FACULTY OF ARTS AND SCIENCE
FACULTY BOARD

A meeting of Faculty Board will be held on Friday, March 2, 2018 at 3:30 p.m.
in the School of Kinesiology and Health Studies – KNS101

AGENDA

1. Adoption of the Agenda

2. Approval of the Minutes
The Minutes of January 26, 2018 have been posted.

3. Business Arising from the Minutes

4. Arts and Science Undergraduate Society Report

5. Dean’s Report

6. Question Period

7. Curriculum Committee Omnibus Report IV – Appendix A – for approval
J. Stephenson will move “that the Omnibus Report Part IV be approved.”

8. New Undergraduate Program – Certificate in Mohawk Language and Culture – Appendix B – for approval
J. Stephenson will move “that the proposal for a New Undergraduate Program, a Certificate in Mohawk Language and Culture, be approved.”

9. New Undergraduate Program – Certificate in Queen’s Entrepreneurship and Innovation – Appendix C – for approval
J. Stephenson will move “that the proposal for a New Undergraduate Program, a Certificate in Queen’s Entrepreneurship and Innovation, be approved.”

10. New Undergraduate Program – Certificate in Urban Planning Studies – Appendix D – for approval
J. Stephenson will move “that the proposal for a New Undergraduate Program, a Certificate in Urban Planning Studies, be approved.”

11. Other Business

P. Costigan, Secretary
Faculty Board

R. Ascough, Acting Chair
Faculty Board
### FACULTY OF ARTS AND SCIENCE
#### CURRICULUM COMMITTEE
#### OMNIBUS REPORT IV
#### March 2nd, 2018

## COURSE ADDITIONS

<table>
<thead>
<tr>
<th>Dept</th>
<th>Subject</th>
<th>Course</th>
<th>Catalog Number</th>
<th>New Course Units</th>
<th>New Course Title</th>
<th>New Course Description</th>
<th>New Course Notes</th>
<th>New Prerequisite</th>
<th>Learning Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF</td>
<td>ARTF</td>
<td>275</td>
<td>3.0</td>
<td>Digital Media in Studio Practice</td>
<td>In this introductory studio e-course, students will examine the current nature of digital media practices in relation to Contemporary Art. Through studio research, students will explore the context of digital practices and theories, and its effect on the production of images and objects within the digital landscape.</td>
<td>Only offered online.</td>
<td>Level 2</td>
<td>120(60O;60P)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dept</th>
<th>Subject</th>
<th>Course</th>
<th>Catalog Number</th>
<th>New Course Units</th>
<th>New Course Title</th>
<th>New Course Description</th>
<th>New Course Notes</th>
<th>New Prerequisite</th>
<th>Learning Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>BIOL</td>
<td>300</td>
<td>3.0</td>
<td>Ecology</td>
<td>Covers the major concepts at the scales of individual life history, population, community and ecosystem. This includes life history strategies, population regulation, species interactions, community structure, elemental cycles and energy flow. Includes field and lab activities with collection, analysis and interpretation of ecological data.</td>
<td>Field Trip: estimated cost $85.00</td>
<td>BIOL 201/3.0 and BIOL 202/3.0 and BIOL 206/3.0</td>
<td>BIOL 243/3.0 or PSYC 202/3.0 or STAT 269/3.0</td>
<td>No more than 3.0 units from BIOL 300/3.0; BIOL 302/3.0; BIOL 303/3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Course</th>
<th>Catalog Number</th>
<th>New Course Units</th>
<th>Transcript Title</th>
<th>New Course Title</th>
<th>New Course Description</th>
<th>New Prerequisite</th>
<th>New Corequisite</th>
<th>Learning Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>BIOL</td>
<td>432</td>
<td>3.0</td>
<td>Computation and Big Data in Biology</td>
<td>Computation, Big Data in Biology</td>
<td>Application of basic coding and analytical methods to obtain, organize, analyze, visualize, and interpret information from large, complex datasets (i.e. ‘Big Data’) in biology. Datasets may include climate/weather records, 'omics' data, specimen collections, long-term observational studies, journal articles, and other historical and online sources.</td>
<td>A minimum GPA of 2.0 in the Biological Foundations List.</td>
<td>BIOL 331/3.0</td>
<td>120(36L;12T;72P)</td>
</tr>
</tbody>
</table>
### COMP - CISC 467 - Fuzzy Logic
- **Units:** 3.0
- **Course Description:** History of fuzzy theory; fundamental concepts of fuzzy theory: sets, relations, and logic operators. Approximate reasoning, fuzzy inference, possibility theory. Separation from probability. Fuzzy control systems. Fuzzy pattern recognition. Advanced topics may include fuzzy expert systems, financial systems, graph theory, optimization.
- **New Prerequisite:** Level 4 in any BCmp or COCA plan and C- in CISC 204
- **New Exclusion:** No more than 3.0 units from CISC 490-003 and CISC 467/3.0
- **Learning Hours:** 120(36L;84P)

### DRAM/MUSC - ENIN 400 - Innovation Design Sprint
- **Units:** 3.0
- **Course Description:** This course is designed as an intense, short-burst, experiential learning expedition. It is an opportunity for students to practice developing innovative, effective solutions to real-world business, social, and creative problems.
- **New Prerequisite:** Level 3 and ENIN200/3.0 and (ENIN301/3.0 or CHEE302/3.0)
- **Learning Hours:** 108(12L;36O;P60)

### FREN - FREN 350 - Littératures autochtones comparés en Amérique du Nord
- **Units:** 3.0
- **Course Description:** An examination of comparative approaches to Indigenous literatures across North America. Questions of translation, tribal specificity, literary nationalism, inter- and trans-indigenous orientations are examined in relation to a diversity of works by Indigenous scholars, writers, filmmakers, and other artists and thinkers.
- **New Prerequisite:** FREN 230/3.0, FREN 241/3.0
- **Learning Hours:** 120(36L;84P)
<table>
<thead>
<tr>
<th>Dept</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>New Course Units</th>
<th>New Course Title</th>
<th>Transcript Title</th>
<th>New Course Description</th>
<th>New Prerequisite</th>
<th>Learning Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN</td>
<td>FREN</td>
<td>352</td>
<td>3.0</td>
<td>Vers de nouveaux récits pour Haïti: Une introduction aux études haïtiennes</td>
<td>De nouveaux récits pour Haïti</td>
<td>In this course, which aims to provide a solid undergraduate-level foundation in several key figures, texts and concepts in Haitian Studies, students will learn to address some common misunderstandings about Haiti by exploring the political documents of its revolutionary period and literary representations of its popular culture and vodou</td>
<td>FREN 230/3.0, FREN 241/3.0</td>
<td>120(36L;84P)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>Topics Course?</th>
<th>New Course Units</th>
<th>New Course Title</th>
<th>New Course Description</th>
<th>New Prerequisite</th>
<th>Learning Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDG</td>
<td>301</td>
<td>Yes</td>
<td>3.0</td>
<td>Indigenous Ways of Knowing</td>
<td>This course will identify and examine characteristics and sources of Indigenous knowledge and pedagogies.</td>
<td>Level 3 or permission of the Department of Languages, Literatures and Cultures</td>
<td>120(36S;84P)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>New Course Units</th>
<th>New Course Title</th>
<th>New Course Description</th>
<th>New Prerequisite</th>
<th>Learning Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLCU</td>
<td>INUK</td>
<td>102</td>
<td>3.0</td>
<td>Beginning Inuktitut Language and Culture II</td>
<td>Continuation of INUK 101/3.0. This course builds on the foundation of INUK 101/3.0 expanding the student's knowledge of the vocabulary and structure which enables them to carry on limited conversation in selected everyday topics. This course will also provide an overview of the history and culture of the Inuit from the early 20th century to today.</td>
<td>INUK 101/3.0</td>
<td>120(36L;84P)</td>
</tr>
<tr>
<td>Dept.</td>
<td>Course Subject</td>
<td>Course Catalog Number</td>
<td>New Course Units</td>
<td>New Course Title</td>
<td>New Course Description</td>
<td>New Note</td>
<td>New Prerequisite</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>------------------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>LLCU</td>
<td>LLCU</td>
<td>270</td>
<td>3.0</td>
<td>Contemporary Events and Indigenous Cultural Politics</td>
<td>An interdisciplinary analysis of contemporary events and Indigenous cultural politics, with a focus on how Indigenous writers, filmmakers, artists, and community members participate in and recount defining moments. Indigenous knowledges and epistemologies are mobilized to foster a critical understanding of core questions put forward by events.</td>
<td>Level 2</td>
<td>LLCU 295/3.0 -002 (2017-18)</td>
</tr>
<tr>
<td>LLCU</td>
<td>LLCU</td>
<td>370</td>
<td>3.0</td>
<td>Indigenous Women and Power</td>
<td>This course presents an interdisciplinary examination of Indigenous women and power through the lens of Indigenous scholars, writers, filmmakers, artists, and activists. Close reading methodologies are used to examine what it may mean for Indigenous women, including girls and LGBTQ2S+, “to reclaim their power and place.”</td>
<td>Level 3</td>
<td>n/a</td>
</tr>
<tr>
<td>LLCU</td>
<td>MOHK</td>
<td>201</td>
<td>3.0</td>
<td>Intermediate Mohawk Language and Culture</td>
<td>Students will continue to develop their language skills in Kanyen'kehá: wa: (the Mohawk Language) beyond the basics and be able to interact meaningfully in a greater number of daily activities. Offered only in the Mohawk Territory of Tyendinaga and open only to students registered in the Certificate of Mohawk Language and Culture.</td>
<td>MOHK 102/3.0</td>
<td>n/a</td>
</tr>
</tbody>
</table>
### Oral Mohawk Language

**Course Title**: Oral Mohawk Language

**Course Description**: This course will finalize the transition from reading to writing to hearing and speaking in Kanyen’kéha (the Mohawk Language). It will also give students the tools necessary to learn and improve their abilities in conversation with first language speakers (either in person, in recordings, or in written materials).

**Offered only in the Mohawk Territory of Tyendinaga and open only to students registered in the Certificate of Mohawk Language and Culture.**

---

### Introductory Biblical Hebrew

**Course Title**: Intro Bib Hebrew

**Course Description**: Provides a basic introduction to reading and understanding biblical Hebrew prose. No prior knowledge of Hebrew assumed.

**Prerequisites**: None

**Related Courses**: None

**Exclusions**: No more than one course from HEBR 191/6.0; JWST 192/3.0

---

### Classical Hebrew Fundamentals

**Course Title**: Classical Hebrew Fundamentals

**Course Description**: Focus is on reading prose portions with comprehension in biblical texts. Certain extra-biblical second Temple literature may also be read (e.g., texts from the Dead Sea Scrolls).

**Prerequisites**: HEBR 192/3.0 or permission of instructor.

**Related Courses**: None

**Exclusions**: No more than one course from HEBR 191/6.0; JWST 193/3.0
### New Course

**Department** | **Course Subject** | **Course Catalog Number** | **New Course Units** | **New Course Title** | **New Course Description** | **New Prerequisite** | **Learning Hours** |
--- | --- | --- | --- | --- | --- | --- | --- |
RELS | RELS | 345 | 3.0 | Religion and Art | An examination of discursive, historiographical, and affective aspects of a variety of historical and contemporary artistic expressions (e.g., painting, sculpture, video) through the lens of Religious Studies. | Level 3 or above or 6.0 units at the 100 level in RELS. | 126(12L,24G;90P) |

### COURSE DELETION

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>Existing Course Units</th>
<th>Existing Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>BIOL</td>
<td>302</td>
<td>3.0</td>
<td>Population and Evolutionary Ecology</td>
</tr>
<tr>
<td>BIOL</td>
<td>BIOL</td>
<td>303</td>
<td>3.0</td>
<td>Community and Ecosystem Ecology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>Course Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBMS</td>
<td>PHGY</td>
<td>210</td>
<td>6.0</td>
<td>Physiology for Health Sciences</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>Existing Course Units</th>
<th>Existing Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELS</td>
<td>HEBR</td>
<td>191</td>
<td>6.0</td>
<td>Introduction to Biblical Hebrew</td>
</tr>
</tbody>
</table>
### COURSE REVISIONS

<table>
<thead>
<tr>
<th>Sub-type(s)</th>
<th>Dept</th>
<th>Subject</th>
<th>Course Number</th>
<th>Existing Course Units</th>
<th>Existing Course Title</th>
<th>Existing Course Notes</th>
<th>New Course Notes</th>
<th>New Prerequisite</th>
<th>Existing Prerequisite</th>
<th>New Corequisite</th>
<th>Existing Corequisite</th>
<th>New Exclusion</th>
<th>Existing Exclusion</th>
<th>New Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite, Learning Hours</td>
<td>BIOL</td>
<td>BIOL</td>
<td>421</td>
<td>3.0</td>
<td>Conservation Genetics</td>
<td>(BIOL 243/3.0 or PSYC 202/3.0 or STAT 263/3.0 or STAT 269/3.0 or STAT 269/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td>BIOL 206/3.0 and (BIOL 243/3.0 or PSYC 202/3.0 or STAT 263/3.0 or STAT 269/3.0 or STAT 269/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td>PREREQUISITE (BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td>PREREQUISITE (BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td>ONE-WAY EXCLUSION May not be taken with or after BIOL 300/3.0; BIOL 302/3.0; BIOL 303/3.0</td>
<td>ONE-WAY EXCLUSION May not be taken with or after BIOL 300/3.0; BIOL 302/3.0; BIOL 303/3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusion</td>
<td>BIOL</td>
<td>BIOL</td>
<td>111</td>
<td>3.0</td>
<td>Ecology and the Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>BIOL</td>
<td>BIOL</td>
<td>410</td>
<td>3.0</td>
<td>Ecology of Lakes and Streams</td>
<td>PREREQUISITE (BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td>PREREQUISITE (BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-type(s)</td>
<td>Dept</td>
<td>Course Subject</td>
<td>Course Catalog Number</td>
<td>Existing Course Units</td>
<td>Existing Course Title</td>
<td>Existing Course Notes</td>
<td>New Course Notes</td>
<td>New Prerequisite</td>
<td>Existing Prerequisite</td>
<td>Existing Corequisite</td>
<td>New Corequisite</td>
<td>Existing Exclusion</td>
<td>New Exclusion</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>---------------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>---------------------</td>
<td>--------------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>BIOL</td>
<td>BIOL</td>
<td>416</td>
<td>3.0</td>
<td>Terrestrial Ecosystems</td>
<td></td>
<td></td>
<td>PREREQUISITE (BIOL 302/3.0 or BIOL 303/3.0 or GPHY 317/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corequisite</td>
<td>BIOL</td>
<td>BIOL</td>
<td>421</td>
<td>3.0</td>
<td>Conservation Genetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>BIOL</td>
<td>BIOL</td>
<td>422</td>
<td>3.0</td>
<td>Conservation Biology</td>
<td></td>
<td></td>
<td>PREREQUISITE (BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>BIOL</td>
<td>BIOL</td>
<td>433</td>
<td>3.0</td>
<td>History and Philosophy of Biology</td>
<td></td>
<td></td>
<td>PREREQUISITE (BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-type(s)</td>
<td>Dept</td>
<td>Course Subject</td>
<td>Course Catalog Number</td>
<td>Existing Course Units</td>
<td>Existing Course Title</td>
<td>New Course Notes</td>
<td>Existing Prerequisite</td>
<td>New Prerequisite</td>
<td>Existing Corequisite</td>
<td>New Corequisite</td>
<td>Existing Exclusion</td>
<td>New Exclusion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>----------------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>----------------------</td>
<td>-----------------</td>
<td>----------------------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>------------------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>BIOL</td>
<td>BIOL</td>
<td>439</td>
<td>3.0</td>
<td>Natural Selection and Microevolution</td>
<td></td>
<td>PREREQUISITE (BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td>PREREQUISITE (BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>BIOL</td>
<td>BIOL</td>
<td>440</td>
<td>3.0</td>
<td>Speciation and Macroevolution</td>
<td></td>
<td>PREREQUISITE (BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td>PREREQUISITE (BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0) and a minimum GPA of 2.0 in the Biological Foundations List.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Notes</td>
<td>BIOL</td>
<td>BIOL</td>
<td>510</td>
<td>3.0</td>
<td>Biogeochemistry and Global Change</td>
<td></td>
<td>RECOMMENDATION BIOL 300/3.0 or BIOL 302/3.0, and BIOL 303/3.0</td>
<td></td>
<td>RECOMMENDATION BIOL 300/3.0 or BIOL 302/3.0, and BIOL 303/3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>Dept</td>
<td>Course</td>
<td>Catalog</td>
<td>Existing Course Units</td>
<td>Existing Course Title</td>
<td>Existing Course Notes</td>
<td>New Course Notes</td>
<td>Existing Prerequisite</td>
<td>New Prerequisite</td>
<td>Existing Corequisite</td>
<td>New Corequisite</td>
<td>Existing Exclusion</td>
<td>New Exclusion</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>--------</td>
<td>---------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>------------------</td>
<td>----------------------</td>
<td>------------------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>BIOL_FNDS</td>
<td>BIOL</td>
<td>n/a</td>
<td>FNDS</td>
<td>Biological Foundations List</td>
<td>Admission to 400- and 500-level Biology Courses</td>
<td>Admission to 400- and 500-level Biology Courses requires a minimum GPA of 2.0 in any previously taken courses from the Biological Foundations List (BIOL_FNDS).</td>
<td>Admisssion to 400- and 500-level Biology Courses</td>
<td>Admission to 400- and 500-level Biology Courses requires a minimum GPA of 2.0 in any previously taken courses from the Biological Foundations List (BIOL_FNDS).</td>
<td>Requests for special consideration must be submitted to the Chair of Undergraduate Studies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 102</td>
<td>BIOL</td>
<td>3.0</td>
<td>102</td>
<td></td>
<td>BIOL 102/3.0; BIOL 103/3.0; BIOL 201/3.0; BIOL 202/3.0; BIOL 205/3.0; BIOL 206/3.0; BIOL 302/3.0; BIOL 303/3.0; BIOL 330/3.0; BIOL 334/3.0; BIOL 339/3.0; BIOL 341/3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 103</td>
<td>BIOL</td>
<td>3.0</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 201</td>
<td>BIOL</td>
<td>3.0</td>
<td>201</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 202</td>
<td>BIOL</td>
<td>3.0</td>
<td>202</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 205</td>
<td>BIOL</td>
<td>3.0</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 206</td>
<td>BIOL</td>
<td>3.0</td>
<td>206</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 302</td>
<td>BIOL</td>
<td>3.0</td>
<td>302</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 303</td>
<td>BIOL</td>
<td>3.0</td>
<td>303</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 330</td>
<td>BIOL</td>
<td>3.0</td>
<td>330</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 334</td>
<td>BIOL</td>
<td>3.0</td>
<td>334</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 339</td>
<td>BIOL</td>
<td>3.0</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 341</td>
<td>BIOL</td>
<td>3.0</td>
<td>341</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-type(s)</td>
<td>Dept</td>
<td>Course Subject</td>
<td>Course Catalog Number</td>
<td>Existing Course Units</td>
<td>Existing Course Title</td>
<td>New Course Title</td>
<td>Existing Course Description</td>
<td>New Course Description</td>
<td>Existing Prerequisite</td>
<td>New Prerequisite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>----------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td>---------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Title, Course Description</td>
<td>COMP</td>
<td>CISC</td>
<td>432</td>
<td>3.0</td>
<td>Advanced Database Systems</td>
<td>Advanced Data Management Systems</td>
<td>Topics include the presentation and storage of data, implementation concerns, and the integration of databases with other areas of computer science.</td>
<td>Storage and representation of &quot;big data&quot;, which are large, complex, structured or unstructured data sets. Provenance, curation, integration, indexing and querying of data.</td>
<td>COMP CISC/COGS 201/3.0, CISC 203/3.0, CISC 220/3.0, CISC 221/3.0, CISC 226/3.0, CISC 235/3.0, CISC 271/3.0</td>
<td>Add &quot;Level 2 ..&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>COMP</td>
<td>CISC/COGS</td>
<td>COGS 201/3.0, CISC 203/3.0, CISC 220/3.0, CISC 221/3.0, CISC 226/3.0, CISC 235/3.0, CISC 271/3.0</td>
<td>3.0</td>
<td>various</td>
<td>various</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>COMP</td>
<td>CISC</td>
<td>251</td>
<td>3.0</td>
<td>Data Analytics</td>
<td></td>
<td></td>
<td>Recommendation: APSC 142/3.0 or CISC 101/3.0 or CISC 110/3.0 or CISC 121/3.0 or CISC 151/3.0 or previous programming experience</td>
<td>Recommendation: APSC 142/3.0 or APSC 143/3.0 or CISC 101/3.0 or CISC 110/3.0 or CISC 121/3.0 or CISC 151/3.0 or previous programming experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-type(s)</td>
<td>Dept</td>
<td>Course Subject</td>
<td>Course Catalog Number</td>
<td>Existing Course Units</td>
<td>Existing Course Title</td>
<td>New Course Title</td>
<td>Existing Prerequisite</td>
<td>New Prerequisite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>----------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>------------------</td>
<td>----------------------</td>
<td>------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>COMP</td>
<td>CISC</td>
<td>351</td>
<td>3.0</td>
<td>Advanced Data Analytics</td>
<td></td>
<td>C- in (APSC 142/3.0 or CISC 110/3.0 or CISC 151/3.0 or CISC 121/3.0 or previous programming experience) and C- in [CISC 251/3.0 and (STAT263 or one of STAT options)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>Existing Course Units</th>
<th>Existing Course Title</th>
<th>New Course Title</th>
<th>Transcript Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM/MUSC</td>
<td>ENIN</td>
<td>140</td>
<td>3.0</td>
<td>Media and Design Thinking</td>
<td>Design Thinking</td>
<td>Design Thinking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub-type(s)</th>
<th>Department</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>Existing Course Units</th>
<th>Existing Course Title</th>
<th>Existing Exclusion</th>
<th>New Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusion</td>
<td>LLCU</td>
<td>LLCU</td>
<td>432</td>
<td>6.0</td>
<td>Field Research Practicum at Fudan University</td>
<td>No more than 1 course from DEVS 410/6.0; DEVS 420/3.0; DEVS 432/6.0; LLCU 432/6.0</td>
<td>No more than 1 course from DEVS 420/3.0; DEVS 432/6.0; LLCU 432/6.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dept</th>
<th>Course Subject</th>
<th>Course Catalog Number</th>
<th>Multi-Term</th>
<th>Existing Course Units</th>
<th>New Course Units</th>
<th>Existing Course Title</th>
<th>Learning Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS</td>
<td>PHYS</td>
<td>350</td>
<td>YES</td>
<td>3.0</td>
<td>6.0</td>
<td>General Laboratory</td>
<td>222(72Lb;60;144P)</td>
</tr>
</tbody>
</table>
### DEGREE PLAN REVISIONS

