sabbatical leave teaching needs or possibly if the 2021/22 full-time hire is not ideally qualified to deliver all the courses planned for this role.

7.3 **Laboratory Facilities/Equipment**

At the new Markham campus, brand new purpose-built laboratory facilities and equipment will be ready for the opening of the Master's in Biotechnology Management program. All Specialized laboratory facilities for teaching and research have been planned including, both wet and dry laboratory spaces. This includes:

- 120 square meter (m^2) Biology instructional laboratory for teaching 24-student sections
- 120 m^2 Chemistry lab
- 120 m^2 dry Physics lab has been designed to accommodate 24 student sections

The plans also include a robust suite of preparation and support spaces for these instructional laboratories. A list of equipment for each laboratories/equipment has been submitted to the facilities manager of the Faculty of Science. The equipment list has been determined based on: (1) pedagogical needs, (2) program course offerings including specialized laboratory equipment, (3) research needs in biotechnology and (3) providing a rich student experience including experiential learning.

There is also an Experiential Education Hub on floor 3 intended to provide administrative space and support for upper year students to work on Capstone Projects and act as an intersection for work with Industry partners, students, and faculty.

7.4 **Space**

The new building at Markham campus housing the Biotechnology Management program will have all the required space for the planned curriculum. As described above, the 120 m^2 Biology lab space will be used to house the laboratory biotechnology course, which for the maximum number of students planned for the program in the foreseeable future (2 sections; 48 students) will be adequate. The curriculum of the laboratory course planned for the degree will not use human/patient derived samples and will not require biosafety clearance over and above that which would be required for other courses also using the shared Biology Lab space. Lecture halls are located on the 1st through 3rd floors of the tower. Faculty and administrative staff will be provided with a suite of offices with access to meeting rooms of various sizes, networking lounge space, kitchenettes and various filing and storage facilities. These will occupy the 7^{th} floor along with spaces dedicated to other Faculties. All student Service functions including Advising, Counseling, Alternate Exam facilities, Supplemental Instruction and Tutoring are located on floors 1 and 2.

Active learning environments and Teaching spaces common to all faculties:

YUMCC will feature multiple lecture and active learning spaces. For large lectures, there are two 135 seat (308 m^2) tiered lecture halls with 2 rows of seats per tier (the first row of seats on a tier can rotate for group work with 2nd row). These two halls are separated by a mobile partition to allow creation of a single 270 seat, 616 m^2 tiered lecture hall.

In addition, there is a 125 seat tiered lecture hall, several 50 seat tiered lecture halls, several 50 person-occupancy flat-floored classrooms with movable tables and chairs, and several 35 person-occupancy flat-floored classrooms with movable tables and chairs. All classrooms and lecture halls have complete audio/video service, internet and whiteboards for instruction.

The YUMCC will also have numerous common areas for informal student gatherings and independent study. There are several large study areas in the Library to support varying degrees of activity and noise tolerance. Rooms are furnished and designed to permit collaborative work, quiet study and mixed-use, including study and socializing. Every floor in the building except floors 7 and 8 has informal student lounge and study space off the main corridors. On the classroom floors 4 and 5, there is also significant bench seating installed in corridors, equipped with power to allow students to connect their devices while waiting between their classes.

7.5 **Support Services**

The support services can be broken down into three categories: (1) Laboratory support, (2) IT support, and (3) general student support. See **Appendix H** for summary details.

Laboratory Support
The duties of the laboratory support will be responsible for maintaining and ensuring quality laboratory experiences for students. The laboratory support includes laboratory technicians for the "Laboratory skills in Biotechnology" course. Starting in the opening year, one Laboratory

Technician will be hired to support the first cohort of students. In subsequent years additional laboratory support will be hired as needed.

Administrative Support
The program will be supported by an Operations Manager hired into the Faculty of Science Markham administrative office. There will also be an Undergraduate Program Assistant and an Undergraduate Program Secretary that may be able to contribute to the management of the program. Furthermore, a full-time teaching stream Faculty hire will receive teaching release to help administrate the program. Logistics for the paid internships associated with the program will be coordinated with the experiential education support team specific to the Markham Campus, including student success advisors, career coaches, work-integrated learning administrators, employer engagement staff, and career development and education support.

The internship component of the program will also be supported centrally by the Experiential Education infrastructure currently being planned for the Markham campus. While the Faculty Liaison will continue to engage extensively with Industry partners (see Industry letters of support, Appendix J), York University has committed resources to ensuring continuity and support for experiential education at the Markham campus. The program has been planned so as to have excess paid internship placement relative to the number of enrolled students, and growth of the program will align with commensurate growth in placement opportunities.

IT Support
The IT support for the program will be managed centrally and will be in place prior to opening.

Student Support
The proposed program will be supported and supplemented by a suite of academic success supports and services that contribute to the quality of the program and the success of students. These will be provided by Markham and Keele staff, in-person and online, and include: academic advising, accessibility services, general learning skills (e.g. time management, critical thinking, reading and note-taking), discipline specific supports (e.g. writing and numeracy skills), and peer-based learning supports such as peer tutoring and Supplemental Instruction. Students' sense of belonging and community within their program is strengthened through a robust first year orientation and transition program, the active involvement of peer mentors, and a program specific student club/organization. Further student services include registration services, student finances and bursaries, health and wellness support and programs, and student activities and involvement programs.

7.6 **Anticipated Class Sizes & Supervisory Capacity**
Below is a summary of total enrolment based on the course:

Course	**Term**	**Total Enrollment**	**#Students in Program/ # outside of program**
Organizational Theory and Strategic Management	Fall Term 1	24	24

Manufacturing and Service Operations Management	Fall Term 1	24	24
Organizational Behaviour	Fall Term 1	24	24
Management Information Systems	Fall Term 1	24	24
Financial and Management Accounting	Fall Term 1	24	24
Introduction to Biotechnology Practice	Fall Term 1	24	24
Science Communication and Writing	Fall Term 1	24	24
Law and Corporate Governance	Winter Term 1	24	24
Introduction to Financial Management	Winter Term 1	24	24
Principles of Marketing Management	Winter Term 1	24	24
Research and Development in Biotechnology	Winter Term 1	24	24
Data Analysis, Product Development and Commercialization in Biotechnology	Winter Term 1	24	24
Laboratory Skills in Biotechnology	Winter Term 1	24	24
Paid Internship A	Summer Term	24	24
Paid Internship B	Fall Term 2	24	24
Capstone Experience	Fall Term 2	24	24

This section will focus on technical support and capacity for supervision.

Technical Support

Section 7.5 outlined laboratory technical support staff to be hired. The role of the laboratory support will be to: (1) setup, operational and maintenance of laboratories for program courses, (2) demonstrations of experiments in laboratory courses and (3) safety training for students in laboratories.

Supervisory Capacity

Paid Internships A& B will require faculty members to supervise and mentor students while in their paid internships. Given that we project to have approximately 20 students graduating each year, this would mean 2-3 faculty members in the department will supervise student projects.

7.7 **Financial Support**

We plan to liaise with local biotechnology industry to see if we can develop a limited number need-based scholarships to help make the program accessible for students facing financial constraints. Paid internships will also constitute a form of financial aid. Eligible students will also have access to financial aid through the Ontario Student Assistance Plan (OSAP). In addition to OSAP, students have access to additional financial supports which are described on this site: https://www.yorku.ca/gradstudies/students/current-students/awards-and-scholarships/

8. **Enrolment Projections**

The enrollment projections for the program in Master's in Biotechnology Management are based on the Science Adjusted Faculty Submissions. See **Table 6** for a summary overview.
The program will start in Fall 2023, and we expect that the first cohort in the program will attract 20 students, 15 domestic and 5 international students. By the third year of the program, we project to achieve a steady state of enrollment with 40 students in each year of the program.

Table 6- Projections of Student Enrolment in the Master's in Biotechnology Management for the first ten years of the program.

Year	**Year 1**		**Year 2**		**Total**
	Domestic Students	**International Students**	**Domestic Students**	**International Students**	
2023-24	16	4	0	0	20
2024-25	19	5	16	4	44
2025-26	19	5	19	5	48
2026-27	19	5	19	5	48
2027-28	19	5	19	5	48
2028-29	19	5	19	5	48
2029-30	19	5	19	5	48
2030-31	19	5	19	5	48
2031-32	19	5	19	5	48
2032-33	19	5	19	5	48

9. **Support Statements**

- Relevant Dean with respect to the adequacy of existing human (admin and faculty), physical and financial resources necessary to support the program, as well as the commitment to new resources to implement the program. Appendix K

- Vice-President Academic and Provost with respect to adequacy of existing human (admin and faculty), physical and financial resources necessary to support the program, as well as the commitment to new resources to implement the program
- University Librarian confirming the adequacy of library holdings and support. Appendix K
- University Registrar confirming the implementation schedule and any administrative arrangements
- Relevant Faculties/units/programs confirming consultation on/support for the program
- Policy body statements for the need/demand of program (BioTalent Canada)
- Support statements from private companies in biotechnology. Appendix J

Program Governance

The program will be offered through the Faculty of Science and will eventually be housed by a new Department in F.Sc. but unique to the Markham campus, although this departmental governance structure is not expected to be in place when the campus opens in 2023. The program will be administered by a dedicated teaching stream faculty member, Dr. Jade Atallah, who has been currently hired into the Department of Biology but will form part of the new Department at Markham's complement once this is established. A second teaching stream faculty member will also be hired in July, 2022 that will assist in the teaching of the M. Biotech curriculum. Until the formation of the new department at Markham, these hires that administer the degree will report to their Departmental chair (Biology) as well as the F.Sc. Associate Dean Students and the Dean of Science.

CVs of faculty associated with the program directly or through the M. Biotech Management Advisory board can be provided upon request.

References

BioTalent Canada (2018). *Mapping Potential- Profiles of Canada's Biotech Frontiers*.

Appendix A | Master's Level Biotechnology Programs in Canada

University	Degree Granted	Duration	Credits	General Approach	Internship/ Co-op/Work Placement
1. McGill University	Master's in Applied Science in Biotechnology	16 months	45 credits	Focus on techniques in molecular biology and proteomics, with an introduction to business management.	Yes-in house at Institute of Parasitology (4-8 months)
2. McMaster University	Bachelor-Master Biomedical Discovery and Commercialization	1-year Masters; goes with 4-year BSc.	18 credits	Focus on developing skills in biomedical discovery and research starting in the third year of the BSc, continuing to the fourth year and a one-year Master's.	Yes- students are required to find them independently
3. Northeastern University-Toronto	Master's in Science in Regulatory Affairs for Drugs, Biologics, and Medical Devices	15 months	54 credits	Focus on managing global processes for organization involved in developing and seeking marketing approval for regulated healthcare and food products. (Fully online program)	No
4. University of Calgary	Master's in Biomedical Technology	12 months	33 credits	Focus on biomedical science with training in business including scientific, market, patent, and financial analysis.	Yes-Practicum paid (3 months)
5. University of Guelph	Master's in Biotechnology	12 months with an option for 16 months	40 credits	Focus on molecular approaches to biotechnology, commercializing innovations in biotechnology and business skills.	No-unpaid industry project a possibility

6. University of Lethbridge	Master's in Science in Agricultural Biotechnology	24 months	90 credits	Focus on agricultural biotechnology,	Co-op option available
7. University of Toronto Mississauga	Master's in Biotechnology	24 months	90 credits	Focus on biotechnology in health and agriculture and laboratory skills in biotechnology as well as developing business skills. Students will have an 8-12 month paid internship.	Yes- paid
8. University of Windsor	Master's in Medical Biotechnology	16 months	40 credits	Focus on theoretical concepts in medical biotechnology and practical laboratory techniques used in medical biotechnology industries.	No

Appendix B | Sample of Biotechnology Positions with Master's in Biotechnology Management

Position	Level
Bioinformatician	Mid-Level
Business Development Representative	Mid-Level
Clinical Data Collector	Mid-Level
Clinical Research Associate	Mid-Level
Clinical Research Collector	Mid-Level
Clinical Research Data Coordinator	Mid-Level
Clinical Research Project Manager	Mid-Level
Grant Writer	Mid-Level
Laboratory Researcher	Mid-Level
Laboratory Technician	Mid-Level
Manufacturing Supervisor	Mid-Level
Marketing Researcher	Mid-Level
Materials Planner	Mid-Level
Process Development Technician	Mid-Level
Production Planner/Scheduler	Mid-Level
Project Coordinator in Manufacturing	Mid-Level
Project Manager	Mid-Level
Regulatory Affairs Coordinator	Mid-Level
Regulatory Affairs Specialist	Mid-Level
Research Analyst/Associate	Mid-Level
Research Manager	Mid-Level
Research Technician	Mid-Level
Quality Assurance Analyst	Mid-Level
Quality Control Analyst	Mid-Level
Quality Control Assurance	Mid-Level
Quality Control Inspector	Mid-Level
Science Writer	Mid-Level
Technical Writer	Mid-Level

*Medical Biotechnology positions are from BioTalent Canada, the HR partner of Canada's bioeconomy, and specifically derived from BioCareer Pathways, a project funded by the Government of Canada: www.biotalent.ca

Appendix C | Master's in Biotechnology Management Course Structure

1. **Required Courses**

Fall 1			
Organizational Theory and Strategic Management	This course is designed to expose students to a macro-perspective on organizations and many facets of organizing and strategy that contribute to varied organizational performance.	1.5 credits	Offered: Fall (Offered Weeks 1-6)
Manufacturing and Service Operations Management	In this course, we review classic qualitative and quantitative models in manufacturing and service operations management.	1.5 credits	Offered: Fall (Offered Weeks 1-6)
Organizational Behavior	This course is designed to expose students to a micro-perspective on organizations and provide them with good understanding of factors influencing individual and group behaviour and performance in organizations.	1.5 credits	Offered: Fall (Offered Weeks 1-6)
Management Information Systems	Overview of the main information systems used by organizations and how they can be managed	1.5 credits	Offered: Fall (Offered Weeks 7-12)
Financial Management Accounting	Designed to introduce students to how sales and operations are summarized and reported for internal and external users in monetary terms	1.5 credits	Offered: Fall (Offered Weeks 7-12)
Introduction to Biotechnology Practices	This course provides students with a theoretical background and working knowledge of the field of biotechnology. Students will learn fundamental theories of biotechnology science, latest discoveries, and biotechnology processes. The course will also examine the context of traditional versus modern biotechnology processes, and survey the scientific, ethical, and social considerations in these contexts. Prerequisites: Must be enrolled in the Master's in Biotechnology Management program.	3 credits	Offered: Fall

Science Communication and Writing	This course is designed to give students the opportunity to develop their science communication and writing. Students learn to write articles and reports for science audiences and general audiences, deliver effective oral presentations and communicate science using online platforms. One of the objectives of the course is to prepare students to successfully interview, secure and complete their paid internship s in biotechnology.	3 Credits	Offered: Fall
Winter 1			
Law and Corporate Governance	This course will explore the legal environment of corporate governance, including the duties and liabilities of directors and officers; audit committee requirements and financial reporting; compensation committee requirements and reporting; governance rules and guidelines; shareholder rights and remedies, as well as international issues	1.5 credits	Offered: Winter (Weeks 1-6)
Introduction to Financial Management	The course serves as an integral module of the Graduate Diploma in Management program and provides a condensed introduction to basic financial management within an organization.	1.5 credits	Offered: Winter (Weeks 1-6)
Principles of Marketing Management	The course serves as an integral module of the Graduate Diploma in Management program and provides a condensed introduction into basic marketing functions within an organization.	1.5 credits	Offered: Winter (Weeks 1-6)
Research and Development in Biotechnology	This course introduces students to research and development practices in the Canadian biotechnology industry. Emphasis is placed on the biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labelling, and good manufacturing practice to prepare students to secure and complete their paid internships in biotechnology.	3 credits	Offered: Winter
Data Analysis, Product Development and	This course offers a dual purpose. The first part of the course will provide a comprehensive introduction to the software tools and methods for analyzing biotechnology	3 credits	Offered: Winter

Commercialization in Biotechnology	data, with an emphasis on statistical reasoning and critical interpretations of statistical information in the biotechnology industry. The second part of the course, with provide training on biopharma product development and commercialization		
Laboratory Skills in Biotechnology	This course focuses on the latest laboratory techniques in biotechnology. The main objective of the course is to develop students' skills in practical laboratory skills, experimental procedures, and analysis in biotechnology.	3 credits	Offered: Winter
Paid Internship A			
Fall 2			
Capstone Experience	This course represents the capstone course in the Master's in Biotechnology Management program. Students will look back and synthesis their academic learning and throughout the Master's in Biotechnology Management program, to transform these skills for future contexts. Students form communities of learning to investigate real issues affecting the success of biotechnology organizations through case study management. Students will face complex business situations in biotechnology, draw upon their understanding of the functional areas of business, general management, and biotechnology to identify and assess alternatives, and provide recommendations to management in a consultative capacity.	3 credits	Offered: Fall

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To whom it may concern,

I am glad to share my supportive feedback regarding the development of the Professional Master's in Biotechnology Management at York University Markham Campus.

I am a Regional Director at 3W Healthcare. We are a company that mainly manufactures and distributes consumer medical devices and home healthcare equipment globally. My main role is overseeing procurement, regulatory affairs and distribution operations within Canada.

I have had the opportunity to meet with the YorkU team working on the development of this professional degree. Our meeting allowed me to become familiar with the structure of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two disciplines, and a Biotechnology internship component. I have also had the opportunity to explore the courses within each of the biotechnology and management components of the degree.

I am in agreement with the interdisciplinary program structure that integrates biotechnology and management. Specifically, I value introducing prospective biotechnology students to principles of manufacturing and service operations management. This primes biotechnology trainees with a foundation of essentials in that domain without necessarily having to pursue an extensive post graduate program such as Lean Six Sigma. I also highly value exposing students to principles of marketing management, where employers such as ourselves can benefit from such skills down the road, especially pertaining to digital marketing.

I am also supportive of the Research and Development in Biotechnology course. Companies such as us are in need of improved skills supporting the formulation of SOPs and GMP drafts. The same applies to the Science Communication and Writing course, an area of struggle for many of our hires.

Overall, I believe that this interdisciplinary program will greatly improve the competence and employability of graduates. Furthermore, this is especially exciting for us as the launch of the program is aligned with our planned expansion of our manufacturing capabilities in the near future.

Please feel free to reach out to me if you have any questions or concerns in regards to this letter.

Thank you,

Waleed Mushfiq

BenchSci

September 28, 2021

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To whom it may concern,

I hereby present my supportive feedback regarding the development of the Professional Master's in Biotechnology Management at York University Markham Campus.

I am a Senior Business Analyst at BenchSci in Toronto. We are a company that mainly provides a machine-learning based software solution to accelerate research and reduce wastage for top pharmaceutical companies in the world. My main role is to provide business analytics and advisory on performance and efficiency improvements for these pharmaceutical companies.

I have had the opportunity to meet with the YorkU team working on the development of this professional degree. Our meeting allowed me to become familiar with the structure of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two disciplines, and a Biotechnology internship component.

I would like to express my agreement with the program structure. I believe that the interdisciplinary approach integrating biotechnology and management, and especially the finance/accounting/business aspects, will greatly benefit the competence and employability of the graduates. The same applies to project management fundamentals that would provide leverage for graduates landing manufacturing-related opportunities.

I have also had the opportunity to explore the courses within each of the biotechnology and management components of the degree. Specifically, I support the inclusion of Good Manufacturing Practices (GMP) regulations but also encourage the team to include fundamentals of Good Laboratory Practice (GLP) testing regulations. I also support the inclusion of Research and Development (R&D) principles and encourage the inclusion of quality-cost evaluation principles. I have also voiced my opinion in emphasizing essentials of manufacturing and scaling up processes.

Overall, I believe that Canadian Biotech companies can benefit from graduates of such a program, especially that it is being designed in consultation with the industry.

Thank you,

Alvin Liu

DNA Labs

DNA Labs™
GENETIC TESTING SOLUTIONS

Aaron Goldman, PhD
Chief Science Officer
DNA Labs Canada Inc.
aaron@dnalabs.ca
(416) 561-0288

To whom it may concern,

I present this letter in support of the development of the Professional Master's in Biotechnology Management at York University Markham Campus.

I am a co-founder and Chief Science Officer at DNA Labs Canada. We are a DNA testing company that provides state-of-the-art genetic testing services to clinicians and researchers across North America. My main role is to oversee all scientific functions of the company, including research, development, and commercialization of new genetic testing panels. In this capacity, we are always looking for high quality individuals to fill various research and development roles, and thus I am excited by the launch of this Master's in Biotechnology program.

I have had the opportunity to meet with the YorkU team working on the development of this professional degree. Our meeting allowed me to become familiar with the structure of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two disciplines, and a Biotechnology internship component.

I would like to express my agreement with the program design. I believe that the interdisciplinary approach integrating biotechnology and management will greatly benefit the competence and employability of the graduates, given the evolving landscape of biotechnology in Canada. I have also had the opportunity to explore the courses within each of the biotechnology and management components of the degree. Specifically, I highly agree that a statistical/analytical component is a must and employers such as our group are in need of better trained individuals in this domain.

Overall, I believe that companies such as ours can benefit from graduates of such a program. In fact, we look forward to its launch as our growth plans align well with the timing and availability of prospective interns.

Sincerely,

Aaron Goldman, PhD

Medison

MEDISON
Delivering Innovative Healthcare

To whom it may concern,

I, Joe O'Neill, General Manager at Medison Pharma Canada.

I, Mark Gibson, Business Unit Director at Medison Pharma Canada.

Medison Canada is a pharma company with the mission to help save and improve the lives of Canadian patients across the country who suffer from the most challenging disease. Focusing solely on commercializing highly innovative therapies, Medison Canada is a pioneer in the Canadian healthcare landscape.

We are glad to share our support regarding the development of the Professional Master's in Biotechnology Management at York University Markham Campus. We have had the opportunity to meet with the York University team working on the development of this professional degree. Through our meeting, we became familiar with the design of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two, and a Biotechnology internship component.

First off, we would like to emphasize that our feedback is heavily Canadian-centered. We consistently see remarkable science driven in Canada. Yet, we repetitively see a block in translating this science into industrial-type opportunities. Even when we succeed in that regard, the success rate is minor, and we eventually lose this potential out of the Canadian infrastructure to larger corporations. We need to help anchor companies in Canada that are global. As such, our feedback regarding this degree is based on aspects that will support this goal.

One feature that the Canadian ecosystem is missing to allow such Canadian potential to flourish, is an understanding of the business aspect. In that regard, we are pleased to see a management diploma component in the proposed degree. We also highly encourage a curricular focus on **venture capital basics** and other types of funding that can sustain the development of Canadian start-ups.

Another feature that we strongly believe Canadian graduates will highly benefit from is appropriate training in **data analytics**. Such individuals would have a significant advantage in future leadership roles. For example, leaders with the appropriate fundamentals would be able to bridge data analytics and artificial intelligence with drug design. As such, we are again pleased to see a data-analytics component in the degree, and we encourage the organizing team to give this component special attention as it would provide their graduates with a leading competitive edge.

Another aspect that we think will highly enhance the employability of graduates from this degree is appropriate training on the **commercial end**. This is simply because the reality of Canadian demand is highly grounded in regulatory, reimbursement, health policy, patient engagement, quality, compliance etc. Even speaking from a Medison perspective specifically, we are highly active in these areas and regularly employ in this domain.

1176 Mt. Pleasant Rd. Unit 2
Toronto, ON M4N 2T2

MEDISON
Delivering Innovative Healthcare

Finally, and going back to the management component of this degree, we highly support this element and the inclusion of training in marketing. Specifically, we encourage future instructors to pay special attention to **omnichannel marketing**.

In summary, we are pleased to support the development of this degree especially being done in consultation with industry experts. To us, this is important since it allows catering the educational experience to benefit the future success of the Canadian landscape. We look forward to the opportunity of interacting with prospective interns and graduates.

Regards,

Joe O'Neill

Mark Gibson

Mark Gibson

1176 Mt. Pleasant Rd. Unit 2
Toronto, ON M4N 2T2

Medical Affairs Professional

James G. Burns, PhD
4464 Majestic Drive
Victoria BC Canada
burnsjamesg@gmail.com

To whom it may concern,

Please accept this letter as a brief statement of support for the Professional Master's in Biotechnology Management at York University Markham Campus.

I am currently a Medical Affairs professional at a global pharmaceutical company and have held roles in small to large pharmaceutical companies for the past nine years. My main roles include development of clinical trial protocols, delivery of fair and balanced scientific information, and pipeline therapy strategy.

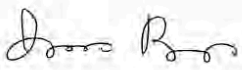
I have had the opportunity to meet with the YorkU team working on the development of this professional degree. Our meeting allowed me to become familiar with the structure of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two disciplines, and a Biotechnology internship component.

First, the interdisciplinary aspect of this degree along with the experiential components increase the employability of prospective graduates. This is mainly because their knowledge and skills would exceed what is gained from a typical academic training in this domain.

Second, I strongly support the science communication course that is planned for the program, as it addresses one of the biggest gaps seen in new hires – the ability to communicate science to intelligent educated non-experts and to larger groups. These are skills that can be learned but are frequently ignored. I appreciate that the program development team is taking this component seriously. I also advise that the course is designed with ample practical opportunities and continuous feedback (even from external guests) to maximize the outcomes of the training experience. In that regard, I was also pleased to see that the program development team appreciated the importance of this component and has moved the course to the first term of the degree so that students get a jump start on these skills before applying for internships.

Overall, I believe that graduates of such a program will be equipped with skills that will facilitate their success in the industry.

Thank you,



James G. Burns, PhD

Prollenium

PROLLENIUM

Mary Avolio, Director Human Resources
Timothy Lee, Chief Scientist/Head R&D

Prollenium Medical Technologies, Inc.
29 East Wilmot Street,
Richmond Hill, Ontario
L4B 1A3
905-508-1469

To whom it may concern,

I hereby present my letter of feedback regarding the prospective Professional Master's in Biotechnology Management at York University Markham Campus.

I am a Director of Human Resources at Prollenium Medical Technologies, Inc. We are a company that manufactures and distributes dermal fillers. My main role is to oversee the administration of the human resource programs which includes, but not limited to, compensation, benefits, disciplinary matters, disputes, performance and talent management, occupational health and safety.

I am a Chief Scientist/Head of Research & Development at Prollenium Medical Technologies, Inc. My main role is to oversee the development of new class III medical devices and the regulatory approval & commercialization of these devices within the different markets globally.

I have had the opportunity to meet with the YorkU team working on the development of this professional degree. Through our meeting, I became familiar with the design of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two, and a Biotechnology internship component. I have also had the opportunity to explore the courses within each of the biotechnology and management components of the degree.

First off, I am supportive of the management component of the degree as it brings in skills that prospective graduates will definitely benefit from in an interdisciplinary industry. I am also in agreement with regards to the value of an integrative capstone project that bridges both biotechnology and management. In fact, I highly recommend that students have the opportunity to bring in their own projects from their internship experiences in order to make the capstone learning component as relevant to the industry as possible.

Second, I am in support of the R&D course component. With that said, there might be a substantial amount of content to cover in one course. One option would be to split the course into two. For instance, the 1st component could focus on getting a product to market and operations. The 2nd component would cover regulatory approval of a product in different markets. Another option would be to integrate some of the content elsewhere in the program such as in the capstone project. Regardless, I consider the regulatory and quality assurance content of extreme importance, given its relevance to Prollenium and to the Canadian biotech industry in general.

I also support the data analysis component of the curriculum. With that said, I think that some of this content could potentially be integrated within clinical trials and laboratory skills. This might free up space

for covering software tools such as ERP systems and CRM or even programs for customer service and other operational software.

Finally, I highly appreciate the scientific communication and writing course since I frequently find that the writing skills of hires is not always at a level that is conducive to the industry. This is especially important given the volume of opportunities within the regulatory subfield of biotechnology in Canada.

Overall, I was pleased with the development of this program. I was also reassured with the receptivity of the group to incorporate various input from the industry.

As such, I believe that this interdisciplinary program will greatly improve the competence and employability of the future talent pool in Canada. I look forward to the opportunity of interacting with prospective graduates.

Regards,

DocuSigned by:
Mary Avolio 20-Oct-2021
91AD8094848E47...
Mary Avolio

DocuSigned by:
Timothy Lee 20-Oct-2021
E5D33E9D380E4D0...
Timothy Lee

Prollenium Medical Technologies Inc.
29 East Wilmot Street
Richmond Hill, ON L4B 1A3

Telephone: (905) 508-1469
www.prollenium.com

Sebia

Cody Mah
Service Manager
Sebia Diagnostics Canada Inc.

To whom it may concern,

I would like to provide my feedback regarding the Professional Master's in Biotechnology Management at York University Markham Campus.

I am the Service Manager at Sebia Diagnostics Canada Inc. We are a proud partner in the Medical Diagnostics space, providing electrophoresis solutions for the diagnosis of multiple myeloma, diabetes, hemoglobinopathies and alcoholism.

I have had the opportunity to meet with the YorkU team working on the development of this professional degree. Our meeting allowed me to become familiar with the structure of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two disciplines, and a Biotechnology internship component.

First off, I would like to express that the management component is much needed to improve the background of hires in the field of biotechnology. However, I would like to emphasize that it would be of utmost importance to integrate as much biotechnology into this management component as possible. This sheds light on the crucial role that the capstone experience will play in bringing together both fields. I also highly recommend tailoring the capstone experience to include topics of day-to-day operations including exposure to marketing management, as well as sales processes and strategies in the world of biotechnology. This is important as I've had interactions with graduates in the past who are unfamiliar with what a tender or an RFP is. So, exposing students to such fundamental principles would be helpful.

Finally, I am also in agreement with the importance of experiential learning and internships in the program. I highly recommend securing subsidies to offset the cost of the employer and I am glad that the program developers are working on this aspect. I also encourage the developing team to set up 8 months long internships or longer to account for the onboarding process.

Overall, I believe that Canadian Biotech companies can benefit from graduates of such a program, especially that it is being designed in consultation with the industry.

Please feel free to reach out if you have any questions or wish to discuss further.

Sincerely,

Cody Mah
Service Manager
Sebia Canada

Sebia Diagnostics Canada Inc.
310 – 550 Avenue Beaumont, Montreal, QC, H3N 1V1, Canada
+1 (888) 725 3013 +1 (438) 380 3780 www.sebia.com

Eversana

Lindy Forte
Head, Market Access & Pricing
CRG-EVERSANA Canada Inc.
210B-219 Dufferin St.
Lindy.forte@eversana.com
416-453-8350

To whom it may concern,

I am glad to share my supportive feedback regarding the development of the Professional Master's in Biotechnology Management at York University Markham Campus.

I am a Head of Market Access & Pricing at CRG-EVERSANA Canada Inc. We are a company that mainly prepares Health Technology Assessment Dossiers for public and private payers across Canada and also provides pricing negotiation support to our pharmaceutical and biotechnology company clients. My main role is to lead the group of 17 employees and provide strategic insight into many of our projects based on my 20 years in Market Access.