<table>
<thead>
<tr>
<th>Sub-type(s)</th>
<th>Department</th>
<th>Degree Plan Code</th>
<th>Course List</th>
<th>Existing Core Courses</th>
<th>New Core Courses</th>
<th>Existing Option Courses</th>
<th>New Option Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td>PHYS</td>
<td>PHYS-M-BSH</td>
<td>E. 12.0 units in PHYS 344/3.0, PHYS 345/3.0, PHYS 350/3.0, PHYS 372/3.0</td>
<td>E. 15.0 units in PHYS 344/3.0, PHYS 345/3.0, PHYS 350/6.0, PHYS 372/3.0, PHYS 313/3.0</td>
<td>B. 3.0 units from PHYS 216/3.0; PHYS at the 300 level or above</td>
<td>delete Option B</td>
<td></td>
</tr>
<tr>
<td>Core Courses</td>
<td>PHYS</td>
<td>PHYS-P-BSH</td>
<td>H. 21.0 units in PHYS 316/3.0, PHYS 317/3.0, PHYS 321/3.0, PHYS 344/3.0, PHYS 350/3.0, PHYS 372/3.0, PHYS 312/6.0, PHYS 313/3.0</td>
<td>H. 24.0 units in PHYS 316/3.0, PHYS 317/3.0, PHYS 321/3.0, PHYS 344/3.0, PHYS 350/6.0, PHYS 372/3.0, PHYS 312/6.0, PHYS 313/3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Courses</td>
<td>PHYS</td>
<td>ASPH-P-BSH</td>
<td>H. 24.0 units in PHYS 315/3.0, PHYS 316/3.0, PHYS 317/3.0, PHYS 321/3.0, PHYS 344/3.0, PHYS 345/3.0, PHYS 350/3.0, PHYS 372/3.0, PHYS 312/3.0, PHYS 313/3.0</td>
<td>H. 27.0 units in PHYS 315/3.0, PHYS 316/3.0, PHYS 317/3.0, PHYS 321/3.0, PHYS 344/3.0, PHYS 345/3.0, PHYS 350/6.0, PHYS 372/3.0, PHYS 313/3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Courses</td>
<td>PHYS</td>
<td>MAPH-P-BSH</td>
<td>H. 15.0 units in PHYS 321/3.0, PHYS 344/3.0, PHYS 345/3.0, PHYS 350/3.0, PHYS 372/3.0</td>
<td>H. 15.0 units in PHYS 321/3.0, PHYS 344/3.0, PHYS 345/3.0, PHYS 350/3.0, PHYS 372/3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Degree Plan Code</th>
<th>Course List</th>
<th>Existing Option Courses</th>
<th>New Option Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>BTEC-P-BSH</td>
<td>BTEC_Biology Biotechnology Biotechnology Biology Courses BIOL 315/3.0; BIOL 331/3.0; BIOL 333/3.0; BIOL 334/3.0; BIOL 339/3.0; BIOL 341/3.0; BIOL 360/3.0; BIOL 401/3.0; BIOL 402/3.0; BIOL 403/3.0; BIOL 404/3.0; BIOL 409/3.0; BIOL 430/3.0; BIOL 431/3.0; BIOL 441/3.0; BIOL 501/3.0; BIOL 502/3.0; BIOL 503/3.0; BIOL 506/3.0; BIOL 507/3.0; BIOL 508/3.0</td>
<td>BTEC_Biology Biotechnology Biotechnology Biology Courses BIOL 315/3.0; BIOL 331/3.0; BIOL 333/3.0; BIOL 334/3.0; BIOL 339/3.0; BIOL 341/3.0; BIOL 360/3.0; BIOL 401/3.0; BIOL 402/3.0; BIOL 403/3.0; BIOL 404/3.0; BIOL 409/3.0; BIOL 430/3.0; BIOL 431/3.0; BIOL 441/3.0; BIOL 501/3.0; BIOL 502/3.0; BIOL 503/3.0; BIOL 506/3.0; BIOL 507/3.0; BIOL 508/3.0</td>
<td></td>
</tr>
</tbody>
</table>
## Sub-type(s)

<table>
<thead>
<tr>
<th>Sub-type(s)</th>
<th>Department</th>
<th>Degree Plan Code</th>
<th>Course List</th>
<th>Existing Core Courses</th>
<th>New Core Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Courses</strong></td>
<td>BIOL</td>
<td>BIOL-M-BSH</td>
<td>1. Core C. 3.0 units from BIOL 302/3.0 or BIOL 303/3.0</td>
<td>1. Core C. 3.0 units in BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Core Courses</strong></td>
<td>BIOL</td>
<td>BIPS-P-BSH</td>
<td>1. Core D. 3.0 units from BIOL 302/3.0 or BIOL 303/3.0</td>
<td>1. Core D. 3.0 units in BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Core Courses</strong></td>
<td>BIOL</td>
<td>BIMA-P-BSH</td>
<td>1. Core Biology D. 3.0 units from BIOL 302/3.0 or BIOL 303/3.0</td>
<td>1. Core Biology D. 3.0 units in BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Core Courses</strong></td>
<td>BIOL</td>
<td>BIOL-G-BA</td>
<td>1. Core Biology C. 12.0 units from BIOL 110/3.0; BIOL 111/3.0; BIOL 205/3.0; BIOL 206/3.0; BIOL 302/3.0; BIOL 303/3.0; BIOL 334/3.0; BIOL 369/3.0; BIOL 210/3.0</td>
<td>1. Core Biology C. 12.0 units from BIOL 110/3.0; BIOL 111/3.0; BIOL 205/3.0; BIOL 206/3.0; BIOL 300/3.0; BIOL 334/3.0; BIOL 369/3.0; BIOL 210/3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Core Courses</strong></td>
<td>BIOL</td>
<td>EBIO-P-BSH</td>
<td>1. Core Environmental Biology Core H. 3.0 units from BIOL 302/3.0 or BIOL 303/3.0</td>
<td>1. Core Environmental Biology Core H. 3.0 units in BIOL 300/3.0 or BIOL 302/3.0 or BIOL 303/3.0</td>
<td></td>
</tr>
</tbody>
</table>

## Sub-type(s)

<table>
<thead>
<tr>
<th>Sub-type(s)</th>
<th>Dept Code</th>
<th>Degree Plan Code</th>
<th>Existing Course Lists</th>
<th>New Course Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option Courses</strong></td>
<td>COMP</td>
<td>CSCI-P-BCH/COMP-M-BAH</td>
<td>A. 3.0 units from CISC 422/3.0; CISC 462/3.0; CISC 465/3.0; CISC 466/3.0</td>
<td>A. 3.0 units from CISC 422/3.0; CISC 462/3.0; CISC 465/3.0; CISC 466/3.0; CISC 467/3.0</td>
</tr>
</tbody>
</table>
### Notes, Course Lists

<table>
<thead>
<tr>
<th>Sub-type(s)</th>
<th>Dept Code</th>
<th>Degree Plan Code</th>
<th>Existing Option Courses</th>
<th>New Option Courses</th>
<th>New Notes</th>
<th>Existing Notes</th>
<th>New Course Lists</th>
<th>New Course Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes, Course Lists</td>
<td>COMP</td>
<td>COMA-P</td>
<td>B.iii. Theory in Computer Science: CISC 422/3.0; CISC 462/3.0; CISC 465/3.0; MATH 401/3.0; MATH 402/3.0; MATH 418/3.0; MATH 481/3.0</td>
<td>B.i. Theory in Computer Science: CISC 422/3.0; CISC 462/3.0; CISC 465/3.0; MATH 401/3.0; MATH 402/3.0; MATH 418/3.0; MATH 481/3.0</td>
<td>COMA_Options BIOM 300/3.0; CISC 330/3.0; CISC 333/3.0; CISC 477/3.0</td>
<td>COMA_Options BIOM 300/3.0; CISC 330/3.0; CISC 333/3.0; CISC 457/3.0; CISC 422/3.0; CISC 462/3.0; CISC 467/3.0</td>
<td>COMA_Options BIOM 300/3.0; CISC 330/3.0; CISC 333/3.0; CISC 457/3.0; CISC 422/3.0; CISC 462/3.0; CISC 465/3.0; CISC 466/3.0; CISC 472/3.0; CISC 500/6.0; MATH 337/3.0; MATH 339/3.0; MATH 401/3.0; MATH 402/3.0; MATH 406/3.0; MATH 413/3.0; MATH 414/3.0; MATH 418/3.0; MATH 472/3.0; MATH 476/3.0; STAT 361/3.0; STAT 462/3.0; STAT 463/3.0; STAT 464/3.0; STAT 471/3.0; STAT 486/3.0</td>
<td>COMA_Options BIOM 300/3.0; CISC 330/3.0; CISC 333/3.0; CISC 457/3.0; CISC 422/3.0; CISC 462/3.0; CISC 465/3.0; CISC 466/3.0; CISC 472/3.0; CISC 500/6.0; MATH 337/3.0; MATH 339/3.0; MATH 401/3.0; MATH 402/3.0; MATH 406/3.0; MATH 413/3.0; MATH 414/3.0; MATH 418/3.0; MATH 472/3.0; MATH 476/3.0; STAT 361/3.0; STAT 462/3.0; STAT 463/3.0; STAT 464/3.0; STAT 471/3.0; STAT 486/3.0</td>
</tr>
</tbody>
</table>

### Course Lists

<table>
<thead>
<tr>
<th>Sub-type(s)</th>
<th>Degree Plan Code</th>
<th>Course List</th>
<th>Existing Course Lists</th>
<th>New Course Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course List</td>
<td>FREN_ALL</td>
<td>FREN_Options</td>
<td>FREN_Options Options in the FREN Major and Medial Plans FREN 290/3.0 (IDIS 290/3.0); FREN 304/3.0; FREN 305/3.0; FREN 306/3.0; FREN 315/3.0; FREN 323/3.0; FREN 324/3.0; FREN 325/3.0; FREN 327/3.0; FREN 335/3.0; FREN 351/3.0; FREN 353/3.0; FREN 363/3.0; FREN 373/3.0; FREN 387/3.0; FREN 388/3.0; FREN 390/3.0; FREN 391/3.0; FREN 392/3.0; FREN 393/3.0; FREN 394/3.0; FREN 395/3.0; FREN 396/3.0; FREN 498/6.0; FREN 499/6.0</td>
<td>FREN_Options Options in the FREN General and Minor Plans FREN 290/3.0 (IDIS 290/3.0); FREN 304/3.0; FREN 305/3.0; FREN 306/3.0; FREN 315/3.0; FREN 320/3.0; FREN 323/3.0; FREN 324/3.0; FREN 325/3.0; FREN 327/3.0; FREN 335/3.0; FREN 338/3.0; FREN 342/3.0; FREN 343/3.0; FREN 351/3.0; FREN 353/3.0; FREN 363/3.0; FREN 373/3.0; FREN 387/3.0; FREN 388/3.0; FREN 390/3.0; FREN 391/3.0; FREN 392/3.0; FREN 393/3.0; FREN 394/3.0; FREN 395/3.0; FREN 396/3.0; FREN 450/3.0 (FREN 444/3.0); FREN 499/6.0</td>
</tr>
<tr>
<td>Dept</td>
<td>Degree Plan Code</td>
<td>Course List</td>
<td>Existing Option Courses</td>
<td>New Option Courses</td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>-------------</td>
<td>-------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>LLCU</td>
<td>INDG-G BA</td>
<td>INDG_Options</td>
<td>INDG_Options in the Indigenous Studies Plan ARTH 231/3.0; ARTH 232/3.0; ARTH 248/3.0; ARTH 272/3.0; ARTH 345/3.0; ARTH 372/3.0; ARTH 383/3.0; BISC 100/3.0; BISC 101/3.0; CLST 203/3.0; CLST 321/3.0; DEV 100/3.0; DEV 220/3.0; DEV 221/3.0; DEV 305/3.0; ENGL 293/3.0; ENGL 294/3.0; FILM 110/6.0; FILM 236/3.0; FILM 240/3.0; FILM 308/3.0; FILM 335/3.0; FILM 338/3.0; FILM 340/3.0; FREN 106/3.0; FREN 109/3.0; FREN 110/3.0; FREN 219/3.0; FREN 283/3.0; FREN 285/3.0; FREN 320/3.0; FREN 327/3.0; FREN 392/3.0; FREN 496/3.0; FRST 290/3.0; GNDS 125/3.0; GNDS 350/3.0; GNDS 360/3.0; GPHY 101/3.0; GPHY 227/3.0; GPHY 229/3.0; GPHY 254/3.0; GPHY 351/3.0; GRMN 203/3.0; GRMN 306/3.0; GRMN 307/3.0; GRMN 308/3.0; GRMN 309/3.0; GRMN 315/3.0; GRMN 317/3.0; GRMN 419/3.0; GRMN 420/3.0; GRMN 426/3.0; GRMN 427/3.0; GRMN 531/3.0; GRMN 532/3.0; HEBR 301/3.0; HIST 274/3.0; HIST 285/3.0; HIST 286/3.0; IDS 302/3.0; INTS 221/3.0; INTS 306/3.0; INTS 312/3.0; INTS 323/3.0; INTS 324/3.0; ITLN 310/3.0; ITLN 408/3.0; LING 100/3.0; LING 202/3.0; LING 205/3.0; LCCU 200/3.0; LCCU 201/3.0; LCCU 203/3.0; LCCU 206/3.0; LCCU 207/3.0; LCCU 209/3.0; LCCU 210/3.0; LCCU 213/3.0; LCCU 214/3.0; LCCU 244/3.0; LCCU 247/3.0; LCCU 248/3.0; LCCU 249/3.0; LCCU 295/3.0; LCCU 302/3.0; LCCU 308/3.0; LCCU 309/3.0; LCCU 319/3.0; LCCU 320/3.0; LCCU 322/3.0; LCCU 326/3.0; LCCU 327/3.0; LCCU 328/3.0; LCCU 432/6.0; LCCU 495/3.0; LCCU 501/3.0; MUSC 289/3.0; MUTH 110/3.0; MUTH 111/3.0; PHIL 276/3.0; RELS 111/6.0; RELS 161/6.0; RELS 226/3.0; RELS 234/3.0; SOCY 235/3.0; SOCY 273/3.0; SOCY 300/3.0; SOCY 306/3.0; SOCY 310/3.0; SPAN 304/3.0; SPAN 345/3.0; SPAN 354/3.0; SPAN 408/3.0; SPAN 428/3.0; SPAN 458/3.0</td>
<td>INDG_Options in the Indigenous Studies Plan ANSH 101/3.0; ANSH 102/3.0; ARTH 231/3.0; ARTH 232/3.0; ARTH 248/3.0; ARTH 272/3.0; ARTH 345/3.0; ARTH 372/3.0; BIOL 319/3.0; BIOL 421/3.0; BIOL 422/3.0; DEV 100/6.0; DEV 300/3.0; DRAM 303/3.0; DRAM 319/3.0; ECON 244/3.0; ENGL 480/6.0; ENGL 481/3.0; ENGL 482/3.0; GNDS 212/3.0; GNDS 340/3.0; GNDS 375/3.0; GNDS 432/6.0; GPHY 351/3.0; GPHY 368/3.0; FILM 388/3.0; HIST 124/6.0; HIST 208/3.0; HIST 256/3.0; HIST 313/6.0; HIST 324/6.0; HIST 335/9.0; HIST 436/4.5; HIST 442/4.5; HIST 455/9.0; HIST 461/4.5; HIST 467/9.0; HLTH 101/3.0; INTS 307/3.0; INTS 322/3.0; INUK 101/3.0; INUK 102/3.0; LCCU 101/3.0; LCCU 102/3.0; LCCU 301/3.0; LCCU 302/3.0; LCCU 332/3.0; MOHK 101/3.0; MOHK 102/3.0; MUSC 289/3.0; POLS 320/3.0; POLS 347/3.0; RELS 227/3.0</td>
</tr>
<tr>
<td>Dept.</td>
<td>Degree Plan Code</td>
<td>Existing Option Courses</td>
<td>New Option Courses</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>LLCU</td>
<td>INDG-BA</td>
<td>ARTH 231/3.0; ARTH 232/3.0; ARTH 248/3.0; ARTH 272/3.0; ARTH 348/3.0; ARTH 372/3.0;</td>
<td>ARTH 231/3.0; ARTH 232/3.0; ARTH 248/3.0; ARTH 272/3.0; ARTH 348/3.0; ARTH</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BIOL 319/3.0; BIOL 421/3.0; BIOL 422/3.0; DEVS 100/6.0; DEVS 320/3.0; DRAM 303/3.0;</td>
<td>372/3.0; BIOL 319/3.0; BIOL 421/3.0; BIOL 422/3.0; DEVS 100/6.0; DEVS 320/3.0;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DRAM 319/3.0; ECON 244/3.0; ENGL 480/6.0; ENGL 481/3.0; ENGL 482/3.0; GNDS 212/3.0;</td>
<td>DRAM 303/3.0; DRAM 319/3.0; ECON 244/3.0; ENGL 480/6.0; ENGL 481/3.0; ENGL 482/3.0;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GNDS 340/3.0; GNDS 375/3.0; GNDS 432/6.0; GPHY 351/3.0; GPHY 368/3.0; HIST 124/6.0;</td>
<td>GNDS 340/3.0; GNDS 375/3.0; GNDS 432/6.0; GPHY 351/3.0; GPHY 368/3.0; HIST 124/6.0;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIST 207/3.0; HIST 208/3.0; HIST 256/3.0; HIST 313/6.0; HIST 324/6.0; HIST 335/9.0;</td>
<td>HIST 207/3.0; HIST 208/3.0; HIST 256/3.0; HIST 313/6.0; HIST 324/6.0; HIST 335/9.0;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIST 436/4.5; HIST 442/4.5; HIST 455/9.0; HIST 461/4.5; HIST 467/9.0; HLTH 101/3.0;</td>
<td>HIST 442/4.5; HIST 455/9.0; HIST 461/4.5; HIST 467/9.0; HLTH 101/3.0; INDG</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>INTS 307/3.0; INTS 322/3.0; INUK 101/3.0; LAW 202/3.0; LLCU 101/3.0; LLCU 102/3.0;</td>
<td>301/3.0; INTS 307/3.0; INTS 322/3.0; INUK 101/3.0; LAW 202/3.0; LLCU 101/3.0; LLCU</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LLCU 301/3.0; LLCU 302/3.0; LLCU 322/3.0; MOHK 101/3.0; MOHK 102/3.0; MUSC 289/3.0;</td>
<td>102/3.0; LLCU 102/3.0; LLCU 301/3.0; LLCU 302/3.0; LLCU 322/3.0; MOHK 101/3.0; MOHK</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POLS 320/3.0; POLS 347/3.0; RELS 227/3.0</td>
<td>102/3.0; MUSC 289/3.0; POLS 320/3.0; POLS 347/3.0; RELS 227/3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LLCU-BA</td>
<td>LLCU_Options_B Cultural Courses ARTH 245/3.0; ARTH 248/3.0; ARTH 250/3.0; ARTH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>260/3.0; ARTH 272/3.0; ARTH 345/3.0; ARTH 348/3.0; ARTH 372/3.0; ARTH 380/3.0; ARTH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>383/3.0; BISC 100/3.0; BISC 103/3.0; CLST 203/3.0; CLST 321/3.0; DEVS 100/6.0; DEVS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>220/3.0; DEVS 221/3.0; DEVS 305/3.0; ENGL 293/3.0; ENGL 294/3.0; FILM 110/6.0; FILM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>236/3.0; FILM 240/3.0; FILM 308/3.0; FILM 335/3.0; FILM 338/3.0; FILM 340/3.0; FREN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>106/3.0; FREN 107/3.0; FREN 118/3.0; FREN 227/3.0; FREN 219/3.0; FREN 283/3.0; FREN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>285/3.0; FREN 320/3.0; FREN 327/3.0; FREN 392/3.0; FREN 396/3.0; FREN 496/3.0; FRST</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>290/3.0; GNDS 125/3.0; GNDS 350/3.0; GNDS 360/3.0; GPHY 101/3.0; GPHY 227/3.0; GPHY</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>229/3.0; GPHY 254/3.0; GPHY 351/3.0; GRMN 203/3.0; GRMN 306/3.0; GRMN 307/3.0; GRMN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>308/3.0; GRMN 309/3.0; GRMN 315/3.0; GRMN 317/3.0; GRMN 419/3.0; GRMN 420/3.0; GRMN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>426/3.0; GRMN 427/3.0; GRMN 531/3.0; GRMN 532/3.0; HEBR 301/3.0; HIST 274/3.0; HIST</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>285/3.0; HIST 286/3.0; IDIS 302/3.0; INTS 221/3.0; INTS 306/3.0; INTS 307/3.0; INTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>321/3.0; INTS 322/3.0; INTS 324/3.0; ITLN 310/3.0; ITLN 408/3.0; LING 100/6.0; LING 202/3.0; LING 205/3.0; LLLC 200/3.0; LLLC 208/3.0; LLLC 205/3.0; LLLC 206/3.0; LLLC 209/3.0; LLLC 210/3.0; LLLC 213/3.0; LLLC 214/3.0; LLLC 244/3.0; LLLC 247/3.0; LLLC 248/3.0; LLLC 249/3.0; LLLC 295/3.0; LLLC 302/3.0; LLLC 308/3.0; LLLC 319/3.0; LLLC 320/3.0; LLLC 322/3.0; LLLC 326/3.0; LLLC 327/3.0; LLLC 328/3.0; LLLC 432/6.0; LLLC 495/3.0; LLLC 501/3.0; MUSC 289/3.0; MUTH 110/3.0; MUTH 111/3.0; PHIL 276/3.0; RELS 131/6.0; RELS 161/6.0; RELS 226/3.0; RELS 234/3.0; SOCY 235/3.0; SOCY 273/3.0; SOCY 300/3.0; SOCY 301/3.0; SOCY 362/3.0; SPAN 310/3.0; SPAN 344/3.0; SPAN 354/3.0; SPAN 408/3.0; SPAN 428/3.0; SPAN 458/3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td>Degree Plan</td>
<td>Existing Course Lists</td>
<td>New Course Lists</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td><strong>LLCU</strong>: LANG-BAH</td>
<td><strong>LANG_Concepts</strong></td>
<td>Conceptual courses meet at least one of the following criteria: Competence in cultural criticism (studies in globalization, diversity and inclusivity), linguistics, psycholinguistics, language acquisition and communicative competence. FRST 290/3.0 (Formerly IDIS 290/3.0); HEBR 135/3.0; IDIS 200/6.0; IDIS 201/6.0; INTS 221/3.0; INTS 306/3.0; INTS 307/3.0; INTS 320/3.0; INTS 321/3.0; INTS 322/3.0; ITLN 210/3.0; ITLN 215/3.0; ITLN 226/3.0; ITLN 232/3.0; ITLN 233/3.0; ITLN 234/3.0; ITLN 257/3.0; ITLN 308/3.0; LANG P10/3.0; LANG P11/3.0; LANG 101/3.0; LANG 102/3.0; LANG 120/3.0; LANG 121/3.0; LANG 201/3.0; LANG 202/3.0; LING 100/6.0; LING 202/3.0; LING 205/3.0; PSYC 321/3.0; SPAN 247/3.0; SPAN 248/3.0; SPAN 308/3.0; SPAN 316/3.0; SPAN 328/3.0</td>
<td><strong>LANG_Concepts</strong> Conceptual courses meet at least one of the following criteria: Competence in cultural criticism (studies in globalization, diversity and inclusivity), linguistics, psycholinguistics, language acquisition and communicative competence. FRST 290/3.0 (Formerly IDIS 290/3.0); HEBR 135/3.0; IDIS 200/6.0; IDIS 201/6.0; INDG 301/3.0; INTS 221/3.0; INTS 306/3.0; INTS 307/3.0; INTS 320/3.0; INTS 321/3.0; INTS 322/3.0; ITLN 210/3.0; ITLN 215/3.0; ITLN 226/3.0; ITLN 232/3.0; ITLN 233/3.0; ITLN 234/3.0; ITLN 257/3.0; ITLN 308/3.0; LANG P10/3.0; LANG P11/3.0; LANG 101/3.0; LANG 102/3.0; LANG 120/3.0; LANG 121/3.0; LANG 201/3.0; LANG 202/3.0; LING 100/6.0; LING 202/3.0; LING 205/3.0; PSYC 321/3.0; SPAN 247/3.0; SPAN 248/3.0; SPAN 308/3.0; SPAN 316/3.0; SPAN 328/3.0</td>
<td></td>
</tr>
</tbody>
</table>

Respectfully Submitted,
Dr. Jenn Stephenson, Chair
Curriculum Committee
NEW UNDERGRADUATE FOR-CREDIT CERTIFICATE PROPOSAL

Expedited Approval Submission Form

Once the pre-approval process for a new undergraduate program is completed, and permission obtained from the provost’s office to submit a full proposal for an expedited approval, this template is to be used for a new for credit Senate-approved undergraduate certificate. This is normally defined as a coherent subset of an existing degree program. New undergraduate certificate submissions must receive the approval of the appropriate Faculty Board(s) (or equivalent) and the provost prior to submission to the secretary of the Senate Committee on Academic Development (SCAD). SCAD will make its recommendations to Senate regarding the certificate’s approval. Academic units are strongly advised to contact the appropriate faculty associate dean(s) with any questions that arise during this proposal development. Please refer also to the Guide to QUQAP.