I have had the opportunity to meet with the YorkU team working on the development of this professional degree. Through our meeting, I became familiar with the design of the program: Graduate courses in Biotechnology, a Diploma in Management, a capstone project integrating the two, and a Biotechnology internship component. I have also had the opportunity to explore the courses within each of the biotechnology and management components of the degree.
First off, I would like to say that we have had extensive experience working with interns over the years. We offer our interns opportunities in strategy-related work and even putting together health technology assessment dossiers. We often retain these students on the long term.
Through these experiences, we have come to realize that students frequently lack science communication and presentation skills along with overall professional etiquette. We have seen graduates struggle with such tasks as presenting to the CEO of a company. We are very glad to see that the Master of Biotech Management program presented to us is designed to tackle this gap and better prepare the future pool of talent for these skills.
A second common theme surfacing from our interaction with graduates from other programs over the years, is their lack of knowledge pertaining to market access, at least not to the extent required in Canada. Some programs include brief exposure to health economics, but these are more academic focused and not truly applicable to what the health technology assessment organizations are looking for (which is much more practical and rigorous). I was pleased to hear that the group working on the Master of Biotechnology Management program will ensure that students receive exposure to such topics curated by experts from the industry (type of hires and guest lectures etc.). It was also reassuring that a much more experiential approach will be adopted to as much of these topics as possible.
Yet another issue that we raised in our meeting is an additional shortfall of other programs, where excessive focus is placed on group work without ensuring accountability for learning at the individual level. This is especially important for project management and writing skills. We expressed this concern to the group and they responded with positivity that they will ensure

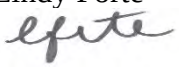
sufficient opportunities to master and assess these skills at the individual level and not only at the group level.

Overall, I was pleased with the current design of the program especially with the inclusion of professional communication training and sufficient exposure to technical skills. I was also reassured with the receptivity of the group to incorporate market access exposure and focus on individual learning along with group work.

As such, I believe that this interdisciplinary program will greatly improve the competence and employability of the future talent pool in Canada. I look forward to the opportunity of interacting with prospective graduates.

Regards,

Lindy Forte



Appendix K: Other support letters

YORK
UNIVERSITÉ
UNIVERSITY

FACULTY OF SCIENCE

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scidean@yorku.ca
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September 10, 2021

Re: Professional Master's of Biotechnology Management for the Markham Campus

Dear Dr. Bayfield,

We have received your proposal for the creation of a Professional Master's of Biotechnology Management for the Markham Campus starting in September, 2023. We support this proposal and will support your efforts however we can, including continued assistance from the Faculty Education Development Specialist, as well as navigating through the official approval process, which includes Faculty Curriculum Committee, Faculty Council and Senate approval. We believe there will be strong demand for this Professional Master's degree, which aligns with our newly approved Strategic Objectives. We support the complement and staff requirements associated with the program as detailed in the proposal, and will discuss any additional resources that may arise as you continue to develop this degree.

Sincerely,

Rui Wang
Dean, Faculty of Science

YORK
UNIVERSITÉ
UNIVERSITY

YORK UNIVERSITY
LIBRARIES

Office of the Dean

516 Scott Library
4700 KEELE ST.
TORONTO ON
CANADA M3J 1P3
T 416 736 5601
F 416 736 5451
www.library.yorku.ca

Memorandum

To: Mark Bayfield

From: Joy Kirchner, Dean of Libraries

Date: October 13, 2021

Subject: Master's in Biotechnology Management Program Library Support

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York University Libraries (YUL) is strongly positioned to support the curriculum and research needs of students and faculty in the proposed Master's in Biotechnology Management program at York University's Markham Centre Campus. As noted in the Statement of Library Support, YUL provides access to an extensive array of resources and services that support the academic engagement of students and faculty in this interdisciplinary program. I draw your attention to the new Markham Centre Campus Library (MCCL) spaces that will provide immersive, technology enhanced spaces that lends itself well to your program. A dedicated graduate reading room for graduate students will also be provided in MCCL. I also highlight YUL's curriculum integration offerings and specialized programming offered through our digital scholarship centre.

We look forward to contributing to the success of students and faculty in the Master's in Biotechnology Management program.

cc: Patti Ryan, Director, Content Development and Analysis,
Jack Leong, Associate Dean of Libraries, Research and Open Scholarship
Andrea Kosavic, Associate Dean of Libraries, Digital Engagement and Strategy

Master's in Biotechnology Management
Statement of Library Support

September, 2021

This statement of library support for the proposed *Master's in Biotechnology Management* has been prepared in accordance with the guidelines outlined in the Quality Assurance Framework as set out by the Ontario Universities Council on Quality Assurance. It describes some of the services and levels of support that York University Libraries (YUL) will be able to provide to students and faculty at the Markham Centre Campus. YUL supports all programs through providing immersive spaces, diverse collections, instructional services, research assistance, access to knowledge resources, expertise with research dissemination, and adaptive services.

This new *Master's in Biotechnology Management* program draws from varied disciplines such as Biology, Molecular Biology, Bioinformatics, Chemistry, Statistics, Business Management, and Engineering. This interdisciplinary scope aligns well with the York University Libraries cross-disciplinary approach to collections and services. The Markham Centre Campus Library (MCCL) supports multimodal learning offering technology, space, and expertise fundamentally integrated with program offerings. The technologies available at MCCL, including media capture and editing suites, Virtual Reality capabilities, and the visualization wall will enable creative collaborations for students, faculty and community partners. From a rich and varied collection of print and electronic resources and tools, to one-on-one consultation services, instructional sessions, co-curricular offerings, and group study spaces, the Libraries are well-positioned to support student success in what promises to be a rich, intensive program of study.

An overview of relevant York University Libraries services and resources for students and faculty is provided in subsequent sections.

Library Curriculum Integration for Master's in Biotechnology Management

Information Literacy encompasses the skills to find, retrieve, evaluate, use, and create information which enable students to participate fully in the university environment and their disciplinary culture. IL integration strengthens alignment with Degree Level Expectations and the seven defined categories of broad knowledge and skills integral to Ontario's Quality Assurance Framework.

Scaffolding information literacy instruction is most effective when organized at the program level as it eliminates duplication, improves assignment outcomes, and enables students to apply their learning. Information literacy (IL) instruction spans many areas including locating and searching information sources, managing search results, data management, record keeping, copyright, ethics, and academic integrity. Based on ACRL's Framework for IL for Higher Education, and years of experience, we suggest integrating library instruction into the assignments of a few courses to build relevant foundational skills that can be immediately applied. The following are examples of how this could be achieved:

- *BIOTXXX Introduction to Biotechnology Practices*

    - Bioethics and academic integrity
- *BIOTXXX Science Communication and Writing*
    - Library resources that are available for Biotechnology Management e.g., subject research guides in Biology, Chemistry, Bioinformatics, Statistics, and Health Industry Management
    - Searching databases and managing the search results with bibliographic management software such as Mendeley or Zotero
    - Identifying publication/literature types (including clinical trials) and their methodologies
    - Finding and searching registries of clinical trials
    - Critical appraisal tools, sources, and applications
- *BIOTXXXX Introduction to Financial Management*
    - Finding and searching finance management resources
- *BIOTXXX Research and Development in Biotechnology*
    - Researching biotechnology business management and industry developments
- *BIOTXXX Software Tools for Biotechnology Data Analysis*
    - Research data management
    - Data visualization
    - Introduction to the Library Visualization Wall
    - Documentation and record-keeping

Instructors are encouraged to take advantage of dedicated, in-class sessions that can be tailored to course materials and assignments. A wide range of programming is available, including digital and information literacy, blended learning modules, co-curricular programming, and open educational resources and student seminars.

Students in data science programs may benefit from dedicated, in-class workshops related to developing and implementing search strategies, tracking and correctly citing data sources, and managing collections of reference materials and citations. In-class sessions should be organized and booked in advance of each semester's offerings, and requests can be submitted at https://classrequests.library.yorku.ca/

Digital Scholarship Centre and Specialized Programming

To discuss curriculum integration in the areas of digital scholarship, digital cultures and pedagogy, data management, open education, or scholarly publishing, YUL welcomes faculty to contact the Digital Scholarship Centre. The Digital Scholarship Centre (DSC) at York University Libraries houses knowledge in a range of digital tools and methods for web crawling and scraping, data cleaning, data curation, text processing and analytics, social graph analysis, data visualization, and linked open data applications, with an emphasis on sustainable, low-barrier approaches, and open-source tools. The Digital Scholarship Centre draws expertise from a variety of departments within York University Libraries. The Digital Scholarship Infrastructure (DSI) supports students and faculty seeking assistance with open repositories, research project design, eLearning, and Open Educational Resources. The Open Scholarship department (OS) supports student and faculty needs around open access publishing, retaining author rights, improving research visibility, research data management, and adopting open science workflows. The department also hosts a data services team that can provide guidance on how to find and evaluate aggregated data and microdata sources for research projects as well as on how to document, publish, and preserve research data objects.

Immersive Spaces at Markham Centre Campus Library

The **Media Creation Spaces at MCCL** offer equitable access to library expertise and media creation spaces including audio and video recording equipment, audio-visual media creation spaces and editing suites, portable virtual reality headsets, and workstations for hands-on digital media production work. The Digital Scholarship Centre offers resources for faculty members seeking to integrate audio- and video-based assignments and activities into their courses and enables media literacy skills development in support of coursework and capstone projects. In addition, it serves faculty needs for equipment and recording space as they are developing their own eLearning Open Educational Resource materials.

The **Makerspace at MCCL** is a site for critical making, offering a research and learning environment where students and researchers have access to 3D printers, electronic textiles, sewing machines, electronics, and robotics. This large space is configured as a teaching environment and can accommodate in-class learning. Library makerspace programming fosters key digital, social, and cross-disciplinary fluencies such as critical and creative thinking, research skills, project planning and management, professional communication, the ability to work in multidisciplinary teams, and adaptability to new contexts and circumstances.

The **Visualization Wall, Gaming Lab and Virtual Reality (VR) Lab** are in a single dynamic, configurable space, with the Visualization Wall augmenting VR and gaming experiences. The Visualization Wall, with a massive viewable area of 28 x 14 feet, allows for enhanced research and teaching applications such as the visualization of large data sets, engagement with sophisticated software platforms, and detailed viewing and modelling of complex structures. The gaming capabilities of the space are leveraged to factor in backwards compatibility for legacy equipment for instructors and allow multiple users to concurrently engage with the visualization wall in a variety of configurations. This infrastructure enables faculty to use VR as a teaching tool by narrating a student's VR experiences as projected on the visualization wall to a class of students. VR applications intensify connection to place and create an extraordinary opportunity to build empathy through lived experiences. Library programming includes introductory instruction in the creation of VR environments.

Library Resources

York University Libraries has adopted an "e-preferred" approach for the acquisition of content, meaning that any requests for new titles will be fulfilled with e-book purchases whenever they are available, and with as few access restrictions as publishers will allow. The Libraries also participates in consortia such as the Canadian Research Knowledge Network (CRKN) and the Ontario Council of University Libraries (OCUL) Scholars Portal, both of which provide access to a growing collection of electronic titles that can be discovered through our primary search interface.

Print materials relevant to the programs can be found through OMNI, the Libraries' main search interface at https://www.library.yorku.ca/. York community members can arrange to have materials held at any of our libraries. Aside from York's collection, our partnership with the OMNI network provides students and faculty members access to print materials housed at any of our 14 partner institutions across Ontario.

Interlibrary Loans (RACER) Interlibrary loan and document delivery options are available through RACER for any additional information needs that may come up. There is no limit to the number of articles that a student or faculty member may order through RACER per year, and these are delivered to the desktop, free of charge. Books can also be requested through this system free of charge. Registration and

requesting is available from: http://www.library.yorku.ca/cms/resourcesharing/services-for-york-faculty-and-students/illrequestform/.

Apart from print books, York University Libraries hosts a large collection of government documents and microfilms, a wide range of audio-visual resources through the Sound and Moving Image Library.

Open Content

As part of its commitment to Open Access and Open Education, York University Libraries is placing increased emphasis on openly licensed and public domain materials for teaching and learning, including sources of open data. In addition, an increasingly wide range of Open Educational Resources (OER) are available through York University Libraries, and we have a guide to finding and evaluating these resources at https://researchguides.library.yorku.ca/OER.

The Libraries is also pleased to provide support for members interested in creating OER for the benefit of the *Master's in Biotechnology Management* program. Complementing our own Pressbooks publishing platform for open textbooks, we encourage faculty members to explore and use eCampusOntario's OER tools, including their Pressbooks platform and their H5P platform for creating open, interactive course content. Learn more about eCampusOntario's commitment to open education at https://www.ecampusontario.ca/open-education-resources/.

Relevant Databases, Indexes, and Data Sources

Many of the courses in the program will focus on diverse topics of biology, bioinformatics, chemistry, biomedicine, statistics, management, and business, in which students will be exploring various fields of interdisciplinary study. To inform their work, students will require access to scholarly articles, trade and industry management information, patents, standards, and sources of data and statistics. The breadth of the program spans many disciplines, all of which can be addressed with elements of the York University Libraries collections.

The Libraries provide access to hundreds of thousands of journals, the vast majority of which are accessible online. Note that individual articles can be located easily in the OMNI catalogue; however, for searching, the Libraries' extensive set of subject-specific databases provide controlled vocabularies, operators, advanced search tools, limits and special filters to enable focused searching for specific topics. Biotechnology articles can be searched in OMNI or discovered through the Libraries' extensive set of subject-specific databases such as *Biological Abstracts (Clarivate), Web of Science (Clarivate), Scopus (Elsevier), SciFinder Scholar (ACS), Medline (Ovid and PubMed), Embase (Ovid), Applied Science and Technology Index (EBSCO),* as well as a range of more domain-specific tools and platforms including all the *NCBI Bioinformatics databases* which are publicly available through the NCBI interface.

Core business databases include *Proquest Business* and *Business Source Complete*; business news databases include *Factiva* and *Nexis Uni;* key company, industry, market research, and finance databases include *Mergent Online, Hoovers, Mergent Intellect, IBISworld, Fitch Connect (*formerly *BMI Research), Capital IQ, Bloomberg, Marketline Advantage, Passport, SimplyAnalytics, Gartner Intraweb*. Statistics and mathematics databases include *MathSciNet (AMS and EBSCO)* and *Current Index to Statistics (IMS and ASA).*

Program-Related Research Guides

York University Libraries publishes research guides related to disciplines and topics addressed by York programs. Existing guides of interest to this program are:

Biology http://researchguides.library.yorku.ca/Biology
Biochemistry https://researchguides.library.yorku.ca/biochemistry
Bioinformatics https://researchguides.library.yorku.ca/bioinfo
Chemistry https://researchguides.library.yorku.ca/chemistry
Science and Technology Studies https://researchguides.library.yorku.ca/c.php?g=679587&p=4793401
Mathematics and Statistics https://researchguides.library.yorku.ca/c.php?g=679408&p=4792454
Data and Statistics https://researchguides.library.yorku.ca/data
Engineering Research Guide (has a section on Finding Patents) https://researchguides.library.yorku.ca/c.php?g=679615&p=4790776
Health Industry Management https://researchguides.library.yorku.ca/c.php?g=679450&p=4790031
Business Articles guide https://researchguides.library.yorku.ca/businessarticles
Business databases are available from the library's Business Databases A-Z list. https://www.library.yorku.ca/web/bbl/collections/businessonline/

Email, Chat, and Consultation Services

In-person assistance with research, citation and other information is readily available from York University Libraries. Currently, online support is available through text messaging, email or through our online chat or drop-in zoom service. Chat and reference support services are accessible every day, with some reduced availability in the quieter Spring and Summer terms. Post-pandemic, librarians and staff will be available onsite at all branches, to provide tailored support for graduate students.

Students in this program may also take advantage of our consultation service, where individuals or groups meet with a subject specialist or data services librarian to discuss specific, assignment- or research-related questions about information sources, search strategies, data storage and preservation questions, data analysis and visualization tools, and more. These consultations are available at regular hours throughout the week, and can be booked online at https://www.library.yorku.ca/web/ask-services/book-a-consultation-with-a-librarian/

Conclusion

York University Libraries is well positioned to support the curriculum and research needs of students and faculty in the proposed *Master's in Biotechnology Management* program at York University. Our external partnerships and collaborative collection building initiatives with other universities have positioned YUL to well support the emerging needs of this program and to ensure the students and faculty are well supported in the ever-changing and complex scholarly communications landscape.

DIVISION OF STUDENTS

Office of the University Registrar

Darran A. Fernandez
University Registrar

Bennett Centre for Student Services
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November 30, 2021

To: Academic Standards, Curriculum and Pedagogy Committee

RE: Proposal for Master's in Biotechnology Management

The proposal for the Master's in Biotechnology Management program at Markham has been reviewed by the Office of the University Registrar.

We support this proposal and look forward to working collaboratively with the Faculty of Science on the implementation details in support of their requirements.

Sincerely,

Darran A. Fernandez, M.Ed.
University Registrar
York University

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January 18, 2022

Mark Bayfield
Department of Biology
Faculty of Science

Email: bayfield@yorku.ca

Dear Professor Bayfield:

Re: Professional Master in Biotechnology Management

On behalf of the Faculty of Liberal Arts & Professional Studies (LA&PS), I am pleased to provide this statement of support for the Faculty of Science's proposal for a new Professional Master of Biotechnology Management program. This innovative and timely new program will give students with undergraduate degrees in Biology, Biological Sciences, Biotechnology, Life Science, and other related disciplines, hands-on experience, and critical competencies for careers in the field of biotechnology management. This new graduate program will enhance programming at our new campus in Markham and complement our Graduate Diploma in Management (GDM).

In addition to supporting this program, LA&PS is pleased to collaborate with the Faculty of Science on this unique program, which will provide students with both a Professional Master in Biotechnology and a Graduate Diploma in Management. The Graduate Diploma in Management from our School of Administrative Studies is intended to serve students without undergraduate education in business to provide them with core skills and competencies to prepare them for careers in management and potentially future graduate studies in business. This dual-credential combination offers specializations in biotechnology and management not found elsewhere in the sector.

I can confirm that the proponents from the Faculty of Science have consulted with our colleagues in the School of Administrative Studies regarding the structure of this program and the capacity of our Faculty to offer the requisite courses in the GDM program. We will continue to communicate with our colleagues in the Faculty of Science to ensure that course planning for the GDM program takes into the account enrolment demand from students in the Professional Master in Biotechnology Management program.

We wish to thank our colleagues in the Faculty of Science for their spirit of collaboration in achieving university-wide goals and developing such a novel program. We wish them every success with the launch of this new program and look forward to working together as partners and founding Faculties for Markham Campus.

Sincerely,

J.J. McMurtry
Dean
Faculty of Liberal Arts & Professional Studies

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OFFICE OF THE PROVOST & VICE-PRESIDENT ACADEMIC

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Memorandum

To: Brenda Spotton Visano, Chair, APPRC

From: Lisa Philipps, Provost & Vice-President Academic

Date: March 14, 2022

Subject: response to external review of Master in Biotechnology Management and Graduate Diploma in Biotechnology, Faculty of Science

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I have reviewed the response of the Dean, Faculty of Science to the external reviewers for the new Master in Biotechnology Management and Graduate Diploma in Biotechnology and am satisfied that the Faculty of Science has addressed the comments of the reviewers, who were enthusiastically in support of the program.

The Dean has noted that the Markham Campus is uniquely well suited to the Masters in Biotechnology Management and Graduate Diploma in Biotechnology as there are many leading biotechnology companies in the region.

While the program will be initiated as a full-time program as previously planned, as the program builds there may well be opportunity to consider adding a part-time option for students. In its first years, the program will focus on retaining a strong capstone experience while offering students the two consecutive paid internships that are integral to the curriculum delivery plan.

To support students in this professional graduate program, the Faculty of Science will work with biotechnology industry partners to develop a limited number of scholarships for needs-based applicants. Students in the program would also be able to apply for OSAP for financial support as needed. Based on industry needs, these internships may take place in person or remotely, supporting flexibility for students and program partners. York's new Markham Campus Co-op and Experiential Education teams will assist in supporting placements that are germane to students and are based in the Markham area.

Pre-requisites for applicants to the program have been amended to ensure that students enter with background in statistics and a strong foundation in biological sciences. Students will be expected to maintain good standing in the program in alignment with Faculty of Graduate Studies expectations. The Office of the University Registrar will assist in the evaluation of international applicants to ascertain that pre-requisites from international institutions are in line with those understood in the Canadian context and build strong cohorts of highly qualified students.

Importantly, the formation of a Biotechnology Management Advisory Board will bring together the full-time faculty delivering this program with other faculty who have related expertise, and with leading biotechnology industry experts who will help the program to remain current with the latest knowledge and practices shaping this industry. The Dean has

confirmed that industry partners on the Advisory Board will have no role in determining admissions to the program.

Finally, the integration of more advanced lab equipment into the curriculum will support students' extensive and applied experimentation.

One full-time faculty member is already in place for this program, and searches are underway for others. I have confidence in the quality and planning for this graduate program and look forward to welcoming the first cohort of Biotechnology Management students to Markham Campus in Fall 2023 and to the growth of the program in years to come. These refinements to the program proposal are appropriate in scope and further demonstrate the Faculty's commitment to the strength and viability of these new graduate degree offerings.

York University Quality Assurance Procedures (YUQAP)
New Program Appraisal

External Appraisal Report on the Proposed New Masters in Biotechnology Management

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External Reviewer(s)

Reviewer #1	Reviewer #2
Lory Z. Santiago-Vázquez, Ph.D. Associate Professor of Biology and Biotechnology Program Chair of Biotechnology M.S. University of Houston-Clear Lake Dept. of Biology and Biotechnology 2700 Bay Area Blvd. Houston, TX, USA 77058 Phone: +1-281-283-3776 santiago@uhcl.edu	Michael Sacher, Ph.D. Professor, Biology Director of Diploma in Biotechnology and Genomics, Biology Concordia University Richard J. Renaud Science Complex, 7141 Sherbrooke W. Montreal, Quebec H4B 1R6, Canada Phone: (514) 848-2424 ext. 5627 michael.sacher@concordia.ca

1. Outline of the Visit

- *Who was interviewed?*
  See agenda picture below.

MEETINGS
SEPTEMBER 24, 2021
Alice Pitt, Senior Advisor, Markham Academic Strategic Planning, Thomas Loebel, Dean, Faculty of Graduate Studies (FGS) Mark Hayward, Associate Dean Academic (FGS)
Mark Bayfield, Program Proponent, Associate Professor, Department of Biology, Faculty of Science Jade Atallah, Assistant Professor, Teaching Stream, Department of Biology
Gerald Audette, Associate Dean Faculty, Faculty of Science Michael Scheid, Associate Dean Students, Faculty of Science Ashley Nahornick, Educational Development Specialist, Faculty of Science

Figure 1: Participants of the 3 different meetings that Dr. Sacher and Dr. Santiago-Vázquez attended on the afternoon of September 24 via zoom.

- *What facilities were seen?*
  The meeting was virtual. However, the organizers provided a pdf document titled "**An Introduction to Markham Campus- York U**". It provided an overview of the facilities, the campus mission, and also provided a short video of the new facilities and plans for the building.

- *Any other activities relevant to the appraisal*
  N/A

2. General Objectives of the Program

- *Is/are the program name and degree designation(s) appropriate?*
  The name of the program and the degree designation are appropriate. It is our feeling that international students are more drawn to programs with the word "biotechnology" in them and we feel this will be no exception.

- *Are the general objectives of the program clear and are they consistent with University and Faculty missions and academic plans?*
  The objectives of the program were clearly stated. One objective was "to provide students with insight into the latest biotechnology theories, discoveries, and laboratory skills". The objectives aligned very well with the Faculty mission and the vision stated for the Markham campus. However, as will be discussed later, we feel that the laboratory course "*Laboratory Skills in Biotechnology*" as presented in this draft of the proposal did not fully convey this objective.

3. Need and Demand

- *Is there sufficient explanation of need/demand for the program?*
  The proposed program sounds unique to the reviewers when compared to other programs in Canada, mixing biotechnology with management skills and required internships. A thorough overview of similar Canadian programs was presented (Appendix A). While there are several master's-level programs in the greater Toronto area, one is focused on health and agricultural biotechnology, and the other is strictly online. The unique feature of this current proposal is the mixture of biotechnology, management, and work placement/internship. We were convinced by the extensive studies indicating that there is in fact a need and demand for this type of program, both from students and from industry executives.

4. Program Content and Curriculum

- *Does the curriculum reflect the current state of the discipline or area of study? If applicable, comment on the appropriateness of any unique curriculum or program innovations or creative components.*
  We found that the work placements were an excellent vehicle for exposing students to the current state of the discipline and providing them with experiential learning. Having said that, we also had concern as to how easy it will be for all students to be matched into a work placement. We stress the need for connections with biotech industry both in the greater Toronto area and elsewhere, as there is no need for solely in-person placements. This could be accomplished through subsequent targeted hires for this program as well as through enthusiastic industry executives already commissioned for their views on this program.
  In addition, the mix of management and biotechnology courses is unique when compared to other Canadian Biotech programs. The fact that students will receive not only a master's degree but a management diploma simultaneously, should position them well for any number of paths upon graduation, including further studies in management at a later time. The work placements, especially if both are done in the same company as planned, could provide graduates with an inside track for a position in the same company which is a certainly a competitive advantage.

- *For graduate programs, is there adequate evidence that each graduate student in the program will take a minimum of two-thirds of the course requirements from among graduate level courses?*

The program is designed to offer 36 credits. The course offerings are fixed, meaning there seems to be no electives other than the courses offered in this program. Thus, students will receive all 36 credits from the courses and work placements in this program and will clearly receive the minimum credits required from graduate-level courses for graduation.

5. Program Structure, Learning Outcomes and Assessment

- *Are the program requirements and learning outcomes clear, appropriate and in alignment with the relevant degree level expectations?*
  The learning outcomes were very clear. The program requirements of 36 credits, coming from courses in the diploma in management program and the biotechnology courses as well as two work placements, were also clear. Admission requirements were clear but we feel they could be more specific. While a degree in a number of biology, chemistry, or life science-related programs was listed as a requirement, we feel the program should specify how many credits and in what subjects would suffice the minimum requirements. For example, what if an applicant has a chemistry background but little in the way of biology or biotechnology? Or perhaps a Biology degree with a background in Ecology. That applicant may in fact struggle with some of the courses. Rejecting such an applicant could result in confusion on the part of the applicant. It would be useful for applicants to know what type of courses and how many credits in those types of courses would be required for this program.

- *Comment on the appropriateness of the program curriculum and structure to support the program learning outcomes. For undergraduate programs, comment on the nature and suitability of students' final-year academic achievement in the program. For research-focused graduate programs, comment on the nature and suitability of the major research requirement(s).*
  The proposal very clearly states the learning outcomes for this program. Each proposed course was linked to one or more of the outcomes. We felt that the links to the outcomes were indeed appropriate and that the courses offered in totality very nicely support all learning outcomes. Though this is not a research-focused program, there is a laboratory course offered, Laboratory Skills in Biotechnology. We felt that the course did not include enough advanced instrumentation for this level of program. The course came across as more appropriate for an undergraduate level and we strongly encourage acquisition of more advanced instrumentation or securing access to advanced instrumentation through some other location or company.

- *Are the methods and criteria for assessing student achievement of learning outcomes and documenting those are appropriate and effective?*
  Assessments are varied and include laboratory reports, exams, written assignments, presentations, and group work. These seem appropriate and fair to the students who may perform better in one type of assessment versus others. Documentation using the "e-class" system is appropriate and will allow students and instructors to be aware of and react to any issues that arise.

- *For graduate programs, comment on the appropriateness of the program length, including on how students' time-to-completion will be supported and managed to ensure that the program requirements can be reasonably completed within the proposed time period.*
  The program length was appropriate. While securing a work placement could be stressful on students who struggle to achieve this, scheduling the Scientific Communication and Writing course in the first semester, before students need to search for a work placement, is a very good idea that can help mitigate any such issues. It is our experience that may students, especially international and non-traditional students, want to be able to study part time. We feel this will also be the case for this proposed program and encourage the committee to consider and work in a part time option.

- *Comment on the appropriateness of the proposed mode(s) of delivery to meet the program learning outcomes.*
  While most courses will be offered in person, two were planned on being offered as either online or hybrid. In addition, during discussions it became apparent that work placements could also be remote if necessary. In addition, remote work placements were discussed as options to broaden the possible

companies available to students. It would appear that all courses except for the laboratory course could be offered online if the situation arises.

- *Comment on the appropriateness of the experiential education component of the program, if applicable.*
  There were multiple opportunities for experiential learning. These include the laboratory course, the two work placements and the capstone project. These are all geared towards multiple learning outcomes. We felt that these experiential components were a strong point of this program.

6. Admission Requirements

- *Are the admission requirements appropriately aligned with the program learning outcomes?*
  As mentioned above on Section 5 bullet 1, the admission requirements could be clearer on background/pre-requisites required. Some of the degrees listed, such as chemistry and some biology disciplines, would not have the required foundation courses for a student to excel in your program. The program proposers may want to consider adding a list of pre-requisite courses that can provide more direction to both applicants and evaluators.
  An item to consider when pre-requisites are adopted would be what to do if a student is mostly qualified but is missing one or a few of these courses. Would the university be able to allow them to complete those courses in their Biology program before they are admitted or after admission and how this will affect the flow of the curriculum?

- *Is there sufficient explanation of any alternative requirements, if any, for admission into an undergraduate, graduate or second-entry program, such as minimum grade point average, additional languages or portfolios, along with how the program recognizes prior work or learning experience?*
  The proposal mentions that graduates with other science degrees or 3-year degrees plus 1 year of relevant work experience may be admitted. A list of pre-requisite courses would also make it easier for a potential student that could qualify with these alternative requirements. It will allow them to judge whether they will have a good chance at admission. For these students, interviews as a requirement for admission might be an alternative.
  These pre-requisites might become very important if the program begins to observe an influx of international applicants, which has been the experience of the reviewers in their respective biotechnology programs. Their educational systems might be quite different from those in Canada and having a list of required or preferred courses might help with their admission evaluation.

7. Resources

For all programs

- *Adequacy of the administrative unit's planned utilization of existing human, physical and financial resources, and any institutional commitment to supplement those resources, to support the program.*
  This is well covered in the proposal, including the building of a brand-new purpose-built laboratory and facilities in the new Markham campus. The building is being designed with the needs of the program in mind. The proposers might want to pursue avenues to obtain more advance instrumentation to teach their Laboratory Skills in Biotechnology course.
  An item to consider would be to coordinate with York University's internships/coop office to help coordinate and manage all the internships/work terms. The office can also assist faculty in developing relationships with industry, which can be time consuming especially if these are required for all students in the program and there are only 2 faculty in the Program to teach all the courses, manage the program, and purse internships for all students.

- *Appropriateness of the collective faculty expertise to contribute substantively to the program.*
  The Faculty of Science recently hired a "full-time, teaching stream faculty member" that will administer the program and teach the Laboratory in Biotechnology course. There is a second search for a faculty member to teach the other required Biotechnology courses. The Graduate Diploma in Management already has the required faculty needed for fulfilling the teaching requirements. During our meetings with the faculty, we

also learned that local subject matter experts will be hired as adjunct instructors or as contributors to lectures or units on courses taught by another faculty. These faculty lines should be able to appropriately cover the teaching needs of the program as long as the student body does not increase too much beyond what is stated in the proposal.

- *Participation of a sufficient number and quality of faculty who are competent to teach and/or supervise in the program, including qualifications, research, innovation and scholarly record.*
  As listed above, faculty are being hired specifically for this program with the needs of the program in mind. An initial number of two might be sufficient to start the program but if the program grows, additional faculty lines might be required to support the growth. The use of adjuncts as described above will help to fulfill the teaching needs.

- *Evidence that there are adequate resources (e.g. library, laboratory, studio space, equipment) to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities.*
  As mentioned above and communicated during our visit, this program will have brand new facilities described in the proposal that will be built with the specific needs of this program. We also want to highlight again the need for more advanced instrumentation to teach the biotechnology laboratory.

Additional criteria for graduate programs only

- *Evidence that faculty have the recent research or professional/clinical expertise needed to sustain the program, promote innovation and foster an appropriate intellectual climate.*
  We were not provided with CV's or websites or any other information on their new hire although we met with a few faculty during our virtual visit. Their ability to understand the needs of the program was evident during our conversation. The other faculty member will be a new hire and the search committee will be in charge of reviewing the credentials to make sure they find the right candidate to fulfill their program needs.

- *Where appropriate to the program, evidence that financial assistance for students will be sufficient to ensure adequate quality and numbers of students.*
  We were informed that there will be no financial assistance provided for students, although their work experience will be paid and they will earn a valuable year of work experience to add to their resume. The proposers might want to consider need-based assistance, especially for local students. Perhaps they can establish scholarships in collaboration with the local biotech industry.

- *Evidence of how supervisory loads will be distributed, and the qualifications and appointment status of faculty who will provide instruction and supervision.*
  Out of the two faculty hired for the program, one will teach the laboratory and administer the program, and the second one will teach four courses. We do not know who will be in charge of the capstone experience. As mentioned several times, these are new hires hired specifically for the needs of this program, therefore their credentials will have to match the teaching needs of the program.

8. Quality of Student Experience

- *Is there evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience?*
  The faculty teaching this program will be teaching-stream and will not have a research program. These faculty are still able to update their skills by participating in conferences, short development/continuing education courses, and their own mini-internships with local biotech industry. The proposed faculty size is small but if they bring in experts to teach, based on what was described above, we expect it to be appropriate. The ability to bring in experts remotely will also be a potential source of adding expertise to the program and enhancing the student experience.

Note: Reviews are urged to avoid using references to individuals. Rather, they are asked to assess the ability of the faculty as a whole to deliver the program and to comment on the appropriateness of each of the areas/fields of the program that the university has chosen to emphasize, in view of the expertise and scholarly productivity of the faculty.

9. Other Issues

N/A

10. Summary and Recommendations (*Note: The responsibility for arriving at a recommendation on the final classification of the program belongs to the Appraisal Committee of Quality Council. Individual reviewers are asked to refrain from making recommendations in this respect.*)

In summary, we were positively impressed with the proposed program and with the unique training opportunities that graduates will acquire. A few items that we would like the proposers to consider are listed below:

a) A part-time option
b) Need-based scholarships
c) Pre-requisites required for admission
d) Potential influx of international students
e) More advanced instrumentation for the laboratory course
f) Remote internships
g) Coordination with university's coop/internship office
h) Biotech advisory board
i) Funding to update faculty knowledge since these will be teaching-stream.

Please feel free to contact us if you have any questions about our report.

Sincerely,

Lory Z. Santiago-Vázquez, Ph.D.
Michael Sacher, Ph.D.

October 25, 2021

York University Quality Assurance Procedures (YUQAP)
New Program Appraisal

Additional Brief Statement on the Proposed New Program in Masters in Biotechnology Management Markham Campus, York University March 2, 2022

External Reviewers:

Dr. Lory Z. Santiago-Vázquez, Associate Professor & Program Chair of Biotechnology, Dept. of Biology and Biotechnology, University of Houston-Clear Lake, Houston, TX, USA

Dr. Michael Sacher, Professor Director, Graduate Diploma in Biotechnology and Genomics Concordia University, Dept. of Biology, Adjunct Professor, Dept. of Anatomy and Cell Biology, McGill University

7. Resources

Additional criteria for graduate programs only

In our initial assessment of the program, under question 7 (additional criteria for graduate programs only), for the heading "*Evidence that faculty have the recent research or professional/clinical expertise needed to sustain the program, promote innovation and foster an appropriate intellectual climate.*" we stated that we based our assessment on conversations with faculty but were not provided with CVs.

We subsequently were given CVs for Drs. Bayfield, Scheid and Atallah, who have all participated in setting up the program and will be involved in its implementation. Based on these CVs and in light of our previous discussions, we feel there is strong evidence that the faculty have the recent research or professional/clinical expertise needed to sustain the program, promote innovation and foster an appropriate intellectual climate.

Dean Rui Wang
Faculty of Science
York University
Toronto, ON

Re: External assessment of Professional Master's of Biotechnology Management & Graduate Diploma in Biotechnology, York University Markham Campus

November 3rd, 2021

Mark Bayfield
Associate Professor

Department of Biology

Faculty of Science

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Dear Dean Wang,

I am writing you to update you on the progress of our revised proposals for the Professional Master's of Biotechnology Management and the Graduate Diploma in Biotechnology. Recently, we received comments from external reviewers for these programs, and we have attempted to revise the proposals accordingly before they are submitted for approval at Faculty Council and then later at ASCP and Senate.

Below, I would like to summarize the respective edits we have made to the proposals in response to the referees in a point-by-point fashion. For clarity, I am referring below to the summary list on Page 6 of the report ("*Summaries and Recommendations")*:

"In summary, we were positively impressed with the proposed program and with the unique training opportunities that graduates will acquire. A few items that we would like the proposers to consider are listed below:

a) A part-time option

We have considered a part-time option for the degree, and hope that we will be able to offer this at a later date. The following text has been added to Section 2.1 (A Brief Overview) of the proposal:

At this point, a part-time option is not being offered, due the nature of the scheduling of sequential coursework, the desire to retain students in cohorts for the capstone course experience and the two consecutive work-placements. As the program grows and the possibility of offering courses more than once a year becomes more likely, the program committee plans to re-visit the option of part-time studies as part of program reflection efforts.

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b) Need-based scholarships

While the proposed degree is a Professional Master's degree and is thus less associated with financial aid, we have added the following text to Section 7.7 (Financial Support):

We plan to liaise with local biotechnology industry to see if we can develop a limited number need-based scholarships to help make the program accessible for students facing financial constraints. Paid internships will also constitute a form of financial aid. Eligible students will also have access to financial aid through the Ontario Student Assistance Plan (OSAP). In addition to OSAP, students have access to additional financial supports which are described on this site: https://www.yorku.ca/gradstudies/students/current-students/awards-and-scholarships/

c) Pre-requisites required for admission

We have added pre-requisites that articulate a requirement for background in statistics and molecular biology/cell biology/biochemistry/genetics (Section 6.1 and Appendix D). Requirements for remaining in good standing was also added based on Faculty of Graduate Studies (FGS) guidelines.

d) Potential influx of international students

In addition to the more extensive articulation of pre-requisites that will allow us to better assess qualifications of applicants (including international ones), we have reached out to Hugo Chen (Director, International Collaborations and Partnerships Dean's Office, Faculty of Science) and Keshia Gray (Associate Registrar & Director Student Recruitment & Admissions). They have confirmed that the Registrar's office will assist us in the assessment of international applicants, which together with the M. Biotech advisory board should allow us to effectively determine the suitability of international candidates.

e) More advanced instrumentation for the laboratory course

The laboratory course description has been modified to incorporate more advanced equipment into the curriculum (Appendix I). Briefly, the laboratory course will consist of a term-long continuous and connected series of experiments that culminate towards an end goal. For instance, students will design, express, isolate, and validate biomedically relevant recombinant proteins starting from molecular cloning all the way to ending with protein functional activity assays. Although general SOPs for the individual techniques will be provided, the students will design, optimize, and troubleshoot their own experimental flow given available reagents.

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Students will communicate their results through team presentations where their findings have to also be connected with developments in the field of biotechnology. Finally, examples of more advanced equipment that will be needed have also been included. It is important to note that these are based on the current general course plan. As the course design develops in more detail, this list will evolve and become more comprehensive.

f) Remote internships

The text of Section 5.5 (Delivery Modes) has been updated: *Work placements could be in-person or remote, based on industry needs.* The course proposals for Work Placement A and Work Placement B have also been modified: *Work placements may be conducted remotely or in-person depending on the employer's needs.*

g) Coordination with university's coop/internship office

We continue to reach out to York's Co-op/Experiential education support staff, including staff that have been assembled for the Markham Campus. The following text has been added to Section 7.5 (Support Services) of the proposal: *Logistics for the work placements associated with the program will be coordinated with the experiential education support team specific to the Markham Campus, including student success advisors, career coaches, work-integrated learning administrators, employer engagement staff, and career development and education support.*

h) Biotech advisory board

This was a very helpful suggestion and we have initiated reaching out to research-stream Faculty and potential industry partners to form an advisory board that will meet regularly in order to assess the suitability of the curriculum as well as to assist with the admissions process. Several research-stream faculty have already agreed to this. The following text has been added to Section 5.5 (Delivery Modes):

The programming and delivery of the M. Biotech Management degree will also be informed and revised through consultation of a M. Biotech Management Advisory Board, which will be made up of the full-time faculty delivering the courses, a group of York research-stream faculty with expertise in biotechnology, as well as leading biotechnology industry experts. Members of the board will also assist in the admissions process. The role of the board might also involve providing an industry perspective to certain topics upon student request. Consultations of willing members to serve on the board have been initiated.

i) Funding to update faculty knowledge since these will be teaching-stream.

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The following text has been added to the proposal in Section 7.1 (Resources):

Faculty delivering the programming will have opportunities to keep up to date with the biotechnology field and for pedagogical development through a professional expense reimbursement fund, sabbatical leaves and industry-coupled training/development opportunities accessed through the M. Biotech Management advisory board and internship relationships.

We are hopeful that our revisions have addressed all the concerns of the external reviewers, and in so doing have strengthened the proposals substantially.

Warm regards,

Mark Bayfield, Ph.D.
Program Lead, F.Sc. @ Markham

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Associate Professor

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YORK
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FACULTY OF SCIENCE

Office of the Dean

Rui Wang
Dean

[redacted]

February 25, 2022

Re: New Program Proposal for Professional Master's of Biotechnology Management and Graduate Diploma in Biotechnology, York University Markham Campus

It gives me great pleasure to enthusiastically support the proposed Master's in Biotechnology Management and Graduate Diploma in Biotechnology programs, currently planned to be offered by the Faculty of Science at York University's Markham Campus. Biotechnology represents one of Canada's fastest growing high-tech areas, whose contribution to the well-being of Canadians has come to the forefront in the context of the COVID-19 pandemic. The proposed programs will train York graduates to become leaders in this exciting and emerging field.

The Markham region is ideally situated for these programs, due to its proximity to many of Canada's leading biotechnology industries. The combination and integration of the Biotechnology and Management components offered in the Master's degree will be unique in Canada, and will address an urgent need articulated by numerous biotech industry leaders. York's planned Markham Campus will provide comprehensive, cutting-edge support for the proposed programs, and the Faculty of Science will staff them with high-quality full-time faculty. One dedicated faculty member has been hired and is already contributing to the mounting of these programs, and searches are also underway for other Markham faculty members. Relationships and links to biotechnology industry leaders that will support paid internships are also already underway, and their strong stated support for these programs represents a key predictor for future success.

We have reviewed the external reviews for the proposals and were delighted to see that they were highly enthusiastic and supportive, specifically highlighting the integrative nature of the Biotechnology and Management components as a strength. Below, I would like to summarize their comments and the respective edits we have made to the proposals in response to their suggestions in a point-by-point fashion. For clarity I will refer to the numbered list on Page 6 of the external review report (*"Summaries and Recommendations"*), with relevant edits to the Master's in Biotechnology Management proposal indicated.

"In summary, we were positively impressed with the proposed program and with the unique training opportunities that graduates will acquire. A few items that we would like the proposers to consider are listed below:

a) A part-time option

We have considered a part-time option for the degree, and hope that we will be able to offer this at a later date. The following text has been added to Section 2.1 (A Brief Overview) of the proposal:

At this point, a part-time option is not being offered, due the nature of the scheduling of sequential coursework, the desire to retain students in cohorts for the capstone course experience and the two consecutive paid internships. As the program grows and the possibility of offering courses more than once a year becomes more likely, the program committee plans to re-visit the option of part-time studies as part of program reflection efforts.

b) Need-based scholarships

While the proposed degree is a professional-type Master's degree and is thus less associated with financial aid, we have added the following text to Section 7.7 (Financial Support):

We plan to liaise with local biotechnology industry to see if we can develop a limited number need-based scholarships to help make the program accessible for students facing financial constraints. Paid internships will also constitute a form of financial aid. Eligible students will also have access to financial aid through the Ontario Student Assistance Plan (OSAP). In addition to OSAP, students have access to additional financial supports which are described on this site:

https://www.yorku.ca/admissions/platforms/current-students/awards-and-scholarships/

c) Pre-requisites required for admission

We have added pre-requisites that articulate a requirement for background in statistics and molecular biology/cell biology/biochemistry/genetics (Section 6.1 and Appendix D). Requirements for remaining in good standing was also added based on Faculty of Graduate Studies (FGS) guidelines.

d) Potential influx of international students

In addition to the more extensive articulation of pre-requisites that will allow us to better assess qualifications of applicants (including international ones), we have reached out to Hugo Chen (Director, International Collaborations and Partnerships

Dean's Office, Faculty of Science) and Keshia Gray (Associate Registrar & Director Student Recruitment & Admissions). They have confirmed that the Registrar's office will assist us in the assessment of international applicants, which together with the M. Biotech advisory board should allow us to effectively determine the suitability of international candidates.

e) More advanced instrumentation for the laboratory course

The laboratory course description has been modified to incorporate more advanced equipment into the curriculum (Appendix I). Briefly, the laboratory course will consist of a term-long continuous and connected series of experiments that culminate towards an end goal. For instance, students will design, express, isolate, and validate biomedically relevant recombinant proteins starting from molecular cloning all the way to ending with protein functional activity assays. Although general SOPs for the individual techniques will be provided, the students will design, optimize, and troubleshoot their own experimental flow given available reagents.

Students will communicate their results through team presentations where their findings have to also be connected with developments in the field of biotechnology.

Finally, examples of more advanced equipment that will be needed have also been included. It is important to note that these are based on the current general course plan. As the course design develops in more detail, this list will evolve and become more comprehensive.

f) Remote internships

The text of Section 5.5 (Delivery Modes) has been updated: *Paid internships could be in-person or remote, based on industry needs.* The course proposals for Paid Internship A and Paid

Internship B have also been modified: *Paid internships may be conducted remotely or in-person depending on the employer's needs.*

g) Coordination with university's coop/internship office

We continue to reach out to York's Co-op/Experiential education support staff, including staff that have been assembled for the Markham Campus. The following text has been added to Section 7.5 (Support Services) of the proposal: *Logistics for the paid internships associated with the program will be coordinated with the experiential education support team specific to the Markham Campus, including student success advisors, career coaches, work-integrated learning administrators, employer engagement staff, and career development and education support.*

h) Biotech advisory board

This is a very helpful suggestion and we have initiated reaching out to research-stream Faculty and potential industry partners to form an advisory board that will meet regularly in order to assess the suitability of the curriculum as well as to assist with the admissions process. Several research-stream faculty have already agreed to this. The following text has been added to Section 5.5 (Delivery Modes):

The programming and delivery of the M. Biotech Management degree will also be informed and revised through consultation of a M. Biotech Management Advisory Board, which will be made up of the full-time faculty delivering the courses, a group of York research-stream faculty with expertise in biotechnology, as well as leading biotechnology industry experts. Members of the board will also assist in the admissions process. The role of the board might also involve providing an industry perspective to certain topics upon student request. Consultations of willing members to serve on the board have been initiated.

i) Funding to update faculty knowledge since these will be teaching-stream.

The following text has been added to the proposal in Section 7.1 (Resources):

Faculty delivering the programming will have opportunities to keep up to date with the biotechnology field and for pedagogical development through a professional expense reimbursement fund, sabbatical leaves and industry-coupled training/development opportunities accessed through the M. Biotech Management advisory board and internship relationships.

In conclusion, I wish to express my full support for these programs.

Sincerely,

Rui Wang,
Dean, Faculty of Science

YORK UNIVERSITY
Faculty of Science

Proposal for a Graduate Diploma in Biotechnology

Intended start date: Fall 2023
Location: Markham Campus

Contents

1. Introduction

1.1 Brief Statement of the Program

The **Graduate Diploma in Biotechnology** (**GDB**) is a graduate certification designed for students who hold a Bachelor of Science degree in Biology, Biological Sciences, Biotechnology, Life Science, or related discipline, and have little/no work experience in Biotechnology, to enhance their competitiveness and employability in the biotechnology sector. This program represents a subset of the courses taken by students in the Master's in Biotechnology Management program, but unlike these master's students, GDB students will not take the Graduate Diploma in Management (GDM) nor complete paid internships.

The program provides students with:

- Graduate courses in Biotechnology designed in collaboration with industry leaders.
- Practical laboratory training in Biotechnology
- Interactions with Biotechnology professionals

The Graduate Diploma in Biotechnology is a much-needed addition to York University's program offerings. It is intended to appeal to students that seek training and education in the field of Biotechnology, especially as this relates to industry and the private sector, but do not require the Management component encompassed in the GDM or the paid internship offered in the Master's in Biotechnology Management. As such the diploma is most suitable for students who aspire to a comprehensive understanding of biotechnology in industry but might already have a management or management-related background, or do not require a management background, and/or for students who wish to opt out of the paid internships offered through the Master's in Biotechnology Management program. Thus, by providing this condensed biotechnology credential, this program will be a distinct program for York University and will be completed over 8 months (two terms).

The Graduate Diploma in Biotechnology is designed to address an unfilled need in the Canadian Biotechnology Industry. Throughout the COVID-19 pandemic, an enormous stress has been put onto to the Canadian society, and the biotechnology industry has been leaned on heavily to bring forward high value strategies and pharmaceuticals options with many job openings remaining unfilled (BioTalent Canada, 2020). The Graduate Diploma in Biotechnology is designed to increase the available pool of trained talent for the biotechnology industry and strengthen the biotechnology eco-system.

1.2 Method Used to Develop the Program

Development of Medical Biotechnology as a research and teaching discipline at York University has been a steady focus over the years. A Biotechnology Bachelor of Science has been in existence for many years at York University.

During 2015, a working group consisting of faculty members from the departments of Biology and Chemistry met to explore the possible organization and curriculum for a master's program in biotechnology. After discussions and informal polling with members of the Faculty of Science, a

steering committee composed of members from various departments of the Faculty of Science reported on planning for the development of a biotechnology program. The positive response from the steering committee has resulted in a Task Force being established by the Dean of Science to develop this program. The Graduate Diploma in Biotechnology was then proposed as a program that would provide students with a comprehensive academic program addressing industrial biotechnology but tailored for students that had a lesser need for the Management component of the Master's in Biotechnology Management. Graduate Diploma in Biotechnology students will only take the Biotechnology course component (5 x 3.0 credit courses) of the Master's degree.

To develop the Graduate Diploma in Biotechnology the Task Force obtained input from faculty deans, faculty members from the Faculty of Science, faculty members from the Faculty of Liberal Arts and Professional Studies, staff from the School of Continuing Studies, prospective students via a detailed focus group, and a survey, and interviews with past alumni working in the Biotechnology field, and industry leaders. Further, feedback from EAB: Education Technology, Services, and Research, an independent advisory board company who specializes in the higher education industry, has helped shape the development of this program.

1.3 **Faculty in which the Program is Housed**

The program will be housed in the Faculty of Science and offered at the Markham Centre Campus, York University.

2. **General Objectives of the Program**

2.1 **Brief Overview**

The program requires students to complete 15-credits in the form of 5 x 3.0 credit courses. Full-time studies will take 2 semesters over 8 months. At this point, a part-time option is not being offered, due the nature of the scheduling of sequential coursework. As the program grows and the possibility of offering courses more than once a year becomes more likely, the program committee plans to re-visit the option of part-time studies as part of program reflection efforts.

Overall, the main objectives of the Graduate Diploma in Biotechnology are to provide students with insight in the latest biotechnology theories, discoveries, and laboratory techniques as well as a practical foundation in the biotechnology industry. As a result, the program is designed to enhance their competitiveness for employment, in a variety of biotechnology related industries, whether in private, public, or non-profit organizations.

The program is designed to appeal to students who hold a Bachelor of Science degree in Biology, Biological Sciences, Biotechnology, Life Science, or related discipline, and have little/no work experience in Biotechnology.

2.2 **Alignment with University and Faculty Missions**

This program will support the University's goals as outlined in the 2020-2025 UAP as follows:

21st Century Learning: The program's design aims to increase the University's profile as a provider of innovative academic programs and strengthen York University's comprehensiveness and cross-disciplinary offerings. The Graduate Diploma in Biotechnology is designed to provide professional preparation for our graduates to fill current labor needs in the biotechnology sector and strengthen the Canadian economy, which have been heavily leaned on during the COVID-19 pandemic (Canada's Biotechnology Industry, Driving Economic Growth, 2021[i]; Growing the bioeconomy, 2021).

Knowledge for the Future: The program aims to establish York as an innovation hub in Biotechnology. Faculty for this program will focus on knowledge mobilization and advancement of exploration, innovation, and growing the bioeconomy in the ever growing $19 billion Biotechnology Canadian market of healthcare.

From Access to Success: The Graduate Diploma in Biotechnology is designed to augment the education and training that student have received past their undergraduate degrees. As the courses offered in the GDB are tailored to be industry-centric, the program is designed to increase access of students to the Biotech industry sector and to promote their success there.

Advancing Global Engagement: The program will be housed in the Faculty of Science in the Markham Centre Campus. The Markham Centre Campus will be offering students innovative, relevant job-ready academic programing, and the Graduate Diploma in Biotechnology will do just this. Additionally, we plan to have a robust recruitment of international students from a multitude of countries and continue to be long-term partners in learning.

Working in Partnership: This program is built around developing interdisciplinary partnerships with the Biotech industry sector of the Markham region. One of our top priorities, as well as that of York University, is to collaborate with local industry to inform the course content of the Graduate Diploma in Biotechnology.

Living Well Together: In searches for teaching staff for the Graduate Diploma in Biotechnology, we will also pay close attention to mentorship, effective teaching, and curricula skills of hires to ensure the faculty complement has the depth and breadth necessary to deliver a program embracing a culture of service excellence.

University Goals

York University's Strategic Mandate Agreement (2020-2025) identifies Science as a specific target area of strength and growth. Additionally, York University's Strategic Mandate Agreement articulates a continued focus on providing unique interdisciplinary programs that respond to the needs of the global knowledge economy. This program will contribute to York University's growth at the graduate level. Biotechnology is truly interdisciplinary in nature with the intersection of biology, chemistry, physiology, genetics, therapeutic strategies, and the scientific method, and aims to fill employment gaps in the biotechnology industry responding to the COVID-19 crisis. This program will offer a rich learning experience with training in

biotechnology theories, skills, and practice, and as such, is expected to drive demand and interest for the program.

Faculty Goals

York University's Faculty of Science Strategic Plan (2021-2025) calls for the Faculty of Science to offer distinctive and appealing programs to reflect the aspirations of students. This new program exhibits all these calls to action. The program has been specifically built around providing a unique educational offering in Biotechnology and addressing the increasing number of employment opportunities in biotechnology careers in a $19 billion industry currently employing 13 000 people directly and 30 000 people indirectly (BioTalent Canada, 2018), and under a lot of pressure due to the COVID-19 pandemic. At the same time, the Faculty of Science Strategic Plan calls for increased focus on enhanced opportunities for research and experiential learning for students.

3. Need and Demand

3.1 Similar Programs Offered Elsewhere

The Graduate Diploma in Biotechnology constitutes a subset of the courses that make up the more extensive Master's in Biotechnology Management, which is the only such degree offered in Canada. There are at least eight master's degree level programs in biotechnology related fields across Canada. Of these programs, five (5) are offered in Ontario and three (3) outside of Ontario. However, there is only one other institution that offers a Graduate Diploma in Biotechnology equivalent in Canada, as shown in **Appendix A,** which is at Concordia University. There are no graduate diplomas in biotechnology currently offered in the GTA.

Like the proposed Graduate Diploma in Biotechnology, The Biotechnology and Genomics Graduate Diploma at Concordia is also a purely course based graduate diploma that can be completed over two terms. However, the number of credits at the Concordia diploma is twice that (30) as for the proposed Graduate Diploma in Biotechnology (15), and approximately half of these credits are grounded in a Genomics/Bioinformatics concentration. Thus, the proposed Graduate Diploma in Biotechnology provides students with a strong course and wet lab-based foundation relevant to the biotechnology private sector for students that are not interested in bioinformatics or genomics.

3.2 Need and Demand

The Graduate Diploma in Biotechnology is designed to address an unfilled need in the Canadian Biotechnology Industry. Throughout the COVID-19 pandemic the biotechnology industry has been leaned on heavily to bring forward high value strategies and pharmaceuticals options with many job openings remaining unfilled (BioTalent Canada, 2020). The demand for health-care related biotechnology expertise has been growing in Canada. The Canadian biotechnology sector employs approximately 13 000 Canadians directly and is growing. This Graduate Diploma in

Biotechnology is designed to increase the available pool of trained talent for the biotechnology industry and strengthen the biotechnology eco-system.

Employers in industry are looking to fill many different types of jobs in health-care related biotechnology. The program focuses on the mid-level positions focusing on health-care related biotechnology detailed in these positions. **Appendix B** contains 28 job descriptions at the mid-level from BioTalent Canada in Biotechnology.

More specifically, BioTalent Canada reports positions in manufacturing, quality control/assurance, distributions and research and development remain unfilled due a lack of trained employees. Additionally, BioTalent Canada reports that skills shortages remain a large issue in the biotechnology sector with 33.2% of companies reporting skills shortages among employees. More specifically, significant numbers of biotechnology companies are based in Ontario, with 22.4% of newly formed biotechnology companies originating from Ontario. The Graduate Diploma in Biotechnology is planned to be offered at the new Markham campus, and as such training individuals living in Ontario who would be in geographic proximity to many biotechnology companies looking to hire.

Beyond the above data, the Task Force carefully examined demand for the Graduate Diploma in Biotechnology and the Master's in Biotechnology Management. Specifically, we examined demand in five ways:

1. Commissioned a Program Feasibility study
2. Survey of future students
3. Interview with biotechnology executive
4. Consultations with Industry Leaders

Findings from these five endeavors indicated that there is significant interest and enthusiasm for the program.

The Task Force commissioned a program feasibility study from EAB: Education Technology, Services, and Research, an independent higher education consultation firm. EAB's consultation suggests increasing employer demand alongside increasing employment opportunities. This indicates a growing market and a strong need for our program. Furthermore, other profiled academic institutions offer a curriculum in general biotechnology skills, while our program will emphasize data analytics in our program differentiating ourselves from our competitors and conferring with the in-demand skills employers are seeking. Based on EAB's analysis our Graduate Diploma in Biotechnology would provide students with theoretical training in Biotechnology to enhance their competitiveness and employability in the Biotechnology related employment opportunities.

A survey of first-year science students was conducted regarding a Markham based Biotechnology program. Overall, there was strong interest: one hundred and twenty-four science undergraduate students from the Faculty of Science responded to a survey about their intentions regarding continuing their education at the Master's level in Biotechnology. The majority were interested. In fact, 67% of students stated they are very interested or somewhat interested in a professional graduate program in Biotechnology.

Furthermore, we interviewed a biotechnology executive to provide feedback on the program. The executive had great enthusiasm for the program and explained a balance of biotechnology and industry skills were a must. Their recommendation was to ensure our program provided training on moving from academic to industry by including coursework on Phase 1-4 clinical trials, general terms/principles of regulations (FDA, Health Canada) phases from R&D to manufacturing and sales terms. We have incorporated this feedback into the curricula of the program.

Finally, consultations were conducted with industry leaders. Industry leaders including Sanofi, DNALabs Canada Inc., Gilead Science Inc.,Novartis, Eversana, SixSense, BenchSci and BIOTECH Canada.

Overall, the Graduate Diploma in Biotechnology is a much-needed program to position York as a provider of innovative biotechnological programming to train the next generation of leaders.

*Statistics from: Bio HR Facts-https://www.biotalent.ca/en/bio-economy-facts

4. **Program Content and Curriculum**

4.1 **Program Requirements**

The program focuses on developing theoretical and practical training in Biotechnology, laboratory techniques, and developing industry skills.

The program consists of 5 required courses (5 x 3 credit courses). This suite of courses is also offered as one component of the larger, 30 credit Master's in Biotechnology Management, and so students taking the Graduate Diploma in Biotechnology will be in the same classes as students taking the Master's in Biotechnology Management.

Figure 1 presents an overview of the program structure.

Figure 1: **Graduate Diploma in Biotechnology Program Overview**

Fall Term

Introduction to Biotechnology Practice (3cr)
Science Communication and Writing (3 cr)

Term Credit total: 6 credits

Winter Term

Research and Development in Biotechnology (3cr)
Data Analysis, Product Development and Commercialization in Biotechnology (3cr)
Laboratory Skills in Biotechnology (3cr)

Term Credit total: 9 credits

Program Total: 15 credits

4.2 **Courses**

Appendix C contains course descriptions, all of which are at the graduate level. No electives are available as the program is very targeted and comprehensive and will serve the students well.

The program has adopted an interdisciplinary course structure. Starting in Term 1 (Fall 1) students will be provided with coursework on the fundamental theories of biotechnology science, latest biotechnology practices, and development of science communication and writing skills.

Term 2 is a deep dive into further biotechnology. Term 2 provides training in research and development practices in the Canadian biotechnology industry, a comprehensive introduction to data analysis, product development and commercialization in biotechnology, and practical laboratory skills in biotechnology.

Course scheduling was largely designed to conform with the scheduling for the Master's in Biotechnology Management.

4.3 **Course Level**

All courses are at the graduate level.

4.4 **Calendar Copy**

Calendar copy is provided in **Appendix D.**

5. **Program Learning Outcomes and Assessment**

5.1 **Learning Outcomes**

The Graduate Diploma in Biotechnology program learning outcomes were developed through extensive discussions with Faculty of Science faculty, staff, industry experts, an independent higher educational consultation firm, prospective students, and curriculum specialists. The Task Force used the results of this data-gathering to help us develop the learning outcomes for this degree.

The specific learning outcomes for the Graduate Diploma in Biotechnology are shown below. **Table 4** provides a detailed map showing how program learning outcomes map to the Ontario University Graduate Degree Level Expectations (UGDLEs). **Appendix E** provides a detailed map showing how individual courses support the learning outcomes. **Appendix F** provides a detailed map showing how individual courses support program learning outcomes and Ontario University Graduate Degree Level Expectations (UGDLEs).