NOTE: the textboxes in this template will expand as needed

<table>
<thead>
<tr>
<th>Part A – General Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Proposed Certificate:</td>
</tr>
<tr>
<td>Academic Unit(s):</td>
</tr>
<tr>
<td>Proposed Start Date:</td>
</tr>
<tr>
<td>Type of Study: (full-time, part-time, both)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Information (1)</th>
<th>Contact Information (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Name:</td>
</tr>
<tr>
<td>David V. Pugh</td>
<td>Janice C. Hill</td>
</tr>
<tr>
<td>Title:</td>
<td>Title:</td>
</tr>
<tr>
<td>Acting Head</td>
<td>Director</td>
</tr>
<tr>
<td>Unit:</td>
<td>Unit:</td>
</tr>
<tr>
<td>Languages, Literatures and Cultures</td>
<td>Office of Indigenous Initiatives</td>
</tr>
<tr>
<td>E-mail:</td>
<td>E-mail:</td>
</tr>
<tr>
<td><a href="mailto:pughdv@queensu.ca">pughdv@queensu.ca</a></td>
<td><a href="mailto:janice.hill@queensu.ca">janice.hill@queensu.ca</a></td>
</tr>
</tbody>
</table>
Executive Summary (1 page maximum suggested – minimum font size 11)

Briefly summarize the rationale for introducing this new undergraduate certificate and how it is consistent with the university’s Academic Plan and Strategic Framework as well as the academic goals of the faculty/school. Briefly describe the educational goals and learning outcomes; internal or external collaboration required to deliver this program; how the program relates to the existing undergraduate program(s); what is the target market; how the relevant stakeholders (e.g. faculty, staff, students) were consulted in preparing the proposal; and additional resources required.

In light of the Truth and Reconciliation Commission on Indian Residential Schools (2008-2015), many postsecondary institutions have been developing curricular programming to promote, support and expand educational opportunities for First Nations, Métis and Inuit peoples. In December 2015, the Commission released its Final Report, which contained a number of key recommendations that pertain to education for Indigenous peoples.

While many of the recommendations charge the Federal Government with creating legislation to address gaps in funding for Aboriginal education, the TRC Report suggests that postsecondary institutions can play a role in addressing the issues they bring to light, for example: closing educational achievement gaps; improving education attainment levels and success rates; developing culturally appropriate curricula; teaching Aboriginal languages as credit courses; and enabling community participation in the development of Aboriginal programming.

Only one recommendation is specifically addressed to postsecondary institutions: “16. We call upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages.” The preservation and revitalization of Aboriginal languages is highlighted in the report, and universities and colleges are called upon to play a role in achieving this goal. The full recommendations are available in the document entitled “Call to Action.”

The Department of Languages, Literatures and Cultures in partnership with Tsi Tyonnheht Onkwewenna (TTO) Language and Cultural Centre in Tyendinaga, Mohawk Territory thus proposes a Certificate in Mohawk Language and Culture. The Certificate builds on current offerings already in place within the Department including MOHK 101/3.0 Mohawk Language and Culture I (formerly LLCU 101/3.0 Mohawk I) and MOHK 102/3.0 Mohawk Language and Culture II (formerly LLCU 102/3.0 Mohawk II) (offered 2012-present). It will comprise a total of 12.0 Units taken from existing and new Mohawk language and culture courses. The Certificate will be adapted from two successful post-secondary initiatives that TTO has delivered in partnership previously with Brock University (certificate, 2004-2007) and Trent University (diploma, 2008-2009).

To ensure appropriate consultation with Mohawk leaders and knowledge keepers, the Certificate will be developed in partnership with the Office of Indigenous Initiatives and Tsi Tyonnheht Onkwawenna Language and Cultural Centre in Tyendinaga, Mohawk Territory. This proposal was also reported at the LLCU’s September 7th, 2016 Departmental Meeting with unanimous support, and by the Aboriginal Council’s Working Group on Indigenous Knowledge, Curriculum and Research. The development of this Certificate acknowledges Queen’s location on the traditional lands of the Haudenosaunee and Anishinaabe peoples, and works toward the revitalization of a language that has been recognized as being in danger of extinction. Courses in the Certificate will give students knowledge of the language embedded in culturally rich learning experiences that introduces students to the many traditions, histories and worldviews of the Mohawk people.

Alignment with Academic Plan:

The Certificate in Mohawk Language and Culture will advance the academic mission of the university, as outlined in the academic plan, with respect to the following guiding principles:

1. Promoting “...a balanced academy that offers an outstanding undergraduate experience...” by providing a high quality program that will yield a recognized, relevant certificate that complements students’ existing programs of study and supports future employment aspirations.
2. Providing education that encourages appreciation of the diversity of cultures within Canada and the rest of the world, and fostering respect for Mohawk knowledge, language, and culture.

3. Supporting the key recommendations for nurturing the student learning experience at Queen’s University by providing students with the Fundamental Academic Skills identified in the Academic Plan (critical reading; effective writing and communication; intercultural literacy; inquiry; critical thinking; problem solving); these academic skills are among the most important core competencies.

4. Imparting to students an understanding of their place in a culturally, economically, and politically ever-changing world and empowering them to participate in it in an informed and responsible manner and also recognizing the central role that research and teaching in the arts and humanities as well as language instruction have in making sense of human experience.

Alignment with Strategic Mandate Agreement:

The Certificate in Mohawk Language and Culture is also aligned with the University’s Strategic Mandate Agreement with MTCU in the following ways:

1. This Certificate will be developed in partnership with the Office of Indigenous Initiatives and Tsi Tyonnheht Onkwawenna Language and Cultural Centre in Tyendinaga. As a result, these partnerships align with the Strategic Mandate Agreement through institutional collaboration with a community partner to establish a role in fostering social and economic development and serving the needs of the economy and labour market.

2. With a focus on Aboriginal language and culture, the proposed Certificate aligns with the University’s mission to provide access to postsecondary education for underrepresented groups (Aboriginal, First Generation students). This program also adds to Queen’s current program offerings that may have particular appeal to Aboriginal students, including a minor in Indigenous Studies, and the only community-based Aboriginal teacher education program in Ontario.

Funding will be provided by the Office of the Provost for five years.

Part B – Evaluation Criteria

Part B is to be completed by the unit/faculty.

In accordance with Queen’s University Quality Assurance Processes (QUQAP), the criteria should be regarded as the minimum criteria upon which the new program submission will be assessed. Further information can be found in the Queen’s University Quality Assurance Processes.

1. Introduction

1.1 List the objectives of the certificate and specify the anticipated learning outcomes and career paths. [Refer to UDLEs, Appendix 1 QUQAP].

The core objectives of the Certificate in Mohawk Language and Culture are to provide students with knowledge of the language where instruction is embedded in culturally rich and linguistically authentic learning experiences in the community that introduces students to the many traditions, histories, and worldviews of the Mohawk people.
Objectives:

The specific objectives for the Certificate emerge from the Truth and Reconciliation Commission on Indian Residential Schools (2008-2015), and adheres to the Queen’s Academic Plan and Strategic Mandate recommendations to:

- Promote, support and expand educational opportunities for First Nations, Métis and Inuit peoples;
- Preserve and work towards the revitalization of an endangered Indigenous language;
- Ensure and enhance partnerships between Queen’s University and Indigenous communities in the development of Indigenous cultures, ways of knowing and languages;
- Familiarize students with Mohawk culture, language and ways of knowing;
- Develop academic programs to meet the needs of Indigenous and non-Indigenous students at Queen’s.

Learning Outcomes: (See Appendix A: Mapping)

1. DLE Depth and Breadth of Knowledge

   Develop skills in Mohawk language at the beginning to intermediate level using appropriate vocabulary and linguistic structures. (*Demonstrated in Mohawk language*)

   Describe the significant elements of Mohawk history, tradition and worldview from ancient times to the contemporary issues facing Mohawk people. (*Demonstrated in English and in Mohawk language*)

2. DLE Knowledge of Methodologies

   Apply the principles of Indigenous methodologies and Indigenous Ways of Knowing (see Appendix B) to the exploration of topics from historical and contemporary perspectives. (*Demonstrated in English and in Mohawk language*)

3. DLE Application of Knowledge

   Identify and apply knowledge of Mohawk language, including appropriate vocabulary and linguistic structures, in the four language skills (listening, reading, speaking, writing) on limited topics. (*Demonstrated in Mohawk language*)

   Apply knowledge of Mohawk culture to articulate a diversity of perspectives regarding Mohawk histories, traditions and experiences and take part in on-the-land seasonal activities. (*Demonstrated in English and in Mohawk language*)

4. DLE Communication Skills

   Effectively communicate in the Mohawk language from beginning to intermediate level (both in range and accuracy) using the four language skills (listening, reading, speaking, writing). (*Demonstrated in Mohawk language*)

   Communicate in respectful and culturally authentic ways with confidence on cultural, historical and contemporary topics. (*Demonstrated in English and in Mohawk language*)

5. DLE Awareness of Limits of Knowledge

   Demonstrate an awareness of the limits of their language ability and devise a plan for future self learning. (*Demonstrated in English*)
Demonstrate an awareness of cultural perspectives and how this might affect interpretations of Mohawk history and contemporary experiences. *(Demonstrated in English and in Mohawk language)*

6. DLE Autonomy and Professional Capacity

Ability to apply knowledge of Mohawk culture and experience for academic, professional and personal contexts. *(Demonstrated in English and in Mohawk language)*

Develop an awareness of the requirements for building ethical relationships between Indigenous people and communities and respectful ways of engaging with Indigenous cultures, histories, and traditions. *(Demonstrated in English and in Mohawk language)*

*Explain how the objectives will be achieved (e.g. course work, teaching and research seminars, independent research, laboratory and technical training, internships, practica, major research papers, and thesis).*

Objectives within the language acquisition option are achieved by the students being assessed and graded on their ability to communicate in the Mohawk language (beginner to intermediate level), both orally and in writing, using the four language skills (speaking, listening, reading and writing). By interacting with their instructors, mentors, Elder speakers, and peers (oral and creative presentations, participation in class, story telling, dialogues), students demonstrate their ability to employ appropriate grammatical structures using multiple resources (e.g., weekly exercises/journal, homework, translations). Quizzes (oral and written) demonstrate students’ comprehension of and capacity to apply class material. Tests (language ability) evidence their appropriate use of vocabulary and grammatical structures and final papers (cultural competency) evidence their communicative capacity.

2. Program Regulations

2.1 **Admission Standards** - Describe the admission standards for the proposed certificate program, including degree, diploma and/or course requirements, and any other specific standards with reference to the learning outcomes and expectations of the program. Provide the rationale for standards that differ from those set by the faculty for degree programs and departmental requirements for entry to undergraduate degree programs. If applicable, indicate policies/procedures to encourage applications from qualified under-represented groups (e.g. Aboriginal people, visible minorities or persons with disabilities).

The **Certificate in Mohawk Language and Culture** will be offered exclusively through Tsi Tyonneheht Onkwewenna (TTO) Language and Cultural Centre in Tyendinaga. Students will range in age and academic background from right out of high school, to elders in the community, to those holding advanced degrees, and will have various occupations/roles in the community. Most students will be members (with and without Aboriginal status) of the community with an interest in learning the language and most will not be degree-seeking students.

Admission to the **Certificate** will be administered by Undergraduate Admission in partnership with TTO. Learners may not have a standard basis of admission (OSSD, college diploma, some post-secondary), and therefore we will create a process intended to reduce barriers and facilitate admission for members of the Tyendinaga community.

- Students will be admitted for Fall Term only, every second year;
- Applicants will submit a written application to TTO, that will include a statement of intent;
- TTO will review all applications and select up to 20 that will be recommended for admission to the Certificate;
- TTO will input all application information for the 20 students into the online Undergraduate Admission web application system, including the standard application fee;
- All students will be offered admission to the **Certificate**, and will be issued a student number, NetID and Queen’s email account;
- Students will accept their offers in SOLUS.
All students enrolled in the Certificate in Mohawk Language and Culture need to meet the Faculty of Arts and Science progression criteria.

3. Certificate Structure and Requirements

Describe the certificate under the following headings (as applicable)

3.1 General Certificate Requirements – Describe the program duration and rationale, total number of courses, examinations, progress reports, advisory committees, etc.

The Certificate consists of courses taken at TTO with the equivalent of 12.0 units from existing and new Mohawk language and culture degree-credit courses. The program provides an intermediate knowledge of the language embedded in culturally rich and linguistically authentic learning that introduces students to the many traditions, philosophies and histories of Mohawk people. The program will be a foundation for students and a means for the community in their efforts towards language revitalization and Queen’s commitment to strengthening their relationship with the Indigenous community. It is anticipated that students will complete the Certificate over two years of study. The expected start date is August 2018.

Students will complete courses equivalent to 6.0 units in Beginning Mohawk Language and Culture (MOHK 101/3.0; MOHK 102/3.0), 3.0 units in Intermediate Mohawk Language and Culture (MOHK 201/3.0), and 3.0 units in Oral Mohawk Language (MOHK 202/3.0). Two of these courses are currently offered within the Department of Languages, Literatures and Cultures (MOHK 101/3.0, MOHK 102/3.0) annually and the other two are being submitted to the Curriculum Committee along with the proposal for the Certificate.

The Certificate will be adapted from two successful post-secondary initiatives that TTO has previously delivered in partnership with Brock University (certificate) and Trent University (diploma).

Proposed immersion and LLCU courses include:

MOHK 101/3.0 Beginning Mohawk Language & Culture I
MOHK 102/3.0 Beginning Mohawk Language & Culture II
MOHK 201/3.0 Intermediate Mohawk Language & Culture
MOHK 202/3.0 Oral Mohawk Language

The Undergraduate Coordinator in the Department of Languages, Literatures and Cultures, in collaboration with the director of TTO, will track students’ progress throughout the Certificate program.

3.2 Course Requirements – In Table 1 below, list core (required) courses, optional courses (e.g. select X from the following list) and elective courses (indicate level and disciplines).

<table>
<thead>
<tr>
<th>Course/Credit (number and name)</th>
<th>(C)ore, (O)ptional or (E)lective</th>
<th>Proposed Instructor(s) and Home Academic Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOHK 101/3.0 Beginning Mohawk Language &amp; Culture I</td>
<td>C</td>
<td>New TTO</td>
</tr>
<tr>
<td>MOHK 102/3.0 Beginning Mohawk Language &amp; Culture II</td>
<td>C</td>
<td>New TTO</td>
</tr>
<tr>
<td>MOHK 201/3.0 Intermediate Mohawk Language &amp; Culture</td>
<td>C</td>
<td>New TTO</td>
</tr>
<tr>
<td>MOHK 202/3.0 Oral Mohawk Language</td>
<td>C</td>
<td>New TTO</td>
</tr>
</tbody>
</table>
Term Adjunct(s) will be hired to teach the Mohawk courses in Tyendinaga with the appropriate academic qualifications (Ph.D. or equivalent Traditional Knowledge) and intermediate to high American Council on the Teaching of Foreign Languages (ACTFL) scale proficiency.

### 3.3 Course Descriptions - For each EXISTING and NEW undergraduate course that is part of the proposed certificate, provide a calendar description below and append/embed the course outline in Section 12. Also indicate if the course currently exists or is under development.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOHK 101/3.0</td>
<td>Beginning Mohawk Language &amp; Culture I</td>
<td>An introduction to the language and culture of the Kanyen’kehá: ka, the people of the Mohawk Nation. This course is designed for those who have neither been exposed to Kanyen’kehá: ka, the Mohawk language, nor its traditional societal practices. Learn basic Mohawk language and gain a rich understanding of the Mohawk culture and tradition. NOTE: Offered also in the Mohawk Territory of Tyendinaga to students registered in the Certificate of Mohawk Language and Culture. Students judged by the instructor to be fluent in Kanyen’keha may not receive credit for this course.</td>
</tr>
<tr>
<td>MOHK 102/3.0</td>
<td>Beginning Mohawk Language &amp; Culture II</td>
<td>A continuation of MOHK 101/3.0. Students will participate and begin to develop the ability to read, write and speak some basic Mohawk Language and further their understanding of the richness of Mohawk Culture, traditions, and worldview. NOTE: Offered also in the Mohawk Territory of Tyendinaga to students registered in the Certificate of Mohawk Language and Culture. Students judged by the instructor to be fluent in Kanyen’keha may not receive credit for this course. PREREQUISITE: MOHK 101/3.0.</td>
</tr>
<tr>
<td>MOHK 201/3.0</td>
<td>Intermediate Mohawk Language &amp; Culture</td>
<td>Students will start to manipulate the verb (beyond tense) making it more useful for everyday situations. They will continue developing their language skills beyond the basics and be able to interact meaningfully in limited number of daily activities. Students will work with a written form of the Kayanerenhserakó:wa to further their understanding of both the Language and the Great Law. NOTE: Offered only in the Mohawk Territory of Tyendinaga to students registered in the Certificate of Mohawk Language and Culture. Students judged by the instructor to be fluent in Kanyen’keha may not receive credit for this course. PREREQUISITE: MOHK 102/3.0.</td>
</tr>
<tr>
<td>MOHK 202/3.0</td>
<td>Oral Mohawk Language</td>
<td>This course will emphasize hearing and speaking and give students the tools necessary to learn from conversations with speakers (in person, in recordings, in written materials). This will prepare students to continue learning after the completion of the course. Students will develop their own set of questions to use when approaching a speaker to help them learn. NOTE: Offered only in the Mohawk Territory of Tyendinaga to students registered in the Certificate of Mohawk Language and Culture. Students judged by the instructor to be fluent in Kanyen’keha may not receive credit for this course. PREREQUISITE: MOHK 201/3.0.</td>
</tr>
</tbody>
</table>
3.4 **Certificate Timelines** – In a table or figure, summarize the expected progress through the certificate by term to completion. If both full-time and part-time studies are proposed, specify timelines for each.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>W</td>
<td>SS</td>
</tr>
<tr>
<td>MOHK 101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOHK 102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>W</td>
<td>SS</td>
</tr>
<tr>
<td>MOHK 201</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOHK 202</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>W</td>
<td>SS</td>
</tr>
<tr>
<td>MOHK 101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOHK 102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Certificate courses are structured as follows:

- One week instruction (7 hours/day x 5 days = 35 hours)
- Two weekend days / month (12 hours/month x 3 months = 36 hours)
- One evening / week (2.5 hours/week x 12 weeks = 30 hours)
- Homework, online learning (19 hours).

This schedule would deliver 101 hours of in-person instruction (compared to the normal 36 hours on-campus course), leaving an approximate expectation of 1.5 hours/week over the 12 weeks for home learning/study. Each course would be three months in length and the entire program would be four semesters.

3.5 **Other matters** - Comment on any special matters and innovative features.

Responsibility for the *Certificate in Mohawk Language and Culture* will be shared between the Department of Languages, Literatures and Cultures, TTO, the Faculty of Arts and Science, and Four Directions Aboriginal Student Centre. TTO and Four Directions Aboriginal Student Centre will provide culturally appropriate student support services, timetabling, facilitate Elder participation and extracurricular programming. The Faculty of Arts and Science will manage program requests, registration, course advisement, awards, as well as other administrative assistance as required, and liaise with LLCU and TTO. The program will be delivered in the Tsi Tionnheht Onkwewenna (TTO) Language and Cultural Centre in Tyendinaga which is the home community of the students, thus enabling greater participation. This will also allow the program to utilize help from local Elders and Knowledge Keepers in course delivery.

The Office of Indigenous Initiatives and the Aboriginal Council Working Group on Indigenous Knowledge, Curriculum and Research will continue to play a role by collaborating with the joint LLCU/TTO Steering Committee that will oversee the growth, development and maintenance of the Certificate.

4. **Program Content**

4.1 *Explain how the curriculum of the proposed certificate addresses the current state of the discipline and/or profession.*

The *Certificate in Mohawk Language and Culture* is part of an emerging field of Indigenous Studies and there are relatively few credentials of this kind, i.e. focusing on language and culture.

There are some programs that focus on language preservation, teaching methodologies or a single language, and quite a few that focus on politics, policy and social equality. Many Indigenous language programs exist outside of postsecondary institutions and are run by community organizations like TTO, but few of these are accredited through a university or college. Students who complete the *Certificate* will be able to apply their credits to a full degree at Queen’s, e.g. a B.A. (Gen) or B.A. (Hons).

The *Certificate in Mohawk Language and Culture* at Queen’s is different from other programs in that it enables students to acquire intermediate skills in the Mohawk language, and take advantage of the unique feature of the deliberate integration of language and culture in a University course. The learning...
outcomes for the program are divided between those demonstrated in the language (linguistic competencies) and those demonstrated in English and the Mohawk language (cultural competencies), thus providing learners with an intermediate knowledge of Kanien'kéha [Mohawk], and an introductory understanding of distinct cultural traditions and contemporary issues facing Mohawk people. For the above reasons, the proposed Certificate in Mohawk Language and Culture is a unique credential that will add to the richness of the field of Indigenous Studies and be a foundation for students and a means for the community in their efforts towards language revitalization.

4.2 Identify any unique curriculum, innovations or creative components.

See Section 3.5.

This program will provide opportunities for students to observe and participate in traditional Kanyen’kehá:ka culture and language activities in the local community. Students will learn naturally through daily activities that will include the participation of Elders and/or knowledge keepers and outings to locations of cultural relevance. Guest speakers will be a regular addition to the program, bringing expertise on areas of language, culture and worldview. Students will take part in on-the-land seasonal activities such as gardening, farming, land stewardship, fishing and medicine foraging.

Through using the medium of story telling, students will build their vocabulary and confidence to use their language as it develops. Students will be given situations in which they can speak with other speakers/learners in natural conversation.

See Appendix B: Indigenous Ways of Knowing

TTO has Mohawk Language resources (print, audio, video) available on-site which are not otherwise available at Queen’s University (Stauffer Library).

An ONCAT grant has been received for developing multimedia learning tools to be used directly with the Certificate in Mohawk Language and Culture. These interactive learning tools being developed are unique amongst Indigenous languages in North America. This innovation is using Queen’s vinciLingua platform to program a digital grammar for Mohawk that will allow students to actively interact directly with the software in Mohawk via the internet.

4.3 Academic Integrity - Explain how the certificate educates students on the importance and role of academic integrity.

Although it is the students’ responsibility to familiarize themselves with faculty and university regulations regarding academic integrity, course syllabi, web pages and the units’ undergraduate studies offices will display and promote faculty and university information and descriptions of policies. As with all Queen’s courses, instructors will be expected to discuss and bring to the students’ attention the relevant regulations and expectations. http://www.queensu.ca/academicintegrity/ai-queens
### 5. Assessment of Teaching and Learning

#### 5.1 Degree Level Expectations (DLE)

In Table 3 below, summarize how the certificate’s structure and requirements address each DLE listed as well as any additional program-specific UDLEs [Refer to Appendix 1 of QUQAP for more information.]