Detailed Program Learning Outcomes:

Graduates of the Graduate Diploma in Biotechnology will be able to:

1. Describe the fundamental role of biotechnology in science as well as within the context of the Canadian private industry biotechnology sector.
2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant Biotechnology practices, their alternatives, as well as industry developments and trends.
3. Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research.
4. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis.
5. Apply practical statistics and data analysis using R to biotechnology data sets.
6. Propose solutions and implementations plans for biotechnology case studies.
7. Communicate clearly and effectively through written articles, reports, oral presentations, and online platforms with varied audiences.
8. Employ appropriate strategies to work independently and in diverse teams.
9. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability with respect to biotechnology.

Table 4: Ontario Graduate Degree Level Expectations (UGDLEs) Mapped to Graduate Diploma in Biotechnology Program Learning Outcomes

	Graduate Diploma in Biotechnology
PROGRAM GOAL:	Upon completion of this program, students should be ready to take on positions in biotechnology
EXPECTATIONS:	Graduates of the Graduate Diploma in Biotechnology program will:
1. Depth and breadth of knowledge	• PLO1. Describe the fundamental role of biotechnology in science as well as within the context of the Canadian private industry biotechnology sector • PLO2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant Biotechnology practices, their alternatives, as well as industry developments and trends.

2. Research and Scholarship	• PLO4. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis. • PLO5. Apply practical statistics and data analysis using R to biotechnology data sets.
3. Level of application of knowledge	• PLO3.Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research. • PLO4. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis. • PLO5. Apply practical statistics and data analysis using R to biotechnology data sets. • PLO 6. Propose solutions and implementations plans.
4. Professional capacity/autonomy	• PLO6. Propose solutions and implementations plans. • PLO8. Employ appropriate strategies to work independently and in diverse teams. • PLO9. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology.
5. Level of communications skills	• PLO7. Communicate clearly and effectively through written articles, reports, oral presentations and online platforms s with varied audiences.
6. Awareness of limits of knowledge	• PLO 2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant Biotechnology practices, their alternatives, as well as industry developments and trends.

	• PLO 9. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology.

5.2 **Achieving the Program Learning Outcomes**

The expected learning outcomes are supported via a program structure that develops students' skills and knowledge in biotechnology as it is approached in the private sector. **Appendix E** demonstrates the learning progression by mapping how program learning outcomes are introduced, developed, achieved, and individually assessed throughout the diploma. **Table 5** summarizes the relationship between learning expectations, program learning outcomes and program courses. In brief, students will develop comprehensive knowledge of the Canadian biotechnology industry, emerging industry developments, roles of alternative practices in biotechnology, practical statistical and data analysis skills, and professional capacity starting in the first semester of the program. Emphasis will be placed on deep learning, higher order skills such as critical thinking, and the evaluation of techniques and advances in the field.

The programming and delivery of the diploma will also be informed and revised through consultation of an Advisory Board, which will be made up of the full-time faculty delivering the courses, a group of York research-stream faculty with expertise in biotechnology, as well as leading biotechnology industry experts. The role of the board might also involve providing an industry perspective to certain topics upon student request.. Consultations of willing members to serve on the board have been initiated.

Further integrated into the structure of each of the biotechnology courses are experiential learning opportunities such as cases studies, analyzing scientific literature, writing exercises, and problem-solving. For all the new biotechnology courses being proposed, please see the course design section in the new course proposals for detailed information on experiential learning in each course.

Table 5: Summary of Achieving the Program Learning Outcomes: Ontario Graduate Degree Level Expectations (UGDLEs) Mapped to Graduate Diploma in Biotechnology Learning Outcomes and Program Courses.

UGDLEs	**Graduate Diploma in Biotechnology**	
PROGRAM GOAL:	Upon completion of this program, students should be ready to take on positions in biotechnology management.	**Program Courses**
Depth and breadth of knowledge	• PLO1. Describe the fundamental role of biotechnology in	• Introduction to Biotechnology Practices

	science as well as within the context of the Canadian private industry biotechnology sector. • PLO2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant Biotechnology practices, their alternatives, as well as industry developments and trends.	• Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology
Research and Scholarship	• PLO4. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis. • PLO5. Apply practical statistics and data analysis using R to biotechnology data sets.	• Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing
Level of application of knowledge	• PLO3.Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research. • PLO4. Implement the latest laboratory	• Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology

	techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis. • PLO5. Apply practical statistics and data analysis using R to biotechnology data sets. • PLO 6. Propose solutions and implementations plans.	• Science Communication and Writing
Professional capacity/autonomy	• PLO6. Propose solutions and implementations plans. • PLO8. Employ appropriate strategies to work independently and in diverse teams. • PLO9. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology.	• Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing
Level of communications skills	• PLO7. Communicate clearly and effectively through written articles, reports, oral presentations, business documents and online platforms with varied audiences.	• Introduction to Biotechnology Practices • Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing
Awareness of limits of knowledge	• PLO 2. Analyze the potential limitations, and/or	• Introduction to Biotechnology Practices

	ethical, political, or social implications of relevant Biotechnology practices, their alternatives, as well as industry developments and trends. • PLO 9. Demonstrate academic integrity, ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology.	• Laboratory Skills in Biotechnology • Research and Development in Biotechnology • Data Analysis, Product Development and Commercialization in Biotechnology • Science Communication and Writing

5.3 **Assessment of Learning Outcomes**

The program has established a detailed assurance of learning (AoL) plan for the purposes of demonstrating and documenting students' achievement of the program's expected learning outcomes DLEs. Each program-level learning outcomes will be measured through constructively aligned course assessments (see Appendix E).

Overall, assessment in a course will be based on students' performance on various elements of the course including laboratory and simulation reports, examinations, written assignments, literature reading presentations, project presentations, group-work and in-class participation. Student performance on these assessments will be evaluated against pre-established performance benchmarks, success criteria and rubrics. These assessment methods will be heavily informed by a dedicated team of Work Integrated Learning and Experiential Education leadership at the Markham and Keele Campus. **Table 6** maps the program learning outcomes to courses where students are individually assessed.

Documentation of students' achievement of learning outcomes will be performed through York University's learning management site, e-class. This system allows our program to grade students' work while automatically collecting data on student progress, tracking at-risk students, and flagging courses where student performance is an issue. Collectively, this performance data will guide subsequent timely educational interventions and will hence serve as our assurance of learning plan. Furthermore, we aim to engage registered students in a yearly survey on their learning to improve the designed learning experiences. To add to this, we plan to send out a yearly survey to our alumni investigating the type of work they are doing, how the program prepared them for their work, and what they recommend for the program to teach. With all these initiatives, we hope to identify student performance and curricular gaps in relation to the expected learning outcomes in an evidence-based manner and "close the loop" on continuous curricular improvement initiatives.

Table 6: Program-level Learning Outcomes and Assessments

Program Learning Outcome	**Course Assessed in Individually**	**Assessment (Individually Completed)**
• PLO1. Describe the fundamental role of biotechnology in science as well as within the context of the Canadian private industry biotechnology sector.	Introduction to Biotechnology Practices Research and Development in Biotechnology Data Analysis, Product Development and Commercialization in Biotechnology	Midterm Final Exam Midterm Final Exam Midterms Final Exam
• PLO2. Analyze the potential limitations, and/or ethical, political, or social implications of relevant Biotechnology practices, their alternatives, as well as industry developments and trends.	Introduction to Biotechnology Practices Research and Development in Biotechnology	Report on development on new and emerging practices In-class case studies Project on selected topic in Biotechnology research and development
• PLO3. Analyze the Canadian biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labeling, regulatory compliance, good manufacturing practice and clinical research.	Introduction to Biotechnology Practices Research and Development in Biotechnology	Report on development on new and emerging practices In-class case studies Project on selected topic in Biotechnology research and development

• PLO4. Implement the latest laboratory techniques in biotechnology including practical laboratory skills, experimental procedures, and analysis in Biotechnology.	Introduction to Biotechnology Practices Laboratory Skills in Biotechnology	Report on development on new and emerging practices In-class case studies Laboratory modules Final Exam
• PLO5. Complete practical statistics and data analysis using R to biotechnology data sets.	Data Analysis, Product Development and Commercialization in Biotechnology	Midterm (s) Final Exam Problem-solving project
• PLO6. Propose solutions and implementations plans.	Introduction to Biotechnology Practices Research and Development in Biotechnology	Report on development on new and emerging practices In-class case studies Problem-solving project
• PLO7. Communicate clearly and effectively through written articles, reports, oral presentations, business documents, and online platforms with varied audiences.	Research and Development in Biotechnology Science Communication and Writing	Project on selected topic in Biotechnology research and development Responses to in-class case study/simulations Student created science-based newspaper story or press-release
• PLO8. Apply appropriate strategies to work independently and in diverse teams.	Laboratory Skills in Biotechnology	Peer and self-evaluation of collaboration experience
• PLO9. Demonstrate academic integrity,	Laboratory Skills in Biotechnology	Laboratory modules

ethical practice, personal responsibility, limitations of one's knowledge, and accountability in biotechnology.	Introduction to Biotechnology practices Research and Development in Biotechnology Science Communication and Writing	Report on development on new and emerging practices In-class case studies Responses to In-class case study/simulations Completion of cases-studies

5.4 **Normal Program Length**

The normal program length is 8 months of full-time study.

5.5 **Delivery Modes**

This is a graduate diploma consisting of coursework. We plan to offer a hybrid-learning program, emphasizing program flexibility. Our program would offer face to face courses in addition to online learning, allowing for student flexibility, and community connections. We plan on mounting Science Communication and Writing and Data Analysis, Product Development and Commercialization in Biotechnology as a hybrid or online course. In general, the other courses will be face to face, lectures, and laboratories with a focus on scientific exploration, scientific literature, case studies, discussions and teamwork. Mentorship is a key attribute of the program, with students receiving mentorship from lab demonstrators and course instructors.

6. **Admission Requirements**

Program Entry:

The Graduate Diploma in Biotechnology Management can be completed on a full-time basis. Entry is fall term.

Program Length:

The expected degree completion time for the Graduate Diploma is 2 terms. Students must register and pay fees for a minimum of the equivalent of 2 terms of full-time study. All requirements for the Diploma must be fulfilled within 12 terms (4 years) of registration as a full-time student in accordance with Faculty of Graduate Studies' registration policies.

6.1 **Program Admission Requirements**

The minimum admission requirements are as follows:

- An undergraduate degree in any area of biology, biological science, biochemistry, chemistry, life sciences or related field from a recognized post-secondary institution with

a B+ average in the last two years (or equivalent) of academic work. Undergraduate degrees must include at least one course in statistics at the second-year level or above, as well as three courses in molecular biology, cell biology, biochemistry, genetics or equivalent at the second-year level or above.

- ☐ Work experience is not required, but internships or prior work experience is encouraged.
- ☐ Alternate admission requirement: Graduates with other Science degrees or 3-year degrees may be admitted as well with at least one year of post-graduation work experience in a sector relevant to the program.
- ☐ Proof of English language proficiency if prior studies were not completed in English: a minimum TOEFL score of 577 (paper-based), or 90-91 (internet-based); and a minimum IELTS score of 7 (Academic Module).
- ☐ Two letters of recommendation. Letters can be from previous professors, employers, or other persons with whom the applicant has had interactions and who can attest to their professional and/or academic qualifications. It is recommended that one of these letters should be from a professor if you graduated in the last 3 years.
- ☐ A supplementary application form with a statement of interest providing evidence of commitment to advanced work in the biotechnology sector. The statement should include a discussion of the applicant's background, interests, skills, and career goals.
- ☐ and an up-to-date résumé or CV

Students are expected to remain in good academic standing as per Faculty of Graduate Studies (FGS) guidelines to remain in the program. FGS guidelines on academic standing are available at: https://www.yorku.ca/gradstudies/students/current-students/regulations/graduate-courses-and-grading/.

Diploma Requirements:

Candidates for the Graduate Diploma in Biotechnology must successfully complete all coursework in good standing in accordance with FGS minimum grade requirements.

6.2 **Alternative Requirements**

See above.

7. **Resources**

7.1 **Areas of Faculty Strength and Expertise**

The Graduate Diploma in Biotechnology at Markham Campus is a new program at a new campus. In July, 2021 the Faculty of Science hired a full-time, teaching stream faculty member that is planned to administrate the program as well as teach the Laboratory Skills in Biotechnology course. A search for a second full-time teaching stream hire that will teach the Introduction to Biotechnology Practice, the Research and Development in Biotechnology, the Data Analysis, Product Development and Commercialization in Biotechnology and the Science Communication and Writing courses is slated for 2021/22.

The hiring of these faculty members will be designed to the match the needs of the Biotechnology program and meet the program offerings in Biotechnology. For example, we will pay special attention to prospective faculty members with a strong background in pharmaceutical related Biotechnology methods with a focus on pharmaceutical, diagnostic and therapeutic strategies. We will also pay close attention to mentorship, effective teaching, and curricula skills of hires to ensure the faculty complement has the depth and breadth necessary to deliver an innovative and effective program in Biotechnology. The design and mounting of these courses has been and will be done in consultation with existing full-time faculty on the Keele campus as well as in consultation with industry stakeholders. Faculty delivering the programming will have opportunities to keep up to date with the biotechnology field and for pedagogical development through a professional expense reimbursement fund, sabbatical leaves and industry-coupled training/development opportunities accessed through the aforementioned advisory board.

7.2 **Role of Retired and Contract Instructors**

The Graduate Diploma in Biotechnology will be a new program and as such there will be no retirees. There are no currently anticipated roles for contract teaching instructors with the exception of filling sabbatical leave teaching needs or possibly if the 2021/22 full-time hire is not ideally qualified to deliver all the courses planned for this role.

7.3 **Laboratory Facilities/Equipment**

At the new Markham campus, brand new purpose-built laboratory facilities and equipment will be ready for the opening of the Graduate Diploma in Biotechnology program. All Specialized laboratory facilities for teaching and research have been planned to include, both wet and dry laboratory spaces. This includes:

- 120 square meter (m^2) Biology instructional laboratory for teaching 24-student sections
- 120 m^2 Chemistry lab
- 120 m^2 dry Physics lab has been designed to accommodate 24 student sections

The plans also include a robust suite of preparation and support spaces for these instructional laboratories. A list of equipment for each laboratories/equipment has been submitted to the facilities manager of the Faculty of Science. The equipment list has been determined based on: (1) pedagogical needs, (2) program course offerings including specialized laboratory equipment, (3) research needs in Biotechnology and (3) providing a rich student experience including experiential learning.

There is also an Experiential Education Hub on floor 3 intended to provide administrative space and support for upper year student work on projects.

7.4 **Space**

The new building at Markham campus housing the Graduate Diploma in Biotechnology program will have all the required space for the planned curriculum. As described above, the 120 m^2 Biology lab space will be used to house the laboratory biotechnology course, which for the maximum number of students planned for the program in the foreseeable future (2 sections; 48 students) will be adequate. The curriculum of the laboratory course planned for the degree will

not use human/patient derived samples and will not require biosafety clearance over and above that which would be required for other courses also using the shared Biology Lab space.
Lecture halls are located on the 1st through 3rd floors of the tower. Faculty and administrative staff will be provided with a suite of offices with access to meeting rooms of various sizes, networking lounge space, kitchenettes and various filing and storage facilities. These will occupy the 7th floor along with spaces dedicated to other Faculties. All student Service functions including Advising, Counseling, Alternate Exam facilities, Supplemental Instruction and Tutoring are located on floors 1 and 2.

Active learning environments and Teaching spaces common to all faculties:

YUMCC will feature multiple lecture and active learning spaces. For large lectures, there are two 135 seat (308 m^2) tiered lecture halls with 2 rows of seats per tier (the first row of seats on a tier can rotate for group work with 2nd row). These two halls are separated by a mobile partition to allow creation of a single 270 seat, 616 m^2 tiered lecture hall.
In addition, there is a 125 seat tiered lecture hall, several 50 seat tiered lecture halls, several 50 person-occupancy flat-floored classrooms with movable tables and chairs, and several 35 person-occupancy flat-floored classrooms with movable tables and chairs. All classrooms and lecture halls have complete audio/video service, internet and whiteboards for instruction.
The YUMCC will also have numerous common areas for informal student gatherings and independent study. There are several large study areas in the Library to support varying degrees of activity and noise tolerance. Rooms are furnished and designed to permit collaborative work, quiet study and mixed-use, including study and socializing. Every floor in the building except floors 7 and 8 has informal student lounge and study space off the main corridors. On the classroom floors 4 and 5, there is also significant bench seating installed in corridors, equipped with power to allow students to connect their devices while waiting between their classes.

7.5 **Support Services**

The support services can be broken down into three categories: (1) Laboratory support, (2) IT support, and (3) general student support. See **Appendix H** for summary details.

Laboratory Support
The duties of the laboratory support will be responsible for maintaining and ensuring quality laboratory experiences for students. The laboratory support includes laboratory technicians for the “Laboratory skills in Biotechnology” course. Starting in the opening year, one Laboratory Technician will be hired to support the first cohort of students. In subsequent years additional laboratory support will be hired as needed.

Administrative Support
The program will be supported by an Operations Manager hired into the Faculty of Science Markham administrative office. There will also be an Undergraduate Program Assistant and an Undergraduate Program Secretary that may be able to contribute to the management of the program. Furthermore, a full-time teaching stream Faculty hire will receive teaching release to help administrate the program.

IT Support
The IT support for the program will be managed centrally and will be in place prior to opening.

Student Support
The proposed program will be supported and supplemented by a suite of academic success supports and services that contribute to the quality of the program and the success of students. These will be provided by Markham and Keele staff, in-person and online, and include: academic advising, accessibility services, general learning skills (eg. time management, critical thinking, reading and note-taking), discipline specific supports (e.g. writing and numeracy skills), and peer-based learning supports such as peer tutoring and Supplemental Instruction. Students' sense of belonging and community within their program is strengthened through a robust first year orientation and transition program, the active involvement of peer mentors, and a program specific student club/organization. Further student services include registrarial services, student finances and bursaries, health and wellness support and programs, and student activities and involvement programs.

7.6 **Anticipated Class Sizes & Supervisory Capacity**

Below is a summary of total enrolment based on the course:

Course	**Term**	**Total Enrollment**	**#Students in Program/ # outside of program**
Introduction to Biotechnology Practice	Fall Term 1	15	15
Science Communication and Writing	Fall Term 1	15	15
Research and Development in Biotechnology	Winter Term 1	15	15
Data Analysis, Product Development and Commercialization in Biotechnology	Winter Term 1	15	15
Laboratory Skills in Biotechnology	Winter Term 1	15	15

This section will focus on technical support and capacity for supervision.

Technical Support
Section 7.5 outlined laboratory technical support staff to be hired. The role of the laboratory support will be to: (1) setup, operational and maintenance of laboratories for program courses, (2) demonstrations of experiments in laboratory courses and (3) safety training for students in laboratories.

7.7 **Financial Support**

As this is a graduate diploma program, no special financial support will be provided.

8. Enrolment Projections

The enrollment projections for the program in Graduate Diploma in Biotechnology are based on the Science Adjusted Faculty Submissions approved by the Faculty of Science. See Table 6 for a summary overview.
The program will start in Fall 2023, and we expect that the first cohort in the program will attract 15 students, 12 domestic and 3 international students. By the third year of the program, we project to achieve a steady state of enrollment with 15 students in each year of the program.

Table 6- Projections of Student Enrolment in the Graduate Diploma in Biotechnology for the first ten years of the program.

Year			**Total**
	Domestic Students	**International Students**	
2023-24	12	3	15
2024-25	12	3	15
2025-26	12	3	15
2026-27	12	3	15
2027-28	12	3	15
2028-29	12	3	15
2029-30	12	3	15
2030-31	12	3	15
2031-32	12	3	15
2032-33	12	3	15

9. Support Statements

- Relevant Dean with respect to the adequacy of existing human (admin and faculty), physical and financial resources necessary to support the program, as well as the commitment to new resources to implement the program. Appendix J
- Vice-President Academic and Provost with respect to adequacy of existing human (admin and faculty), physical and financial resources necessary to support the program, as well as the commitment to new resources to implement the program
- University Librarian confirming the adequacy of library holdings and support Appendix J
- University Registrar confirming the implementation schedule and any administrative arrangements
- Relevant Faculties/units/programs confirming consultation on/support for the program
- Policy body statements for the need/demand of program (BioTalent Canada)
- Support statements from private companies in Biotechnology

Program Governance
The program will be offered through the Faculty of Science and will eventually be housed by a new Department in F.Sc. but unique to the Markham campus, although this departmental governance structure is not expected to be in place when the campus opens in 2023. The program will be administered by a dedicated teaching stream faculty member, Dr. Jade Atallah, who has been currently hired into the Department of Biology but will form part of the new Department at Markham's complement once this is established. A second teaching stream faculty member will also be hired in July, 2022 that will assist in the teaching of the Graduate Diploma in Biotechnology curriculum. Until the formation of the new department at Markham, these hires that administer the degree will report to their Departmental chair (Biology) as well as the F.Sc. Associate Dean Students and the Dean of Science.

CVs of faculty associated with the program directly or through the Advisory board can be provided upon request.

References

BioTalent Canada (2018). *Mapping Potential- Profiles of Canada's Biotech Frontiers*.

Appendix A | Graduate Diploma in Biotechnology Programs in Canada

University	Degree Granted	Duration	Credits	General Approach	Internship/ Co-op/Work Placement
1. Concordia University	Biotechnology and Genomics Graduate Diploma	8 months	30 credits	Focus on knowledge and techniques in biotechnology, genomics and bioinformatics	No

Appendix B | Sample of Biotechnology Positions

Position	**Level**
Bioinformatician	Mid-Level
Business Development Representative	Mid-Level
Clinical Data Collector	Mid-Level
Clinical Research Associate	Mid-Level
Clinical Research Collector	Mid-Level
Clinical Research Data Coordinator	Mid-Level
Clinical Research Project Manager	Mid-Level
Grant Writer	Mid-Level
Laboratory Researcher	Mid-Level
Laboratory Technician	Mid-Level
Manufacturing Supervisor	Mid-Level
Marketing Researcher	Mid-Level
Materials Planner	Mid-Level
Process Development Technician	Mid-Level
Production Planner/Scheduler	Mid-Level
Project Coordinator in Manufacturing	Mid-Level
Project Manager	Mid-Level
Regulatory Affairs Coordinator	Mid-Level
Regulatory Affairs Specialist	Mid-Level
Research Analyst/Associate	Mid-Level
Research Manager	Mid-Level
Research Technician	Mid-Level
Quality Assurance Analyst	Mid-Level
Quality Control Analyst	Mid-Level
Quality Control Assurance	Mid-Level
Quality Control Inspector	Mid-Level
Science Writer	Mid-Level
Technical Writer	Mid-Level

*Medical Biotechnology positions are from BioTalent Canada, the HR partner of Canada's bio-economy, and specifically derived from BioCareer Pathways, a project funded by the Government of Canada: www.biotalent.ca

Appendix C | Graduate Diploma in Biotechnology Course Structure

1. **Required Courses**

Fall 1			
Introduction to Biotechnology Practices	This course provides students with a theoretical background and working knowledge of the field of Biotechnology. Students will learn fundamental theories of biotechnology science, latest discoveries, and biotechnology processes. The course will also examine the context of traditional versus modern biotechnology processes, and survey the scientific, ethical, and social considerations in these contexts.	3 credits	Offered: Fall
Science Communication and Writing	This course is designed to give students the opportunity to develop their science communication and writing. Students learn to write articles and reports for science audiences and general audiences, deliver effective oral presentations and communicate science using online platforms. One of the objectives of the course is to prepare students to successfully interview and secure and careers in biotechnology.	3 Credits	Offered: Fall
Winter 1			
Research and Development in Biotechnology	This course introduces students to research and development practices in the Canadian biotechnology industry. Emphasis is placed on the biotechnology drug and development process, standard operating procedures, regulations, clinical trials, packaging and labelling, and good manufacturing practice to prepare students to interview and secure and careers in biotechnology.	3 credits	Offered: Winter
Data Analysis, Product Development and Commercialization in Biotechnology	This course offers a dual purpose. The first part of the course will provide a comprehensive introduction to the software tools and methods for analyzing biotechnology data, with an emphasis on statistical reasoning and critical interpretations of statistical information in the biotechnology industry. The second part of the course, with provide training on biotechnology product development and commercialization.	3 credits	Offered: Winter
Laboratory Skills in Biotechnology	This course focuses on the latest laboratory techniques in biotechnology. The main objective of the course is to develop students' skills in practical laboratory skills, experimental procedures, and analysis in biotechnology.	3 credits	Offered: Winter

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November 5, 2021

Re: Graduate Diploma in Biotechnology for the Markham Campus

Dear Dr. Bayfield,

We have received your proposal for the creation of a Graduate Diploma in Biotechnology for the Markham Campus starting in September, 2023. We were pleased to see that the external reviewers were so positive about the program. We support this proposal, including the external reviewer request for relevant lab instrumentation, and will support your efforts however we can, including continued assistance from the Faculty Education Development Specialist, as well as navigating through the official approval process, which includes Faculty Council and Senate approval. We believe there will be strong demand for this Graduate Diploma, which aligns with our newly approved Strategic Objectives. We support the complement and staff requirements associated with the program as detailed in the proposal, and will discuss any additional resources that may arise as you continue to develop this diploma.

Sincerely,

Rui Wang
Dean, Faculty of Science

DIVISION OF STUDENTS

Office of the University Registrar

Darran A. Fernandez
University Registrar

Bennett Centre for Student Services
4700 KEELE ST.
TORONTO ON
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T 416 736 2100
darran@yorku.ca

November 30, 2021

To: Academic Standards, Curriculum and Pedagogy Committee

RE: Proposal for Graduate Diploma in Biotechnology

The proposal for the Graduate Diploma in Biotechnology program at Markham has been reviewed by the Office of the University Registrar.

We support this proposal and look forward to working collaboratively with the Faculty of Science on the implementation details in support of their requirements.

Sincerely,

Darran A. Fernandez, M.Ed.
University Registrar
York University

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Memorandum

To: Mark Bayfield

From: Joy Kirchner, Dean of Libraries

Date: October 13, 2021

Subject: Graduate Diploma in Biotechnology Program Library Support

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York University Libraries (YUL) is well-positioned to support the curriculum and research needs of students and faculty in the proposed Graduate Diploma in Biotechnology program at York University's Markham Campus. As noted in the Statement of Library Support, YUL provides access to an extensive array of resources and services that support academic engagement for students and faculty in this program. I draw your attention to the new Markham Campus Centre Library (MCCL) spaces that will provide immersive, technology enhanced spaces that lends itself well to your program. I also highlight YUL's curriculum integration offerings, digital literacy programs and specialized programming offered through our digital scholarship centre.

We look forward to contributing to the success of students and faculty in the Graduate Diploma in Biotechnology program at the Markham Centre Campus.

cc: Patti Ryan, Director, Content Development and Analysis,
Jack Leong, Associate Dean of Libraries, Research and Open Scholarship
Andrea Kosavic, Associate Dean of Libraries, Digital Engagement and Strategy

Graduate Diploma in Biotechnology
Statement of Library Support

October, 2021

This statement of library support for the proposed *Graduate Diploma in Biotechnology* has been prepared in accordance with the guidelines outlined in the Quality Assurance Framework as set out by the Ontario Universities Council on Quality Assurance. It describes some of the services and levels of support that York University Libraries (YUL) will be able to provide to students and faculty at the Markham Centre Campus. YUL supports all programs through providing immersive spaces, diverse collections, instructional services, research assistance, access to knowledge resources, expertise with research dissemination, and adaptive services.

This new *Graduate Diploma in Biotechnology* program draws from varied disciplines such as Biology, Molecular Biology, Bioinformatics, Chemistry, Statistics, Business Management, and Engineering. This interdisciplinary scope aligns well with the York University Libraries cross-disciplinary approach to collections and services. The Markham Centre Campus Library (MCCL) supports multimodal learning offering technology, space, and expertise fundamentally integrated with program offerings. The technologies available at MCCL, including media capture and editing suites, Virtual Reality capabilities, and the visualization wall will enable creative collaborations for students, faculty and community partners. From a rich and varied collection of print and electronic resources and tools, to one-on-one consultation services, instructional sessions, co-curricular offerings, and group study spaces, the Libraries are well-positioned to support student success in what promises to be a rich, intensive program of study.

An overview of relevant York University Libraries services and resources for students and faculty is provided in subsequent sections.

Library Curriculum Integration for Graduate Diploma in Biotechnology

Information Literacy encompasses the skills to find, retrieve, evaluate, use, and create information which enable students to participate fully in the university environment and their disciplinary culture. IL integration strengthens alignment with Degree Level Expectations and the seven defined categories of broad knowledge and skills integral to Ontario's Quality Assurance Framework.

Scaffolding information literacy instruction is most effective when organized at the program level as it eliminates duplication, improves assignment outcomes, and enables students to apply their learning. Information literacy (IL) instruction spans many areas including locating and searching information sources, managing search results, data management, record keeping, copyright, ethics, and academic integrity. Based on ACRL's Framework for IL for Higher Education, and years of experience, we suggest

integrating library instruction into the assignments of a few courses to build relevant foundational skills that can be immediately applied. The following are examples of how this could be achieved:

- *BIOTXXX Introduction to Biotechnology Practices*
  - Bioethics and academic integrity
- *BIOTXXX Science Communication and Writing*
  - Library resources that are available for Biotechnology Management e.g., subject research guides in Biology, Chemistry, Bioinformatics, Statistics, and Health Industry Management
  - Searching databases and managing the search results with bibliographic management software such as Mendeley or Zotero
  - Identifying publication/literature types (including clinical trials) and their methodologies
  - Finding and searching registries of clinical trials
  - Critical appraisal tools, sources, and applications
- *BIOTXXX Research and Development in Biotechnology*
  - Researching biotechnology business management and industry developments
- *BIOTXXX Software Tools for Biotechnology Data Analysis*
  - Research data management
  - Data visualization
  - Introduction to the Library Visualization Wall
  - Documentation and record-keeping

Instructors are encouraged to take advantage of dedicated, in-class sessions that can be tailored to course materials and assignments. A wide range of programming is available, including digital and information literacy, blended learning modules, co-curricular programming, and open educational resources and student seminars.

Students in data science programs may benefit from dedicated, in-class workshops related to developing and implementing search strategies, tracking and correctly citing data sources, and managing collections of reference materials and citations. In-class sessions should be organized and booked in advance of each semester's offerings, and requests can be submitted at https://classrequests.library.yorku.ca/

Digital Scholarship Centre and Specialized Programming

To discuss curriculum integration in the areas of digital scholarship, digital cultures and pedagogy, data management, open education, or scholarly publishing, YUL welcomes faculty to contact the Digital Scholarship Centre. The Digital Scholarship Centre (DSC) at York University Libraries houses knowledge in a range of digital tools and methods for web crawling and scraping, data cleaning, data curation, text processing and analytics, social graph analysis, data visualization, and linked open data applications, with an emphasis on sustainable, low-barrier approaches, and open-source tools. The Digital Scholarship Centre draws expertise from a variety of departments within York University Libraries. The Digital Scholarship Infrastructure (DSI) supports students and faculty seeking assistance with open repositories, research project design, eLearning, and Open Educational Resources. The Open Scholarship department (OS) supports student and faculty needs around open access publishing, retaining author rights, improving research visibility, research data management, and adopting open science workflows. The department also hosts a data services team that can provide guidance on how to find and evaluate

aggregated data and microdata sources for research projects as well as on how to document, publish, and preserve research data objects.