<table>
<thead>
<tr>
<th>DLE</th>
<th>Learning Outcomes</th>
<th>Relevant Courses, Academic Requirement</th>
<th>Indicators of Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depth and breadth of knowledge</strong></td>
<td>Develop skills in Mohawk language at the beginning to intermediate level using appropriate vocabulary and linguistic structures. <em>(Demonstrated in Mohawk language)</em> Describe the significant elements of Mohawk history, tradition, and worldview from ancient times to the contemporary issues facing Mohawk people. <em>(Demonstrated in English and in Mohawk language)</em></td>
<td>MOHK 101/3.0  MOHK 102/3.0  MOHK 201/3.0  MOHK 202/3.0</td>
<td>Recognize and identify words and phrases, orally recite short passages using appropriate pronunciation of Mohawk sounds and sound combinations, and write short dialogues using appropriate language structures. Write, state or describe cultural characteristics of Mohawk people and their histories in written story telling or papers and oral comprehension, presentations and tests.</td>
</tr>
<tr>
<td><strong>Knowledge of methodologies</strong></td>
<td>Apply the principles of Mohawk methodologies and Indigenous Ways of Knowing (Appendix B) to the exploration of topics from historical and contemporary perspectives. <em>(Demonstrated in English and in Mohawk language)</em></td>
<td>MOHK 101/3.0  MOHK 102/3.0  MOHK 201/3.0  MOHK 202/3.0</td>
<td>Differentiate and compare various Mohawk historical events and traditions through to today in written journals, papers and oral presentations.</td>
</tr>
<tr>
<td><strong>Application of knowledge</strong></td>
<td>Identify and apply knowledge of Mohawk language, including appropriate vocabulary and linguistic structures, in the four language skills (listening, reading, speaking, writing) on limited topics. <em>(Demonstrated in Mohawk language)</em> Apply knowledge of Mohawk culture to articulate a diversity of perspectives regarding Mohawk histories, traditions and experiences and take part in on-the-land seasonal activities. <em>(Demonstrated in English and in Mohawk language)</em></td>
<td>MOHK 101/3.0  MOHK 102/3.0  MOHK 201/3.0  MOHK 202/3.0</td>
<td>Demonstrate the ability to comprehend Mohawk texts, audio and visual resources of Elder speakers by applying appropriate vocabulary and linguistic structures. Evaluate, assess and construct short texts (story) presenting different perspectives of Mohawk histories, traditions and experiences in written and oral presentations and tests.</td>
</tr>
<tr>
<td><strong>Communication skills</strong></td>
<td>Effectively communicate in Mohawk language at from beginning to intermediate level (both in range and accuracy) using the four language skills (listening, reading, speaking, writing). (<em>Demonstrated in Mohawk language</em>)</td>
<td>MOHK 101/3.0</td>
<td>Actively participate in oral class activities, guided by dialogues, role playing activities, discussions on language structures and compositions as well as basic information on Mohawk culture, tradition and worldview.</td>
</tr>
<tr>
<td></td>
<td>Communicate in respectful and culturally authentic ways with confidence on cultural, historical and contemporary topics. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>MOHK 102/3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Awareness of limits of knowledge</strong></td>
<td>Demonstrate an awareness of the limits of their language skills and devise a plan for future self-learning. (<em>Demonstrated in English</em>)</td>
<td>MOHK 201/3.0</td>
<td>Recognize and acknowledge the limitations in one’s knowledge of Mohawk language and culture when composing oral and written communications.</td>
</tr>
<tr>
<td></td>
<td>Demonstrate an awareness of cultural perspectives and how this might affect interpretations of Mohawk cultures and experiences. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>MOHK 202/3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Autonomy and professional capacity</strong></td>
<td>Ability to apply knowledge of Mohawk cultures and experiences for academic, professional and personal contexts. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>MOHK 201/3.0</td>
<td>Independently demonstrate one’s understanding of Mohawk culture and experiences gained within the Certificate in academic, professional and personal contexts.</td>
</tr>
<tr>
<td></td>
<td>Develop an awareness of the requirements for building ethical relationships between Indigenous people and communities and respective ways of engaging with Mohawk cultures, histories, and traditions. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>MOHK 202/3.0</td>
<td>Demonstrate an awareness of ethical and respectful standards for engaging with Mohawk people and communities in written stories, journals, papers and oral presentations and tests.</td>
</tr>
</tbody>
</table>

*Use space below for comments on Table 3. Include discussion of how indicators of achievement associated with the certificate program differ from or overlap with those of the degree program(s) when the same courses are involved.*
5.2 Describe how the proposed methods of assessing student achievement relate to the certificate’s learning outcomes and degree level expectations.

Mohawk people have their own culture and ways of knowing. Students will be assessed on their ability to communicate in each of the DLEs and the Objectives. They will be assessed in the Mohawk language, from beginning to intermediate level, using the four language skills (speaking, listening, reading and writing) as well as their knowledge of Mohawk cultural tradition, worldview, and history (demonstrated in English and in Mohawk language).

By interacting with their instructor and peers (oral and creative presentations, participation in class, weekly exercises) students are given multiple opportunities to demonstrate their ability to employ appropriate language structures and to achieve the ability to “develop skills in Mohawk language …” and “describe the literary, artistic and cultural histories of the Mohawk people…” (DLE #1); exploring topics from historical to contemporary perspectives (DLE #2); “identify and apply knowledge of Mohawk language … on limited topics (demonstrated in Mohawk language)” and “articulate a diversity of perspectives regarding Mohawk histories, traditions and experiences (demonstrated in English)” (DLE #3); and communicate at an introductory level using the four languages skills (demonstrated in Mohawk language) and communicate in a respectful and meaningful way (demonstrated in English) … on cultural topics (DLE #4).

Students also use a variety of resources (e.g., homework, translations, weekly exercises, storytelling) to assist them in developing their presentations, responses in class, quizzes, final paper, and tests. Quizzes (oral and written) provide formative assessments of students’ comprehension and capacity to use class material. Final evaluations (written and oral), evidence their command of vocabulary and language structures and their communicative competence. Final Papers will demonstrate the student’s comprehension of Mohawk history, tradition and worldview and how it influences contemporary experience of Mohawk people.

Students “demonstrate their awareness of the limits to language skills and cultural perspectives and how this might affect interpretations of Mohawk culture and experiences” (DLE #5) and “their ability to apply knowledge of Mohawk culture and experiences for academic, professional and personal contexts” and “an awareness of the requirements for building ethical relationships with Mohawk people and communities and respective ways of engaging with Mohawk culture, histories, and traditions” (DLE#6) throughout the course by interacting with the instructor and their peers during classroom discussions and (where appropriate) student presentations. Students receive feedback from their instructors and peers through their active participation in class and through activities such as oral and creative presentations, group work, in-depth discussion and debates.

5.3 Outline the plans for documenting and demonstrating the level of performance of students [Refer to UDLEs, Appendix 1 of QUQAP]

Students will be given multiple opportunities in class activities and weekly exercises to demonstrate their ability to search for knowledge, synthesize knowledge, adapt to the local context, and to write and speak at an appropriate level in the Mohawk language. Each course instructor will use rubrics to identify the key aspects of each assessment so that students understand the assessment process. Formative and summative assessments will be linked back to core concepts, consistent with the DLEs and Learning Outcomes (see 5.1 above) so that over the course of their studies students are able to learn and adapt the knowledge to their own focus of interest and appreciate perspectives from Mohawk culture. Where gaps and shortcomings are noted students will be referred to appropriate services such as the Four Directions Aboriginal Student Centre and TTO. Assessments will be documented by grades on returned work, which will be recorded on the relevant course web site, and ultimately via SOLUS on the student transcript.
6. **Mode of Delivery**

**6.1 Explain how the proposed mode(s) of delivery meets the certificate’s learning outcomes and the DLEs. Comment on the relationship between mode of delivery and accessibility requirements.**

Language and culture courses: students attend participatory lecture and discussion-style classes that focus by intensive face-to-face contact on language acquisition, communicative proficiency in the four modalities (listening, reading, speaking, and writing) and expand their knowledge of Mohawk culture. Students are exposed to the culture of the Mohawk people, including developing knowledge of their traditions, worldviews and histories. Within the class period, instructors will incorporate Elders and Knowledge Keepers (either in person, in recordings, or in written materials) to draw upon real-life situations to reinforce new topics. They will also observe and participate in traditional Mohawk culture and language activities in the local community, learn naturally through daily activities that will include the participation of Elders and/or knowledge keepers and outings to locations of cultural relevance. Students will also have an opportunity to access specific cultural practices and engage in a wide range of activities linked to Mohawk language and culture being studied such as taking part in on-the-land seasonal activities such as gardening, farming, land stewardship, fishing and medicine foraging. Faculty may also incorporate online and other exercises which provide a short study session, complement and expand the in-class learning plans, and prepare students for the next class.

**OnQ**

The OnQ learning management system is used by the majority of LLCU faculty to disseminate information and communicate with students and will be used by students enrolled in the Certificate. Faculty members may organize their course content by placing resources in the appropriate week segments. They may provide links to other resources (articles, book chapters, videos, pictures, films), which expand the supplementary course materials and helps students in their research assignments. With the cooperation of Queen’s Library, links to streaming videos may also be posted. This allows the students to watch the material before class instead of during the class, which reserves time for class work. The forum function permits faculty members to communicate efficiently with students outside class time. Many faculty members set up student forums to facilitate peer-to-peer discussions and group work. In terms of performance assessment, OnQ provides instructors with a convenient grading book. Students can therefore continuously check their course progress. Most faculty also arrange for the assignments to be submitted directly through OnQ. This ensures that all assignments are accessible to the instructor at any time or location. Since OnQ is a password-protected system, only instructors and students registered in the given course have access to it, ensuring a safe and reliable learning environment. Providing the resources and accepting the assignments in electronic form lessens the environmental impact. One in-house staff person is available to instruct and assist LLCU faculty in case of any troubleshooting.

**6.2 Distance Delivery** - Where students may take the same certificate or elements of it in two different modes of delivery, indicate how consistency in the certificate requirements and standards will be assured. **Describe how a learning community will be fostered, how regular interactions with faculty, students, etc., will be assured, and comment on access to materials, resources, and technology.**

Only offered in the Mohawk Territory of Tyendinaga and open only to students registered in the *Certificate of Mohawk Language and Culture*. Learning Outcomes are the same for MOHK 101/3.0 and MOHK 102/3.0 in both modes of delivery.
7. Anticipated Enrolment

7.1 Indicate how many new students the certificate program is expected to attract; describe the strategies to recruit students.

It is anticipated that students from within the community of Tyendinaga (Members of the Mohawks of the Bay of Quinte) will be particularly interested in this Certificate. This interest is owing to the growing demand for teachers and other professionals who have knowledge of a Mohawk language and/or possess a degree of Mohawk cultural awareness. Expected enrollment is 15 students per year. We also anticipate a 20% attrition rate in year 2, result in 12 students in the second year. There will be a intake every two years.

7.2 In Table 4 below, summarize the projected intake and enrolments by year until steady-state is reached (modify table as needed).

Table 4. Anticipated intake and enrolment in Certificate Program

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate Intake</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Certificate Enrolment</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Total Enrolment</td>
<td>15</td>
<td>12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Use space below for comments on Table 4. Include comments on whether enrolments in the existing degree program(s) might be affected in any way.

8. Resources

Provide evidence that the Academic Unit(s) has the necessary resources to implement and deliver the proposed new Certificate under the following headings (where applicable). A budget module and template (located on the QUQAP website) must be completed.

8.1 Faculty – Identify faculty members who will have involvement in the delivery of the proposed certificate program and comment on the adequacy of these resources. Complete Table 5 below.

Submit CVs (following the CV guidelines found on the QUQAP website) for all faculty that are not listed as core in the degree program(s) from which the certificate is derived. Core faculty is defined here as tenured, tenure-track, emeriti and continuing adjunct professors.

Table 5. Faculty associated with the proposed Certificate Program (add rows as needed)

<table>
<thead>
<tr>
<th>Faculty Member (Home Unit)</th>
<th>Rank/Status</th>
<th>Total Undergrad Teaching (incl new Program) (units)</th>
<th>Total Grad Teaching (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathan Brinklow + new</td>
<td>Instructor, Term Adjunct</td>
<td>6.0</td>
<td>0</td>
</tr>
<tr>
<td>New and/or Nathan Brinklow</td>
<td>Instructor, Term Adjunct</td>
<td>6.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Use space below to comment on Table 5

Nathan Brinklow currently teaches MOHK 101/3.0 and MOHK 102/3.0 on campus. He could potentially be hired to teach the 12.0 units at Tyendinega, or a term adjunct with the appropriate qualifications could be hired.
Nathan Brinklow
Thanyehténhas (Nathan Brinklow) is Turtle Clan from the Tyendinaga Mohawk Territory. He grew up without the language in a community that had largely lost its heritage language as an everyday spoken language. Nathan’s interest in the language was sparked through the “Mohawk Hymns” he sang with his grandmother as a young man and following his formal studies, he went on to study at Shatiwennakará:tats, the intensive adult language program at Tyendinaga. He now teaches in that program.

In Nathan’s experience of learning and teaching, the language and culture are inseparable. This informs his approach to teaching constantly passing on elements of the culture as they present themselves in the language. Kanyen’kéha (Mohawk) is also a descriptive language and paints vivid pictures with the way words have been created, so learning to recognize the actual meanings of the words allows the contemporary speaker to actually “see” how previous generations encountered and interacted with the world.

Professional interests include second language acquisition methodologies, especially for adults; the canon of Mohawk Hymns, with attention to the unique compositions; early Bible translations and how Christian concepts were translated using traditional ideas; and the development of the traditional Mohawk cycle of ceremonies.

8.2 Staff - Comment on the adequacy of the staff complement to support the certificate program (administrative, technical, IT, laboratory, etc.).

The Faculty of Arts and Science and Continuing and Distance Studies will assist students with registration, academic support and directing students to the appropriate student support services that Queen’s provides.

The Department of Languages, Literatures and Cultures has two administrative assistants. Both provide administrative and secretarial support to all the Plans and disciplines within the Department. Duties consists of: course planning; course counselling advising students during registration; registration; open enrolment; OnQ assistance; and coordination of physical services, such as space allocation; timetabling; calendar and curriculum submissions.

Tsi Tyónnheht Onkwawén:na has an Executive Director and an Administrative Assistant that will provide administrative support to the program. Such support will include: registration, coordination of facility use (classroom space, longhouse use, etc); assistance with scheduling Elders and Knowledge Keepers visits and field trips, and culturally appropriate support services.

Four Directions Aboriginal Student Centre has an Aboriginal Recruitment and Admissions Officer, who will assist with the admissions process, and a Student Advisement Officer, who will provide culturally appropriate student support services for students who come to campus to study.

8.3 Space Requirements - Describe the space (work space, laboratory space, office, classrooms) and equipment needed to support students' academic activities.

The Department of Languages, Literatures and Cultures has all the requirements to support the delivery of the Certificate in Mohawk Language and Culture in Tyendinaga. No additional space will be required as all instruction for the Certificate will take place at Tsi Tyónnheht Onkwawenna (TTO).

TTO has a main administrative office in the community of Kenhteke, Tyendinaga. The main building holds the office and program equipment such as copier, internet, iPads, video/audio recorders and a resource library. There are on-site raised garden beds and newly planted white-pine trees used in programming. The on-site garage holds equipment used for cultural arts and teaching such as a seasonal greenhouse, gardening equipment, saw horses, basket-making equipment, rattle/drum making equipment.

Classrooms are located next door to the administrative building in the school building and off-site classroom space is leased from local businesses for additional rooms when required. One classroom is
equipped with a smartboard; one classroom replicates a longhouse. The actual longhouse is located in the community and within a short walk from the administrative/school buildings (5 minutes). The community library is located in the same building as the school building and has a host of services available such as quiet study space, a boardroom with a smartboard, photocopying services and resource lending.

8.4 Program Administration – Describe how the program will be administered (e.g. admissions, tracking progress, curriculum, etc.)

The Faculty of Arts and Science will administer admission to the Certificate in Mohawk Language and Culture in collaboration with Undergraduate Admission following newly established infrastructure and processes. Student performance and academic progress will be monitored by the Student Services division of the Faculty Office in same way as for students in other Arts and Science programs. Curriculum review will be led by the Joint LLCU/TTO Steering Committee and will be part of the regular Cyclical Program Review process in the Department of Languages, Literatures and Cultures.

8.5 Information Technology – Describe the information technology needed to support the delivery of the program and to support the student’s scholarship. Indicate the resource implications for hardware, software/internet, audio-visual, telecommunications, etc.

Provide contact person and date that consultation with IT staff took place.

Information Technology:

The University provides information technology to all faculty, staff and students by providing them with individual e-mail, web space, the Microsoft Office suite and anti-virus software. Faculty are also offered services such as OnQ (for courses), Wiki and QShare pages for individuals, departments and groups, as well as WebPublish for Departmental websites. Faculty and departmental administrators use PeopleSoft for class lists and entering grades, and managing their research accounts. Students have access to several public and semi-public computing sites across campus, as well as computers and software in the Libraries. ITServices supports various software packages and troubleshooting services to faculty, staff and students through a telephone IT Support Centre. Training for faculty on the various software packages is provided through ITServices on-line seminars, webinars, and web documentation as well as the hands-on training by the Department’s Administrative Assistant, Margaret Maliszewska.

Tsi Tyónnheht Onkwawén:na (TTO)

Tsi Tyónnheht Onkwawén:na has IT services typical of a small office, including telephone access, a high speed fibre optic internet connection, WiFi, a colour photocopier, book publishing software running on Apple computers (Office for Apple and the Adobe Creative Suite), and equipment for publishing small book runs (lamination, binding equipment, etc). There are also two production quality video cameras, Final Cut Pro X, and a portable 4 channel audio recording device.

Students are expected to have access to a computer for on-line exercises (TTO and the library have computers that can be used for those students who do not own one).

Four Directions Aboriginal Centre (FDASC)

The Four Directions Aboriginal Student Centre strives to be a home away from home, a hub of activity and a key resource for Queen’s Mohawk students. It is located in a historic home at 146 Barrie St., which offers many amenities. Students hang out or study in the lounge with free wifi and cable TV, grab a snack or a meal in the fully equipped kitchen, and do their laundry for free! The FDASC offers academic tutoring and advising, cultural programming, Mohawk focused library, and a range of workshops designed to support Mohawk students, academically, socially and culturally. The FDASC has been around since 1996 when it opened with funding from the Ontario Ministry of Education and Training under its Aboriginal Education and Training Strategy. The Centre has been at its current location since 2000.
FDASC Academic Services

FDASC Resources Library: Searches can be done by keywords or by author, title, subject, etc.

Aboriginal Teacher Education Resources Library: The Aboriginal Teacher Education Program (ATEP) in the Faculty of Education is proud to offer an extensive collection of Aboriginal education resources and general Aboriginal resources. ATEP lends these resources to students, staff and faculty. This collection includes books, tapes, VHS videos, DVDs and CDs.

Academic-related Financial Support

FDASC Academic Travel Bursary: The Student Assistance Fund exists to support and enhance the Aboriginal student experience at Queen's University. The Fund seeks to assist students and fund projects that provide educational opportunities such as, but not limited to, participation in: Competitions, Symposia, Conferences, Festivals. The approval of funding will be contingent on the availability of funds and the total amount of requests received throughout the year.

FDASC Tipi

The FDASC tipi is located behind the FDASC. They hold class lectures, Full Moon ceremonies, talking circles in the tipi. The Tipi is the traditional housing structure of the Western plains nations. A tipi is a conical tent, traditionally made of animal skins, and wooden poles. The tipi was used by the nomadic tribes of the Great Plains in Canada and the United States. Tipis could be disassembled and packed away quickly when a tribe decided to move and could be reconstructed quickly upon settling in a new area. This portability was important to Plains Indians with their nomadic lifestyle.

The Writing Centre:

Students are directed by faculty to use the Writing Centre if they do not have sufficient experience in writing their assignments. However, some students require a higher, more advanced level of assistance in writing in a language other than English that the Centre is unable to provide. Students are encouraged to work more closely with their instructors and to meet with them during their office hours.

Centre for Teaching and Learning:

Faculty in LLCU have participated in programs offered through the Centre for Teaching and Learning and found the public lectures and workshops on various topics very useful. Faculty have also found the Centre very helpful with curriculum and course design, blended learning facilitation, and the annual workshop day to introduce teaching innovations. Faculty have used the Centre for advice on compiling a teaching dossier for career progression purposes. The Centre has been very generous with their assistance in understanding and writing the Cyclical Review Report (2014) and this document.

8.6 Library - Provide information about library support holdings, availability of and access to library resources relevant to the proposed program(s).

Collections

Queen’s University Library (QUL) has been collecting resources in this field (since the approval of the certificate of Mohawk Studies a few years ago). In addition to titles acquired for Mohawk Languages, relevant monographs have been collected in many related disciplines including Film, Latin American Studies, Cultural Studies, Global Development Studies, Geography, History and in Special Collections.

The Library’s growing collection of electronic books contains hundreds of primary and secondary works of interest to researchers in LLCU. The Library provides access to over 600 indexing and abstracting databases in all disciplines. QUL currently provides access to over 50,000 electronic journals, including subscribed and freely accessible academic titles. The Library subscribes to online databases such as The Bibliography of Native North Americans, Project Muse, JSTOR, CAIRN, and Periodicals Archive Online. We also include freely accessible titles on our website, such as First Nations Periodical Database, Caninuit, and iPortal- Mohawk Studies Portal from the University of Saskatchewan.
The Library has acquired some of the many rich primary source collections produced by publishers like Adam Matthew, Alexander Street Press, Gale, and ProQuest. *North American Indian Thought and Culture* is a great example of such acquisitions for the Queen’s community.

The Queen’s Library is able to borrow materials from the Centre for Research Libraries (CRL) for extended loan periods and at no cost, on behalf of Queen’s faculty, students and researchers. There are no limitations with respect to format or the amount of material borrowed. Typically, interlibrary loan requests at CRL are fulfilled within one business day and delivered to the requesting institution by 2-day express courier.

A complete list of databases and other online reference works, many more of which are relevant to this program, is available at http://library.queensu.ca/research/databases/. To expedite access to electronic content, the ability to link from database citations to subscribed full-text or to the Queen’s University Library Catalogue (QCAT) has been enabled.

The Library collects information resources in all formats to support teaching, learning and research across the range of programs offered by the Department of Languages, Literatures and Cultures. Stauffer Library houses the majority of print resources in the discipline but relevant materials may be located across the library system, depending on each researcher’s area of focus.

In collection practice there is a growing emphasis on electronic resources that provide currency of content, and point-of-need 24/7 access. Remote access to most electronic resources is available through the Queen’s Proxy, allowing students and faculty members to access a rich array of resources from anywhere on or off campus.

Primary responsibility for the selection of new resources rests in the collaboration of the LLCU liaison librarian and the departmental library representative. The Department works with the Library to ensure that all faculty publications are included in our collection. Interlibrary borrowing requests are monitored to identify material of interest that should be added to the collection and publishers’ catalogues are reviewed and routed as appropriate. Students and faculty members may make recommendations for purchase online or through their liaison librarian or library representative.

**Service**

The LLCU liaison librarian provides introductory or specialized workshops, collaborates with faculty members to integrate information resources and information-seeking skills into course-management-software environments, works with seminar and tutorial groups, assists in identifying and locating data and materials, and provides research assistance at every stage of a student’s time at Queen’s. Course-specific workshops, arranged through faculty, pinpoint the most useful sources and search strategies for a given area of research. The liaison librarian for LLCU offers hands-on, customized information literacy/research skills workshop instruction upon request in addition to one-on-one instruction.

Queen’s University Library is committed to student learning and has an active team, the Teaching & Learning Working Group, leading their colleagues in writing learning outcomes, curriculum design and learning assessment. As well, the Library maintains a close working relationship with the Centre for Teaching and Learning, which assists in the development of teaching techniques, and in fostering partnerships among librarians and teaching faculty wishing to integrate library research skills into their courses.

Every effort will be made to ensure resources are available to students either on campus or at the TTO location.
Indicate what new library resources will be needed (e.g. journals, print monographs, audio-visual material, historical documents, electronic databases, statistical/geospatial data).

The resource that LLCU faculty have been increasingly requesting the library to purchase are online/streaming videos. Often these videos come at a high cost and are not always available in Canada or even online. In terms of materials for learning Mohawk languages, we may need to review what is in our collection that can serve students and faculty.

Indicate the likelihood of the program having an impact on library staffing. Provide contact person and date that consultation with the Library staff took place.