Immersive Spaces at Markham Centre Campus Library

The **Media Creation Spaces at MCCL** offer equitable access to library expertise and media creation spaces including audio and video recording equipment, audio-visual media creation spaces and editing suites, portable virtual reality headsets, and workstations for hands-on digital media production work. The Digital Scholarship Centre offers resources for faculty members seeking to integrate audio- and video-based assignments and activities into their courses and enables media literacy skills development in support of coursework and capstone projects. In addition, it serves faculty needs for equipment and recording space as they are developing their own eLearning Open Educational Resource materials.

The **Makerspace at MCCL** is a site for critical making, offering a research and learning environment where students and researchers have access to 3D printers, electronic textiles, sewing machines, electronics, and robotics. This large space is configured as a teaching environment and can accommodate in-class learning. Library makerspace programming fosters key digital, social, and cross-disciplinary fluencies such as critical and creative thinking, research skills, project planning and management, professional communication, the ability to work in multidisciplinary teams, and adaptability to new contexts and circumstances.

The **Visualization Wall, Gaming Lab and Virtual Reality (VR) Lab** are in a single dynamic, configurable space, with the Visualization Wall augmenting VR and gaming experiences. The Visualization Wall, with a massive viewable area of 28 x 14 feet, allows for enhanced research and teaching applications such as the visualization of large data sets, engagement with sophisticated software platforms, and detailed viewing and modelling of complex structures. The gaming capabilities of the space are leveraged to factor in backwards compatibility for legacy equipment for instructors and allow multiple users to concurrently engage with the visualization wall in a variety of configurations. This infrastructure enables faculty to use VR as a teaching tool by narrating a student's VR experiences as projected on the visualization wall to a class of students. VR applications intensify connection to place and create an extraordinary opportunity to build empathy through lived experiences. Library programming includes introductory instruction in the creation of VR environments.

Library Resources

York University Libraries has adopted an "e-preferred" approach for the acquisition of content, meaning that any requests for new titles will be fulfilled with e-book purchases whenever they are available, and with as few access restrictions as publishers will allow. The Libraries also participates in consortia such as the Canadian Research Knowledge Network (CRKN) and the Ontario Council of University Libraries (OCUL) Scholars Portal, both of which provide access to a growing collection of electronic titles that can be discovered through our primary search interface.

Print materials relevant to the programs can be found through the Libraries' main Omni search interface at https://www.library.yorku.ca/. York community members can arrange to have materials held at any of our libraries. Aside from York's collection, our partnership with the Omni network provides students and faculty members access to print materials housed at any of our 14 partner institutions across Ontario.

Interlibrary Loans (RACER) Interlibrary loan and document delivery options are available through RACER for any additional information needs that may come up. There is no limit to the number of articles that a student or faculty member may order through RACER per year, and these are delivered to the desktop, free of charge. Books can also be requested through this system free of charge. Registration and requesting is available from: http://www.library.yorku.ca/cms/resourcesharing/services-for-york-faculty-and-students/illrequestform/.

Apart from print books, York University Libraries hosts a large collection of government documents and microfilms, a wide range of audio-visual resources through the Sound and Moving Image Library.

Open Content

As part of its commitment to Open Access and Open Education, York University Libraries is placing increased emphasis on openly licensed and public domain materials for teaching and learning, including sources of open data. In addition, an increasingly wide range of Open Educational Resources (OER) are available through York University Libraries, and we have a guide to finding and evaluating these resources at https://researchguides.library.yorku.ca/OER.

The Libraries is also pleased to provide support for members interested in creating OER for the benefit of the *Graduate Diploma in Biotechnology* program. Complementing our own Pressbooks publishing platform for open textbooks, we encourage faculty members to explore and use eCampusOntario's OER tools, including their Pressbooks platform and their H5P platform for creating open, interactive course content. Learn more about eCampusOntario's commitment to open education at https://www.ecampusontario.ca/open-education-resources/.

Relevant Databases, Indexes, and Data Sources

Many of the courses in the program will focus on diverse topics of biology, bioinformatics, chemistry, biomedicine, statistics, management, and business, in which students will be exploring various fields of interdisciplinary study. To inform their work, students will require access to scholarly articles, trade and industry management information, patents, standards, and sources of data and statistics. The breadth of the program spans many disciplines, all of which can be addressed with elements of the York University Libraries collections.

The Libraries provide access to hundreds of thousands of journals, the vast majority of which are accessible online. Note that individual articles can be located easily in the OMNI catalogue; however, for searching, the Libraries' extensive set of subject-specific databases provide controlled vocabularies, operators, advanced search tools, limits and special filters to enable focused searching for specific topics. Biotechnology articles can be searched in OMNI or discovered through the Libraries' extensive set of subject-specific databases such as *Biological Abstracts (Clarivate), Web of Science (Clarivate), Scopus (Elsevier), SciFinder Scholar (ACS), Medline (Ovid and PubMed), Embase*

(Ovid), Applied Science and Technology Index (EBSCO), as well as a range of more domain-specific tools and platforms including all the *NCBI Bioinformatics databases* which are publicly available through the NCBI interface.

Core business databases include *Proquest Business* and *Business Source Complete*; business news databases include *Factiva* and *Nexis Uni;* key company, industry, market research, and finance databases include *Mergent Online* (that provides access to Investext's broker research reports collection), *Hoovers, Mergent Intellect, IBISworld, Fitch Connect (*formerly *BMI Research), Capital IQ, Bloomberg, Marketline Advantage, Passport, SimplyAnalytics, Gartner Intraweb.*
Statistics and mathematics databases include *MathSciNet (AMS and EBSCO)* and *Current Index to Statistics (IMS and ASA).*

Program-Related Research Guides

York University Libraries publishes research guides related to disciplines and topics addressed by York programs. Existing guides of interest to this program are:

Biology http://researchguides.library.yorku.ca/Biology
Biochemistry https://researchguides.library.yorku.ca/biochemistry
Bioinformatics https://researchguides.library.yorku.ca/bioinfo
Chemistry https://researchguides.library.yorku.ca/chemistry
Science and Technology Studies https://researchguides.library.yorku.ca/c.php?g=679587&p=4793401
Mathematics and Statistics https://researchguides.library.yorku.ca/c.php?g=679408&p=4792454
Data and Statistics https://researchguides.library.yorku.ca/data
Engineering Research Guide (has a section on Finding Patents) https://researchguides.library.yorku.ca/c.php?g=679615&p=4790776
Health Industry Management https://researchguides.library.yorku.ca/c.php?g=679450&p=4790031
Business Articles guide https://researchguides.library.yorku.ca/businessarticles
Business databases are available from the library's Business Databases A-Z list. https://www.library.yorku.ca/web/bbl/collections/businessonline/

Email, Chat, and Consultation Services

In-person assistance with research, citation and other information is readily available from York University Libraries. Currently, online support is available through text messaging, email or through our online chat or drop-in zoom service. Chat and reference support services are accessible every day, with some reduced availability in the quieter Spring and Summer terms. Post-pandemic, librarians and staff will be available onsite at all branches, to provide tailored support for graduate students.

Students in this program may also take advantage of our consultation service, where individuals or groups meet with a subject specialist or data services librarian to discuss specific, assignment- or research-related questions about information sources, search strategies, data storage and preservation questions, data analysis and visualization tools, and more. These consultations are available at regular

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Memorandum

To: Brenda Spotton Visano, Chair, APPRC

From: Lisa Philipps, Provost & Vice-President Academic

Date: March 14, 2022

Subject: response to external review of Master in Biotechnology Management and Graduate Diploma in Biotechnology, Faculty of Science

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I have reviewed the response of the Dean, Faculty of Science to the external reviewers for the new Master in Biotechnology Management and Graduate Diploma in Biotechnology and am satisfied that the Faculty of Science has addressed the comments of the reviewers, who were enthusiastically in support of the program.

The Dean has noted that the Markham Campus is uniquely well suited to the Masters in Biotechnology Management and Graduate Diploma in Biotechnology as there are many leading biotechnology companies in the region.

While the program will be initiated as a full-time program as previously planned, as the program builds there may well be opportunity to consider adding a part-time option for students. In its first years, the program will focus on retaining a strong capstone experience while offering students the two consecutive paid internships that are integral to the curriculum delivery plan.

To support students in this professional graduate program, the Faculty of Science will work with biotechnology industry partners to develop a limited number of scholarships for needs-based applicants. Students in the program would also be able to apply for OSAP for financial support as needed. Based on industry needs, these internships may take place in person or remotely, supporting flexibility for students and program partners. York's new Markham Campus Co-op and Experiential Education teams will assist in supporting placements that are germane to students and are based in the Markham area.

Pre-requisites for applicants to the program have been amended to ensure that students enter with background in statistics and a strong foundation in biological sciences. Students will be expected to maintain good standing in the program in alignment with Faculty of Graduate Studies expectations. The Office of the University Registrar will assist in the evaluation of international applicants to ascertain that pre-requisites from international institutions are in line with those understood in the Canadian context and build strong cohorts of highly qualified students.

Importantly, the formation of a Biotechnology Management Advisory Board will bring together the full-time faculty delivering this program with other faculty who have related expertise, and with leading biotechnology industry experts who will help the program to remain current with the latest knowledge and practices shaping this industry. The Dean has

confirmed that industry partners on the Advisory Board will have no role in determining admissions to the program.

Finally, the integration of more advanced lab equipment into the curriculum will support students' extensive and applied experimentation.

One full-time faculty member is already in place for this program, and searches are underway for others. I have confidence in the quality and planning for this graduate program and look forward to welcoming the first cohort of Biotechnology Management students to Markham Campus in Fall 2023 and to the growth of the program in years to come. These refinements to the program proposal are appropriate in scope and further demonstrate the Faculty's commitment to the strength and viability of these new graduate degree offerings.

Major Modification Proposal

1. Faculty: Osgoode Hall Law School

2. Department: Osgoode Professional Development

3. Program: Professional LLM in International Business Law

4. Degree Designation: Master of Laws

5. Type of Modification: (Example: deletion of or change to a field; changes to program requirements / content that affects the learning outcomes.)

    - Changes to program requirements
    - Change to Graduate Calendar description of courses
    - Addition of a part-time option within the existing program

6. Location: (current campus and, if applicable, proposed)

    - Keele Campus and 1 Dundas Street West

7. Effective Date: Winter 2023

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8. Provide a general description of the proposed changes to the program.

This is a proposal for a Major Modification of the Professional LLM in International Business Law.

The first element of the modification is to change the current required courses of the program, which are currently BLIS 6513 Introduction to Canadian Law and BLIS 6508 Legal Research and Writing for International Students. These courses no longer reflect the needs of students in the program or the intended business law focus of the program.

BLIS 6501 Comparative Legal Studies in International Business will become the required course for the program and will be taken by students in their first term of the program. The course change proposal form for BLIS 6501 is attached as Appendix C. A formal course change will be submitted through KUALI once this major modification proposal has gone through the approval process.

GNRL 6209 Graduate Legal Research and Writing (Online), an existing Professional LLM course, will be imposed as an admission condition on a case- by-case basis for students for whom it will be beneficial to ensure academic success.

This modification also proposes to change the categorization of courses in the program from “Core” to “Elective” in the Graduate calendar, in line with other Professional LLM specializations. Course change proposals reclassifying these courses from Core to Elective will be submitted through KUALI once this major modification proposal has gone through the approval process.

The requirement that students must complete at least 21 credits of courses listed as “Core” courses will change to a requirement that students must complete at least 18 credits of BLIS “Elective” courses.

Finally, we propose to add a part-time option for the International Business Law specialization.

9. Provide the rationale for the proposed changes.

The first modification is to remove the current required courses of the program which are BLIS 6513 Introduction to Canadian Law and BLIS 6508 Legal Research and Writing for International Students/GNRL 6209 Legal Research and Writing for International Students (Online). GNRL 6209 Canadian Graduate Legal Research and Writing or any other appropriate course as an admission condition for students who require foundational or introductory courses. The rationale for this change is that the target audience for the Professional LLM in International Business Law is now the same as our other Professional LLM specializations, and includes internationally-trained lawyers, Canadian lawyers, and non-lawyer professionals. Changing these requirements in the Professional LLM in International Business Law would bring these requirements more in line with the other Professional LLM offerings, in which general introductory courses are imposed based on the incoming students’ profiles, as needed. The existing required introductory course structure reflects the original student profile for this specialization, which was almost exclusively internationally-trained lawyers (and primarily visa students).

The second modification is to make BLIS 6501 Comparative Legal Studies in International Business the required course for the program. The current required course of BLIS 6513 Introduction to Canadian Law focuses on comparing non-Canadian jurisdictions with Canada, as well as a general introduction to Canadian public and private law. There are many aspects of public and private law in this course that are important in a foundational understanding of Canadian law but are outside of the scope of the International Business Law specialization, for example, issues like Charter of Human Rights and Freedoms; federalism and division of powers; judicial review of administrative body decisions; professional regulation of lawyers, etc. The BLIS 6501 course was developed as a part of the program to introduce, reinforce, key international business and commercial law concepts such as:

- Comparative contract law
- Comparative commercial law
- Comparative company and business corporations law and the role of an international corporate counsel

- Socio-political considerations in comparative law
- Globalization and global comparative law
- Certain issues associations with corporate social responsibility and development in the context of comparative law and international trade and investment
- The choice of law and dispute resolution in international business transactions

These concepts will also be a better introduction in preparation for other courses in the specialization such as International Business Transactions, International Sale of Goods, and International Trade Law.

This course will also draw upon the background knowledge of diverse students who are enrolled in this specialization and allow them to have meaningful discussions and to draw upon their legal practice experience from other jurisdictions to contribute to the content of the course. This course therefore will prepare students to also engage meaningfully with the content and class discussions in all subsequent courses in the specialization.

The third modification is to change the description of courses from “Core” to “Elective” in the Graduate calendar in line with other Professional LLM offerings.

In other Professional LLM specializations we use the terms “Required courses” for courses that are required for the degree, “Electives” as courses that students can choose from in their home specialization or are related to their home specialization, and “Outside electives” as courses that students can choose as elective credits that may not specifically relate to their home specialization.

In International Business Law we will continue to use the term “Required courses” for courses that are required as a part of the program requirements as well as those that are assigned as admissions conditions on a case-by-case basis.

However, in this specialization we are currently using the terms “Core” and “Elective” course for courses that were introduced specifically for this specialization with no specific distinction. We have already updated all the course codes in the International Business Law specialization to BLIS, which makes it much clearer which courses are from this home specialization of International Business Law.

The discrepancy in term usage has been confusing for when students choose courses and are trying to determine whether they are on track for program completion. It has also created confusion for students hoping to choose elective courses from outside of their home specialization. This change will allow more clarity for students choosing their courses that are designated electives for their program and electives from outside of the home specialization.

The fourth modification is to reduce the required courses taken within the home specialization from 21 credits to 18 credits. The rationale for this change is to account for the fact that the second modification provides more required International Business Law substantive content, meaning that all students will move from the foundational requirements into electives with a more sophisticated understanding of relevant

concepts. This modification introduces a structure that is similar to most other Professional LLM specializations, allowing students to take some outside electives but ensuring that the bulk of their studies are focused in the area of specialization.

The fifth modification is the addition of a part-time option within the existing program. The Professional LLM in International Business Law was introduced in 2008 as a full-time program. Since then it has grown to have a robust curriculum offering and has reached maturity, with approximately 40 new students joining the program each Fall and Winter. The Professional LLM includes part-time specialization offerings in Business Law and other related areas and in recent years we have been regularly fielding inquiries from part-time Professional LLM applicants interested in focusing on international, rather than domestic, business law. Accordingly, we wish to add the part-time option to the International Business Law to absorb this incremental demand. The market need for this program is a similar market need of the other specializations we offer with both a Full Time and a Part Time option (i.e., Professional LLM: Canadian Common Law, Professional LLM: Tax Law, Professional LLM: General Law). International Business Law knowledge is increasingly important and a solid understanding of topics like international business transactions, international dispute resolution mechanisms, and international financing is needed in today's labour market.

The addition of the part-time option will also permit full-time students in the program to change to part-time if that better suits their personal or professional circumstances. . A part time offering allows a greater opportunity for candidates who require more flexibility in accessing education for work or familial circumstances.

10. Comment on the alignment between the program changes with Faculty and/or University academic plans.

This is a major modification of an existing program. The proposal of a Part Time offering of International Business Law is in alignment with YorkU's SMA's goals for students to graduate with the skills and competencies required to succeed in the global knowledge economy and to thrive as citizens and leaders in business and law.

The proposal of a part time offering is also in alignment with the UAP's priority of diversifying whom, what, and how we teach and equipping graduates with the knowledge, transferable skills, and values to adapt to change. We will be able to reach a larger audience and equip them with essential international business law knowledge and understanding that can apply in many workplaces and settings.

The greater emphasis on comparative legal systems as a required course and the opportunities for a more diverse class in offering a part time program is also in alignment with the UAP's priority of advancing global engagement and allowing people from around the world who seek to learn from each other and gain the global fluencies needed to work locally and across borders.

11. If applicable, provide a detailed outline of the changes to the program and the associated learning outcomes, including how the proposed requirements will support the

achievement of program learning outcomes. Programs should have eight to twelve program learning outcomes. Describe how the achievement of the program learning outcomes will be assessed and how that assessment will be documented. (i.e., the mapping of the courses to the program learning outcomes; graduate outcomes).

The major modifications to the program proposed do not change the associated learning outcomes. The modification to make BLIS 6501 Comparative Legal Studies in International Business supports the achievement of the program learning outcomes. The BLIS 6501 course was developed as a part of the program to introduce, reinforce, and assess students on key international business law issues (i.e., examination of different legal systems in selected countries that play a prominent role in the global economy, and ability to analyze and compare the major elements of each system). [See Appendix A]

Through the assigned readings, class exercises, and active class discussions as a part of their class participation assessment (10% of final grade) students will meet the first program level learning outcome (depth and breadth of knowledge), the fifth program level learning outcome (Level of Communication Skills), and the sixth program level learning outcome (Awareness of the Limits of Knowledge) because the learning outcomes of the course are for students to understand:

- The methods and sources of comparative law
- Differences and similarities between common law and civil law
- Law finding and procedure in comparative law
- Comparative contract law
- Comparative commercial law
- Comparative company and business corporations law
- Convergence and regionalization
- Sociopolitical considerations in comparative law
- Globalization and global comparative law

Students are required to be prepared to debate and answer questions posed by the instructor as the instructor guides and facilitates discussion.

The assigned readings and class discussions will also meet the fourth program learning outcome (Professional Capacity/Autonomy) as key learning outcomes from the course are:

- The role of counsel in a context of different legal systems
- Role of an international corporate counsel
- Certain issues associated with corporate social responsibility and development in the context of comparative law and international trade and investments.
- The choice of law and dispute resolution in international business transactions

The major method of evaluation of the course will be through a legal research and writing assignment (90% of final grade) which will achieve the first program level learning outcome (Depth and Breath of Knowledge), the second program level learning outcome (Research

and Scholarship), the third program level learning outcome (level of application of knowledge), the fourth program level learning outcome (Professional Capacity/Autonomy), and the fifth program level learning outcome (Level of Communication Skill). This research paper will require students to identify a topic for further research. Students will need to draw upon what they've learned (through class discussion, their peers, the instructor, and the course readings) to formulate a thesis topic and utilize their legal research and writing abilities to apply the knowledge acquired and communicate that eloquently in a research paper.

12. 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.

    No consultations with other programs and/or Faculties at York University or outside of York University are necessary for this proposal, as there are no similar programs at York.

13. If applicable, describe changes to any admission requirements and on the appropriateness of the revised requirements for the achievement of the program learning outcomes.

    There are no changes to any admissions requirements.

14. 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.

    No new or reallocation of resources are necessary. The Professional LLM in International Business Law is already running on a full-time basis and new part- time students can be accommodated in existing courses or by adding one to two additional course offerings per term, using adjunct instructors as is our model in the Professional LLM. The new required course will be taught by program director Germán Morales twice per year.

15. When applicable, comment on the appropriateness of the revised mode(s) of delivery for the achievement of the program learning outcomes.

    In the Professional LLM, we already offer an assortment of in-person and distance learning courses to meet the needs of full-time and part-time students. This model applies equally to the Professional LLM in International Business Law.

16. Is the assessment of teaching and learning within the program changing? If so, comment on the appropriateness of the revised forms of assessment to the achievement of the program learning outcomes.

    The assessment of teaching and learning within the program is not changing.

17. Provide a summary of how students currently enrolled in the program will be accommodated.

Students currently enrolled in the program will be unaffected by this change. Students who began their program before the effective date of the modification will be able to complete their program requirements as previously listed as the previous courses are not being removed from the course offerings. Any required courses would have been completed in the first term and so any reduction in course offerings for the previously required courses will not affect continuing students.

The offering of a part time specialization will also allow current students to switch their registration status from Full Time to Part Time after the approval of these modifications, if they wish.

18. Provide the following appendices:

A) Program Learning Outcomes (eight to twelve) – See Appendix A

B) 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. – See Appendix B

Appendix B
Calendar – Program Requirements

OSGOODE PROFESSIONAL DEVELOPMENT PROGRAM **MASTER OF LAWS**	**OSGOODE PROFESSIONAL DEVELOPMENT PROGRAM** **MASTER OF LAWS**
ADMISSION REQUIREMENTS To be eligible for admission, an applicant normally must meet the following criteria:	ADMISSION REQUIREMENTS To be eligible for admission, an applicant normally must meet the following criteria:
CANADIAN COMMON LAW A Bachelor of Laws degree or its equivalent from a university outside Canada or a Bachelor of Civil Laws (not a common law degree) from a Canadian university, with an overall B (75%) average or equivalent.	CANADIAN COMMON LAW A Bachelor of Laws degree or its equivalent from a university outside Canada or a Bachelor of Civil Laws (not a common law degree) from a Canadian university, with an overall B (75%) average or equivalent.
ALL OTHER SPECIALIZATIONS An LLB or JD degree with an overall B average or equivalent. Applicants with less than a B average in the LLB or JD will be considered provided they also have five years or more of relevant practice experience.	ALL OTHER SPECIALIZATIONS An LLB or JD degree with an overall B average or equivalent. Applicants with less than a B average in the LLB or JD will be considered provided they also have five years or more of relevant practice experience.
In cases where an applicant has relevant experience (typically five years) or where an applicant completed an LLB prior to 1985, a C+ average will usually be considered adequate for admission.	In cases where an applicant has relevant experience (typically five years) or where an applicant completed an LLB prior to 1985, a C+ average will usually be considered adequate for admission.
Applicants without an LLB or JD degree will be considered provided they have a university degree, a superior academic record and significant work experience related to the specialization for which they have applied. A graduate degree is preferred.	Applicants without an LLB or JD degree will be considered provided they have a university degree, a superior academic record and significant work experience related to the specialization for which they have applied. A graduate degree is preferred.
Applicants without an LLB or JD degree will be conditionally admitted based on completion of the one-week intensive course General **Law 6149 3.0: Introduction to Graduate Legal Studies**. *Note: General Law LLM is only open to applicants who hold an LLB or JD.*	Applicants without an LLB or JD degree will be conditionally admitted based on completion of the one-week intensive course General **Law 6149 3.0: Introduction to Graduate Legal Studies**. *Note: General Law LLM is only open to applicants who hold an LLB or JD.*

Some students will also be required to take summer preparatory courses and foundational courses in Introduction to Canadian Law and/or Legal Research and Writing. These courses are generally required for students who have completed their law degree in a country other than Canada, the United States or the United Kingdom, and students admitted without an LLB or JD degree. **Language Requirement** Applicants whose first language is not English must produce proof of a score of 7.5 on the International English Language Testing System or any of the equivalent scores listed at http://www.osgoodepd.ca/ graduate-programs-and-courses/admissions-requirements/#Language. Applicants who have completed at least ONE year of full time study at an accredited university where English is the ONLY official language of instruction at the institution level (not only the program level) are not required to provide a language test. DEGREE REQUIREMENTS Students in all specializations (except Canadian Common Law, where there is no research requirement) must successfully complete 36 **required credits** including a research requirement to fulfill their degree requirements. At least **18** of the **required 36 credits** must be completed from among the home specialization, and up to **6 credits** of electives must be completed from outside of the home specialization and a research requirement. The research requirement can be fulfilled through the following options: • A major research paper (70 pages; **six credits**) • An independent significant research paper (30 pages, **three credits**) • A significant research paper (30 pages) completed as the means of assessment for one of the courses within the specialization. Students completing their degree requirements though the major research paper or independent significant research paper	Some students will also be required to take summer preparatory courses and foundational courses in Introduction to Canadian Law and/or Legal Research and Writing. These courses are generally required for students who have completed their law degree in a country other than Canada, the United States or the United Kingdom, and students admitted without an LLB or JD degree. **Language Requirement** Applicants whose first language is not English must produce proof of a score of 7.5 on the International English Language Testing System or any of the equivalent scores listed at http://www.osgoodepd.ca/ graduate-programs-and-courses/admissions-requirements/#Language. Applicants who have completed at least ONE year of full time study at an accredited university where English is the ONLY official language of instruction at the institution level (not only the program level) are not required to provide a language test. DEGREE REQUIREMENTS Students in all specializations (except Canadian Common Law, where there is no research requirement) must successfully complete 36 **required credits** including a research requirement to fulfill their degree requirements. At least **18** of the **required 36 credits** must be completed from among the home specialization, and up to **6 credits** of electives must be completed from outside of the home specialization and a research requirement. The research requirement can be fulfilled through the following options: • A major research paper (70 pages; **six credits**) • An independent significant research paper (30 pages, **three credits**) • A significant research paper (30 pages) completed as the means of assessment for one of the courses within the specialization. Students completing their degree requirements though the major research paper or independent significant research paper option are required to complete **General Law 6101: Advanced Legal Research and Writing Skills**.

option are required to complete **General Law 6101: Advanced Legal Research and Writing Skills**. […] INTERNATIONAL BUSINESS LAW ~~**International Business Law 6513 3.0: Introduction to Canadian Law**~~ ~~**International Business Law 6508 3.0: Legal Research and Writing for International Students**~~ In addition students must complete at least **21 credits** of courses that are listed as "core" courses. […] PROGRAM LENGTH The expected degree completion time for full-time master's students is three terms (the equivalent of one full year) or six terms (equivalent to two full years) for part-time students. Students who complete degree requirements earlier than three full-time or six part- time terms, will be billed fees for remaining terms upon completion of degree requirements. All requirements for a master's degree must be fulfilled within 12 terms (the equivalent of four full years) of registration as a full-time or part-time master's student in accordance with Faculty of Graduate Studies' registration policies.	[…] INTERNATIONAL BUSINESS LAW **International Business Law 6501 6.0 Comparative Legal Studies in International Business** In addition students must complete at least **18 credits** of courses that are listed as "elective" courses for the International Business Law specialization. […] PROGRAM LENGTH The expected degree completion time for full-time master's students is three terms (the equivalent of one full year) or six terms (equivalent to two full years) for part-time students. Students who complete degree requirements earlier than three full-time or six part- time terms, will be billed fees for remaining terms upon completion of degree requirements. All requirements for a master's degree must be fulfilled within 12 terms (the equivalent of four full years) of registration as a full-time or part-time master's student in accordance with Faculty of Graduate Studies' registration policies.

Appendix C
Course Change Proposal for BLIS 6501

Course Change Proposal Form

The following information is required for all course change proposals. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. Program: Professional LLM in International Business Law

2. Course Number and Credit Value: GS BLIS 6501 3.0

3. Course Title: Comparative Legal Systems

4. Type of Course Change(s) (indicate all that apply):

	in course number
X	in credit value
	in course title **(short course titles may be a maximum of 40 characters, including punctuation and spaces)**
X	in course description **(short course descriptions may be a maximum of 60 words, written in present tense)**
	in learning objectives/outcomes **(please append the graduate program's existing learning outcomes as a separate document)**
	in integration **(please provide statement of approval from relevant undergraduate coordinator or Chair)**
	in crosslisting **(please provide statement of approval from other program)**
	in pre/co-requisite
	expire course
	other **(please specify)**

5. Effective Session of Proposed Change(s): Winter 2023

6. Academic Rationale:

The change in the credit value is to reflect the increasing complexity and content required to be covered in comparing legal systems, including issues such as the role of international legal counsel, legal systems in the digital era, and law in a global business context. The complexity of these issues have increased dramatically since the initial offering of the course.

The increase in credit value also is to recognize a more commercial and international business law focus in the course to set as a foundational for many of the other courses in the home specialization.

7. Proposed Course Information:

Please insert approved course information on the left, and proposed course information on the right. Please clearly and visibly indicate how course information has been changed using strikethrough (left column), bold, underlining, colours, etc. *(right column).*

Existing Course Information (change from)	Proposed Course Information (change to)
GS BLIS 6501 Course Code: GS BLIS 6501 Credit Value: 3.0 Course Title: Comparative Legal Systems Brief Course Description: This course provides an overview of the classification and operation of major legal systems around the world, using examples from countries that play a prominent role in the global economy. Long Course Description: This course provides an overview of the classification and operation of major legal systems around the world, using examples from countries that play a prominent role in the global economy.	GS BLIS 6501 Course Code: GS BLIS 6501 Credit Value: 6.0 Course Title: Comparative Legal Studies in International Business Brief Course Description: This course provides an overview of the classification and operation of major legal systems around the world. Students will develop a theoretical understanding of different legal systems and will examine some specific examples from countries that play a prominent role in the global economy. Issues important to international business transactions and disputes will be examined from a comparative perspective. Long Course Description: This course provides an overview of the classification and operation of major legal systems around the world. Starting with a review of legal traditions in Canada, students will be introduced to comparative legal methodology and will develop a strong understanding of civil law and common law systems, as well as other legal traditions. Students will develop a theoretical understanding of these systems and will examine some specific examples from countries that play a prominent role in the global economy. Issues important to international business transactions and disputes will be examined from a comparative perspective.

8. Consultation:

For changes in integrations and crosslistings, as well as changes to courses that are integrated and/or crosslisted, please provide evidence that appropriate consultation has taken place.

No consultations are required for this course change. The course is taught by co-director of the Professional LLM in International Business Law, Germán Morales Farah.

York University

Notice of Intention to Develop a Curriculum Proposal

Submission of a Notice of Intention to develop a curriculum proposal of any kind, with the exception of course changes and minor modifications, must be submitted before the development of a fuller formed proposal. Please refer to the YUQAP site for information on new program proposals, major modifications, and closure: http://yuqap.info.yorku.ca/.

Note: for the closure of programs, please use the Closure Notice of Intent posted on the YUQAP site: https://yuqap.info.yorku.ca/program-closure/.

This form is to be completed and sent electronically to YUQAP@yorku.ca prior to the development of a full proposal. Authorization to begin development will be given by the Vice-Provost Academic within six weeks of submission of this form.

The office of the Vice-Provost Academic is available to advise and support on the completion of this notice of intention.

Faculty Name: Osgoode Hall Law School

Department Name: Osgoode Professional Development

Program Name (include location): Professional LLM Specializing in International Business Law

1. **Proposal type.** *State what change is being proposed. E.g., new degree type; degree program (major); graduate diploma or undergraduate certificate; modification of an existing program or other curriculum modifications (e.g., general education requirements, faculty level requirements).*

   This is a proposal for a Major Modification of the Professional LLM in International Business Law.