There should not be any impact on library staffing for this program. The LLCU liaison librarian has assured us that reserves (including ARES), Interlibrary Loan, information literacy and other services will be able to accommodate this new program.

(Nathalie Soini, February 1st, 2017).

8.7 Describe any additional resources required that are not currently available. Provide evidence of institutional commitment to supplement existing resources as needed. [Complete budget module]

As with all language courses, best practice for Mohawk-language acquisition pedagogies limits the number of students in the classroom, as the oral component is essential. Language courses are different from the lecture-type courses (sometimes with very large enrolments) as individual students orally participate in every class, which is essential for learning a language. In order to meet the department’s requirement for fiscal sustainability, the implementation of the Certificate in Mohawk Language and Culture will require support from the department (LLCU), The Faculty Office, the University and from government grants.

Tsi Tyónnheht Onkwawén:na (TTO) will provide administrative support to the program. Such support will include: registration, coordination of facility use (classroom space, longhouse use, etc); assistance with scheduling Elder visits and field trips, and culturally appropriate support services.

LLCU will also provide administrative support for the Certificate (general administration) and Four Directions Aboriginal Centre will provide the resources for student support services, coordinating and facilitating the visits of Elders and invited speakers, as well as communications with local Mohawk groups and communities.

Revenue for the proposed program will come primarily from the new tuition fees and government grants will be sought. We anticipate that the program will be sustainable based on an intake of 15-20 students bi-annually. As a result, it is anticipated that the program will be net revenue generating.

The program has been designed to best utilize existing staff. The Provost’s Office will be providing the funds for adjunct faculty, including travel, for five years.
9. Other Matters

9.1 Provide evidence of student demand for the certificate program and describe how this information was obtained.

A Certificate in Mohawk Language and Culture would be a first step in fulfilling one of the main recommendations of the Truth and Reconciliation Commission’s (2015) final report (“We call upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages”) and would realize one of the main highpoints of the University’s Academic Plan (2011) (“[…] we strongly recommend that Queen’s promote […] the learning of Aboriginal languages”).

Together with language learning, which intrinsically is an essential element of Mohawk cultural identification, students will have an opportunity to access specific cultural practices as well as Elders and knowledge keepers. Furthermore, the proposed Certificate will allow students to engage in a wide range of activities linked to the Mohawk languages and cultures covered in the Certificate.

Presently there are 40 students enrolled in the Minor (B.A. (Gen)) in Indigenous Studies, over 40 students are enrolled in Mohawk language and culture courses on an annual basis, and the recently approved (by Faculty Board) Certificate in Indigenous Languages and Cultures.

A review of Indigenous Studies programs at Ontario and other Canadian universities reveals that new programs are being introduced at a rapid rate, demonstrating that this is an area of curricular growth and renewal and that speaks to student interest. Trent University was among the first to develop a program in Native Studies in 1972. Lakehead University has several programs in Indigenous Learning (Major, Minor, Certificate, Native Language Minor, Concurrent Programs with Education); York University has a variety or programs on Indigenous Studies at the Certificate and Undergraduate Level through the Department of Equity Studies, an Indigenous Teacher Education program, as well as a new Medial program in Urban Aboriginal Education, while Osgoode Intensive program in Aboriginal Lands, Resources and Governments provides Law students with programming that is unique across Canada. Wilfrid Laurier University has an Indigenous Studies Option which can be coupled with any Honours program; McMaster University has had an Indigenous Studies Program since 1992 and announced a very prestigious Indigenous Knowledge Chair for the University in 2011. The University of Western Ontario has an interdisciplinary program which offers Minor, Major and Honours specialization modules in Indigenous Studies; and the University of Ottawa offers a Major and Minor in Aboriginal Studies. The field of Indigenous Studies has evolved very quickly in the last decade and the trend has been to move away from discipline-specific programs. What sets Queen’s apart is the highly interdisciplinary nature of the Indigenous Studies Minor / B.A. (Gen) Plan, with courses in the creative arts, humanities, social sciences and health-related disciplines. The program in Indigenous Studies has attracted students from a great variety of disciplines and continues to grow in popularity, just as the course offerings within the Plan have increased as departments have expanded their offerings in Indigenous-related courses.

9.2 Explain how the certificate program will fulfill societal need.

As stated in the introduction, the Indian Residential Schools Truth and Reconciliation Commission tabled its report including “Calls to Action” that require postsecondary institutions develop curricular programming to promote, support and expand educational opportunities for First Nations, Métis and Inuit peoples, with specific mention of credit courses and programs in Mohawk languages. It is well known that many Mohawk languages in Canada are current under threat of extinction, including Mohawk (Kanien’kéha) and Ojibway (Anishinaabemowin). http://www.unesco.org/languages-atlas/index.php

Furthermore, the Final Report of the Truth and Reconciliation Commission Task Force, entitled Yakwanastahentéha / Aankenjigemi / Extending the Rafters, includes the following recommendation: “In support of Call to Action 16, the university must work with Indigenous communities to create credentialed Indigenous language programs.”
The **Certificate in Mohawk Language and Culture** therefore addresses societal need by assisting in the revitalization and preservation of endangered languages and by educating Indigenous and non-Indigenous Canadians about Mohawk histories, cultures and experiences.

9.3 *For new professional certificate programs, provide evidence that the certificate is congruent with the regulatory requirements of the profession.*

Not applicable.

### 10. Equity, Diversity and Accessibility

10.1 *Describe how the proposed new program will address equity considerations, including (but not limited to) issues of particular concern for the groups identified in the University’s various equity programs.*

Report provided by the Equity Office (January 2017), Updated statistics provided by Equity Office January 19, 2017.

10.2 *Provide information about the representation rates of members of designated groups within the faculty, and identify gaps in representation as compared to the appropriate Canadian workforce population.*

### 11. Quality and Other Indicators

11.1 *Define indicators that will provide evidence of the quality of the faculty and how they will be used (e.g. qualifications, teaching effectiveness, supervisory/mentorship ability, research impact, innovation and scholarly record; appropriateness of collective faculty expertise to contribute substantively to the proposed certificate program).*

The **Certificate in Mohawk Language and Culture** will be reviewed under the regular QUQAPs process to ensure that the program reflects Queen’s standards for academic excellence. Participating faculty members will be subject to the regular Bi-Annual Review processes. Hiring practices will follow the normal appointments processes as outlined in the Collective Agreement.

Term Adjunct(s) will be hired to teach the Mohawk courses (12.0 units) in Tyendinaga with the appropriate academic qualifications (Ph.D. or equivalent Traditional Knowledge) and intermediate to high American Council on the Teaching of Foreign Languages (ACTFL) scale proficiency.

11.2 *Comment on the certificate program structure and faculty attributes (including research activity) that will ensure the intellectual quality of the student experience.*

The Office of Indigenous Initiatives and the Aboriginal Council Working Group on Indigenous Knowledge, Curriculum and Research will collaborate with the joint LLCU/TTO Steering Committee which will oversee the growth, development and maintenance of the **Certificate.**
12. Supporting Documentation – Unit(s) Input

_In this section please append (or provide hyperlinks to) any additional information that is pertinent to the program(s) and that supports the narratives in Part B (Sections 1-11). For example, as relevant and available, append/embed the following:_

_This is not a complete list or exhaustive list, and is only intended to provide examples_

- Letters of support from: Office of Indigenous Initiatives; Office of the Vice-Provost (Teaching and Learning); Indigenous Knowledge, Curriculum and Research Working Group c/o Four Directions Aboriginal Students Centre; The Aboriginal Council of Queen’s University; Deputy Commissioner of Indigenous Affairs (Alma Mater Society); Queen’s Native Student Association; Indigenous Studies Curriculum Committee;
- Letters of support from relevant external institutions or agencies: Chief, Mohawks of the Bay of Quinte; Director of Federal Schools; Quinte Mohawk School
- Course outlines
- Appendix A: Mapping Course Learning Outcomes to Certificate Learning Outcomes
- Appendix B: Indigenous Ways of Knowing
- Calendar Copy
- Budget
Part C – Administration & Government Reporting Information

Part C is to be completed by the Department(s)/Faculty(s) in consultation with the Office of the University Registrar and the Faculty Office(s).

13. Information for and/or from the Office of the University Registrar and/or the Faculty Office(s)

13.1. Academic Administration

Academic Career

<table>
<thead>
<tr>
<th>Department(s)/Academic Unit(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Languages, Literatures and Cultures in partnership with Four Directions Aboriginal Student Centre</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Start Date</th>
<th>August 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program duration</td>
<td>2 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Year 15 Steady State 15</td>
</tr>
</tbody>
</table>

Program Name: Certificate in ...(max 50 characters) (e.g. Certificate in Business)

Certificate in Mohawk Language and Culture
MOHK-C-MOK

13.2. Complete the following:

<table>
<thead>
<tr>
<th>Will students be admitted part-time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>x Yes □ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Will all or part of the program be offered at the BISC campus?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes x □ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Will all or part of this program be offered via distance learning (e.g. online or blended learning?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>x □ Yes □ No</td>
</tr>
</tbody>
</table>

14. Course Information

<table>
<thead>
<tr>
<th>New Courses with new subject code required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes x □ No</td>
</tr>
</tbody>
</table>

If yes, suggested Subject Code

15. Tuition and Student Activity Fees

<table>
<thead>
<tr>
<th>Tuition Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Domestic $218.97 and International $1249.67 Arts and Science per unit fee</td>
</tr>
<tr>
<td>Fee Assessment Protocol</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Student Activity Fees</td>
</tr>
<tr>
<td>Non-Tuition Fees</td>
</tr>
</tbody>
</table>

### 16. Government Reporting

<table>
<thead>
<tr>
<th>Proposed FORPOS</th>
<th>103 Arts, GEN and 1 YR Honours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Weight (BIUs)</td>
<td>1.0</td>
</tr>
<tr>
<td>Proposed CIP Code</td>
<td>16.1001 Aboriginal languages, literatures and linguistics</td>
</tr>
</tbody>
</table>
Part D – Government Reporting Information

<table>
<thead>
<tr>
<th>Part D is to be completed by the unit/faculty</th>
</tr>
</thead>
</table>

17. Describe how the program is consistent with an area of strength and/or growth identified in the **Strategic Mandate Agreement** (SMA). If not aligned, describe how the program is consistent with the mission, aims, objectives and existing strengths of the university.

The **Certificate in Mohawk Language and Culture** is aligned with the University’s Strategic Mandate Agreement with MAESD in the following ways:

1. This Certificate will be developed in partnership with the Department of Languages, Literatures and Cultures, Four Directions Aboriginal Student Centre the Office of Indigenous Initiatives and Tsi Tyonnheht Onkwawenna Language and Cultural Centre in Tyendinaga, Ontario. As a result, these partnerships align with the Strategic Mandate Agreement through institutional collaborative work through a community partner to establish a role in fostering social and economic development and serving the needs of the economy and labour market.

2. With a focus on Mohawk languages and culture, the proposed Certificate aligns with the University’s mission to provide access to postsecondary education for underrepresented groups (Aboriginal, First Generation students). This program also adds to Queen’s current program offerings that may have particular appeal to Aboriginal students, including a minor in Indigenous studies, and the only community-based Aboriginal teacher education program in Ontario.

3. Three of the 2015 Senate Cyclical Program Review Committee (SCPRC) recognized the strengths of the Department as “A diversified curriculum and emerging interdisciplinary synergies that position the department as a leader in shaping both internationalization of the curriculum at Queen’s and more broadly, language and intercultural studies at the provincial or national level;” “Collaborations with other units in the faculty of Arts and Science which results in innovative offerings (for example the Indigenous Studies program); and “creating a caring and supportive culture for its students.”

4. The Languages, Literatures and Cultures (LLCU) **Certificate in Mohawk Language and Culture** reflects the Department’s objectives stated in the CPR Self-study which align with the 2011 Queen’s University Academic Plan:

i) The Student Learning Experience: As in the Department’s other Plans, students begin by acquiring a proficiency in the target languages (listening, reading, speaking, writing) which allows them to appreciate, understand, communicate in, and become familiar with (or be introduced to) the region’s literature and culture as well as key social, historical, political and cultural influences.

ii) Disciplinarity and Interdisciplinarity: Students choosing the Certificate in Mohawk Language and Culture will gain an understanding of multiple methodologies … offered within the Department.

iii) Reaching Beyond: Globalism, Diversity, and Inclusion at Queen’s: Students are taught critical inquiry and information literacy through the socio-cultural, political and literary histories and presents of three target languages; by broadening and exposing both their linguistic and cultural horizons; and by providing them with a clear understanding of cultural differences between and within regions and of the rich cultural heritage of other regions of the world also in relation to their own. The Certificate in Mohawk Language and Culture provides students with valuable transferable skills and with the knowledge and skills for further study.

iv) Health, Wellness, and Community: The Department offers study in 14 different cultural-linguistic paradigms, which encourages multi-cultural social and intellectual interaction in the classroom, the Department, and the University community at large. Conferences and special events held within the Department emphasize...
topics such as the articulation of identities (struggle, formation and expression), health and well-being of Indigenous people, livability of cities, LGBTQ+ issues, and racial identities.

18. Explain how the proposed program fits with Queen’s current program offerings and the university’s capacity to deliver the proposed program

The Certificate builds on current offerings already in place within the department; currently, students can take up to 6.0 Units in Mohawk languages, including MOHK 101/3.0 Beginning Mohawk Language and Culture I (formerly LLCU 101/3.0 Mohawk I), MOHK 102/3.0 Beginning Mohawk Language and Culture II (formerly LLCU 102/3.0 Mohawk II). The Certificate will comprise a total of 12.0 Units taken from the equivalency of existing and new Mohawk language and culture courses. The Certificate also builds on two successful curricular initiatives within the department: the BA (General) / Minor Concentration in World Language Studies, approved in 2010, with a current enrolment of 87; and the BA (General) / Minor Concentration in Indigenous Studies, approved in 2013, with a current enrolment of 40, and the recently Faculty Board approved Certificate in Indigenous Languages and Cultures.

19. Provide at least two external comparator programs outside of Queen’s used to derive the proposed tuition fee (program name, university and most recent tuition fee exclusive of additional fees). Comparators should ideally be similar credentials and/or programs in Ontario or Canada if none in Ontario. Justify reasoning for proposed tuition; if higher than comparators how will the impact on accessibility be mitigated?

Certificate In Indigenous Languages at the University of Saskatchewan
This certificate is a 10-course program offered over a two-year period. It differs slightly in that it has a focus on teaching methodologies for Indigenous languages.

The Minor in Native Language at Lakehead University
http://navigator.lakeheadu.ca/~Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=20&topicgroupid=1 0354
This program consists of instruction Ojibway / Anishinaabemowin but is otherwise similar in scope to the Certificate.

20. (a) Justify the duplication with comparator programs and others (list programs, why is adding a new program justifiable, evidence of consultation, evidence that there is sufficient demand, sufficient opportunities for experiential learning, etc.)

The Certificate in Mohawk Language and Culture appears to be unique among programs at Canadian universities. Very few credentials include language instruction and those that do focus on language preservation or teaching methodologies. Many programs for Indigenous language instruction exist outside of postsecondary institutions and are run by community organizations with no access to credit recognition. For this reason, the proposed Certificate in Mohawk Language and Culture is a much-needed and unique credential.

20 (b) Comment on any differences between the proposed program and comparators (number of credits/courses, structure, etc.)

The Certificate in Mohawk Language and Culture at Queen’s is different from other programs in that it enables students to take the courses in the Mohawk Territory in Tyendinaga as well as take Mohawk language where other courses have a strong focus on the histories, traditions and experiences of Indigenous peoples. The learning outcomes for the program are divided between those demonstrated in the language (linguistic competencies) and those demonstrated in English and, where appropriate, the language (cultural competencies) The 12.0 unit courses will provide learners with a basic working knowledge of Kanien’kéha [Mohawk] language, an introduction and understanding of distinct cultural traditions and contemporary issues facing Mohawk people, as well as an awareness of the requirements for respectful and ethical engagement with Indigenous persons and communities.
### Part E - Authorizations

Part E is to be completed by the faculty office(s) following Faculty Board approval and then sent to the provost’s office for approval and signature.

<table>
<thead>
<tr>
<th>Date Approved by Faculty Board (or equivalent)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Department/Unit Head(s)</td>
<td>Signature</td>
</tr>
<tr>
<td></td>
<td>Signature</td>
</tr>
<tr>
<td>Vice-Provost and University Librarian</td>
<td>Signature</td>
</tr>
<tr>
<td>University Registrar</td>
<td>Signature</td>
</tr>
<tr>
<td>Faculty Dean(s) or delegate(s)</td>
<td>Signature</td>
</tr>
<tr>
<td>Associate Vice-Principal (Planning and Budgeting)</td>
<td>Signature</td>
</tr>
<tr>
<td>Provost and Vice-Principal (Academic)</td>
<td>Signature</td>
</tr>
<tr>
<td>Date Approved by SCAD</td>
<td></td>
</tr>
<tr>
<td>Date Approved by Senate</td>
<td></td>
</tr>
</tbody>
</table>
14 December 2017

To Whom It May Concern:

Re: Certificate in Mohawk Language and Culture

“Our language and culture is the window through which we see the world”

— Paul Disain, Denesuline Elder

Language carries culture and many of our Indigenous languages are at a precipice, in danger of dying, if we do not do all that we can to ensure that our young people learn to speak them. Research indicates that for a language to continue, the young especially teens and young adults need to speak. They need to speak to be able to pass the language, and with it the culture on to their children. Our language and culture is the foundation of who we are as a people and as individuals.

“The Truth and Reconciliation Commission (TRC) Call to Action #16 calls upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages.” In support of this the Queen’s University TRC Task Force recommendation # 22.1 calls for the university to work with Indigenous communities to create credentialed Indigenous language programs. The proposed Certificate in Mohawk Language and Culture is a step in this direction. Creating a program which will be offered in partnership with a local Kanyen’kéhaka (Mohawk) community and delivered on site creates an accessible, beneficial and unique program in the post-secondary sector.

There are currently no elder mother tongue speakers left in Tyendinaga Mohawk Territory so it is imperative that we take the opportunity to assist in the rejuvenation efforts there. This is especially true given they are our neighbors, closest First Nation community and members of the Haundenosaunee, upon whose land the university sits. This is one step towards reconciling some of the damage done historically by the education system and could prove to be a ladder into further university studies for students of the certificate.

Principal Wolf has stated that curricular change to address inclusivity, diversity and Indigenization must be planned, with implementation beginning in 2018. Acknowledging and supporting the regeneration of Indigenous languages is essential to this work and to acknowledging Indigenous presence on the land and within the university. Indigenous language education is also essential for students of the Indigenous studies minor to have a fulsome understanding of Indigenous cultures and traditions.

It is imperative that Queen’s takes a lead in becoming one of the few universities to work expeditiously to see that credentialed Indigenous language programming happens. The proposed Certificate in Mohawk Language and Culture is a welcome indication of the university’s commitment to support the rejuvenation of Indigenous languages in this country.

For these reasons I fully support and encourage that this proposal be approved.

Respectfully,

Janice C. Hill
Director Indigenous Initiatives
Dear Dr. Pugh,

I am writing to you today on behalf of the Indigenous Knowledge, Curriculum, and Research working group to express support for the development and implementation of a Certificate in Mohawk Language and Culture at Queen’s University.

This certificate represents significant progress in Queen’s University’s commitment to the languages and cultures of the territory on which it stands. Alongside other advances, such as the creation of courses in Anishinaabemowin and the ongoing development of the Indigenous Studies minor, this certificate shows that our institution has a meaningful commitment to meeting the Calls to Action of the Truth and Reconciliation Commission of Canada (TRC). Specifically, TRC Call to Action #16 specifically states: “We call upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages.” The creation of this certificate is a tangible response to this Call to Action, and demonstrates Queen’s University’s capacity to lead in work toward reconciliation at the post-secondary level. Furthermore, it is a response to recommendations made by our own TRC Task Force Report, several of which indicate a need to strengthen Indigenous programming and enhance access to Indigenous scholarship within the institution. As an expert in Indigenous languages, I can attest that a response to these recommendations that also contributes to language revitalization efforts is particularly appropriate. According to UNESCO’s Language Vitality and Endangerment Framework, the Mohawk language is definitely endangered. That means that unless action is taken now, the Mohawk language and the cultural knowledge it carries will be dead within two generations. By providing a pathway for individuals to develop as Mohawk language speakers and culture bearers through this certificate, we will help to ensure its propagation for future generations.

In short, I believe that the creation of the Certificate in Mohawk Language and Culture is an important step in our ongoing work toward reconciliation, and I support it wholeheartedly. If you have any questions about this endorsement, please contact me at any time at morcoml@queensu.ca or extension 77268.

Sincerely,

Dr. Lindsay A. Morcom
Assistant Professor
Queen’s University Faculty of Education
December 16, 2017

LETTER IN SUPPORT OF CERTIFICATE IN MOHAWK LANGUAGE AND CULTURE

To Whom It May Concern:

This letter expresses our full support, on behalf of the Indigenous Studies Curriculum Committee, for the Certificate in Mohawk Language and Culture being proposed by the Department of Languages, Literatures, and Cultures, and to be offered in partnership with the Tsi Tyonhheht Onkwewenna (TTO) Language and Cultural Centre in Tyendinaga.

The proposed certificate supports recommendation 22.1 from the final report of the Queen’s TRC task force that “Consideration should also be given to the development of degree offerings in Indigenous languages and the university should ensure that both languages of Indigenous traditional territory upon which Queen’s sits are represented.” This in turn reflects Call to Action #16 from the federal Truth and Reconciliation Commission, which states: “We call upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages.”

These recommendations reflect a broader call to preserve and revitalize Indigenous languages, recognizing their significance and encouraging their adoption by a new generation of speakers.

Courses in Mohawk language and culture have been offered at Queen’s since 2012, and form part of the minor program in Indigenous Studies, first offered in 2013. Mohawk language courses have also been incorporated into the World Language Studies minor and LLCU major in the department, and into the department’s Certificate in Indigenous Languages and Cultures. The proposed Certificate in Mohawk Language and Culture strengthens the university’s commitment to creating opportunities for students to engage with indigenous languages and cultures. It also builds a partnership with individuals and community organizations at Tyendinaga.

For these reasons, we fully support this proposal and encourage its approval.

Sincerely,

Kanonhsyonne / Janice C. Hill  
Co-Chair

Bronwyn M. Bjorkman  
Co-chair

Indigenous Studies Curriculum Committee
To whomever it may concern,

As Presidents of the Queen’s Native Student Association, we support the implementation of the Certificate in Mohawk Language and Culture from the Department of Languages, Literatures and Culture.

We are a student run group on campus, with an executive team made up entirely of self-identified Indigenous students this year. Our mandate is to raise awareness, promote cultural understanding, and to provide solidarity and cooperation towards achieving campus-wide respect. Although all our executives are Indigenous, our general members group is a combination of both Indigenous as well as non-Indigenous students who help to organize our yearly events.

The certificate will allow members of the Queen’s Native Student Association, present and future, to apply and expand any previous knowledge of Mohawk language and culture. It will also increase the visibility of Indigenous students on campus, as those who are Mohawk will have a course to either help learn a part of their heritage or strengthen the knowledge that they already hold. For the growing ally ship within the Queen’s community, the certificate provides a step towards reconciliation as it is tangible evidence that Queen’s University aims to grow knowledge, and discourse surrounding Indigenous issues.

In the experience from our general members and ourselves, we see the certificate as being a step in a positive direction for increasing the availability for student’s campus-wide to learn about the Indigenous cultures of Canada, the social issues they face and the history of colonization, through the direct lens of the Mohawk people. Not only does this align with the TRC recommendation to increase culturally appropriate curricula, but it provides Indigenous and non-Indigenous students the opportunity acknowledge one of Canada’s Indigenous peoples. By involving the community of Tyendinaga, it increases the partnerships in place and ensures accurate and relevant teachings from those who utilized the land Queen’s University is situated on before colonization.