   The first element of the modification is to change the current required courses of the program, which are currently BLIS 6513 Introduction to Canadian Law and BLIS 6508 Legal Research and Writing for International Students. These courses no longer reflect the needs of students in the program or the intended business law focus of the program.

   BLIS 6501 Comparative Legal Studies in International Business will become the required course for the program and will be taken by students in their first term of the program.

   GNRL 6209 Graduate Legal Research and Writing (Online), an existing Professional LLM course, will be imposed as an admission condition on a case-by-case basis for students for whom it will be beneficial to ensure academic success.

   This modification also proposes to change the categorization of courses in the program from “Core” to “Elective” in the Graduate calendar, in line with other Professional LLM specializations. The requirement that students must complete at least 21 credits of courses listed as “Core” courses to a requirement that students must complete at least 18 credits of BLIS “Elective” courses.

Finally, we propose to add a part-time option for the International Business Law specialization.

2. **Intended start date.** Fall 2022
3. **Short description of the proposed program.** *The short description should include information on how the program learning outcomes and the assessment of those outcomes will be developed. For major modifications, indicate the nature of any anticipated changes to the program learning outcomes (maximum 250 words).*

   This proposed major modification does not change the learning outcomes. The replacement of the required course better ensures that the focus on international business law is achieved. BLIS 6501 Comparative Legal Studies will provide a more comprehensive and consistent foundational understanding of International Business Law issues for students starting the program. The focus will shift from comparing non-Canadian jurisdictions with Canada, to a focus on comparing different jurisdictions with each other. The focus will also shift from a general introduction to Canadian public and private law to a focus on how different jurisdictions deal with business law issues. The assessments in this required course are a combination of case commentaries, in-class participation, and a research paper or take-home exam in line with other Professional LLM courses. These assessments are developed through in-class discussions and readings (academic articles and case law) on topics of globalization and socio-political-legal realities of business across borders.

4. **Describe plans to determine and evidence why this program is needed**. *(e.g., societal, labor market need.)*

   The Professional LLM in International Business Law was introduced in 2008 as a full-time program. Since then it has grown to have a robust curriculum offering and has reached maturity, with approximately 40 new students joining the program each Fall and Winter. The Professional LLM includes part-time specialization offerings in Business Law and other related areas and in recent years we have been regularly fielding inquiries from part-time Professional LLM applicants interested in focusing on international, rather than domestic, business law. Accordingly, we wish to add the part-time option to the International Business Law to absorb this incremental demand.

   The addition of the part-time option will also permit full-time students in the program to change to part-time if that better suits their personal or professional circumstances.

5. **Describe plans to determine and evidence that there is/will be significant student demand for the program**.

The target audience for the Professional LLM are law graduates, preferably with legal practice experience, related work experience or a demonstrated interest in international business law. The target audience is also professionals without a law degree, but who have at least five years of work experience related to international business law. These categories of candidates are often mature applicants who may have work or familial obligations. A part time version of this program will be attractive to such candidates who have not pursued it previously because it is only offered as a full-time program. While the full-time option may still be more appealing to international applicants, a part time option may be more appealing to domestic applicants, senior professionals, and more mature applicants.

6. **Provide a short statement about the proposed program's alignment with the UAP, SMA, and other university plans, including justification of duplication of existing programs at York and in Ontario.** *Please make note of any legal requirements for graduates in a program to be certified, registered, licensed or of program accreditation needs. (maximum 250 words).*

This is a major modification of an existing program. The proposal of a Part Time offering of International Business Law is in alignment with YorkU's SMA's goals for students to graduate with the skills and competencies required to succeed in the global knowledge economy and to thrive as citizens and leaders in business and law.

The proposal of a part time offering is also in alignment with the UAP's priority of diversifying whom, what, and how we teach and equipping graduates with the knowledge, transferable skills, and values to adapt to change. We will be able to reach a larger audience and equip them with essential international business law knowledge and understanding that can apply in many workplaces and settings.

The greater emphasis on comparative legal systems as a required course and the opportunities for a more diverse class in offering a part time program is also in alignment with the UAP's priority of advancing global engagement and allowing people from around the world who seek to learn from each other and gain the global fluencies needed to work locally and across borders.

7. **Summarize any new or reallocation of resources (academic, financial, physical and/or administrative) required in implementing the proposal.** *Note: The Dean/Principal will need to provide confirmation of support for the allocation of resources.*

No new or reallocation of resources are necessary. The Professional LLM in International Business Law is already running on a full-time basis and new part-time students can be accommodated in existing courses or by adding one to two additional offerings per term, using adjunct instructors as is our model in the Professional LLM. The new required course will be taught by program director Germán Morales twice per year.

8. **Provide details regarding consultations with other programs and/or Faculties at York University or outside of York University.** *The purpose of the consultation is to ensure awareness of potential duplication or overlap and to encourage collaboration. Please describe the consultation process to date, including names and roles of those consulted, and a summary of the feedback provided (maximum 250 words).*

No consultations with other programs and/or Faculties at York University or outside of York University are necessary for the major modification proposal.

Name and title of proposal proponent:
Email: mthomas@osgoode.yorku.ca

Signature:
Date: August 30, 2021

Statement of support from Dean(s)/Principal:

Please see attached signed statement.

Signature of Dean/Principal of the Faculty (or Faculties if relevant):
Date:

Office of the Dean

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MEMORANDUM

TO: Lisa Philipps, Vice-President Academic & Provost

FROM: Mary Condon, Dean

DATE: October 5, 2021

RE: Professional LLM Specializing in International Business Law

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Dear Provost Philipps,

I am pleased to offer my enthusiastic support for the proposal for a Major Modification of the Professional LLM in International Business Law.

These changes are requested to better reflect the needs of students in the program and the intended business law focus of the program. They will also serve to ensure that the focus on international business law is heightened.

This program is highly regarded in Canada and is designed for lawyers or law graduates with legal work experience who have a strong demonstrated interest in international business law and wish to establish or develop a practice in this area of specialization. It therefore aligns with the goals of the University "for students to graduate with the skills and competencies required to succeed in the global knowledge economy and to thrive as citizens and leaders in business and law." The proposal of a part time offering is also in alignment with the UAP's priority of diversifying whom, what, and how we teach and equipping graduates with the knowledge, transferable skills, and values to adapt to change.

The initiative is fully aligned with the strategic goals of Osgoode Hall Law School and Osgoode Professional Development in that it will "Produce graduates who are well prepared to navigate transnational, international and global forces and their growing interconnection with local legal practice, regulatory evolution and policy development."

With respect to the adequacy of the existing human (administrative and faculty), physical and financial resources necessary to support the graduate diploma, the proposed Diploma will have limited additional impact on those resources. As we anticipate that this program will be revenue generating, the operating and delivery costs are built into the delivery model. As such, we do not anticipate any negative impact on the law school's financial resources. Administrative support will be provided by OPD's existing graduate program support team. No additional staff or office space will be required to deliver the program. The teaching faculty

will include some of the same Osgoode faculty who currently teach courses through OsgoodePD. We will also be drawing on instructors who teach in some of our non-degree offerings and other adjunct professors with experience in the specific course offerings. Ultimately, resources will be minimally expended given that we are already running the courses we intend to offer to the students enrolled in the Graduate Diploma program.

In conclusion, I am pleased to offer my strong support for the proposed Major Modification of the Professional LLM in International Business Law.

Sincerely,

Mary Condon

YORK
UNIVERSITÉ
UNIVERSITY

OFFICE OF THE VICE-PROVOST ACADEMIC

4700 Keele St.
Toronto Ontario
Canada M3J 1P3

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vprovost@yorku.ca

Memo

To: Meghan Thomas, Director, Professional Graduate and International Programs, Osgoode Professional Development, Osgoode Hall Law School

Cc: Mary Condon, Dean, Osgoode Hall Law School
Julie Parna, Director, Academic Programs and Policy
Hillary Barron, Assistant Secretary of the University
Frances Billingsley, Associate Registrar & Director, Student Records & Scheduling
Nina Unantenne, York University Quality Assurance Procedures

From: Lyndon Martin, Vice-Provost Academic

Date: December 8, 2021

Subject: Notice of Intent for a Major Modification of the Professional LLM Specializing in International Business Law

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Thank you for your submission of a Notice of Intent to make modifications to the LLM in International Business Law, including changes to courses and the addition of a part-time option.

As Vice-Provost Academic, it is my responsibility under our quality assurance procedures, to authorize the development of a proposal and I am pleased to do so for these changes which will enhance the quality of the programs and support students wishing to complete the LLM at varying speeds.

Information on major modifications processes, as well as the template for the proposal, are posted on the YUQAP site: https://yuqap.info.yorku.ca/home/procedures/protocols/major-modifications-to-existing-programs/

2021

YORK UNIVERSITY

GLENDON COLLEGE

MAJOR MODIFICATION: FACULTY LANGUAGE REQUIREMENT

GLENDON BACHELOR OF ARTS

Major Modifications Proposal

1. **Faculty:** Glendon.

2. **Department:** Economics, English, Gender and Women's Studies, Hispanic Studies, History, International Studies, Philosophy, Political Science, Psychology, and Sociology.

3. **Program:** Business Economics, Economics, English, Gender and Women's Studies, Hispanic Studies, History, International Studies, Philosophy, Political Science, Psychology, Sexuality Studies, and Sociology.

4. **Degree Designation:** Glendon BA.

5. **Type of Modification:** An additional undergraduate degree option entitled "Glendon Bachelor of Arts" based on a revised faculty-level language requirement, available to students enrolled in the following programs, in two forms:

   a) EN-Eligible: Business Economics, Economics, English, Gender and Women's Studies, Hispanic Studies, History, International Studies, Philosophy, Political Science, Psychology, Sexuality Studies, and Sociology;

   and

   b) FR-Eligible: Political Science.

6. **Location:** Glendon Campus.

7. **Effective Date:** Fall, 2022.

8. **General description of the proposed changes:**

   This proposal entails the creation of a Glendon Bachelor of Arts with a revised faculty language requirement, to co-exist with degree types currently offered at Glendon (Bilingual Bachelor of Arts, Bilingual/Trilingual International Bachelor of Arts, Bilingual Bachelor of Science, Bilingual/Trilingual International Bachelor of Science), while retaining all pan-university requirements within each degree type. Whereas the Glendon Bilingual BA/BSc iBA/iBSc currently requires a minimum of 6 credits of second-language learning (L2) *at the 2000-level* regardless of the level of placement assessed by an entrance language exam, the proposed Glendon BA stipulates 6 credits of L2 *at the level of placement*.[1]

   The proposed Glendon Bachelor of Arts entails two forms available to students depending on the L2 for which they will take a language placement exam before enrolment. All participating programs will offer at least one version (EN-Eligible or FR-Eligible), while one program will offer both (see #5 above). Students with French as L2

[1] Glendon's Bilingual BA stipulates the present minimum in the following calendar regulation: "Courses at the second-year level and above in French as a second language and/or in English as a second language" (1.1.3.1). A student's L2 is defined as their non-dominant language between the two official languages, English and French.

will have the option to enroll in the EN-Eligible stream, in which 6 credits of French as a Second Language (FSL) at their level of placement will meet the minimum requirement for this form of the BA. The Glendon BA FR-Eligible will be available to those students who declared English as L2. In their case, 6 credits of English as a Second Language (ESL) at their level of placement will meet the minimum requirement for this form of the BA.

9. **Rationale for the proposed changes:**

The modification in the faculty requirement proposed herein is part of a set of parallel initiatives and processes that have emerged at Glendon since 2019, aimed at refocusing Glendon's academic mission as a liberal arts college and improving recruitment and retention figures. The data and contexts informing the Faculty Council's decision to authorize the creation of this degree option were presented in the Recruitment and Retention Working Group's Report presented to Glendon Faculty Council in September, 2020 (see Appendix 3).

The mandate defining the work of the *Co-Leads* on this proposal is grounded in a motion of the Recruitment and Retention Working Group, approved by Glendon Faculty Council on 20 November, 2020. The motion was conceived as a direct response to what the Working Group considered a crisis in recruitment and student retention; it aimed to diversify the profiles of students recruited for programs at Glendon, and also to improve the retention of students for whom the present Bilingual BA/iBA,BSc/iBSc language requirements might have proven too challenging. Although the Co-Leads authoring this proposal are mindful of the need for short-term tactics to address recent unfavourable enrolment numbers, the aim of the proposal is primarily to serve as a long-term *academic strategy* aiming to diversify and enrich Glendon's degree offerings in order to attract greater student interest.

In order to preserve Glendon's distinguishing bilingual features while at the same time ensuring the faculty's financial sustainability, a crucial component of this proposal is that the Glendon Principal's Office will establish an annual *admissions target* for students applying to the Glendon BA. The Principal's Office, working with the Offices of Recruitment and Academic Services, will have timely access to data related to the recruitment, enrolment, and retention of students, and will be able to monitor and maintain a healthy ratio of Glendon BA to Bilingual BA students enrolled at any time.

This 6-credit L2 requirement, furthermore, also accords with the proposed design of the Glendon Core Curriculum that stipulates 6 credits of L2 *at the level of placement* to be taken as part of the first year of every student's experience at Glendon.[2]

It must be emphasized that the present proposal *does not* create new programs nor duplicate any existing program at York University; all the programs eligible for the Glendon BA are already in existence, and no changes to their requirements are being

[2] The Co-Leads of the two projects have collaborated extensively, but the two project proposals will be submitted separately.

proposed. What is being proposed here is a change to the *faculty language requirement* at Glendon, the home faculty of these eligible programs.

Glendon's student-centered approach supports this modification. As part of their liberal arts education, students should have the flexibility to choose the intensity of second-language learning and the level of linguistic competency that they wish to attain. These two choices, optimally, shape any student's university experience at Glendon. The Glendon Academic Plan 2020-2025 makes the commitment to "[e]nable Glendon students to design and pursue their own linguistic and intellectual journey through a range of academic options within Glendon's bilingual and plurilingual matrix of programs, courses, and curricula." This proposal for a Glendon BA not only presents students with an additional option that responds to their variable needs regarding the intensity of language learning and the specific competencies being built, but also provides them with the flexibility—should their personal and career goals change—to move between the BA and the Bilingual BA (BSc) or Bilingual/Trilingual iBA (iBSc) so long as individual program admission requirements are met.

10. **Alignment with Faculty and/or University academic plans:**

Glendon's Academic Plan 2020-2025 articulates the faculty's academic mission and the competencies it seeks to build in its students, equipping them as lifelong learners able to respond to the variable challenges and opportunities that will come their way:

> Glendon's identity as a liberal arts institution is central to its academic mission and purpose. Redefined to meet 21st century challenges, the bilingual/multilingual liberal arts curriculum of Glendon's graduate and undergraduate programs encourages innovation and engagement to make an impact, teaches transferable and marketable skills for career-readiness, offers opportunities for entrepreneurialism, cultivates abilities for deep learning and critical analysis, aims at being inclusive of the diversity of cultures and lived experiences, and embraces a range of disciplines from philosophy to communications to business to biology.
>
> Redefining the idea of a liberal arts education for the 21st century involves going beyond traditional definitions to encompass the natural sciences, the arts, mathematics, business, humanities and the social sciences – all in an intellectually stimulating, bilingual/multilingual matrix of French, English, Spanish, Indigenous, and other languages. It requires liberal arts programs to harness interdisciplinarity, intellectual diversity, and varied research practices, pedagogies, and perspectives across the social sciences, the natural sciences and the humanities, and to encourage collaborative research, learning, and knowledge mobilization across the traditional "silos" of academe. As a learning and

> teaching community, we seek to cultivate the skills and aptitudes faculty members and students need to become knowledgeable,
>
> productive, creative, and empathetic people, capable and competent to think critically and to address complex problems in Canada and abroad. Our interdisciplinary, reflexive, and forward-thinking approach to the liberal arts promotes the modes of inquiry, transferable skills, and deep expertise which our students and graduates will need to become successful leaders in their fields and to tackle the demanding global and transnational challenges of our time, including climate change and environmental degradation, social and economic inequalities, conflict, crime, poverty, and disease.

The Glendon BA requirement that every student fulfil a minimum of 6.0 credits of L2 is grounded in Glendon's core vision that language learning is a fundamental part of a liberal arts education. The proposed modification enables students to do what the faculty's core vision promises: "to design and pursue their own linguistic and intellectual journey through a range of academic options within Glendon's bilingual and plurilingual matrix of programs, courses, and curricula." This idea also informs the vision of the future Glendon Core Curriculum, and underpins the forms of Bilingual and Plurilingual study conceived by the Report of the Bilingualism Academic Architecture Work Group (25 January, 2021)—projects whose creation is under way independent of this proposal.

The present proposal does not abolish nor change the Bilingual BA which has been a distinguishing feature of Glendon as a faculty at York for decades. Rather, by instituting the Glendon BA, it aims to provide a common starting point for each student's personalized pathway to variable plurilingual competencies—a "pillar" of Glendon's mission articulated in the Academic Plan for 2020-2025 as "Bilingualism and Beyond." The modification thus also corresponds to York University's "Six Priorities for Action" for 2020-2025, "Advancing Global Engagement," in which Glendon is considered "a unique environment for cross-linguistic and cross-cultural teaching, research, and dialogue."

The Glendon BA L2 language requirement is intended to integrate the Glendon Core Curriculum language requirement into its structure. Consequently, it will be flexible enough to allow any student to transfer into the Glendon Bilingual BA (or some future degree variant with requirements of higher plurilingual competency conceived by the BAAWG Report), and also to receive those who for personal reasons may decide to switch from a Bilingual or Plurilingual BA to the Glendon BA and continue their studies without changing faculties.

11. **Learning Outcomes:**

As an overarching degree requirement, Glendon's faculty language requirement falls under the learning outcomes defined by the Matrix of the Bachelor of Arts Degree at

York University (commonly known as the BA Matrix). In the section pertaining to "Breadth," the BA Matrix stipulates that non-major courses taken in French instruction (or in English for francophones) to meet Glendon's bilingual requirement are counted towards the *Outside the Major Discipline* requirement.[3] This will remain true of the revised language requirement of the Glendon Bachelor of Arts, proposed in this document. The BA Matrix lists the academic objectives of Breadth, within which exposure to and the learning of a second language can be taken to "establish both a foundation and supportive, diverse context for university-level study" which "provides knowledge and skills for the degree as a whole, but also for a life of learning to come." Therefore, the learning outcome of "Breadth" as defined by the BA Matrix, *will not* change at Glendon for any of its degrees, including the Glendon BA proposed here as it "establishes a foundation" of language learning "for a life of learning to come."

12. **Consultation summary:**

The Co-Leads began their work in December of 2020 by classifying all of Glendon's existing programs according to their ability to offer the Glendon BA or BSc in English and French, with respect to their existing program requirements and existing courses taught in one or the other official language, or as the Glendon Principal noted, due to the stipulations of their funding. The following programs were identified as ineligible for the new BA: Canadian Studies, Communications, International Studies Dual Degree, Linguistics and Language Studies, Mathematics, Translation, and the BSc degrees in Biology and Psychology. The Chairs and Coordinators of these programs were informed of the reasons for their respective programs' ineligibility for the new degree options. The programs in Mathematics and Communications indicated their interest in joining the project at a later date and were informed of the conditions that needed to be put in place for that to occur. Though they were eligible for participation in either language, the programs in Drama and Creative Arts and French Studies declined participation at the time of consultation prior to the Notice of Intent, but expressed their support for the project as beneficial to other programs at Glendon.

Between February and June of 2021, the Co-Leads consulted with and obtained the formal support (with letters) for the Notice of Intent from the Glendon Principal and participating programs (Business Economics, Economics, English, Gender and Women's Studies, Hispanic Studies, History, International Studies, Philosophy, Political Science, BA in Psychology, and Sexuality Studies). In June, the Co-Leads shared the NOI with the Deans of the relevant other faculties of York University that offer BA degrees in disciplines cognate with the eligible Departments and Programs at Glendon (J.J. McMurtry, Dean of Liberal Arts and Professional Studies (LA&PS), and Paul McDonald, Dean of the Faculty of Health) and invited them to provide feedback and/or signed statements by 21 June. Principal Fiola also followed up with them, inviting their feedback. Receiving no objections, Glendon's Principal, Marco Fiola, forwarded the

[3] https://secretariat.info.yorku.ca/files/BAMatrixFinal.pdf?x50430. **See page 4.**

completed NOI to the Vice Provost Academic, Lyndon Martin, who gave his formal support for the Notice of Intent on 9 September, 2021. The complete Notice of Intent package and the Vice-Provost Academic's letter are provided in Appendix 3.

The Proposal was completed over the summer months, and submitted to the Principal for review and approval, which was granted on 29 November. A renewed round of consultations ensued and was completed by 24 December, 2021. The participating programs were all consulted once again, and letters of support requested. At this point, Sociology, which had previously expressed an interest in the project at the NOI-stage but not made a firm commitment to join, now studied the completed proposal and opted to be included among the programs that offer the Glendon BA EN-Eligible. The Co-Leads of the Glendon Core Curriculum were consulted to ensure the accurate coordination of the language requirements in the two structures and a letter of support was provided. The Co-leads of the Bilingualism Academic Architecture Working Group (BAAWG) were consulted to ensure the feasibility of student transfers from one degree form to another—from the Glendon BA to the Glendon Bilingual BA, as well as other degree variants planned by that group, and vice versa—and a letter of support was provided. All the letters of support for this Proposal are provided in Appendix 2.

13. **Admission requirements:**

The revision of the admission requirements for the Glendon BA in this Proposal is confined to addressing the language component expected from high school applicants currently required at Glendon for admission into the Bilingual Bachelor of Arts, Bilingual/Trilingual International Bachelor of Arts, Bilingual Bachelor of Science, Bilingual/Trilingual International Bachelor of Science. The following admission requirements have been approved by the programs participating in the Glendon BA to ensure the achievement of the program learning outcomes depending on whether a program is delivered in the EN-Eligible or FR-Eligible form.

Business Economics (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U or FRA4U; 5 additional 4U or M courses (*Recommended: MHF4U, MCV4U*).

Economics (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U or FRA4U; 5 additional 4U or M courses (*Recommended: MHF4U, MCV4U*).

English (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

Gender & Women's Studies (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

Hispanic Studies (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

History (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

International Studies (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U or FRA4U; 5 additional 4U or M courses.

Philosophy (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

Political Science (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

Political Science (FR-Eligible): Ontario Secondary School Diploma (OSSD); FRA4U; 5 additional 4U or M courses.

Psychology (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U or FRA4U; 5 additional 4U or M courses (*Recommended: 4U French*).

Sexuality Studies (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

Sociology (EN-Eligible): Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M courses.

14. **Resource implications:**

The new Glendon BA will require neither any new financial and human resources nor the creation of any new courses. This degree option is immediately implementable with existing courses currently offered by existing programs at Glendon.

15. **Modes of delivery of program learning outcomes:**

There will be no changes to any Glendon program and no changes in the mode of delivery of any program learning outcome are being proposed.

16. **Forms of assessment:**

The forms of assessment in second-language learning courses (FSL and ESL) used to satisfy the language requirement for the Glendon BA will be determined by the FSL and ESL Programs and their faculty, as in all other courses offered by those programs.

17. **Continuing Student Accommodation:**

Students currently enrolled at Glendon (as well as York more broadly) will be allowed to transfer to the Glendon BA EN-Eligible and FR-Eligible programs in numbers permitted by the target determined by the Glendon Principal's Office.

18. **Appendices:**

a) Appendix 1: Side-by-Side Comparison.

b) Appendix 2: Glendon BA Letters of Support: Glendon Principal, Departments, and Programs

c) Appendix 3: Glendon BA Complete Notice of Intent Package, containing Vice-Provost Academic's Letter of Support and Glendon Recruitment and Retention Working Group's Report (September, 2020)

APPENDIX 1

Side-by-Side Comparison

York University
GLENDON
Committee on Academic Standards, Teaching and Learning (CASTL)

DEPARTMENT: Glendon College

DATE: 11 January 2022

CHANGES: Faculty Language Requirement for Glendon BA
NOTE: Only the relevant sections of the calendar have been reproduced in this document.

Current: (~~Strikethrough~~ changes in current requirements)	**Proposed:** (Underline new changes in proposed requirements)
1.1 ~~Bilingualism~~	1.1 Language requirement.
1.1.1 Students admitted to an undergraduate degree program at Glendon must satisfy ~~the bilingual~~ requirement at Glendon.	1.1.1 Students admitted to an undergraduate degree program at Glendon offering the Glendon Bachelor of Arts (EN-Eligible or FR-Eligible) must satisfy a language requirement at Glendon.
1.1.2 Students must take a language placement assessment to determine their appropriate level of French ~~and/~~or English.	1.1.2 Students must take a language placement assessment to determine their appropriate level of French or English at Glendon.
1.1.3 In order to satisfy the ~~bilingual~~ requirement, students must successfully complete ~~at least~~ six credits in ~~each~~ official language (French ~~and~~ English) at Glendon ~~from the following two categories:~~	1.1.3 In order to satisfy the language requirement of the Glendon Bachelor of Arts (EN-Eligible or FR-Eligible), students must successfully complete six credits in their second official language (French or English), at the level established by their placement assessment exam, in courses of the following categories:
1.1.3.1 Courses ~~at the second-year level and above~~ in French as a second language ~~and/~~or in English as a second language;	1.1.3.1 Courses in French as a second language (FSL) or in English as a second language (ENSL).
~~1.1.3.2 Courses in any discipline which are designated as satisfying the bilingual requirement. A student who wants to satisfy the bilingual requirement with courses other than FRLS, FSL and ENSL must submit to the Academic Services Office a Bilingual Requirement form signed by the course instructor stating that they completed all of the~~	

~~required course work, tests and exams in the language of instruction of the course~~. ~~1.1.4 The following courses are not eligible for the bilingual requirement:~~ ~~All FRAN, FRLS and FSL courses below the 2000-level. All ENSL courses below the 2000-level.~~ ~~All SP courses.~~ ~~All courses taught in two languages or in any language other than English and French.~~ 1.3 Major 1.3.1 In addition to taking courses which contribute to their broad knowledge, students are required to specialize in a specific subject or combination of subjects. The area of primary concentration is known as the major; an area of secondary concentration (if any) is known as the minor. In a double major program, a course may count for major credit towards only one major. In a major/minor program, a course may count only for major credit or for minor credit. Students may choose to major or minor in a specific subject when they enter the University or they may wait until they have completed up to 24 credits. 1.3.2 Courses may not be double counted in order to fulfill major requirements. For example, if GL/FRAN 3600 6.00 is cross-listed to GL/~~DRST~~ 3600 6.00, it may be counted as a French studies course or a ~~drama studies~~ course, but not as both.	1.3 Major 1.3.1 In addition to taking courses which contribute to their broad knowledge, students are required to specialize in a specific subject or combination of subjects. The area of primary concentration is known as the major; an area of secondary concentration (if any) is known as the minor. In a double major program, a course may count for major credit towards only one major. In a major/minor program, a course may count only for major credit or for minor credit. Students may choose to major or minor in a specific subject when they enter the University or they may wait until they have completed up to 24 credits. 1.3.2 Courses may not be double counted in order to fulfill major requirements. For example, if GL/FRAN 3600 6.00 is cross-listed to GL/DRCA 3600 6.00, it may be counted as a French Studies course or a Drama and Creative Arts course, but not as both. 1.3.3 The following programs offer the Glendon BA EN-Eligible: Business Economics, Economics, English, Gender & Women's Studies, Hispanic Studies, History, International Studies, Philosophy, Political Science, Psychology, Sexuality Studies, and Sociology. 1.3.4 The following program offers the Glendon BA FR-Eligible: Political Science.

~~2.1 There are two iBA program options at Glendon: Bilingual iBA or Trilingual iBA. Students may choose to switch to a BA program during the course of their studies or vice-versa depending on their academic standing. Please note that these requirements are in addition to the ones currently listed for the Bachelor of Arts.~~ ~~2.2 Bilingualism or Trilingualism~~ ~~2.2.1 Bilingualism~~ ~~2.2.1.1 For the bilingual iBA, students must complete at least 18 credits in each official language (English and French). At least 6 of these credits must be completed at Glendon from the following two categories: a) French as a second language and/or in English as a second language at the 2000 level or above or b) discipline courses which are designated as satisfying the bilingual requirement. The remaining 12 credits in either official language may be completed abroad*.~~ ~~2.2.1.2 The following courses are not eligible for the bilingual requirement:~~ ~~All FRAN, FRLS and FSL courses below the 2000-level. All ENSL courses below the 2000-level.~~ ~~All SP courses.~~ ~~All courses taught in two languages or in any language other than English and French.~~ ~~*Note: All equivalents completed at a designated partner institution during the semester or year abroad are subject to approval by Academic Services, including those used to satisfy the bilingual component of the IBA. For courses taken in a student's second language while on exchange, a Language Requirement form must be completed by the instructor and submitted to the Office of Academic Services.~~	2. Not applicable for the Glendon BA.

~~2.2.2 Trilingualism~~ ~~2.2.2.1 For the trilingual iBA, in addition to the above 18 credits in English and French, students must complete 18 credits in Hispanic studies or in a modern language offered by York University. Six of the 18 credits must be at an advanced level (e.g. GL/SP 2100 6.00 or GL/SP 3000 6.00 will be accepted for Hispanic Studies).~~ ~~10.1 Anglophone students who obtain a minimum of C in 12 credits taken entirely in French may apply for a Language Credit worth 6 credits. Anglophone students who obtain a minimum of C in 6 credits taken entirely in French may apply for a Language Credit worth 3 credits. Francophone students who obtain a minimum of C in 12 credits taken entirely in English may apply for a Language Credit worth 6 credits. Francophone students who obtain a minimum of C in 6 credits taken entirely in English may apply for a Language Credit worth 3 credits.~~ ~~Note: All written work submitted in connection with the course must be done in the language of the course, with the exception of non-take-home examinations.~~ ~~10.2 The following courses are not eligible for the language credit:~~ • ~~GL/FRLS 0400 6.00~~ • ~~All FRLS/FRAN 1000-level courses~~ • ~~All FSL courses~~ • ~~All ENSL courses~~ • ~~GL/HUMA 2500 6.00~~ • ~~GL/HUMA 3200 6.00~~ • ~~GL/HUMA 3400 6.00~~ • ~~All courses taught in two languages or in any language other than English and French.~~ ~~10.3 Courses taken in the Department of French by English-speaking students majoring in French will not be counted for a language credit.~~	10. Not applicable for the Glendon BA.

~~10.4 Language credit, either weighted at 3 credits or 6 credits, will reduce the number of electives available in the degree. Students must still complete all degree requirements.~~ ~~10.5 The language credit will only appear on a student's record upon graduation from Glendon. Students who transfer to another faculty of York university or another university will not receive language credit. Some graduate schools do not recognize the language credit as equivalent to a course.~~ ~~Note: Although students majoring in the Translation program are not eligible to receive the language credit, anglophone students who complete their second year in a francophone university may receive a 6 credit or a 3 credit language credit at the discretion of the school depending on the number of courses completed and the grades obtained.~~	
12.1 All students admitted to the college whose mother tongue is a language other than English are required to take an English language placement test before registering.	12.1 All students admitted to the college whose mother tongue is a language other than English are required to take an English language placement test before registering, <u>since all students enrolled in the Glendon BA are required to meet the language requirement</u>.
12.2 All students admitted to the college whose mother tongue is a language other than French are required to take a French as a Second language placement test before registering, since all students are required to meet Glendon's ~~Bilingual~~ Requirement. ~~Those students who are majoring in a subject other than French Studies will be placed in the FSL stream of French on the basis of their test results. French Studies majors will be placed in the Francophone/Anglophone stream.~~ ~~34.1 To receive the Certificate of Bilingualism, students must successfully complete at least 18 credits in their second language with a minimum grade of C in each course. These courses must be at the second-year level and above in French as a Second Language and~~	12.2 All students admitted to the college whose mother tongue is a language other than French are required to take a French as a Second language placement test before registering, since all students <u>enrolled in the Glendon BA</u> are required to meet <u>the language</u> requirement. 34. <u>Not applicable for the Glendon BA.</u>

~~in English as a Second Language or any courses at any level in another discipline of the college which are designated as satisfying the bilingual requirements.~~ ~~35.1 Students who successfully pass the Glendon examination of bilingual excellence will receive the Certificate of Bilingual Excellence. Information about registering for the exam is available from the Academic Services Office.~~ ~~35.2 Eligibility:~~ ~~35.2.1 To sit for this exam, students must fulfill the following requirements:~~ ~~35.2.2 Students whose declared language is English must:~~ • ~~be registered and enrolled in a York degree program.~~ • ~~be in their final year of studies and submit an application by the annually announced deadline.~~ • ~~have obtained or be reasonably certain of obtaining a minimum grade of B in 18 credits taken in French.~~ ~~35.2.3 Courses which are acceptable are: FRLS and FSL courses at the 2000 level or above, FRAN courses and courses designated as satisfying the bilingual requirement from any discipline of the college. For courses other than FRLS and FSL, a Bilingual Requirement form signed by the course instructor must be submitted to the Academic Services Office.~~ ~~35.2.4 Students whose declared language is French must:~~ • ~~be registered and enrolled in a York degree program;~~ • ~~be in their final year of studies and submit an application by the annually announced deadline;~~ • ~~have obtained or be reasonably certain of obtaining a minimum grade of B in~~	35. Not applicable for the Glendon BA.

~~18 credits taken in English.~~ ~~35.2.5 Courses which are acceptable are: ENSL courses at the 2000 level or above, EN courses and courses designated as satisfying the bilingual requirement from any discipline of the college. For courses other than ENSL, a Bilingual Requirement form signed by the course instructor must be submitted to the Academic Services Office.~~ ~~**Note:** courses taken outside of York University, which meet the above criteria, are acceptable for the purposes of sitting for the Glendon examination of bilingual excellence.~~ ~~36.1 Students who successfully pass the Glendon examination of trilingual excellence will receive the Certificate of Trilingual Excellence. Information about registering for the exam is available from the Academic Services Office.~~ ~~36.2 Eligibility:~~ ~~36.2.1 To sit for this exam, students must fulfill the following requirements:~~ ~~36.2.1.1 Non-hispanophone students must:~~ • ~~be registered in a York degree program;~~ • ~~fulfill the relevant second-language requirement as set out in the regulations for the Certificate of Bilingual Excellence (see section 35.2);~~ • ~~have obtained or be reasonably certain of obtaining a minimum grade of B in 18 credits taken in Spanish.~~ • ~~Courses which are acceptable are: SP courses at the 2000 level or above.~~ ~~36.2.1.2 Hispanophone students must:~~ • ~~be registered in a York degree program;~~ • ~~fulfill the relevant second-language requirement as set out in the regulations for the Certificate of~~	36. Not applicable for the Glendon BA.

~~Bilingual Excellence (see section 35.2);~~ • ~~obtain the approval of the coordinator for the Bilingual/Trilingual Excellence Exam.~~ ~~**Note:** courses taken outside of York University, which meet the above criteria, are acceptable for the purposes of sitting for the Glendon examination of bilingual excellence.~~	38.1 Transferring between Glendon BA and other degree types. 38.1.1 Students admitted into the Glendon BA (EN-Eligible and FR-Eligible) are permitted to transfer at any point in their studies into the Glendon Bilingual BA/iBA/BSc/iBSc degrees. 38.1.2 Students admitted into the Glendon Bilingual BA/iBA/BSc/iBSc degrees are permitted to transfer at any point in their studies into the Glendon BA (EN-Eligible and FR-Eligible). 38.2 In order to complete their program of study, regardless of the degree type, all Glendon students must complete the respective degree requirements.

RATIONALE

The modification in the faculty requirement proposed herein is part of a set of parallel initiatives and processes that have emerged at Glendon since 2019, aimed at refocusing Glendon's academic mission as a liberal arts college and improving recruitment and retention figures. The data and contexts informing the Faculty Council's decision to authorize the creation of this degree option were presented in the Recruitment and Retention Working Group's Report presented to Glendon Faculty Council in September, 2020 (see Appendix 2).
The mandate defining the work of the *Co-Leads* on this proposal is grounded in a motion of the Recruitment and Retention Working Group, approved by Glendon Faculty Council on 20 November, 2020. The motion was conceived as a direct response to what the Working Group considered a crisis in recruitment and student retention; it aimed to diversify the profiles of students recruited for programs at Glendon, and also to improve the retention of students for whom the present Bilingual BA/iBA,BSc/iBSc language requirements might have proven too challenging. Although the Co-Leads authoring this proposal are mindful of the need for short-term tactics to address recent unfavourable enrolment numbers, the aim of the proposal is primarily to serve as a long-term *academic strategy* aiming to diversify and enrich Glendon's degree offerings in order to attract greater student interest.

In order to preserve Glendon's distinguishing bilingual features while at the same time ensuring the faculty's financial sustainability, a crucial component of this proposal is that the Glendon Principal's Office will establish an annual *admissions target* for students applying to the Glendon BA. The Principal's Office, working with the Offices of Recruitment and Academic Services, will have timely access to data related to the recruitment, enrolment, and retention of students, and will be able to monitor and maintain a healthy ratio of Glendon BA to Bilingual BA students enrolled at any time.

This 6-credit L2 requirement, furthermore, also accords with the proposed design of the Glendon Core Curriculum that stipulates 6 credits of L2 *at the level of placement* to be taken as part of the first year of every student's experience at Glendon.

It must be emphasized that the present proposal *does not* create new programs nor duplicate any existing program at York University; all the programs eligible for the Glendon BA are already in existence, and no changes to their requirements are being proposed. What is being proposed here is a change to the *faculty language requirement* at Glendon, the home faculty of these eligible programs.

Glendon's student-centered approach supports this modification. As part of their liberal arts education, students should have the flexibility to choose the intensity of second-language learning and the level of linguistic competency that they wish to attain. These two choices, optimally, shape any student's university experience at Glendon. The Glendon Academic Plan 2020-2025 makes the commitment to "[e]nable Glendon students to design and pursue their own linguistic and intellectual journey through a range of academic options within Glendon's bilingual and plurilingual matrix of programs, courses, and curricula." This proposal for a Glendon BA not only presents students with an additional option that responds to their variable needs regarding the intensity of language learning and the specific competencies being built, but also provides them with the flexibility—should their personal and career goals change—to move between the BA and the Bilingual BA (BSc) or Bilingual/Trilingual iBA (iBSc) so long as individual program admission requirements are met.

APPENDIX 2

Glendon BA Proposal - Letters of Support

1. Glendon Principal
2. Glendon Core Curriculum (GCC)
3. Bilingual Academic Architecture Working Group (BAAWG)
4. Business Economics; Economics
5. English
6. Gender and Women's Studies; Sexuality Studies
7. Hispanic Studies
8. History
9. International Studies
10. Philosophy
11. Political Science
12. Psychology
13. Sociology

GLENDON COLLEGE
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Bureau du Principal

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November 29, 2021

To whom it may concern,

I am pleased to provide this letter of support for the new Glendon BA, which specifies a more flexible language requirement as part of the Faculty requirement for a number of eligible degrees.

This proposal is a timely initiative that aims at providing students with increased flexibility in their language-learning pathway, while encouraging the pursuit of a bilingual education, one of the hallmarks of Glendon undergraduate degrees. This stand-alone initiative is part of a comprehensive plan to increase student retention and to make Glendon offerings more accessible to those students who doubt their ability to learn an additional language or for whom advanced bilingualism is not a current ambition.

This initiative applies to those degrees that have expressed interest in this option at this point. It must be noted that Glendon College intends to continue to offer courses in both languages, and we do not anticipate that the implementation of this initiative will require additional resources.

I am pleased to support this proposal without any reservation whatsoever, and I look forward to it being implemented.

Marco Fiola,
Principal


TENTANDA VIA

GLENDON CAMPUS

CAMPUS GLENDON

Department of English
Département d'études anglaises

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www.glendon.yorku.ca/englishstudies

13 December 2021

To the BA Option Leads:

I would like to offer my support for your Major Modification Proposal to create a new degree option by revising Glendon's faculty-level language requirement. In my view, the proposed Glendon BA takes a more equitable pedagogical approach to carrying out Glendon's multilingual liberal arts mandate. Not only would it provide students with more flexibility in terms of choosing degree options and courses suited to their needs, but it would also allow Glendon to attract more diverse cohorts of students and afford them increased opportunities to study additional languages beyond bilingualism.

This Major Modification Proposal would also align completely with the design of the proposed Glendon Core Curriculum. In order to foreground the centrality of languages to Glendon's academic mission, the GCC would require students to take 6 credits in the non-dominant language at the level of placement (normally) in the first year of study. As such, students enrolled in the proposed Glendon BA would be able to fulfill both this proposed GCC requirement and their language requirement early in their degree program, by the time they were to enter second year.

I believe the proposed changes to the faculty-level requirements presented in this proposal will be of great benefit to Glendon.

Sincerely,

Lee Frew
Glendon Core Curriculum Co-Lead

GLENDON CAMPUS
CAMPUS GLENDON

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December 10th, 2021

Dear Igor, Gillian, and Louis-Philippe,

Thank you very much for consulting with us on the most recent iteration of the Glendon BA proposal, which we resolutely support.

We would like to restate our belief that our combined efforts will result in significant improvements to the available academic and bilingual options for our students, while providing them with greater flexibility should they need to change academic paths regarding their language requirements.

Thank you very much for all your arduous work,

Marie-Élaine Lebel, Catherine Lamaison, Marlon Valencia
Co-leads, Bilingualism Academic Architecture Working Group

COLLÈGE
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GLENDON

Vincent A. Hildebrand
Department of Economics

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vincent@econ.yorku.ca
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Saturday Febraury 6, 2010

Toronto, Thursday 16th December, 2021

Catherine Salib
2239 Yonge Street, 4th floor
Toronto, ON
M4S 2B5

Dear faculty co-leads for the "Glendon BA",

Dear Catherine,

The Economics Department happily welcomes the opportunity to offer the Glendon BA option (EN-stream requiring 6.0 credits in FSL at the level of placement) for both Economics (ECON) and Business Economics (BUEC) programs, which provides students with an alternative avenue to benefit from our small campus, immersed in a less intimidating bilingual environment.

Yours truly,

Vincent Hildebrand
Associate Professor and Chair

As a new owner of a Minto Skyy suite, having closed on January 6, 2010, I have fully moved to my new home. Unfortunately, what should have been an enjoyable experience has left me with many frustrations and questions regarding Minto's true professionalism and fairness.

As the owner of a midsize unit on the 10th floor of the building, which I bought when the building was maybe half sold out, with a relatively early moving day, I for not saying shocked) to have been assigned a parking spot on el. I realized that I never made any request simply trusting that objective fairness procedure was followed regarding parking was told that parking spots were assigned randomly. I do not remember being told of this procedure at the time of purchasing my unit. After talking to a few unit owners, it appears very clearly that this procedure was not followed strictly (if followed at all). I am thus asking, very naively, before doing it more formally, whether it would possible to be reassigned a parking spot reflecting my relatively early purchase, mid-floor unit in the building and my early possession date. In the same spirit, I am also shocked to have been assigned a locker space (P5-4) which is relatively smaller in size due to the concrete structure of the building. God, I should not play lottery two have drawn randomly a bad number. Of course, we all know that the only thing random in the procedure was the word used to describe it. I have spent a fair bit of money for my unit and I expect that all the amenities I purchased with my unit reflect this.

An early move in a building which is still very much under construction is far from being blessing. I am sleep deprived from being consistently awakened by drilling as early as 6:45 in the morning. I cannot work from home as daily drilling is preventing me from concentrating (not everyone has the chance to work in factories). The drilling does not even stop during the week-end. There is a code in Ontario regarding noise pollution. As a corporation praising itself of following environmental standard, noise pollution is something that should be taking a bit more seriously. If the building is not ready for moving in then I should not be here.

Rushing the finish of the unit has also left me with a bitter taste. I have a long list of minor but ridiculous defect including poor positioning of thermostat, bathroom fixture without caulking/grouting (meaning that there is a risk of water damage to surrounding units every time I take a bath) and furnace blowers not properly setup and very noisy as a result (adding to my poor sleep).

YORK
UNIVERSITÉ
UNIVERSITY

GLENDON COLLEGE

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English Department

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December 8, 2021

To the Co-Leads of the BA Option:

I am writing in the name of the Glendon English Department to voice our complete support for the Proposal of the "Glendon BA." The faculty of the English Department have endorsed the English Program's full participation in the project with a commitment to offering the Glendon BA-EN Eligible.

Yours sincerely,

Igor Djordjevic
Chair

Re: Support for Glendon BA (Option 1) proposal

Eva C Karpinski <evakarp@yorku.ca>

Thu 16-Dec-21 18:27

To: Louis-Philippe Hodgson <lhodgson@yorku.ca>

Dear Louis-Philippe, Gillian, and Igor,

It is with great enthusiasm that on behalf of the Gender and Women's Studies Program and Sexuality Studies Program at Glendon, I want to express our full support for the new Glendon BA. We are happy to see greater flexibility in the language requirement and hope that it will a ract more students and improve reten on in our programs. Both our programs have demonstrated consistent support to Glendon's bilingualism mandate, and this le er confirms our commitment to con nue implemen ng it through the new Glendon BA Op on 1.

Wishing you a Happy Holiday Season!

Kind regards,

Eva

Eva C. Karpinski, PhD
Associate Professor
School of Gender, Sexuality and Women's Studies
Undergraduate Program Director
Glendon Coordinator
Chair of the Board of the Nellie Langford Rowell Library
206 Founders College
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December 4, 2021

Re: *Glendon BA/Option 1*

Dear Igor, Louis-Philippe, and Gillian:

I am happy to write this letter expressing the Department of Hispanic Studies' support for the new Glendon BA. The Department would like to offer **option 1 EN-eligible** for the moment, as we do not have enough courses for FR-eligible at the present (= Ontario Secondary School Diploma (OSSD); ENG4U; 5 additional 4U or M Courses).

The Department believes this new BA will enhance Glendon's linguistic and cultural diversity and inclusiveness while preserving our bilingual mandate and distinctiveness. It will also foster Glendon's image as a leading liberal arts college with a global perspective and a local commitment. As such, Option 1 will recognize and value its population's cultural and linguistic diversity, taking full advantage of the unique multicultural and multilingual city in which it is nestled and greater possibilities for international recruitment.

We also see this proposal as an opportunity to promote our official bilingualism by providing a French-English environment to a wider cohort of students who may not come to Glendon initially attracted by the bilingual specificity of our institution, but who may find motivation in our bilingual interactions, governance and course offerings throughout their education.

This proposal is also a strategic step to achieve important goals stated in Glendon's Academic Plan 2020-2025, which recognizes the college's "diverse academic programs and multilingual matrix" as one of its strengths, and identifies "bilingualism and beyond" as one of its pillars. Therefore, this proposal is a necessary step towards the structural implementation of that "beyond" and recognizing, celebrating, and fully engaging with our diverse population's multilingual ecology, present and future.

Best wishes,

Jerzy Kowal
Chair and Associate Professor
Department of Hispanic Studies

GLENDON COLLEGE
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history@glendon.yorku.ca

December 5, 2021

Dear Gillian, Igor, and Louis-Philippe,

I am happy to write this letter expressing the History Department's support for the new Glendon BA. We are confident that increased flexibility in the language requirement will enable us to improve recruitment and retention in ways consistent with Glendon's larger commitment to bilingualism. We look forward to implementing it as soon as possible.

Best,

Mark Jurdjevic
Professor and Chair
History Department
York University-Glendon Campus

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New Glendon BA Co-Leads
Gillian McGillivray & Louis-Philippe Hodgson

December 15, 2021

Dear Gillian and Louis-Philippe,

The Department of International Studies is in support of the new Glendon BA and is ready to offer the English stream in the ILST program. The new Glendon BA has the potential to attract students who may not have the required bilingual language skills to be admitted to and/or succeed in the current BA and iBA programs in ILST. Moreover, the department is convinced that the new BA would help in retaining students, since one of the reasons students drop out of our program is the difficulty to meet its bilingual requirements.

Thank you,

Hossam Ali-Hassan, PhD
Chair, Department of International Studies
Glendon Campus, York University

Louis-Philippe Hodgson
Associate Prof. & Chair
Dept. of Philosophy
Glendon College,
York University

2275 Bayview Avenue
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Canada
lhodgson@yorku.ca

Toronto, 17 December 2021

Dear colleagues,

It is a pleasure to write to express the Philosophy Department's unqualified and enthusiastic support for the new Glendon BA. We are unanimous in welcoming this important initiative, which we think will provide much needed help with our recruitment and retention efforts while preserving Glendon's distinct character. We are ready to implement the new BA (in the EN-eligible version) as soon as it is officially adopted, which we hope will be very soon.

Sincerely,

Louis-Philippe Hodgson

Associate Professor and Chair
Philosophy Department
Glendon College, York University

December 14, 2021

GLENDON COLLEGE

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Department of Political Science

Département de science politique

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Dear Igor, Gillian, and Louis-Philippe,

It is my pleasure to write this letter expressing the Political Science department's enthusiastic support for the new Glendon BA. We are confident that increased flexibility in the language requirement will enable us to improve recruitment and retention in ways consistent with Glendon's larger commitment to bilingualism. We are delighted to be able to offer our program to both EN-eligible and FR-eligible BA students. We look forward to implementing this new degree option as soon as possible.

Sincerely,

Ellen Gutterman

Ellen Gutterman
Chair
egutterman@glendon.yorku.ca

Date: December 20, 2021

To: Igor Djordjevic, Louis-Phillipe Hodson, Gillian McGillivray, [Co-leads (Option 1; the Glendon BA)]

Reference: Proposal Option 1 ("the Glendon BA")

GLENDON COLLEGE

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Dear Drs. Djordjevic, Hodson and McGillivray,

I am writing this note to confirm that the department of Psychology at Glendon College supports the proposal describing the Glendon BA Option 1.

Our department does not wish to change its degree requirements for being admitted in the BA Option 1 of Psychology. Our requirements must remain the same. They are:

> *Ontario Secondary School Diploma (OSSD); ENG4U or FRA4U; 5 additional 4U or M courses (Recommended: 4U French)*

Yours sincerely,

Josée Rivest, Ph.D., C. Psych.
Chair of the Department of Psychology
Glendon College, York University

GLENDON COLLEGE
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Département de sociologie

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December 14th, 2021

BA Option 1 Faculty Co-Leads
Glendon College
York University

Re: Sociology – Letter of Support

Dear Professors Djordjevic, Hodgson and McGillivray,

It is my pleasure to provide this letter expressing the Department of Sociology's support for the BA Option 1 initiative. The proposal provides additional flexibility to students, while maintaining our commitment to bilingualism. The Department is hopeful that this new BA option will directly address some of the College's recruitment and retention concerns.

The Department will participate in the EN-option. While we would like to also offer the FR-option, we cannot currently guarantee the minimum number of French-language courses required.

Members of the Department note that the Option 1 proposal does not explicitly address Equity, Diversity and Inclusion implications. We are of the view that this new option will increase inclusiveness and diversity by potentially attracting students with a wider array of linguistic profiles, particularly as it does not affect existing degree options.

Sincerely,

Andrew Dawson
Associate Professor and Chair
Department of Sociology
York University, Glendon Campus

Senate Appeals Committee

Report to Senate

At its meeting of March 24, 2022

FOR INFORMATION

1. Annual Student Appeals Statistics, 2020-21

In this annual report, the Senate Appeals Committee (SAC) describes its activities for the past year and presents data on Senate and Faculty-level cases.

Between July 1, 2020 and June 30, 2021, SAC received 52 new files. Eighteen (18) files were not completed by June 30; an additional 30 files initiated in 2019-20 were completed. Figure 1 presents the number of cases from the last five years. There were no requests for SAC to approve, on behalf Senate, the rescission of a degree as penalty for breach of academic honesty.

The total number of appeals declined from the previous year, likely due to the modifications to regulations that resulted from the declaration of a disruption due to the COVID-19 pandemic. The percentage of appeals granted was slightly higher than in previous years but remains within the range of the last five years. This slight increase in the percentage of appeals granted may also be related to the impact of the COVID-19 pandemic and the particular circumstances put forward by students in their appeals.

Figures 1 and 2, below, and Tables 1-3 give the data for SAC appeals. As the SAC procedures were revised, Table 1, Outcome of Consideration by SAC, provides data for the last four years under the old categories, and Table 1A provides data on decisions for the five years under the new procedures.

Figure 1

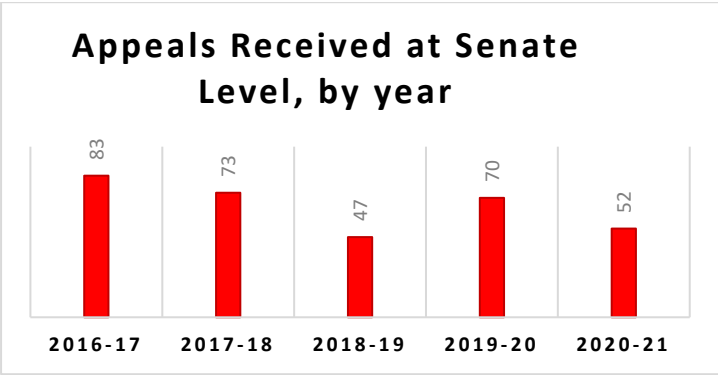

Table 1[1]

OUTCOME OF CONSIDERATION BY SAC, BY YEAR AND DECISION (procedures prior to 2016-17)

	2012-13		2013-14		2014-15		2015-16	
	Grant	**Deny**	**Grant**	**Deny**	**Grant**	**Deny**	**Grant**	**Deny**
Leave to Appeal of Faculty Decisions	20	53	24	63	22	31	20	32
Appeal Hearing Decisions	16	4	18	8	22	4	15	4
Reconsideration of Leave to Appeal Decisions	0	12	3	15	6	8	1	9
Total	**36**	**69**	**45**	**86**	**50**	**43**	**36**	**45**

Table 1A
OUTCOME OF CONSIDERATION BY SAC, BY YEAR AND DECISION (revised procedures)

	2016-17		2017-18		2018-19		2019-20		2020-21	
	Grant	**Dismiss**	**Grant**	**Dismiss**	**Grant**	**Dismiss**	**Grant**	**Dismiss**	**Grant**	**Dismiss**
Dismissal without a hearing	8	33	9	46	2	22	10	41	11	36
Appeal hearings	24	7	27	9	13	9	20	7	22	4
Reconsideration	5	4	3	14	2	9	1	15	2	12
Total	37	44	39	69	17	40	31	63	35	52

[1] Notes: Decisions are recorded in the year when the final decision is made. With the introduction of Withdrawn as a decision for a late withdrawal appeal in 2016-17, where SAC gives a W decision it is recorded as a granted appeal.

Figure 2
Percentage of Appeals Granted and Denied, by Year

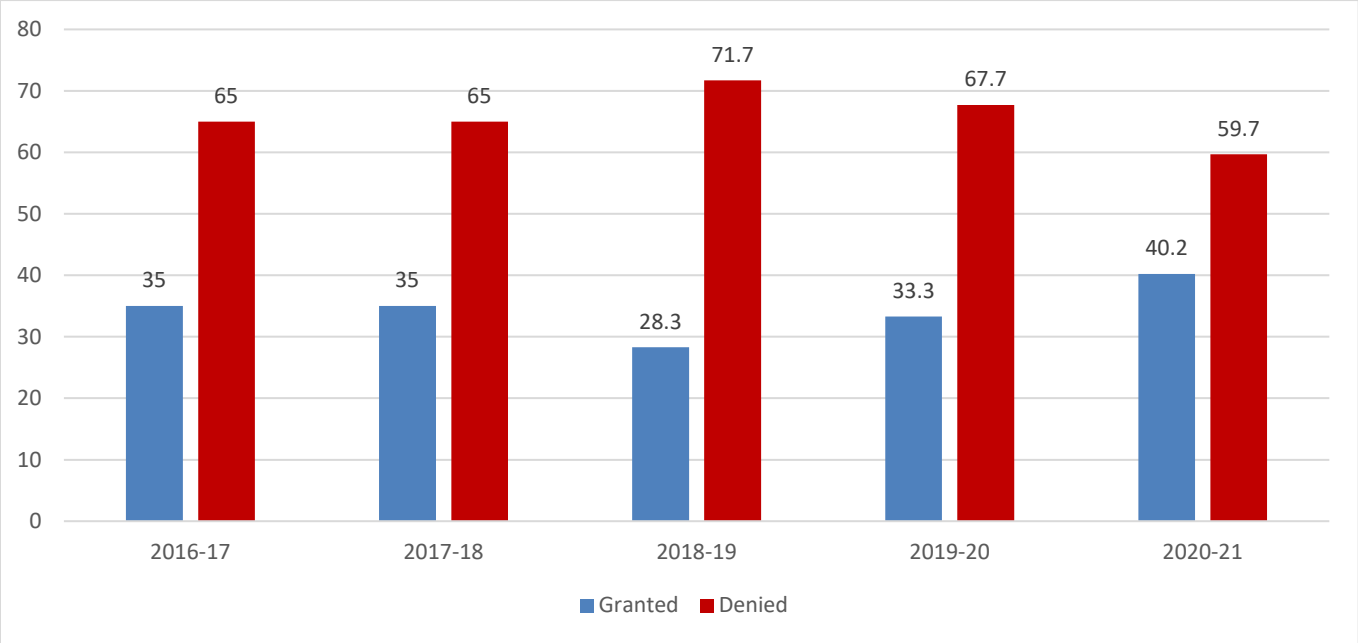

Table 2
SAC APPEALS BY TYPE, YEAR AND NUMBER[2]

Type of SAC Appeal	2016-17 69 Appeals	2017-18 84 Appeals	2018-19 46 Appeals	2019-20 70 Appeals	2020-21 52 Appeals
Course drop without receiving a grade	37	35	21	28	23
Reconsideration of SAC Decision	11	17	11	16	21
Deferment	3	6	4	3	1
Academic Honesty	7	16	8	10	11
Waiver of Required Withdrawal / Debarment	13	12	2	15	5
Grade Reappraisal	3	4	8	9	4
Late Enrolment	0	0	0	1	0
Other	5	2	0	0	5
Waiver of Degree/ Program requirement	1	6	2	4	3
Total	**80**	**98**	**54**	**86**	**73**

[2] Totals exceed individual cases due to reconsiderations and/or multiple appeals within one case.

Table 3
SAC APPEALS BY FACULTY OF ORIGIN

	2016-17	2017-18	2018-19	2019-20	2020-21
AMPD	1	1	1	0	0
Education	1	0	0	0	0
Environmental and Urban Change	0	0	0	0	0
Glendon	3	6	4	5	4
Graduate Studies	6	4	2	6	0
Health	14	28	8	13	15
Lassonde	3	2	6	7	3
LA&PS	16	19	12	15	13
Osgoode	0	2	4	9	5
Schulich	10	4	1	3	1
Science	15	18	8	12	11

2. Annual Reporting of Faculty-level Petition and Appeals Statistics, 2020-21

SAC is continuing its efforts to standardize reporting across the University. The data are for petitions initiated from July 1, 2020 to June 30, 2021. The data in Table 4 provide the big picture but are not entirely comparable across Faculties.

At the bottom of the table, the total number of appeals for each Faculty and the percentage of petitions which were appealed at the Faculty level is provided. The overall percentage of cases appealed is 3.7%, which is slightly lower than last year (4.9%). Over the past five years, the average has ranged between 3.7 and 6%.

The total number of petitions (5671) is comparable to the previous year (5664). Overall, most petitions continued to be granted, particularly in the smaller Faculties such as Education and Environmental and Urban Change that have few petitions overall.

Table 4

FACULTY-LEVEL PETITIONS BY TYPE 2020-21

		AMPD	ED	EUC	GL	GS	HH	LA&PS	LSE	OSG	SSB	SC	TOTAL
Petition Type	**Reason**												
Course Add	Enrol In Course(s) After The Faculty Deadline	2	10		4	22	7	26	4		5	4	84
Course Drop	Drop Course(s) After Faculty Deadline	42	20	1	25	81	243	1136	42		16	164	1770
	Granted W on transcript		12	15	32	3	340	215	13		1	9	640
Credit						2		45	5		5		57
Departmental/Programme Waiver	Advanced Standing: Course Substitute					1							1
	Advanced Standing: Course Waiver	1				1					9		11
	Advanced Standing: Course Transfer					52							52
	Course Substitution for Major or Minor Req. (s)			1		1							2
	Other			1		37					3		41
	Waiver Of Degree Credit Exclusion Legislation			1		5							6
	Waiver with replacement			34		13					2		49
	Take courses out of sequence - Schulich										1		1
	Promotion without satisfying year requirements - Schulich												99
	Reduced course load - Schulich										1		
Exemptions	Degree Exemption(s)												
Extension	Deferred Standing, extension of deferred standing	3	2		17	2	28	201	17		4		274
	Course extension					47							47
	Program extension					342					1		343
Grade Reappraisal	Grade Reappraisal					1				24	18		43
Leave	Leave of Absence					213					84		297
	LOA Medical/compassionate					122					10		132
	LOA No course available					98							98
	Maternity leave					88							88
	Strike-related - FGS												
Letter of Permission	Credit For Course(s) Taken Elsewhere Without LOP	2					2		1				5
Other	Other					14	79		0		45		138
Overload	Course Overload	7	5			1	88	156	34		2		293

		AMPD	ED	EUC	GL	GS	HH	LA&PS	LSE	OSG	SSB	SC	TOTAL
Readmission													0
Relief against failure	Osgoode only												0
Repeat	Repeat Failed Course		29				9		18				56
	Repeat Passed Course						5						5
Status	Change degree stream		47			14							61
	Change to full-time					29					1		30
	Change to part-time					43					4		47
	Reinstatement		2			128					10		140
	Withdrawal		8			23							31
	Study at a location other than York												
Stop-out	Education only		6										6
Waiver	Graduate Without Min. Req'd G.P.A.										1		1
	Request For Waiver Of Req. Withdrawal*	11					86	84	19		56	18	274
	Request For Waiver Of Req.Debarment				6		25		2			1	34
	Upgrade G.P.A. In Attempt To Graduate						22		3			2	27
	Waiver Of Degree Credit Exclusion Legislation				3								3
	Waiver Of General Education Requirement	8				1	9		17			2	37
	Waiver Of Honours Standing Regulations	15		2		1	74	93	16				201
	Waiver Of In-Faculty Requirement	15			3	1	5		22		16	2	64
	Waiver Of Major Requirement(s)	33				4			23		2	2	64
	Waiver Of Upper Level Course Requirements	11										6	17
	Other	11	0	4	3	0	6			90		9	123
Total	**TOTAL**	**148**	**141**	**49**	**93**	**1390**	**1028**	**1956**	**236**	**114**	**297**	**219**	**5671**
Appeals		2	0	0	9	6	64	49	8	NA	15	57	210
Percentage of decisions appealed		1.35%	0.00%	0.00%	9.68%	0.00%	6.23%	2.51%	3.39%	NA	5.05%	26.03%	3.70%

3. Annual Faculty-Level Academic Honesty Statistics, 2020-21

SAC includes in its annual report statistics on Faculty considerations of charges of breaches of academic honesty. For 2020-21, there were 2,178 cases of breaches of academic honesty, an increase from 978 in 2019-20. See Table 5 for details.