Miigwech | Nya:wen (Thank you),

Sarah Hanson and Tara Wilson
Presidents
Queen’s Native Student Association
December 16, 17

It is my privilege to write in support of the Certificate in Mohawk Language and Culture, proposed by the Department of Languages, Literatures and Cultures in partnership with Tsi Tsyonnheht Onkwewenna. This is an excellent opportunity to build upon Queen’s relationship with the community of Tyendinaga, and to support Indigenous language revitalization. Kanyenkeha (Mohawk) is an endangered language and there are few resources to support its growth and development. This certificate will provide opportunities for adult and professional learners in the region to take the program in their own community.

Given the report of the Task Force on Truth and Reconciliation with its recommendations around further integrating Indigenous knowledge into Queen’s curricula, the certificate is timely and relevant.

In closing, I reiterate my conviction that the Certificate in Mohawk Language and Culture is a crucial new credential for the Faculty of Arts and Science at Queen’s University.

Sincerely,

Jill Scott
Vice-Provost (Teaching and Learning)
December 15, 2017

TO WHOM IT MAY CONCERN

RE: Proposal for a Certificate in Mohawk Language and Culture

The Aboriginal Council of Queen’s University (ACQU) brings together representatives of regional Indigenous communities, both geographical and organizational. We have applauded the approach of Queen’s University in emphasizing the important links to Haudenosaunee and Anishbaabe peoples on whose traditional lands the University is located. We have been encouraged by Queen’s response to the recommendations of the Truth and Reconciliation Commission and articulation of specific initiatives in the TRC Task Force Report.

Language conservation and revitalization is a priority to anchor our own efforts at affirming our place as peoples and nations in the Canadian federation. The proposal to extend the reach of current offerings in Indigenous Languages and Cultures to introduce a certificate specific to Mohawk language and culture is a welcome next step. The active interest and support expressed by leaders, educators and students of the Tyendinaga Mohawk community and the material and in-kind support extended by Queen’s academic and service units and Tsi Tyonnheht Onkwewenna (TTO) Language and Cultural Centre of Tyendinaga Territory together bode well for the success of the initiative.

The ACQU, particularly through the involvement of our Working Group on Indigenous Knowledge, Curriculum and Research, will follow with interest the progress of this proposal through approval processes and implementation.

Sincerely,

Marlene Brant Castellano
Community Co-chair, The Aboriginal Council of Queen’s University
November 27, 2017

To Whom It May Concern:

On behalf of the Tyendinaga Mohawk Council (TMC), I offer this letter of support to the partnership between Queen’s University and Tsi Tyónnheht Onkwawén:na Language and Cultural Centre (TTO) in Tyendinaga in the development of a Certificate in Mohawk Language program.

TMC has provided financial support to TTO for many years as we recognize the outstanding language programs TTO provides to our community members. It has been a recommendation of the TMC for TTO to work towards an accredited adult language program so that students are given recognition for their efforts in reviving and revitalizing the Mohawk language.

Our Indigenous languages carry within them our identities and our worldview; they are not just a mode of communication. In a recent language documentation project organized by TTO, first language speakers from various sister communities were brought together to record oral language. These speakers ranged in age from late 60’s to late 80’s; these are our last mother tongue speakers in our communities. We all have to contribute to finding ways to ensure that a new generation of speakers is nurtured so that our precious language does not die.

The Truth and Reconciliation Commission (TRC) Call to Action #16 calls upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages. The proposed Certificate in Mohawk language program is a step forward for Queen’s University in meeting this call.

On behalf of the TMC, I trust that this accredited language program proposal will be approved. I await your earliest reply.

Yours sincerely,

[Signature]

R. Donald Maracle
Chief, Mohawks of the Bay of Quinte

Tyendinaga, as part of the Mohawk Nation, is a healthy, sustainable Kanienkehà:ka community, built on and united by our language, culture, traditions, knowledge and history. We exercise our rights and responsibilities for the protection of and respect for our people, our land, our resources and the environment.
It is important that Ontario College of Teachers and affiliate schools recognize and acknowledge the significance of accrediting First Nations Languages as Additional Qualification courses.

Teachers have the right and responsibility to further qualify themselves in their specialized field of study as do our French language teachers.

Interested students who have a passion to learn the language and may want to pursue a teaching career should have the opportunity to continue studying at the post-secondary level and beyond and be acknowledged for their specialist for part 1, 2 and 3.

As a classroom Mohawk language teacher and former student of the ATEP Bachelor of Education program please consider all the hard work and time we put into learning and implementing the language for our learners. Recognition of that hard work would be greatly appreciated.

Sincerely,

Brittany Procurier

B.A.,B.E.d, OCT
November 21, 2017

Callie Hill
Executive Director
Tsi Tyonnheht Onkwawenna
Language and Cultural Centre
1658 York Road,
Kenhteke, Ontario  K0K 1X0

To Whom It May Concern:

Re: Letter of Support for “Certificate in Mohawk Language” Program

I am writing to express my full support for the joint partnership between Tsi Tyonnheht Onkwawenna Language and Cultural Centre and Queen’s University in relation to the development of an accredited program of study resulting in a “Certificate in Mohawk Language”. This language certificate will greatly benefit this and future generations of Mohawks of the Bay of Quinte members, in a myriad ways.

I believe the time has long since passed for a Mohawk Language program of this kind. On February 3, 1973, the Minister of Indian Affairs and Northern Development gave official recognition to the position of the National Indian Brotherhood, in its paper “Indian Control of Indian Education” which espoused, “…the development of First Nation language immersion curricula, the training of First Nation language immersion teachers, and the promotion of First Nation languages in our community and in mainstream education institutions…”

I am an educator with over thirty years of experience working with First Nations communities and provincial school boards. The majority of my experience, some twenty-five years, has been with Mohawks of the Bay of Quinte as a teacher, vice-principal and principal of Quinte Mohawk School. I have worked closely with all community agencies on Tyendinaga. As a member of the Mohawks of the Bay of Quinte First Nation, I understand the strong desire to remove obstacles and barrier to the acquisition of a Mohawk language certification program for Tyendinaga Mohawks.

As the past principal of Quinte Mohawk Elementary School and the current Director of Federal Schools, I can attest to the need for trained and certified Mohawk language speakers who will be strong and vibrant proponents of the revitalization of the Mohawk language for the students and staff of QMS.
This project needs to happen so the Department and neighbouring provincial school boards will have fully qualified language teachers, through what I am confident will be a rigorous program. I am confident in expressing my concurrence with the Callie Hill, Executive Director of Tsi Tyonnheht Onkwawenna when she states that a program such as this will reflect “the voice of the people in their own language in their own Mohawk words.”

This program will contribute a great deal to reaching the dreams of the National Indian Brotherhood, forerunner to the Assembly of First Nations, and many over these many decades who have worked tirelessly to see the language revitalized and once again reach prominence in the community. I eagerly anticipate the program coming into fruition.

If you should wish to further discuss my unconditional support of this venture between Tsi Tyonnheht Onkwawenna and Queen’s University, please feel free to contact me at 613-885-0869

Respectfully yours,

Kathleen Manderville
Director of Federal Schools
December 5, 2017

To Whom It May Concern,

My name is Taylor Bluhm and I am currently in my third year of the nursing program here at Queen’s. However, more importantly I am Mohawk first nation from Six Nations of the Grand River. I was approached from the Languages, Literatures and Cultures Department and was informed of the proposed Certificate in Mohawk Language and Culture. I, myself being of Mohawk ancestry see this as a significant step forward towards regaining our language that has been lost over the years. I believe this to be a vital certificate that needs to be offered at Queen’s University. By integrating this certificate into the university, you are showing myself as well as other Mohawk people that you are honoring the rich language and culture that accompanies the ancestry, and that you want to go forth with reconciliation by making sure people know the truths of colonialism in Canadian culture. Partnering with Tsi Tyonnheht Onkwewenna is also a great way to ensure that the program is being run/taught by as many Mohawk people as possible to ensure that students are getting the full experience from this program. By including this group, it will further increase the knowledge students will obtain after finishing the certificate and allow them to appreciate the culture that surrounds this.

I would like to finish off, by kindly saying as a student at Queen’s and as a Mohawk woman, this certificate is extremely important in going forward with the efforts in decolonizing Queen’s University.

In Solidarity,

Taylor Bluhm
MOHK 201  Intermediate Mohawk Language & Culture

Course Description
Kanyen’kéha (the Mohawk Language) is almost an entirely verb based language. In this course, students will start to manipulate the verb beyond simple tense: adding features such as the repetitive, distributive, benefactive, and locatives. This will make the language more useful in every day situations. Students will continue to develop their language skills beyond the basics and be able to interact meaningfully in greater number of daily activities, describing their morning routine, food and food preparation, evening activities, sports and recreation, etc.

Students will work with a written portions in Kanyen’kéha of the Kayanerenhkó:wa (the founding constitutional document of the Six Nations Confederacy) and the Creation Story to further their understanding of both the Language and the stories themselves. The will become familiar with the major elements of both.

Audio and video resources of elder speakers will be utilized to give students access to fluent speakers to build the own proficiency as they start to identify techniques whereby the can “teach themselves” in whichever situation they encounter the language.

Learning Outcomes
To complete this course students will demonstrate their ability to
1. demonstrate an ability to participate in conversations about daily life, including the various activities of the day, wants and desires, needs and family life, and seasonal activities on-the-land.
2. recognize and use Indigenous Ways of Knowing to discuss the foundations for a contemporary understanding of a Mohawk national identity
3. interpret and articulate the implications for Mohawk / Settler relations today in English, and in Mohawk when possible
4. identify the major grammatical and morphological features of the language and explain their purpose
5. explain Mohawk language concepts in the language

Course Content
1. Possessive Prefixes
2. Pre-prefixes: Iterative (repetitive), Cislocative & Translocative directionals
3. Noun-Verb Incorporation
4. Distributives
5. Transitive Pronominal Prefixes and Benefactive Suffixes
6. The Great Law

Some of these are advanced features that a student at this level won't be able to use with any confidence. The aim of covering them in this course would be to introduce their existence, to learn how to identify them in speech based on their form and position within the verb and to determine their meaning when they are encountered
Assessment

1. **Combination Vocab / Grammar Quizzes - Written and Oral (30%)**
   Students will begin to be assessed on their oral comprehension and their ability to manipulate grammatical features in speech.

2. **Daily Journal Writing (20%)**
   Students will document their experience of learning, identifying weaknesses in vocabulary and grammar. The journal may simply take the form of listing the various activities of the day and people encountered, and where they need to improve their language abilities.

3. **Final Story Based Assessment (30%)**
   This final assessment will discern the student’s ability to use the language on the fly. Students will develop a story text during the course which they will memorize. During the final evaluation, the student will be asked to change the story in different ways: the person it is happening to, the time of day, the location, etc., and will be responsible for retelling their story with the changes.

4. **Final Project (20%)**
   Students will submit a final project (either written or creative) that documents the learning they’ve done in the class.
MOHK 202  Oral Mohawk Language

Course Description
This course will finalize the transition from reading and writing to hearing and speaking in Kanyen’kéha (the Mohawk Language). It will also give students the tools necessary to learn and improve their abilities in conversation with first language speakers (either in person, in recordings, or in written materials). This approach to structured learning will help turn every day interactions into opportunities to improve one’s own ability and will develop more native like speech patterns. Furthermore, it will also prepare students to continue learning after the completion of the course when they will have to learn outside of the structure of a classroom.

Through the medium of story telling, students will build their vocabulary and confidence to use their language as it develops. Students will be given situations in which they can speak with other speakers / learners in natural conversation. This is one of the hardest things to do as a student as they transition from “learner” to “speaker.”

Learning Outcomes
To complete this course students will demonstrate their ability to
1. use intermediate language skills according to guidelines of the American Council on the Teaching of Foreign Languages (ACTFL)
2. demonstrate spontaneous language generation (unscripted language) through the use of dialogue, story telling and classroom conversation
3. in English and Mohawk demonstrate application of knowledge of Mohawk culture, traditions and worldviews on historical and contemporary topics
4. create (and use) a personal language learning plan that makes use of available resources to further independent language study
5. work collaboratively to increase language skills in a spoken environment

Course Content
1. Great Law (selected portions in Mohawk, others in translation)
2. Creation Story (selected portions in Mohawk, others in translation)
3. Primary Source Material (elder language speech / recordings) and teaching skills for how to use them in learning. Material available from the Indigenous Language Institute, Santa Fe, NM.
4. Vocabulary development through dialogue (using the list of 500 common words)
Assessment

1. Presentation of a Story (20%)
   The student will choose a story (traditional or contemporary) and present it orally to the class. The student will identify and become familiar with unique vocabulary appropriate to their story and will share this vocabulary with the class. A written version of the story will accompany the oral presentation. Students may choose to present a creative interpretation of the story (in place of the written version), but must still deliver an oral version of the story in class.

2. Weekly Journal (20%)
   Students will have the opportunity to work with primary source material of elder language speech (approx. 30-45 minutes of audio / week). They will keep a weekly journal of their experience identifying the major themes and researching the new vocabulary they encounter. Students can also use the journal to identify areas that need further development in the own language keeping track of words that they need to find and concepts they need to study further. The journals will help the instructor identify areas where the class may need to refocus.

3. Final Reflection Paper (20%)
   The final reflection paper is an opportunity for the student to reflect upon their experience of learning the language. How has learning the language impacted their life? Has it changed anything about they way they think? What do they identify as the next steps in the learning journey?

4. Oral Evaluation (40%)
   Students will be evaluated using the Intermediate standard of the American Council of the Teaching of Foreign Langauges (ACTFL). The assessments will be conducted following the final class by an interviewer who has undergone the ACTFL training. A copy of the assessment will be provided to the student.
### Appendix A: Mapping Course Learning Outcomes to Certificate Learning Outcomes

<table>
<thead>
<tr>
<th>Certificate Learning Outcomes</th>
<th>MOHK 101</th>
<th>MOHK 102</th>
<th>MOHK 201</th>
<th>MOHK202</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. DLE Depth and Breadth of Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Develop skills in Mohawk language at the beginning to intermediate level using appropriate vocabulary and linguistic structures. (<em>Demonstrated in Mohawk language</em>)</td>
<td>1, 3</td>
<td>1, 2</td>
<td>1, 4, 5</td>
<td>1, 2, 4</td>
</tr>
<tr>
<td>B. Describe the significant elements of Mohawk history, tradition and worldview from ancient times to the contemporary issues facing Mohawk people. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>2, 4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>2. DLE Knowledge of Methodologies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Apply the principles of Indigenous methodologies and Indigenous Ways of Knowing (see Appendix A) to the exploration of topics from historical and contemporary perspectives. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td><strong>3. DLE Application of Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Identify and apply knowledge of Mohawk language, including appropriate vocabulary and linguistic structures, in the four language skills (listening, reading, speaking, writing) on limited topics. (<em>Demonstrated in Mohawk language</em>)</td>
<td>1, 3</td>
<td>1, 2</td>
<td>1, 4, 5</td>
<td>1, 2, 4</td>
</tr>
<tr>
<td>B. Apply knowledge of Mohawk culture to articulate a diversity of perspectives regarding Mohawk histories, traditions and experiences and take part in on-the-land seasonal activities. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>2, 4</td>
<td>3</td>
<td>2, 3</td>
<td>3</td>
</tr>
<tr>
<td><strong>4. DLE Communication Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Effectively communicate in the Mohawk language from beginning to intermediate level (both in range and accuracy) using the four language skills (listening, reading, speaking, writing). (<em>Demonstrated in Mohawk language</em>)</td>
<td>1, 3</td>
<td>1, 2</td>
<td>1, 4, 5</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
<td>B. Communicate in respectful and culturally authentic ways with confidence on cultural, historical and contemporary topics. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td>2, 4</td>
<td>3, 4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>5. DLE Awareness of Limits of Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Demonstrate an awareness of the limits of their language ability and devise a plan for future self learning. (<em>Demonstrated in English</em>)</td>
<td></td>
<td></td>
<td>4, 5</td>
<td>2, 4</td>
</tr>
<tr>
<td>B. Demonstrate an awareness of cultural perspectives and how this might affect interpretations of Mohawk history and contemporary experiences. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td></td>
<td></td>
<td>2, 3</td>
<td>2, 3</td>
</tr>
<tr>
<td><strong>6. DLE Autonomy and Professional Capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Ability to apply knowledge of Mohawk culture and experience for academic, professional and personal contexts. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td></td>
<td></td>
<td>2, 3</td>
<td>2, 3, 5</td>
</tr>
<tr>
<td>B. Develop an awareness of the requirements for building ethical relationships between Indigenous people and communities and respectful ways of engaging with Indigenous cultures, histories, and traditions. (<em>Demonstrated in English and in Mohawk language</em>)</td>
<td></td>
<td></td>
<td>2, 3</td>
<td>3, 5</td>
</tr>
</tbody>
</table>
Course Learning Outcomes

MOHK 101
1. Using the standard Mohawk orthography identify and pronounce Mohawk sounds & sound combinations.
2. Relate the significance of the ceremonial speech to the contemporary reality of Mohawk life in Canada.
3. Apply appropriate Mohawk grammar and morphology in the four language skills.
4. Describe Mohawk history, traditions, stories, and contemporary issues facing the Kanyen’kehá:ka.

MOHK 102
1. Effectively using Mohawk sounds/sound combinations and utilizing the standard Mohawk orthography.
2. Apply appropriate introductory Mohawk grammar and morphology in the four language skills.
3. Examine the issues of identity and nationhood in the Canadian context from an "insiders" perspective.
4. Effectively communicate in an oral format current issues impacting the Mohawk people.

MOHK 201
1. Demonstrate an ability to participate in conversations about daily life, including the various activities of the day, wants and desires, needs and family life, and seasonal activities on-the-land.
2. Recognize and use Indigenous Ways of Knowing to discuss the foundations for a contemporary understanding of a Mohawk national identity.
3. Interpret and articulate the implications for Mohawk / Settler relations today in English, and in Mohawk when possible.
4. Identify the major grammatical and morphological features of the language and explain their purpose.
5. Explain Mohawk language concepts in the language.

MOHK 202
1. Use intermediate language skills according to guidelines of the American Council on the Teaching of Foreign Languages (ACTFL).
2. Demonstrate spontaneous language generation (unscripted language) through the use of dialogue, story telling and classroom conversation.
3. In English and Mohawk demonstrate application of knowledge of Mohawk culture, traditions and worldviews on historical and contemporary topics.
4. Create (and use) a personal language learning plan that makes use of available resources to further independent language study.
5. Work collaboratively to increase language skills in a spoken environment.
Appendix B

Indigenous ways of knowing, Indigenous Pedagodies, and Indigenous Research methodologies*

In addition to a general understanding of research methodologies for academic disciplines in keeping with the UUDLES principles and the QUQAPS process, Core and Option courses will expose students to additional competencies in the specificity of Indigenous Ways of Knowing. In its Aboriginal Postsecondary Education & Training Policy Framework, Ontario’s Ministry for Training, Colleges and Universities recognizes the importance of Indigenous Ways of Knowing for postsecondary education:

The Government of Ontario recognizes that Aboriginal worldviews and cultures and the diversity of Aboriginal knowledge systems are valid ways of knowing the world which have a place in the development and delivery of postsecondary education and training programs, services, curriculum and evaluation mechanisms. The interchange of knowledge between Aboriginal and non-Aboriginal ways of knowing the world enriches the education of all Ontarians.
The *Aboriginal Postsecondary Framework* document further recognizes the benefits of sharing Aboriginal knowledge systems with non-Aboriginal learners:

The Ministry of Training, Colleges and Universities respects the importance and contributions of Indigenous Knowledge within postsecondary education and training settings. We also recognize the benefits of sharing Aboriginal knowledge systems, perspectives and world views with non-Aboriginal learners, faculty members of postsecondary education institutions, skills development and training service providers and delivery agents, and, more broadly, with the general public.

Indigenous ways of knowing are defined in various ways, and will be included in the Certificate to the extent that individual courses instructors deem appropriate. “Sharing Voices for a Shared Vision of a Shared Future,” a presentation made during the Vision Gathering Day (February 2011) as part of the Equity process which led to the Equity Report, makes the following statements about Indigenous ways of knowing:

- Where Western approaches conceive of “knowledge as an individual entity...something that is gained and owned by an individual... Indigenous knowledge goes beyond the idea of individual knowledge to the concept of relational knowledge” (Steinhauer, 71).

- Indigenous ways of knowing are based on integrating and synthesizing direct experience, observation, and reflection (Sinclair, 4; Goulet, 58; Weber-Pillwax, 169; Steinhauer, 76).

- Indigenous knowledge is the culmination of generations of experience and insight passed down through oral tradition... holistic in nature incorporating spiritual, ecological, human and social experiences into one understanding of Native people’s place in the universe... (Weber-Pillwax, 169).

- Indigenous epistemologies and research approaches are not static or institutionalized because they are always incorporating and / or synthesizing new understandings and methodologies based on: “fluid and dynamic approaches that emphasise circular and cyclical perspectives” (Weber-Pillwax, 171).

- Indigenous ways of knowing are based on integrating and synthesizing direct experience, observation, and reflection (Sinclair, 4; Goulet, 58; Weber-Pillwax, 169; Steinhauer, 76).

“Sharing Voices for a Shared Vision of a Shared Future” further states that in Indigenous pedagogies and learning methodologies, education and research are considered a spiritual journey and the approach is driven by four general principles (Louis, 133-134: Steinhauer, 72):

- *relational accountability*, meaning everything is related – and we are accountable to all our relations;
- *respectful representation* of oneself and others inside and outside of the Queen’s community
- *reciprocity*, all aspects of the community must realize adequate benefits;
- *rights and regulation*, to ensure that learning & research processes are non-extractive and follow from Indigenous protocols. (e.g.: ownership, control, access & possession)

Indigenous ways of knowing are passed down through the transmission of language, clan and family structures, historical knowledge, and spiritual traditions. By framing Indigenous ways of knowing in a traditional academic institution, there is a potential to perpetuate the conditions of the colonial project. The Certificate will therefore ask how courses and events associated with the Certificate might accounted for the specificity of Indigenous Ways of Knowing, including Indigenous languages, custom and culture, notions of self embedded in community, connection to the land, holistic worldview, and oral forms of communication.

The Certificate in Mohawk Language and Culture seeks to integrate both Western academic standards and procedures for achieving excellence in postsecondary education as well as Indigenous ways of knowing and learning. Every effort will be made to ensure that the Certificate in Mohawk Language and Culture conforms to the principles of UUDLES as outlined in the QUCAPS process. To the extent deemed appropriate and where deemed feasible by the course instructors, Indigenous ways of knowing will be integrated at the level of knowledge production, skill development, assessment criteria, and evaluation processes.
Experiential learning is an essential component of Indigenous ways of knowing. As such, wherever possible, experiential learning opportunities will be integrated into the Core courses, as well as in the extracurricular events facilitated by FDASC, in particular exposure to local Indigenous communities, including contact with Elders and other community members, and learning-by-doing development of traditional skills and the arts. An example of experiential learning might be to have students of Mohawk LLCU 101/3.0 learn about traditional herbs while learning the specific vocabulary and protocols around ceremonies. Experiential learning components of the Core courses will be assessed partially on the basis of regular student attendance and student participation.

*The WGoICKR gratefully acknowledges Cathy Willis for preparing “Sharing Voices for a Shared Vision of a Shared Future,” a presentation made during the Vision Gathering Day (February 2011).
Mohawk Language and Culture – Certificate

MOHK-C-MOK

Subject: Administered by the Department of Languages, Literatures and Cultures in partnership with Four Directions Aboriginal Student Centre and Tsi Tyonnheht Onkwawenna Language and Cultural Centre.

Plan: Consists of 12.0 units as described below.

Program: The Plan will lead to a Certificate in Mohawk Language and Culture.