This increase in cases can likely be traced back to the COVID-19 pandemic, with many Faculties reporting a large increase in online cheating and group cheating cases.

Table 5
ACADEMIC HONESTY CASES BY FACULTY
2016-17 TO 2020-21

Faculty	2016-17 N=664	2017-18 N=610	2018-19 N=817	2019-20 N=978	2020-21 N=2,178
AMPD	3	9	24	40	25
Education	0	8	9	8	6
Environmental Studies	9	8	8	17	10
Glendon	11	8	26	27	23
Graduate Studies	18	12	30	10	22
Health	72	23	49	78	248
Lassonde	111	36	209	239	406
LA&PS	276	257	357	390	620
Osgoode	6	5	3	11	10
Schulich	68	75	35	70	112
Science	90	169	67	88	696

NOTE: The numbers above refer to charges laid. Where the conclusion of an exploratory meeting was that there was no breach and no formal charge was laid, the case is not recorded.

4. Policies and Procedures

In Winter 2020, the Academic Standards, Curriculum and Pedagogy Committee of Senate (ASCP) and SAC convened the Academic Honesty Policy Review Working Group to develop a new policy framework. The Policy Review Working Group's efforts from February to June 2020 culminated in the development of the draft Academic Conduct Policy and Procedures, which were reviewed by ASCP and SAC in Fall 2020.

The University community was invited to review and provide input on the draft Policy and Procedures in Winter 2021. In Spring 2021, a new Working Group was convened to review the consultation input and finalize the Policy and Procedures. The Working Group continued its work through Fall 2021 and Winter 2022 under the leadership of Professor Jen Gilbert, Chair of SAC. Further consultations on this proposed draft are planned for Spring 2022, with Professor Chloë Brushwood Rose, who had led the Working Group in Spring 2021, stepping back into the role of Chair.

5. Hail and Farewell

The members of the Senate Appeals Committee and the support staff of the Secretariat would like to extend their thanks and appreciation to our departing members for their work on and commitment to the Senate Appeals Committee: Professors Brian Huss, Minas Spetsakis, Saskia Van Viegen, Alexander Bajic, and Giulia Rosano.

A warm welcome is extended to new members: Professors Scott Adler, Bridget Cauthery and Gabrielle Moser and stude*nts* Ana Kraljević and Disha Mittel.

Jen Gilbert, Chair, 2021-22

Academic Policy, Planning and Research Committee

Report to Senate

At its meeting of 24 March 2022

FOR ACTION

a. Change of Name, Department of Theatre, School of Arts, Media, Performance and Design

APPRC recommends

That Senate approve a change in the name of the Department of Theatre in the School of Arts, Media, Performance and Design to the *Department of Theatre and Performance,* effectively immediately.

Rationale

This proposed departmental name change has been approved by the AMPD Faculty Council. It is supported by the Chair of the Department and unit colleagues, the Dean of the School and the Provost & Vice-President Academic; statements of support from the latter two are included in the documentation. It should be noted that the names of constituent programs will not change as a result of the new Department name. APPRC enthusiastically endorses this proposal.

Legislative Pathway

Department Approval: 27 October 2021
Academic and Administrative Policy & Planning Committee Approval: 30 November 2021
Faculty Council Approval: 8 December 2021
APPRC Approval: 17 February 2022

Supporting documentation is in Appendix A to this report.

For Information

b. Consultation with Senate: School of Medicine

The Academic Policy, Planning and Research Committee is facilitating consultation with Senate on the University's conceptual plans for a School of Medicine. Creating a medical school has been a long-held aspiration for York that has been signaled in successive University Academic Plans. The creation of a medical Faculty would require the approval of both Senate and the Board of Governors, were the Province to indicate its support.

Adding a medical Faculty would be a major academic endeavour, representing a transformational direction for the University. What opportunities might a medical Faculty

bring to York? What are the resource implications? How might we best canvass pan-university interest in this possibility?

Facilitating a discussion of the initiative with Senate at this early stage serves two vital purposes:

- Sharing information about the plans developed thus far and the next stages of the internal proposal development and governance processes
- Canvassing Senate for general views and critical issues about the direction of a medical school at the University.

In preparation for the discussion, Senators are encouraged to read The Conceptual Proposal for the School of Medicine. The Provost and Vice-President Academic will further set the stage for the Senate discussion through brief introductory remarks that will speak to the internal and external processes that led to the development and submission of the conceptual proposal to the Province in February, and the planned next steps.

As Senate's planning committee, APPRC engaged in a robust discussion of the medical school project with the President, the Provost and the Vice-President Research & Innovation at its meeting earlier this month. The conversation focused on the broader planning aspects of the initiative, in which members touched on matters pertaining to:

- the principles and priorities of the University that are driving the impetus to take up the opportunity to seek a school of medicine
- the opportunities investing in a medical school brings to York
- avenues for consultation to ensure that pan-university input on the academic dimensions is gathered
- the need for information on the resource implications for the University and the broad frameworks of how a new school would affect Faculty and other academic resource allocations
- the relationship of the school to existing Faculties

The Committee looks forward to hearing Senators' input and questions, knowing a constructive debate will positively contribute to shaping the University's plans.

c. Academic Planning Forum 2022

The Committee has finalized the program for this year's planning forum being held on **Thursday, 7 April 2022 from 9:30 – 12:00pm** in a virtual mode. The focus of the session is "*21st Century Learning: Challenges and opportunities for diversifying whom, how and what we teach*". The forum provides the community an opportunity to examine the role of both in-person learning and on-line learning in delivering York's mission. It offers a venue to share advantages and disadvantages that emerged through virtual delivery of programming that had been designed for in person learning, and to begin discussions about how these insights might best inform our course and program delivery in the future.

The discussions will specifically seek to explore as a collegium the opportunities and challenges related to:

- the curricular content and learning outcomes best suited to different modes of delivery
- the equity, inclusivity, diversity and decolonization dimensions of pedagogy (i.e., access, mode of delivery, curricular content)
- how the innovations harnessed from remote teaching can be utilized to enhance in-person course delivery from the perspective of student experience and achievement of learning outcomes.
- sustaining quality online course delivery from an instructor and academic program point of view; and
- the potential for more flexibility through blended or fully online programs in future.

This year's event will be offered as a 2.5-hour session that includes two components: a panel discussion at the outset on key topics of the theme, and small break-out group discussions that rely heavily on audience participation. While the individual panelists are being finalized, the topics they will address include:

i. Principles of research-informed pedagogy that might inform choices
ii. Insights on innovations in pedagogy from remote delivery experiences and how they could inform future practice
iii. Approaches to inclusive curriculum and pedagogy

An invitation to the forum will be widely distributed to the York community will be distributed shortly.

Academic Policy, Planning and Research Committee
Report to Senate

d. New Research Frameworks Applicable to University Scholarship

The Vice-President Research and Innovation provided brief overviews of two new policy frameworks applicable to university research and researchers. The first initiative is the province's *Commercialization mandate policy framework reporting system.* It is focused on addressing intellectual property rights and improving universities' commercialization outcomes. The Province requires each institution develop a commercialization policy for review and feedback by the Province, and prepare annual commercialization plans.

The second initiative is a *Research Security Framework* being implemented by the federal government. Prompted by recent incidents of "foreign espionage" at a Canadian university and highly sensitive emerging technologies, the new security framework establishes National Security Guidelines for Research Partnerships' risk assessment form for all NSERC Alliance grant applications involving one or more partner organizations from the private sector. If, "in consultation with" Canadian intelligence services, a security risk is found, the application will be rejected. Initially, the policy is being applied to *NSERC Create* funded research, with the goal to extend it to all partnership grants.

This development raised questions and concerns by APPRC, and further information about the new framework to understand its scope has been requested of the Vice-President. The Committee together with the Vice-President will share more information with Senate on this new process and may seek Senate's input on preparing a response to be communicated to Tri-Council, or the appropriate body.

Brenda Spotton Visano
Chair of APPRC

Proposal to change the Department of Theatre to the Department of Theatre and Performance
Updated November 10, 2021

The Department of Theatre at York University was established in 1968 and has been a leader nationally and internationally in all aspects of professional theatre training, including acting, directing, playwriting, dramaturgy, production, and design, while offering robust courses in applied theatre, and the history and theory of theatre and performance. In the 53 years since the Department's founding the study of Theatre/Theatre Studies has undergone substantial transformations in research and teaching, particularly where its relationship to Performance Studies is concerned. Many scholars and students now combine methodologies and theoretical frameworks from both Theatre Studies and Performance Studies in exciting, productive ways. In recognition of the important, symbiotic relationship that has developed between these disciplines, numerous undergraduate and graduate programs throughout Canada have begun to change their names from Theatre or Theatre Studies to Theatre and Performance Studies. In fact, our MA/PhD program changed its name to Theatre and Performance Studies in 2013 and our MFA program offers a degree specialization in Performance Creation. These name changes reflect a much larger shift at the international level to develop undergraduate and graduate programs dedicated to Theatre and Performance Studies.

A department name change, from the Department of Theatre to the Department of Theatre and Performance, will better reflect the state of the field as well as the diversity of performance-based work our faculty and students create. This work includes (but is not limited to):

- acting for stage and screen
- physical theatre/ movement for actors (Laban, Viewpoints, River Work, Suzuki, etc.)
- devised theatre and performance
- voice coaching for stage and screen (including video games)
- live event curation and management
- performance ethnography
- solo performance
- applied theatre and performance
- performance art
- installation art
- applied theatre
- digital performance
- ecological design for performance

Moreover, we view changing our name to encompass the already broader areas of study and creation in which our department is engaged as a valuable opportunity to strengthen ties to other performance-based programs and course offerings within The School for Arts Media Performance and Design and in adjacent fields at York, including the recently renamed program "Drama and Creative Arts" program at Glendon.

In addition to aligning our name with our current practice, research, and creation, the name change will help outside communities, and particularly prospective students, more easily identify the focus of our program. "Theatre" registers differently for students than "Performance." Performance is a more expansive term and allows us to signal to prospective and current students that they are developing expertise that will allow them to perform across a variety of stages, screens, and performance platforms, both analog and digital.

In the spring of 2021, The Theatre Department identified a series of curricular priorities to support our academic and creation activates. This proposed name change aligns with these priorities in several ways, most notably with our efforts to decolonize and decenter white European practices. Theatre has often been deployed in support of colonial endeavours and related goals. The word derives from the Greek word for "seeing place" and is entangled with the imperialist project, including the cultural genocide of Indigenous peoples. While the department recognizes the need to acknowledge this history - as it continues to inform how and what we teach and produce - we are interested in what "performance" as a wider, arguably more inclusive, framework has to offer.

Finally, this proposal will bring alignment to our courses, programs, and degrees. In fact, several of our degrees and programs have *already* undergone department, Faculty, and Senate-approved name changes in the last 10 years to reflect the broader cultural and disciplinary shifts referenced above. Undergraduate survey classes have "theatre and performance" in their title (THEA 1200: Introduction to Theatre and Performance, THEA 2200: History of Theatre and Performance, THEA 3200: Canadian Theatre and Performance, THEA 4200: Contemporary Theatre and Performance) in recognition of the exciting and energetic blurring of boundaries between theatre and performance studies practices, theories, and methodologies. In 2013 we changed the name of our MA/PhD from Theatre Studies to Theatre & Performance Studies. In 2018, we officially changed our Honours BA in Theatre Studies to a BA and BFA in Performance Creation. The MFA in Theatre offers a degree specialization in Performance Creation. These changes recognize the broad range of performance practices that our students explore - theatre is central to classes in this area but practices include installation art, digital performance, etc. Changing the name of the undergraduate department will further allow us to align with our undergraduate BA and BFA degree offerings as well as our graduate program in Theatre and Performance Studies.

The proposed change of our department name from The Department of Theatre to The Department of Theatre and Performance will not constitute a change to any degree requirements, learning outcomes or objectives.

In summary, if the proposal is accepted, the goals of this change are:

- Accurately reflecting the diverse range of performance activities (research, creation, and studies) of our faculty, students, and community partners
- Aligning our name and brand with scholarly and industry terminology to accurately reflect the focus of our department better identifying us in the market to potential students and partner organizations
- Moving toward decentering whiteness and European practice in our department and performance creation
- Aligning our department name with existing courses, degrees, and graduate programs (MA/PhD).

<u>Internal Discussion, Consultation, and Decision:</u>
Initial conversations about a name change began in summer 2021 and were the focus of conversation at an August 26 retreat. Faculty expressed general enthusiasm and support for the idea, although several posed questions about student perceptions of the word "performance," and the department chair consulted with AMPD's recruitment team.

In late September, department chair Marlis Schweitzer consulted with other AMPD chairs about the proposed name change and received enthusiastic support for all six department chairs. She also contacted the director of the Drama and Creative Arts program at Glendon College, who likewise offered support for the change.

At a department meeting, held on October 27, department faculty and staff unanimously approved a motion to move forward with the name change. A decision was made to also hold an electronic vote to ensure faculty who were not present at the department meeting also had a chance to vote. That vote will take place in November via email.

Table 1: Similar Departments and Programs in Anglophone Canada

Institution	Department Name	URL
Queen's University	School of Music and Drama	Queen's U
University of British Columbia	Department of Theatre & Film	https://theatrefilm.ubc.ca/
University of Toronto	Centre for Drama, Theatre, and Performance Studies	https://www.cdtps.utoronto.ca/
University of Toronto - Mississauga	Theatre, Drama, and Performance Studies	University of Toronto - Mississauga
University of Toronto - Scarborough	Theatre and Performance	University of Toronto - Scarborough
University of Fraser Valley	School of Creative Arts	https://www.ufv.ca/creative-arts/
Simon Fraser University	School for the Contemporary Arts	Program in Theatre Performance
Dalhousie University	Department of Theatre, Fountain School of Fine Arts	Dalhousie
University of Waterloo	Communication Arts (with Theatre and Performance as one of four options)	University of Waterloo
University of Guelph	School of English and Theatre Studies (BA)	University of Guelph
Ryerson University	Performance (Acting, Dance, Production + Design)	Ryerson U
Concordia University	Department of Theatre	Concordia University
Humber College	programs in Theatre Arts and Production	https://mediaarts.humber.ca/programs/theatre-arts-performance.html
University of Ottawa	Department of Theatre	https://arts.uottawa.ca/theatre/en
University of Calgary	Department of Drama	https://www.ucalgary.ca/future-students/undergraduate/explore-programs/drama

Table 2: Similar Departments and Programs in United States

Brown	Department of Theatre Arts and Performance Studies	https://www.brown.edu/academics/theatre-arts-performance-studies/
University of Texas - Austin	Department of Theatre and Dance	https://theatredance.utexas.edu/
University of California - Berkeley	Department of Theatre and Performance Studies	http://guide.berkeley.edu/undergraduate/degree-programs/theater-performance-studies/
Potsdam – State University of New York	Department of Theatre & Dance	https://www.potsdam.edu/academics/AAS/depts/theatre
University at Buffalo	Department of Theatre & Dance	https://arts-sciences.buffalo.edu/theatre-dance.html
Stanford	Theater and Performance	https://arts.stanford.edu/directory/theater-performance/
University of California - LA	School of Theater, Film & Television	https://www.tft.ucla.edu/programs/theater-department/

Table 3: Similar Departments and Programs outside North America

Queen Mary University of London	Department of Drama	https://www.qmul.ac.uk/sed/drama/
Wimbledon College of Arts	Offers BA (Hons) degrees in Contemporary Theatre and Performance; Acting and Performance; Costuming for Stage and Screen; Technical Arts for Theatre and Performance	https://www.arts.ac.uk/colleges/wimbledon-college-of-arts/courses/undergraduate-courses
LMU Munich	Theatre Studies	
University of Exeter	Drama	https://humanities.exeter.ac.uk/drama/

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SCHOOL OF THE ARTS, MEDIA, PERFORMANCE & DESIGN

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Professor Brenda Spotton Visano
Chair, Academic Policy, Planning & Research Committee (APPRC)

29 November 2021

Dear Prof. Spotton Visano,

I am pleased to write in support of the proposed name change for the Department of Theatre to the Department of Theatre and Performance. For all of the reasons outlined in their proposal and rationale, the name change more accurately reflects the current state of work in the Department and in their field itself. This change will better communicate and distinguish the Department and its programs from the range of similarly named programs that have emerged at York, such as Glendon's "Drama and Creative Arts."

This name change further aligns the Department at York with its closest corollaries, such as Brown, Stanford, and the University of Texas-Austin, all of which combine the study of theatre in historical, literary and cultural contexts with contemporary performance studies as an expansive, multi-disciplinary approach to understanding diverse performances and live art forms across media.

The new name not only more accurately reflects the current programs and creative context for the Department, but also highlights some of its more accomplished researchers working across ethnography, sustainability in the arts, and performance cultures and artifacts of all kinds. The name identifies the field in which some of our most accomplished colleagues regularly publish, and for which they have been recognized in the form of national and international awards, and with major research funding.

This name therefore supports the current and future work in Theatre and Performance at York at the highest level. I am therefore pleased to support this proposed change and look forward to its implementation.

Should you have any questions or wish to discuss further, please do not hesitate to contact me, either by email deanampd@yorku.ca or by phone.

Sincerely,

S. Bay-Cheng

Sarah Bay-Cheng, PhD
Dean

Cc: Cheryl Underhill Secretary, APPRC

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Memorandum

OFFICE OF THE PROVOST & VICE-PRESIDENT ACADEMIC

4700 KEELE ST.
TORONTO ON
CANADA M3J 1P3
T 416 736 5280
provost@yorku.ca
yorku.ca

To: Brenda Spotton-Visano, Chair, APPRC

From: Lisa Philipps, Provost & Vice-President Academic

Date: February 14, 2022

Subject: Support for name change to Department of Theatre and Performance, School of the Arts, Media, Performance & Design

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I write this letter in support of the proposed name change by which the Department of Theatre, School of the Arts, Media, Performance & Design, will become known as the Department of Theatre and Performance.

In keeping with existing course titles and recent changes to the names of several graduate programs within the School, the name Theatre and Performance reflects the range of research and teaching practices already taking place in the Department. Without affecting degree requirements, learning outcomes or learning objectives, this new nomenclature is intended to signal both the existing state of work within the Department and its commitment to more inclusive and expansive practices and approaches, as also reflected in its Action Plan to Enhance Equity, Diversity, Decolonization, and Inclusion within the Department.

Theatre and Performance will strongly signal to prospective students the range of practices which they may explore in their studies and is in keeping with peer institutions internationally, who have been integrating the word Performance into the names of their Departments and Schools of Theatre, Drama, Communication and Creative Arts.

Consultation has been undertaken within the Department of Theatre and with Chairs across AMPD, with all participants strongly in favour of this name change. I endorse this new name and the consultation process which led to it as a way to reflect the strengths, expertise and multidisciplinary practices that already exist and will continue to be fostered within the School of the Arts, Media, Performance & Design.

The Senate of York University – Minutes

Meeting: Thursday, 17 February 2022, 3:00 pm via Zoom

M. Roy (Chair)	J. Grant	N. Niell
C. Brushwood Rose (Vice-Chair)	R. Grinspun	P. Nguyen
P. Robichaud (Secretary)	M. Guzman	A. Norwood
L. Appel	M. Hamadeh	R. Ophir
J. Aryaan	L. Hébert	K. Ozowe
A. Asif	E. Hessels	D. Palermo
G. Audette	A. Hilliker	V. Pavri
P. Aulakh	R. Hornsey	L. Philipps
A. Badruddin	A. Hovorka	P. Phillips
T. Baumgartner	B. Hu	M. Poon
S. Bay Cheng	U. Idemudia	C. Popovic
M. Bayfield	I. Jamaa	A. Pyée
D. Berbecel	M. Karakul	P. Rahimpoor-Marnani
R. Bhatla	S. Karimi	N. Richardson
K. Bird	T. Knight	A. Rizwan
M. Bloom	P. Kohler	V. Saridakis
M H. Budworth	L. Korrick	R. Savage
M. Bunch	A. Kraljevic	A. Seifollahi
D. Cabianca	K. Krasny	L. Sloniowski
N. Canefe	A. Kusi	B. Spotton Visano
T. Choi	P. Lakin-Thomas	C. Steele
J. Clark	M. Lambert-Drache	K. Tasa
E. Clements	G. Langlois	T. Theophanidis
J. Conder	H. Larochelle	M. Thomas
M. Condon	M F. Latchford	K. Thomson
J. Connolly	J. Lazenby	G. Tourlakis
S. Cote-Meek	N. Lemish	D. Triki
M. Darroch	R. Lenton	P. Tsaparis
S. Day	S. Liaskos	R. Tsushima
M. Dodman	T. Loebel	I. Uwanyiligira
S. Ehrlich	W. Maas	C. van Daalen Smith
M. Elghobashy	A. Macpherson	G. van Harten
J. Etcheverry	Y. Manek	G. Vanstone
D. Fernandez	J. Marchessault	A. Viens
M. Fiola	D. Matten	R. Wang
L. Fromowitz	C. McAulay	S. Watson
S. Gajic-Bruyea	P. McDonald	N. Waweru
D. Gelb	A. McKenzie	R. Wildes
M. Giudice	J.J McMurty	S. Winton
J. Goodyer	B. Meisner	P.Wood
S. Grace	K. Murray	R. Zacharias
C. Graham	R. Nandan	D. Zwick

The Senate of York University – Minutes

1. Chair's Remarks

The Chair, Professor Mario Roy of Glendon College, welcomed Senators to the meeting. He acknowledged with sorrow the recent passing of Professors Emeriti Thomas T. Sekine and Pastor Valle-Garay, and former Associate Professor Joseph Clark Sherren.

2. Business Arising from the Minutes

There was no business arising from the minutes.

3. Inquiries and Communications

a. Report of the Academic Colleague to COU

Speaking to the written report included in the agenda, the Academic Colleague to the COU, Senator Spotton Visano, reported on its December meetings in which members engaged in a focused discussion on Lakehead University's development of an Indigenous Content Requirement (ICR). The Academic Colleagues also received updates on COU's current projects and priorities, including pre-election strategy, SMA3, micro-credentials, eCampusOntario's new portal, and the Auditor General's inquiry.

4. President's Items

President Lenton reported on the following items:

- an update on the delivery of academic programming for the winter 2022 term and York's continued prioritization of the advice of health and safety officials
- the forthcoming departure of Graeme Stewart, Chief of Staff, and appreciation for his service to the University
- the Kudos report, highlighting York alumna Cynthia Appiah, who is competing in the 2022 Winter Olympics in Beijing as a member of Canada's national bobsled team
- acknowledgment of Black History Month as an opportunity to recognize the contributions, achievements and histories of Black students, staff, faculty, course instructors and alumni at York

The monthly "Kudos" report on the achievements of members of the York community can be accessed with other documentation for the meeting.

The President also spoke to developments on the initiative to establish a School of Medicine at York University, including the recent submission of the conceptual proposal

to the Province and the launch of the next phase of community consultation. Feedback from Senators highlighted the necessity of consulting Senate (separate and apart from community-wide information sessions) on the aspiration to establish a medical school, including the academic aspects and directions that may be considered for the new School in respect of the principals and practices of the University's collegial governance.

Committee Reports

5. Executive Committee

a. Information Items

The Executive Committee's information items included the following:

- its ongoing monitoring of the impact of the COVID-19 pandemic on academic activities, with actions pertaining to the disruption outlined in its written Report
- the call for expressions of interest in the position of Vice-Chair / Chair of Senate, noting desire to receive nominations in three-weeks' time, by 11 March 2022
- its approval of a member to serve on a Senate Committee, as nominated by student Senators

6. Academic Standards, Curriculum and Pedagogy (ASCP)

a. Establishment of a Master of Biotechnology Management Degree Type: Notice of Statutory Motion

The Academic Standards, Curriculum and Pedagogy Committee put forward a notice of statutory motion to approve the establishment of the degree of Master of Biotechnology Management, and received the input of Senators on the initiative to consider prior to presenting the recommendation to Senate for approval. The proposal will be reviewed for final approval at Senate's 24 March 2022 meeting.

b. Establishment of a Specialized Honours Major option in Integrative Arts within BFA degree program in Creative Technologies, Markham Campus, School of Arts, Media, Performance and Design

It was moved, seconded and carried**, "that Senate approve the establishment of a Specialized Honours Major option in Creative Technologies within the BFA degree program in Integrative Arts, Markham Campus, School of Arts, Media, Performance and Design, effective FW2023-2024"**

c. Information Items

ASCP reported on its approval of the following minor modifications to curriculum:

Faculty of Liberal Arts & Professional Studies

Revisions to the calendar copy for the Japanese, BA program

Minor changes to the program requirements for the BCom Business Minor

Minor changes to the program requirements for the Children, Childhood & Youth BA program

Minor changes to the workshop requirement for the MA, PhD and Graduate Diploma programs in English

Faculty of Health

Minor changes to the calendar copy for the Kinesiology and Health Science BA and BSc programs

Minor changes to the calendar copy for the Psychology, Hons BSc and BSc programs

Minor changes to the degree requirements for the Global Health, BA and BSc programs

Faculty of Health / Faculty of Science

Minor changes to the qualifying period and continuation requirements for the Neuroscience Specialized Hons BSc program

Minor changes to internal transfers and re-entry requirements for the Neuroscience Specialized Hons BSc program

Lassonde School of Engineering

Minor Changes in Degree Requirements in Computer Security BA and BSc programs

Minor Changes in Complementary Studies requirements for BEng programs

Minor Changes in Degree Requirements in the BEng Space Engineering program

School of the Arts, Media, Performance and Design

Minor changes to the course requirements for the Music BFA and BA programs

Osgoode Hall Law School / Schulich School of Business

Change to admission requirements for Schulich MBA component of MBA/JD Program

Schulich School of Business

Retirement of Public Sector (PUBL) and Social Sector Management (SOCM) Specializations

7. Academic Policy, Planning and Research (APPRC)

a. Annual Report on Research

Under the auspices of the Academic Policy, Planning and Research Committee, Vice-President Research & Innovation Amir Asif presented the annual research report.

b. Information Items

APPRC reported on the following items:

- its receipt and discussion of the Vice-President Research & Innovation's annual report on research
- its monthly report to Senate on Markham Campus planning, including discussion of options to integrate Markham campus representation within the membership of Senate
- an update on recent preparations for the APPRC-sponsored spring planning forum on the *Future of Pedagogy*
- an update on the work underway to develop the high-level vision for a School of Medicine at York University and broad plans for the submission to the Province
- its receipt and discussion of the most recent report issued by the Senate Executive Sub-committee on Equity
- its concurrence with the recommendation of the Provost to establish the Pedagogical Innovation Chair in Science Education, within the Faculty of Science, effective 1 August 2021
- an update on its membership for 2021-2022

8. Other Business

There being no further business it was moved, seconded, and carried **"that Senate adjourn."**

Consent Agenda Items

9. Minutes of 27 January 2022 Meeting

The minutes of the 27 January 2022 meeting were approved by consent.

10. Changes to degree requirements for the MASc and PhD degree programs in Civil Engineering

Senate approved by consent changes to the degree requirements for the MASc and PhD in Civil Engineering, housed in the Department of Civil Engineering, Lassonde School of Engineering, effective FW2022-2023.

11. Changes to degree requirements for the BA programs in Communication & Media Studies; and closure of the Specialized Honours degree option within Communication & Media Studies

Senate approved by consent changes to the degree requirements and removal of the Specialized Honours option for the Communication & Media Studies BA and BA Honours programs, housed in the Department of Communication & Media Studies in the Faculty of Liberal Arts & Professional Studies, effective FW2022-2023.

Mario Roy, Chair _____

Pascal Robichaud, Secretary _____

York University Board of Governors

Synopsis

473rd Meeting held on 1 March 2022

Approvals

The *Regulation Regarding Student Organizations*, effective January 1, 2023.

The establishment of the *Pedagogical Innovation Chair in Science Education*.

The domestic tuition fees for fiscal 2022-23, as follows:

- Maintain the 2021-22 Board approved tuition fees during the spring/summer sessions for domestic students in programs eligible for provincial operating grants.
- Align any increase in domestic tuition fees for undergraduate programs with the new government Tuition Fee Framework for the period September 1, 2022 to April 30, 2023, but not to exceed a 3% increase.
- A reduction in the tuition fees for the Master of Design program.
- No fee increases are being requested for all other research-based graduate programs

International tuition fees for fiscal 2022-23, as follows:

- A 4% increase in international tuition fees for all undergraduate programs
- Tuition fee increases ranging from 2% to 7% for international professional masters programs as proposed by Faculties.
- A reduction in the tuition fees for the Master of Design program.
- No international fee increases for research-based graduate programs.

Domestic tuition fees for the University's full cost-recovery programs for fiscal 2022-23, as follows:

- No change for Osgoode's Diploma in Law for Law Enforcement
- A 5% increase in LA&PS' Graduate Diploma in Professional Accounting

York University Board of Governors

Synopsis

A 3.30% increase in centrally collected ancillary fees for 2022-2023, effective May 1, 2022, as follows:

- For undergraduate students, the increase is $0.77 per credit, from $23.35 to $24.12, resulting in an increase from $700.50 to $723.60 for full-time students (enrolled in 30 credits).
- For graduate students in professional programs, the increase is $11.56, from $350.17 to $361.73, for programs charged on a per-term fee basis. Part-time graduate students pay 50% of the full-time fee.

Amendments to the *Policy on Sexual Violence.*

Presentations

From the President on advancing the priorities articulated in the University Academic Plan (UAP) 2020-2025, including updates on the Vaughn Healthcare Precinct and recent progress on the initiative to establish a School of Medicine at York University.

From the Vice-President Research & Innovation on the Annual Report on Research.

From the President, Provost & Vice-President Academic, and Vice-President Finance & Administration on the 2021-22 Budget Consultation.

Reports and Remarks

Brief reports from each of the Executive, Academic Resources, External Relations, Finance and Audit, Governance and Human Resources, and Land and Property committees on matters discussed in their meetings this Board cycle.

The agenda for the meeting is posted on the Board of Governors website:
https://www.yorku.ca/secretariat/wp-content/uploads/sites/107/2022/02/board-agenda-20220301.pdf

Pascal Robichaud,
University Secretary