<table>
<thead>
<tr>
<th>1. Core</th>
<th>(12.0 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>6.0 units</td>
</tr>
<tr>
<td>B.</td>
<td>6.0 units</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Option</th>
<th>(0.0 units)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3. Supporting</th>
<th>(0.0 units)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>4. Additional Requirements</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>5. Substitutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
</tr>
<tr>
<td>B.</td>
</tr>
</tbody>
</table>
# Program Name: Certificate in Mohawk Language & Culture

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Intake</td>
<td>15.00</td>
<td>-</td>
<td>15.00</td>
<td>-</td>
<td>15.00</td>
<td>-</td>
<td>15.00</td>
</tr>
</tbody>
</table>

## Enrolment

- Returning Students Year 2
  - 12.00
- Returning Students Year 3
  - 12.00
- Returning Students Year 4
  - 12.00

## Total Enrolment

|                | 15.00  | 12.00  | 15.00  | 12.00  | 15.00  | 12.00  | 15.00  |

**Notes:**
- Annual intake of 15 students taking 2 years to complete, with a student intake every two years.
- Certificate is 12 units.
- Students will be external to Queen's (distance students), so all units are incremental.
- Assumes attrition rate of 20% in 2nd year of study.

<table>
<thead>
<tr>
<th>% of Program taken in</th>
<th>Year 1</th>
<th>0.50</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Program taken in</td>
<td>Year 2</td>
<td>0.50</td>
</tr>
<tr>
<td>FFTE</td>
<td></td>
<td>0.40</td>
</tr>
</tbody>
</table>

## Enrolment Domestic vs International

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

## Enrolment Reductions if any Required to Accommodate Growth in New Program

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

## Total Reduction

|                | - | - | - | - | - | - | - | - | - |

**Need 2.9% increase for inflation**

<table>
<thead>
<tr>
<th></th>
<th>2.90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic program fees</td>
<td>$ 6,760</td>
</tr>
<tr>
<td>International program fees</td>
<td>$ -</td>
</tr>
</tbody>
</table>
### Domestic

<table>
<thead>
<tr>
<th></th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>20,280</td>
<td>16,694</td>
<td>21,473</td>
<td>17,677</td>
<td>22,737</td>
<td>18,717</td>
</tr>
<tr>
<td>Non-tuition</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Total Fees</td>
<td>20,280</td>
<td>16,694</td>
<td>21,473</td>
<td>17,677</td>
<td>22,737</td>
<td>18,717</td>
</tr>
</tbody>
</table>

### International

<table>
<thead>
<tr>
<th></th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Non-tuition</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Program fee</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
</tbody>
</table>

### Assumptions:

- Assumes no BIU Grant Revenue Assumption
- Recovery to the University Fund: 3.25% 4.50% 4.50% 4.50% 4.50%
- Shared Services Attribution Cost per FTE: $512
- New Faculty Positions Required: na

### Revenue

<table>
<thead>
<tr>
<th></th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition revenue</td>
<td>20,280</td>
<td>16,694</td>
<td>21,473</td>
<td>17,677</td>
<td>22,737</td>
<td>18,717</td>
</tr>
<tr>
<td>Non-tuition revenue</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Government grant revenue</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td></td>
<td>20,280</td>
<td>16,694</td>
<td>21,473</td>
<td>17,677</td>
<td>22,737</td>
<td>18,717</td>
</tr>
</tbody>
</table>

- Gifts and grant
- University Fund Recovery on Revenues
- University Investment From Provost Office
- Total net new revenue from proposed program: 94,621

### Expenditures

- Increase for inflation: 2.00%
- Academic salaries: 10,000
### Direct program costs

<table>
<thead>
<tr>
<th></th>
<th>20,000</th>
<th>20,400</th>
<th>20,808</th>
<th>21,224</th>
<th>21,649</th>
<th>22,082</th>
<th>22,523</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjunct Salaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Salaries &amp; Professional Fees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA - Salaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program delivery / facility rental</td>
<td>4,000</td>
<td>4,080</td>
<td>4,162</td>
<td>4,245</td>
<td>4,330</td>
<td>4,416</td>
<td>4,505</td>
</tr>
<tr>
<td>Elder in Residence</td>
<td>2,000</td>
<td>2,040</td>
<td>2,081</td>
<td>2,122</td>
<td>2,165</td>
<td>2,208</td>
<td>2,252</td>
</tr>
<tr>
<td>Travel</td>
<td>4,000</td>
<td>4,080</td>
<td>4,162</td>
<td>4,245</td>
<td>4,330</td>
<td>4,416</td>
<td>4,505</td>
</tr>
<tr>
<td>Books and materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scholarships and bursaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other salaries and benefits</td>
<td>4,400</td>
<td>4,488</td>
<td>4,578</td>
<td>4,669</td>
<td>4,763</td>
<td>4,858</td>
<td>4,955</td>
</tr>
<tr>
<td>Marketing</td>
<td>3,000</td>
<td>3,060</td>
<td>3,121</td>
<td>3,184</td>
<td>3,247</td>
<td>3,312</td>
<td>3,378</td>
</tr>
</tbody>
</table>

Total expenses: 37,400

$75/day X 26 days:

- Program Delivery: 4,000
- Elder in Residence: 2,000
- Travel: 4,000
- Benefits: 22%
- Marketing: 3,000

### Attribution of Central Shared Services

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>7,680.00</td>
<td>6,144.00</td>
<td>7,680.00</td>
<td>6,144.00</td>
<td>7,680.00</td>
</tr>
</tbody>
</table>

Total expenses: 37,400

### Total expenses

|                          | 37,400   | 38,148   | 38,911   | 39,689   | 40,483   | 41,293   | 42,118   |

### Net Revenue

|                          | 57,221   | 52,795   | 48,916   | 46,048   | 48,551   | (29,562) | (26,807) |

Cumulative Surplus/(Deficit)

|                          | 57,221   | 110,016  | 158,932  | 204,980  | 253,531  | 223,969  | 197,162  |

Cumulative Surplus/(Deficit): 6,144.00 7,680.00
This module is to be completed by the Academic Units in consultation with the Faculty Office (s) and/or School of Graduate Studies as appropriate as well as the Office of Planning and Budgeting.

**Budget Module**

<table>
<thead>
<tr>
<th>Summarize the additional resources needed to implement the program under the following headings (where applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty (e.g. number of 0.5-credit courses)</td>
</tr>
<tr>
<td>Staff (include number or fraction of FTEs)</td>
</tr>
<tr>
<td>Teaching Assistants (include number of TA hours)</td>
</tr>
</tbody>
</table>

**Other Non-Academic University Services**

*Indicate which of the following Services will be needed. Provide details as needed.*

| Financial Services | Minimal additional resources are anticipated as distance student enrollments are small |
| Human Resources | Minimal support will be required with the hiring faculty |
| Advancement | No support required |
| Student Services | Incremental based on new enrolment. Same level of service as for students enrolled in other undergraduate certificate programs. These students may increase participation in Career Services and Counseling, however we expect this to be a minimal impact. |
| Residences | No additional resources are anticipated as the program will be delivered off-campus |
| Administrative services | Incremental based on new enrolment, development of certificate application system, creation of new program codes etc., student tracking and completions |
| Other | |

Last Revised: February 07, 2018
## Budget Module and Narrative

Complete the budget template found on the QUQAP website in consultation with the Faculty Financial Officer and the Registrar detailing one-time expenses (monies that will only be required once for start-up), base funds (year after year expenses), all other expenses and revenues from all sources for each year until steady state is reached. Consultations with the Office of Planning and Budgeting are also recommended.

Include a narrative to accompany the budget template [maximum 2 pages; use of subheadings suggested].

The program has been designed to best utilize existing staff and faculty resources. However, some additional resources will be required to mount the program, including investments in adjunct faculty $20,000 annually plus $4,000 a year for a faculty rental in Tyendinaga. In addition, the program will require a small investment of roughly $2000 annually for an Elder in Residence and $4000 annually for faculty to travel to and from Tyendinaga. To support the marketing of the program, $3,000 will be required annually.

If other sources are needed, list the sources and indicate if the funds have been applied for and if they have been secured.

## Net Impact of the Proposed Program

Summarize any other resource or funding implications of the proposed program.

Revenue for this proposed program will come primarily from the new tuition fees. The University’s Provost has also committed $375,000 over 5 years of funding ($75,000 a year). It is anticipated that the proposed program will attract 15 students annually (Taking the students 2 years to complete the program, with an intake every two years). As a precaution, we have built in a 20% attrition rate. As a result, it is anticipated that all initial start-up and administration costs will be recovered in Year 1 and a net positive revenue to the University of approximately $57,000 in Year 1 and $48,500 in Year 5. To be conservative, we have extended the budget model out 7 years and have noted that in order for the Certificate to remain sustainable, an intake of about 40+ students will be required to cover all of the costs after the $75K per year from the Provost ends (unless a new funding source is found by that time (potentially BIU funding), or the Provost renews the commitment). The Faculty Office and the Department will monitor enrollments and the program’s financial sustainability closely.

Note: This model does not reflect BIU funding from the Ministry.
NEW UNDERGRADUATE FOR-CREDIT CERTIFICATE PROPOSAL

Expedited Approval Submission Form

Once the pre-approval process for a new undergraduate program is completed, and permission obtained from the provost’s office to submit a full proposal for an expedited approval, this template is to be used for a new for-credit Senate-approved undergraduate certificate. This is normally defined as a coherent subset of an existing degree program. New undergraduate certificate submissions must receive the approval of the appropriate Faculty Board(s) (or equivalent) and the provost prior to submission to the secretary of the Senate Committee on Academic Development (SCAD). SCAD will make its recommendations to Senate regarding the certificate’s approval. Academic units are strongly advised to contact the appropriate faculty associate dean(s) with any questions that arise during this proposal development. Please refer also to the Guide to QUQAP.

NOTE: the textboxes in this template will expand as needed

Part A – General Summary

<table>
<thead>
<tr>
<th>Name of Proposed Certificate:</th>
<th>Queen’s Entrepreneurship and Innovation Certificate (QEIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Unit(s):</td>
<td>Dan School of Drama and Music</td>
</tr>
<tr>
<td>Proposed Start Date:</td>
<td>Fall 2018</td>
</tr>
<tr>
<td>Type of Study:</td>
<td>Part time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Information (1)</th>
<th>Contact Information (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Craig Walker</td>
</tr>
<tr>
<td>Title:</td>
<td>Director</td>
</tr>
<tr>
<td>Unit:</td>
<td>Dan School of Drama and Music</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:craig.walker@queensu.ca">craig.walker@queensu.ca</a></td>
</tr>
<tr>
<td></td>
<td>Sidneyeve Matrix</td>
</tr>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Title:</td>
<td>Academic Coordinator, QEIC</td>
</tr>
<tr>
<td>Unit:</td>
<td>Dan School of Drama and Music</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:matrixs@queensu.ca">matrixs@queensu.ca</a></td>
</tr>
</tbody>
</table>

Executive Summary (1 page maximum suggested – minimum font size 11)

Briefly summarize the rationale for introducing this new undergraduate certificate and how it is consistent with the university’s Academic Plan and Strategic Framework as well as the academic goals of the faculty/school. Briefly describe: the educational goals and learning outcomes; internal or external collaboration required to deliver this program; how the program relates to the existing undergraduate program(s); what is the target market; how the relevant stakeholders (e.g. faculty, staff, students) were consulted in preparing the proposal; and additional resources required.

This project is to develop a new fully-online Certificate program in entrepreneurship and innovation to be launched in Fall 2018. A uniquely collaborative academic initiative, this project brings together participants from 9 Queen’s Faculties, Schools, Departments and service units to develop, design and deliver the program. Housed in the Faculty of Arts and Science, the proposed Certificate in Entrepreneurship and Innovation Program will be a full undergraduate academic credential reflecting a strong cross-disciplinary and pan-university theoretical and practical background in entrepreneurial thinking and innovation strategies, coupled with active learning experiences.

As the lifecycle of industries shortens, graduates are entering an increasingly dynamic workforce. Innovation and entrepreneurial skills are essential to succeeding in this shifting economy. This new Certificate program will enable learners to develop an entrepreneurial mindset, and to execute intrapreneurial innovation (i.e. innovation that takes place
within a large corporation by its employees) as part of an organizational team working within the STEAM (Science, Technology, Engineering, Arts, and Mathematical) disciplines, industries, and sectors. The online delivery model will make this innovative program accessible to learners across Canada and around the world. Graduates will earn a recognized credential that demonstrates their skills in research and ideation, creativity and problem solving, communication and collaboration -- proficiencies required for the innovation and entrepreneurship process.

Learners pursuing the Certificate will have the chance to study and practice skills in marketing and promotion, and finance and business planning. They will study information and digital resource management, design thinking, business communication, and how to assemble and manage a strong, competent and diverse team. Learners will practice brainstorming, researching, designing, and presenting a new product or service to peers, end users, leadership teams, potential investors, and to online and digital publics. Participants will actively collaborate online in multidisciplinary teams to pursue original entrepreneurial, social innovation, and corporate innovation initiatives with real and lasting impact.

Learners will be able to achieve the proposed Certificate entirely through online study, providing access and flexibility to a wide range of learners: current undergraduates, distance learners, working adults, and international learners in Canada and abroad. This Certificate will be open to all registered full- and part-time residential and distance undergraduate students in 2nd, 3rd and 4th year, and to visiting and exchange students studying at Queen’s.

Certificate Structure

Although it is designed to be completed 100% online, the Certificate can also be achieved by completing a combination of online and on-campus courses.

The program will comprise 15.0 units of undergraduate courses, including two core courses and three option courses. Arts and Science students who are enrolled in a degree program as well as the certificate program may count up to 6.0 units of certificate courses toward the requirements of both the Certificate and their degree.

Core Courses: 2 required [(o) = available online]

Students will take both of the following courses:
(o) ENIN 200/3.0 Foundations of Entrepreneurship
(o) ENIN 400/3.0 Innovation Design Sprint

Option Courses: 1 required [(o) = available online]
Students must take one (but are permitted to take both1) of the following courses:
(o) ENIN 301/3.0 Creative Entrepreneurship
(o) CHEE 302/3.0 Technical Entrepreneurship2

---

1 Students who want to learn about creative and technical entrepreneurship may complete and count both ENIN 301/3.0 and CHEE 302/3.0 toward the 15.0 credits required for this Certificate. For this reason, ENIN 301 and CHEE 302 are designed as complementary, with no significant overlap in their coverage of the ins-and-outs of entrepreneurship. Students who opt to complete and count both ENIN 301 and CHEE 302 only need to complete 3.0 units from the list of eligible "Innovation-Centric" courses below.

2 Students may substitute CHEE 310/3.0 Engineering Innovation & Entrepreneurship for CHEE 302/3.0 Technical Entrepreneurship. These courses are both being created by, and will be delivered by Dr. Jim McLellan, thus the content will partially overlap, by design. Students may count only one of these courses toward their QEIC plan.
“Innovation-Centric” Option Courses: 2 required [(o) = available online]

Students will take two\(^3\) of the following courses:

(o) BMED 271/3.0 Global and Population Health
(o) BMED 471/3.0 Advanced Global and Population Health
COCA 201/3.0 Computing and the Creative Arts
COMM 201/3.0 Introduction to Business for Entrepreneurs
(o) ENIN 140/3.0 Design Thinking
(o) ENIN 204/3.0 Public Relations
(o) ENIN 205/3.0 Innovation for STEAM
(o) ENIN 207/3.0 Explorations in Creativity
(o) ENIN 240/3.0 Explorations in Creativity
(o) ENIN 340/3.0 Thinking Inside the Box: Intrapreneurial Innovation Strategies
(o) IDIS 280/3.0 Interprofessional Practice in Healthcare
(o) LAW 204/3.0 Corporate Law
(o) WRIT 250/3.0 Writing in Business Contexts

Target Markets:

The Certificate program is designed for current full- and part-time undergraduate degree students in all Faculties and Schools at Queen’s, as well as for current and new distance students. We expect the following external and non-traditional audience segments will be interested in this new fully-online Certificate:

Part-time learners who see a 5-course certificate as more achievable than a full degree
Distance learners who prefer flexible, online program options
International learners interested in earning Queen’s credentials
Professionals and job-seekers in the market for online professional development opportunities
People in the workforce seeking to cultivate their entrepreneurial spirit by developing the knowledge and skills to start their own business
Lifelong learners seeking a learning network and additional/upgraded certifications and credentials

Stakeholder Support: Commitment of Academic Leaders

The program proposal for a fully-online version of the Certificate in Entrepreneurship and Innovation Program has been endorsed by the Director of the Dan School of Drama and Music and the Dean of the Faculty of Arts and Science and received approval in principle by the Provost's delegate as part of the Queen’s University Quality Assurance Processes (QUQAP). This program proposal has also been endorsed by the Deans of the Faculty of Law and Faculty of Health Sciences and Smith School of Business.

The Certificate in Entrepreneurship and Innovation Program is a uniquely collaborative academic initiative. It will bring together a diverse participant group involved in designing and delivering courses including instructors from the Dan School of Drama and Music, the Faculty of Engineering and Applied Science, the Faculty of Law, the Smith School of Business, the School of Computing, the Dunin-Deshpande Queen’s Innovation Centre (DDQIC), the School of Medicine in the Faculty of Health Sciences, and the Faculty of Arts and Science Online. Our goal is to meet the needs of learners regardless of their location by offering multidisciplinary online courses in innovation and entrepreneurship that adhere to evidence-based best practice principles in online learning (Moore & Kearsley, 2011) and reflect the high quality of education associated with Queen’s University. Annual program evaluations will provide quantitative and qualitative data to guide our collaborative process.

---

\(^3\) When selecting classes from this “Innovation-Centric” options course list, students must meet all course prerequisites and departmental requirements for enrollment.
Alignment with Queen’s Academic Plan

The *Queen’s Entrepreneurship and Innovation Certificate* is designed to meet the academic mission of the University as outlined in our Academic Plan. The following paragraphs align the certificate program-level learning objectives with the four pillars that form the strategic framework of Queen’s Academic Plan.

I. The Student Learning Experience

The Queen’s Academic Plan specifies that in order to deliver a student learning experience based in an inquiry-based curriculum, it is integral that students develop excellent communication skills. The Plan mandates that:

“All Queen’s students should graduate with an ability to communicate their expertise effectively in speech and in writing. Communication skills thus need to be addressed early and receive continuing attention with writing requirements in every year of study. The capacities to read or listen with critical understanding and to reformulate are skills intimately connected with communication and learning, effective thinking, and academic integrity. Academic integrity needs to be fostered at its roots by enabling students in the communication skills and discursive conventions appropriate to their chosen fields of study.”

The courses selected as core and options for this *Certificate* each emphasize communication skills, including research activities and creative productions. Whether the focus is on writing, verbal presentations, videography, web and mobile app design, visual communication or graphic design, there is a “bias toward action” at the basis of the QEIC. Building on the Queen’s Academic Plan then, the *Certificate* will support students in developing their creative multimodal, multimedia communication skills, not just through oral and written narratives, but also via digital audio, video, visual, and online projects and platforms.

Inquiry-based learning encourages a learner to be self-directed in their learning through the process of question-driven research, evidence-based reasoning and critical thinking (Pedaste et al, 2012). Most of the courses included in this Certificate incorporate inquiry-based learning activities. For example, in ENIN 200/3.0 “Foundations of Entrepreneurship,” students will complete an individual Macro Change in Technology assessment, wherein they will choose any industrial, business, creative, or non-profit sector and identify a design problem that could be solved through innovation. Using the university's research holdings as well as the internet, students will conduct research to investigate the topic, the problem, the context, and the options. When this inquiry-based research is complete, learners will develop a proposed solution, describe and defend it, and communicate their views and ideas in a written report. This process of inquiry will be carefully scaffolded to build learners’ confidence and ensure success in asking solid research and design questions and self-direction to prepare students for their group project: System Analysis. Likewise, in ENIN 207/3.0 “Disruptive Technology,” the assignments will help learners to develop their inquiry skills, as they seek to understand both the positive and negative impacts of socially-driven disruptive/persuasive technologies in historical and contemporary perspectives. Through doing research, engaging in active discussion, and preparing, delivering, and responding to online presentations, students will uncover and learn about examples of how organizations have been influenced by a range of disruptive/persuasive technologies.

II. On Disciplinarity and Interdisciplinarity

The Queen’s Academic Plan specifies that students would have opportunities for “significant interdisciplinary encounters”, so as to prepare them for “successful careers and global citizenship.” Not only does this *Certificate* deliver an opportunity for students from several Faculties and Schools to collaborate, communicate, and connect, but it also exposes them to various cross-disciplinary communications modalities and methods. The *Certificate* encourages and welcomes students from outside Arts and Science to experience both creative and technical entrepreneurship models and methods courses, and to expand their disciplinary horizons by enrolling in classes that require them to practice hard skills including research, design, business writing, business planning, videography, or public speaking.

The *Certificate* will be a full undergraduate academic credential reflecting a strong cross-disciplinary and pan-university theoretical and practical background in entrepreneurial thinking and innovation strategies. Whether they are working in small teams, peer-reviewing each other’s ideas, models and prototypes, engaging in online brainstorming sessions to
create new products, services, and solutions, doing student-to-student pitch presentations, or participating in an online critique and digital poster session, QEIC students will experience numerous rich and diversified opportunities to consider, interact and engage across, and benefit from, disciplinary distinctions.

III. Reaching Beyond: Globalism, Diversity, Inclusion

As explained in the Queen’s Academic Plan, “research and teaching in the arts and humanities as well as language instruction have a central role in making sense of human experience.” To this end, the Certificate in Entrepreneurship and Innovation supports students to “find new ways to understand human interactions” while developing their empathetic research and design skills, to create human-centred, co-created, social innovations.

The core and option courses in this Certificate are distinguished by their use of collaborative learning methods to model and support the power of diversity and inclusion. This is an opportunity for students to work in teams to generate, evaluate and document the innovation, and deliver a clearly articulated and comprehensive overview of the fundamental concepts, key risks and opportunity that offer strategic value to stakeholders. By engaging with content in this way, learners are able to practice and improve their problem-solving, leadership, cooperation, and communications skills (Smith et al, 2011; Hou, 2012; Dingel & Wei 2014).

For example, in courses purpose-built for this Certificate, such as ENIN 200/3.0 “Foundations of Entrepreneurship,” ENIN 301/3.0 “Creative Entrepreneurship,” CHEE 302/3.0 “Technical Entrepreneurship”, and ENIN 400 “Innovation Design Sprint”, we utilize the principles of authentic learning to encourage learners to “think and behave as practicing members of the community”, which research suggests will improve their academic achievement and motivation for learning (Herrington & Oliver, 2000; Hickey, Moore & Pellegrino, 2001). Peer interaction is a key component of these courses, as they teach and use a collaborative approach to brainstorming, prototyping, and troubleshooting designs for products and processes. Students will have many chances to be peer-instructors as they grapple with difficult, thorny problems, and apply theoretical concepts and strategies in online synchronous and asynchronous learning spaces (Stanford 1994, 2001). In the process, learners will experience the free flow of ideas exchanged between team members who have diverse disciplinary perspectives and experiences. As a result, every learner will greatly benefit, expanding their creative and critical thinking and communication skills by listening, reflecting on, and learning from each other.

As Queen’s professors and students well know, the process of peer collaboration we are describing here enhances the student experience by encouraging deep learning (Topping, 2009).

Globalism, diversity, and inclusion mandates will also be addressed in this Certificate through research-based, multimedia course assignments, and peer-to-peer collaborative activities that reach across campus and around the world. Since many of the courses (including all of the core and option requirements) are delivered online, students will have the opportunity to work closely with peers who enrol from other universities in Canada and abroad. Moreover, online courses offer a unique experience for Kingston-based residential Queen’s students to study alongside and learn from part-time, mature, and distance students located elsewhere.

IV. Health, Wellness and Community

The Queen’s Academic Plan stresses the importance of community and fostering a culture of support and inclusion, to ensure that all stakeholders are able to take “proper advantage of the academic experiences available in the University,” and “contribute their own unique perspectives and innovation to Queen’s.” There are several ways this Certificate addresses these goals. First, the four required/option courses (ENIN 200/3.0, ENIN 301/3.0, CHEE 302/3.0, ENIN 400/3.0) align with the philosophy of inclusive information and technological design. From taking online accessibility seriously, to supporting students to complete user-centred research projects, to collaborating on social good initiatives and innovations, to building assignments and a course management onQ/Brightspace portal using best practices in universal user experience design — the proposed Certificate will provide students with a foundation in inclusive communication, research design and business practice.

Secondly, many of the courses included in this Certificate program are configured with online sections, on-demand resources, and asynchronous group collaboration activities. In so doing, these courses leverage educational and multimedia technologies to increase their accessibility for students located near and far, with busy lives, competing commitments, diverse needs, and individualized learning preferences. Students will be supported to form personal learning networks as they hone their entrepreneurial skills online and off.

Finally, decades of cross-disciplinary research indicate that creativity is a key component of intellectual health and wellness. Importantly then, the innovative projects students will complete while engaged in this certificate are certain to
increase both their creative confidence and sense of self-efficacy. Whether they are honing their hard skills to research and design videos, business plans, websites or wireframes, apps or advertisements, infographics or essays, pitches, prototypes, presentations or posters, students will be challenged to expand their creative competencies. Such activities involving self-expression, ideation, and innovation are widely recognized as essential to a motivated, engaged and inspired learning community, citizenry, and culture.

Part B – Evaluation Criteria

Part B is to be completed by the unit/faculty.

In accordance with Queen’s University Quality Assurance Processes (AP), the criteria should be regarded as the minimum criteria upon which the new program submission will be assessed. Further information can be found in the Queen’s University Quality Assurance Processes.

1. Introduction

1.1 List the objectives of the certificate and specify the anticipated learning outcomes and career paths. [Refer to UDLEs, Appendix 1 QUQAP].

Educational Goals and Learning Outcomes:
On completion of the Queen’s Entrepreneurship and Innovation Certificate, graduates will:

- Approach situations with an entrepreneurial mindset, finding opportunities in, and novel solutions to, problems in the business, technology, engineering, creative, social, and health sectors;
- Collaborate effectively with clients and colleagues to find, define, examine and assess problems;
- Apply a range of entrepreneurial and analytical approaches to multi-sectoral problems;
- Apply relevant digital technological literacies for online research, design, and communication;
- Implement research skills required for research, communication, and digital design to enhance and expand technological literacies; and
- Communicate design solutions, data and information visually and verbally, using appropriate graphical forms.

The courses included in the Certificate include a considerable mix of theory and practice. As such, students are engaged in research and critical assessment of scholarship, to acquire a depth and breadth of knowledge about entrepreneurship and innovation in contemporary and historical context, across multiple sectors, disciplines, and industries. As well, learners will be tasked with generating new knowledge as they master research, design, and multimodal communication methods and apply them to problems, topics, and cases in which they have a personal interest. The majority of the courses listed in this proposal include creative, hands-on active learning assignments, activities that require students to apply their newfound knowledge to original research problems and cultural scenarios, to arrive at and deliver original solutions and ideas using a variety of formats.

For example, in our introductory course ENIN 200/3.0 “Foundations of Entrepreneurship” and our capstone course ENIN 400/3.0 “Innovation Design Sprint,” the assignments will help learners to develop a practical understanding of what is involved in launching entrepreneurial ventures. Through research, engaging in active discussion, and preparing, delivering, and responding to online presentations, students will uncover and learn effective strategies for innovation across sectors.

Professional capacity is a key objective of this Certificate. Students who complete the requisite number of courses in innovation and entrepreneurship will be exposed to a variety of professional challenges, activities, and events. From developing their digital media literacy, to creating information objects and navigating the library databases, to acquiring a professional vocabulary associated with the creative industries, to collaborating with others, students will graduate with the practical creative capacities needed to succeed post-graduation in the world of work.

For example, in ENIN 204/3.0 “Public Relations,” learners will have a chance to “walk the talk” and learn how to use all kinds of social media platforms professionally and productively. Leveraging learners’ familiarity with online and
mobile tools for educational ends, while supporting further development of their digital literacies, will serve them well in their future careers (Gillard, Bailey & Nolan, 2008; Huffman & Hergatt Huffman, 2012; Hall, Nicks, & Baker, 2013; Mora et al, 2015).

The students completing courses associated with the Certificate will be expected to demonstrate their communication skills via standard research essays and reports, presentations, online and in-class discussion forums, peer reviews, and perhaps most importantly via group co-creation and ideation sessions – synchronous and asynchronous collaborations, online and in-person. These activities will help learners in developing their awareness of the limits of knowledge and an appreciation for others’ perspectives, interpretations, and methods, as they engage with each other in a course community.

1.2 Explain how the objectives will be achieved (e.g. course work, teaching and research seminars, independent research, laboratory and technical training, internships, practica, major research papers, and thesis).

**Outcomes-Based Educational Model**

Program design will be based on an outcomes-based educational model. Several educators have advocated for this “learner-centered approach” (McCombs & Whisler, 1997; Weimer, 2002; Pillay, 2002), arguing, “what and whether students learn successfully is more important than when and how they learn something” (Spady, 1994, p. 8). With the implementation of the Ontario Council of Academic Vice-Presidents’ Quality Assurance Framework (2010), Ontario universities adopted a learner-centered, outcomes-based educational model. The quality assurance framework aims to “demystify the knowledge, skills, and competencies to be acquired through the chosen educational program” (Lennon, 2010, p. 7), add transparency in communicating students’ accomplishments, and create pathways to increase the mobility of students within education systems and institutions, nationally and internationally.

**Innovative Technology-Enhanced Pedagogical Approaches**

At both the program level and within individual courses, our intention is to use a range of innovative, technology-forward pedagogical approaches and learning support “extras,” to increase productivity, push the “digital literacy” envelope, increase accessibility, and add value to the educational experience for all participants. Intended pedagogical approaches include technology-enhanced learning, competency-based learning, collaborative and social learning, problem-based learning, multimodal learning, active and authentic learning, and mobile learning. Innovative technologies to be explored include awarding digital badges to recognize various hard- and soft-skill competencies, using videoconferencing for 1-1 online coaching, and leveraging webinars to support interactive synchronous meetings including our design sprint capstone hackathon event. To ensure a quality student experience, all the technological components of the QEIC program will be closely with our expected learning outcomes.

**Competency-based learning**

As part of our competency-based learning initiatives and objectives, learners will be encouraged to earn a range of digital badges associated with various technological, creative, and academic (soft and hard) skills sets. Both within individual online courses, and as part of the extra 60-minute workshops, learners can achieve these extra digital credentials, including performance-based and effort-based badges, securely delivered via the Credly online learning app. Suitable for display on social networks including Linked-In, these badges will acknowledge learners’ accomplishments and communicate them to peers, parents, prospective employers and selection committees of all kinds. Importantly, our QEIC digital badges will include recognition of achievements in social and participatory forms of learning – such as effective teamwork and participation in online forum discussions (Schenke, Tran & Hickey, 2013).

**Collaborative and social learning**

*Online forums and peer review:*

Throughout the QEIC courses, students will be peer reviewing other students’ assignments and participating in the online discussion forums. Peer interaction is a key component of this Certificate, as we focus on teaching students how to effectively collaborative when brainstorming, prototyping, testing, and troubleshooting designs for innovative products and processes. This collaborative activity will occur online asynchronously on the LMS platform, to accommodate students’ different schedules and time zones.
Moreover, several of the individual courses and the program as a whole will make use of popular social platforms such as Twitter, YouTube, Facebook, LinkedIn, and Instagram to co-create and communicate online, beyond the classroom. A wide range of educational research on teaching with social media tools has demonstrated that if properly integrated, and used in conjunction with clear policies and guidelines, such mainstream social networking tools can deliver clear benefits to students (Allen & Seaman, 2012a/b; Dunn, 2011; Minocha, 2012; Moran, Seaman & Tinti-Kane, 2011; Joosten, Pasquini & Harness, 2013; Beetham & Sharpe, 2013; Matrix 2013; Greenhow & Gleeson, 2014; De Paoli & La Rooy, 2015).

Leveraging students’ familiarity with online and social tools for educational ends, while supporting further development of their digital literacies, will serve them well in their future careers (Gillard, Bailey & Nolan, 2008; Huffman & Hergatt Huffman, 2012; Hall, Nix & Baker, 2013; Mora et al, 2015). Together, these online social networking activities will help students become more technologically fluent, as they express their ideas and opinions together, and learn to engage with an authentic audience of their peers (Hafner, 2014).

**Team- and group- assignments:**

Most of the courses in the QEIC involve substantial online group and team activities, giving students multiple opportunities to achieve one of the key learning outcomes for this program, namely, establishing productive collaborative working relationships within diverse (and often remotely-located) teams. From co-authored research essays to peer reviews, from asynchronous forum discussions to group pitch presentations and case-based teaching, students will collaborate to improve their leadership, entrepreneurial, communication, brainstorming and networking skills, as they grapple to come up with innovative solutions to business, social, and creative challenges. Research shows that collaborative modes of inquiry, group self-regulation, and the development of informal learning communities increase student engagement, self-directed learning and feelings of value in the classroom (Longhurst & Sandage, 2004; Phipps, 2005; Churchill, 2009; Dabbagh & Kitsantas, 2012; Hemmi, Bayne & Landt, 2009; Boud, Cohen & Sampson, 2014).

**Invited guest speaker Q&A webinar events:**

Learners will be involved in a number of special invited online guest lectures and Q&A webinar sessions with prominent speakers from industry and academia. These guests will include Queen’s alumni and community leaders with experience in innovation and entrepreneurship to share. These webinars will be recorded for on-demand and repeat viewing for learners located across time zones. The pedagogical value of these social learning events will be realized through the opportunity they afford for learners to connect with professionals from every industry and field, and to observe, reflect on, and absorb “lessons learned” from seasoned entrepreneurs. From a practical perspective, these webinar events are designed to connect the dots between the classroom and the practical, ‘real-world’ entrepreneurial environment, adding value to the overall learning experience, and developing learners’ employability skills in the areas of communication, problem solving, initiative, decision-making and teamwork. In so doing, we seek to establish a contiguous line of support connecting the university to our campus incubators and our alumni network (which includes investors), forming a cohesive ecosystem (Abeyta, 2014). From a pedagogical perspective, these webinars provide learners with the opportunity to engage with industry professionals, to enhance and situate their learning, which should help improve their understanding and retention of key concepts (Menchaca, Hoffman & Ho, 2012; Salzmann, Stewart & Panuwatwanich, 2015).

**Multimodal Learning**

*Multimedia and Cross-Platform Learning Activities:*

The courses in this Certificate will require learners to practice their creative and critical thinking skills to hone new digital and media literacies, information and visual literacies. They will create a range of deliverables (individually and in teams) including research projects incorporating images, text, video, and HTML, presentations, and prototypes. Such multimodal learning activities help learners develop 21st-century multi-literacies (Cope & Kalantzis, 2015). From digital and media literacies to information and visual literacies, today’s learners require skills and tools to develop new ways of knowing, to take advantage of computer technologies, and to understand the social implications of a networked information economy (Kress, 1997; Selber, 2004). As they complete the assignments for this Certificate, learners will create and share multimedia knowledge objects, and learn how to revise, remix, and redistribute digital information. Learners will develop an appreciation for the importance of form and content, of interactive and visual information design, and of composing user-centred, accessible digital assets (Matrix, 2015). In the process they will engage in authentic, participatory, and social multimodal learning activities (Sinclair 2006, 2010). Whether they are developing
videos or research reports, digital prototypes of powerpoint slides, designing photo quotes, landing pages, user polls or data visualizations such as infographics – Certificate participants will have multiple opportunities to develop advanced creative visual and digital communication literacies (Osterman, Reio & Thirunarayanan, 2013; Matrix 2014a, 2014b).

**Active and Authentic Learning**

This Certificate offers many opportunities for authentic and active learning. For example, in the form of a “Weekend Intensive Event”: as a culminating and active learning experience, the required capstone course (ENIN 400/3.0) “Innovation Design Sprint” will include a hackathon-like event. This new course includes an intensive, weekend-long, experiential learning expedition culminating in what we call an “IdeaFest”. The synchronous, online, 48-hour hackathon session is an opportunity for learners to practice developing innovative, effective solutions to real-world business, social, and creative problems – in just 48 hours, using a rapid innovation method (thus “sprint” in the title). Working together in diverse teams and as individuals, learners will identify an opportunity, propose a new product/service/business model or experience, and then engage in online discussions, brainstorming, collaborative market research, budgeting, prototyping, user testing, and pitching.

Students will participate in synchronous and asynchronous brainstorming and authoring sessions, coordinated according to their time-zones, using the campus learning management system, the university library website, and a series of free, cloud-based collaboration and communication tools. As they research and co-design their entrepreneurial initiatives, students will engage in ongoing group-critique and creative ideation/conversation, thus qualifying the “IdeaFest” event as a social learning experience. The “Innovation Design Sprint” is an exciting and important pedagogical and practical course, as students experience the free flow of ideas exchanged between team members who have diverse disciplinary perspectives and experiences. As a result, every student will greatly benefit, expanding their creative and critical thinking and communication skills by listening, reflecting on, and learning from each other and from professors and industry experts. At the end of the IdeaFest, students and a panel of experts will provide teams with constructive comments on their pitches. This feedback will be both summative (insofar as students will receive actionable takeaways for future venture development) and formative --in the sense that the top ranked teams will be awarded extra recognition in the form of a “Top Team” digital badge.

Likewise, another example of active and authentic learning occurs in CHEE 302/3.0 “Technical Entrepreneurship” wherein a research report assignment will prompt learners to articulate a clear and comprehensive understanding of the role of technology in innovation management. Through original library research using print and online resources, students will consider the differences and affordances inherent in a case study of an emerging and innovative technology. In the process, they will gather, organize, and summarize information necessary to appropriately study a problem, research a topic, develop a position, and communicate their views and ideas. Moreover, this course also includes a low fidelity prototype assignment, which is an active learning challenge that requires learners to first build a digital 2D prototype and then perform a simple usability test. Students will then post the prototype (JPG, PDF, or slides) to the learning management system for peers to review. These activities will help learners become more technologically fluent, as they express their digital creativity together, and learn to engage with an authentic audience of their peers (Hafner, 2014).

**2. Program Regulations**

**2.1 Admission Standards** - Describe the admission standards for the proposed certificate program, including degree, diploma and/or course requirements, and any other specific standards with reference to the learning outcomes and expectations of the program. Provide the rationale for standards that differ from those set by the faculty for degree programs and departmental requirements for entry to undergraduate degree programs. If applicable, indicate policies/procedures to encourage applications from qualified under-represented groups (e.g. Aboriginal people, visible minorities or persons with disabilities).

**Admission Standards:**

The QEIC will be open to all registered full- and part-time undergraduate students in 2nd through 4th year, Queen’s graduates holding an undergraduate degree and qualified distance learners.

The Certificate can be taken in conjunction with a degree program from any Faculty, or as a stand-alone credential:
i. **Current Queen’s Arts and Science students** who have completed at least one year of study (minimum of 24.0 units) will apply to the *Certificate* through a web application that will be available on the Arts and Science website during Program/Plan selection in May. Students must have a minimum cumulative GPA of 1.60.

ii. **Current Queen’s undergraduate students in other Faculties and Schools** who have completed at least one year of study (minimum of 24.0 units) will apply to the *Certificate* through a web application on the Undergraduate Admission website during Program/Plan selection in May. Students must have a minimum cumulative GPA of 1.60.

iii. **Students who hold an Arts and Science undergraduate degree from Queen’s** may register in the *Certificate* by completing a Return to Studies form.

iv. **Students who hold an undergraduate degree from another Faculty or School at Queen’s** will apply to the *Certificate* through the Undergraduate Admission website.

v. **New distance applicants** will apply to the *Certificate* via the Arts and Science Online web application. Such students must meet existing admission standards for online BA degrees, which are the same as for the BA(Honours) degree at Queen’s, as specified in the Faculty of Arts and Science Admission Regulation 2.2.1:
   - Applicants with an Ontario Secondary School Diploma must have a minimum overall average of 75% on six 4U and 4M courses, including ENG4U, two additional 4U courses, and three 4U/4M courses.

Distance applicants can also enter the Faculty of Arts and Science as non-degree students and, if they meet Arts and Science eligibility criteria for progression to a degree program, can enrol in the *Certificate* at a later point.

The *Certificate* requires students to complete 15.0 units total, including 2 core courses and 3 option courses. Students enrolled in a Queen’s degree program as well as this *Certificate* may count up to 6.0 units toward both the requirements of the *Certificate* and their degree program. The remaining 9.0 units will be in addition to those required for the degree.

Online courses are particularly accessible to students who are located remotely, who may be managing a disability that makes on-campus classes a challenge, and for non-traditional, returning, continuing, and life-long learners in the Kingston area and far beyond.
Certificate Structure and Requirements

Describe the certificate under the following headings (as applicable)

3. General Certificate Requirements – Describe the program duration and rationale, total number of courses, examinations, progress reports, advisory committees, etc.

Certificate Structure (15.0 credits)

Although it is designed to be completed 100% online, the Certificate can also be achieved by completing a combination of online and on-campus courses.

The program will comprise 15.0 units of undergraduate courses, including two core courses and three option courses.

Core Courses: 2 required [(o) = online]

Students will take both of the following courses:
- (o) ENIN 200/3.0 Foundations of Entrepreneurship
- (o) ENIN 400/3.0 Innovation Design Sprint

Option Courses: 1 required [(o) = online]

Students must take one (but are permitted to take both) of the following courses:
- (o) ENIN 301/3.0 Creative Entrepreneurship
- (o) CHEE 302/3.0 Technical Entrepreneurship

“Innovation-Centric” Options Courses: 2 required [(o) = online]

Students will take two of the following courses:
- (o) BMED 271/3.0 Global and Population Health
- (o) BMED 471/3.0 Advanced Global and Population Health
- COCA 201/3.0 Computing and the Creative Arts
- COMM 201/3.0 Introduction to Business for Entrepreneurs
- (o) ENIN 140/3.0 Design Thinking
- (o) ENIN 204/3.0 Public Relations
- (o) ENIN 205/3.0 Innovation for STEAM
- (o) ENIN 207/3.0 Envisioning Disruptive Technologies
- (o) ENIN 240/3.0 Explorations in Creativity
- (o) ENIN 340/3.0 Thinking Inside the Box: Intrapreneurial Innovation Strategies
- (o) IDIS 280/3.0 Interprofessional Practice in Healthcare
- (o) LAW 204/3.0 Corporate Law
- (o) WRIT 250/3.0 Writing in Business Contexts

Program Duration: 4 academic terms

Total Number of Courses Required: 5 (15.0 units)

Courses in the Certificate are either currently offered by Arts and Science Online (ASO) or are in development, and will be offered in rotation, allowing students to be able to complete the program within 4 academic terms. Students will be

---

4 Students who want to learn about creative and technical entrepreneurship may complete and count both ENIN 301/3.0 and CHEE 302/3.0 toward the 15.0 units required for this Certificate. For this reason, ENIN 301/3.0 and CHEE 302/3.0 are designed as complementary, with no significant overlap in their coverage of the ins-and-outs of entrepreneurship. Students who opt to complete and count both ENIN 301/3.0 and CHEE 302/3.0 must complete an additional 3.0 units from the list of eligible “Innovation-Centric” courses above.

5 Students may substitute CHEE 310/3.0 Engineering Innovation & Entrepreneurship for CHEE 302/3.0 Technical Entrepreneurship. These courses are both being created and delivered by Dr. Jim McLellan, thus the content will partially overlap, by design. Students may count only one of these courses toward their QEIC program.

6 When selecting classes from this “Innovation-Centric” option course list, students must meet all course prerequisites and departmental requirements for enrolment.
able to complete all the courses for the program entirely through online study. Additional online course options will be developed as demand and funding warrant, to augment and diversify the program.

The QEIC program will be open to all registered full- and part-time undergraduate students in 2nd through 4th year, Queen’s graduates holding an undergraduate degree and qualified distance learners. Distance learners will be assessed as “qualified” if they meet all admission requirements for Queen’s Arts and Science Online Certificates, as described on this web page: http://www.queensu.ca/artsci_online/future-students/admission-requirements

The Certificate requires students to complete 15.0 units total, including 2 core courses and 3 option courses. Students enrolled in an Arts and Science degree program as well as this Certificate may count up to 6.0 units of Certificate courses toward the requirements of both the Certificate and their degree, consistent with the Faculty’s Policy on Certificate and Diploma Programs.

Advisory Committee:

Our executive advisory board provides vision and feedback to the Program Development Academic and Creative Director. Members include:

- Gregory Bavington, Director, Dunin-Deshpande Queen’s Innovation Centre
- James McLellan, Chemical Engineering
- Benoit-Anton Bacon, Queen’s Provost
- Elspeth Murray, Smith School of Business
- Leslie Flynn, Faculty of Health Sciences, School of Medicine
- Bev King, Assistant Dean (Teaching and Learning), Arts and Science Online
- Shari Hughson, Smith School of Business
- Jill Scott, Vice Provost, Teaching and Learning
- Entrepreneurs from the Kingston Community
- QEIC student graduates (when the program begins graduating students)

### 3.2 Course Requirements

In Table 1 below, list core (required) courses, optional courses (e.g. select X from the following list) and elective courses (indicate level and disciplines).

<table>
<thead>
<tr>
<th>Course/Credit (number and name)</th>
<th>(C)ore, (O)ption</th>
<th>Proposed Instructor(s) and Home Academic Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENIN 200/3.0 Foundations of Entrepreneurship</td>
<td>C</td>
<td>G. Bavington, DDQIC/Dan School</td>
</tr>
<tr>
<td>ENIN 400/3.0 Innovation Design Sprint</td>
<td>C</td>
<td>Team-taught, S. Matrix (coordinator)</td>
</tr>
<tr>
<td>ENIN 140/3.0 Design Thinking</td>
<td>O</td>
<td>S. Matrix, Dan School</td>
</tr>
<tr>
<td>ENIN 204/3.0 Public Relations</td>
<td>O</td>
<td>C. Evans, Dan School</td>
</tr>
<tr>
<td>ENIN 205/3.0 Innovation for STEAM</td>
<td>O</td>
<td>J. McLellan, Chemical Engineering S. Matrix, Dan School</td>
</tr>
<tr>
<td>ENIN 207/3.0 Envisioning Disruptive Technologies</td>
<td>O</td>
<td>D. Rodenberg, Dan School</td>
</tr>
<tr>
<td>ENIN 240/3.0 Explorations in Creativity</td>
<td>O</td>
<td>S. Matrix, Dan School</td>
</tr>
<tr>
<td>ENIN 301/3.0 Creative Entrepreneurship</td>
<td>O</td>
<td>S. Matrix, Dan School</td>
</tr>
<tr>
<td>ENIN 340/3.0 Thinking Inside the Box: Intrapreneurial Innovation Strategies</td>
<td>O</td>
<td>S. Matrix, Dan School</td>
</tr>
<tr>
<td>BMED 271/3.0 Global and Population Health</td>
<td>O</td>
<td>J. Carpenter, Department of Emergency Medicine, Faculty of Health Sciences</td>
</tr>
<tr>
<td>BMED 471/3.0 Advanced Global and Population Health</td>
<td>O</td>
<td>J. Carpenter, Department of Emergency Medicine, Faculty of Health Sciences</td>
</tr>
<tr>
<td>CHEE 302/3.0 Technical Entrepreneurship</td>
<td>O</td>
<td>J. McLellan, Chemical Engineering</td>
</tr>
<tr>
<td>COCA 201/3.0 Computing and the Creative Arts</td>
<td>O</td>
<td>R. Vertegaal, School of Computing</td>
</tr>
<tr>
<td>COMM 201/3.0 Introduction to Business for Entrepreneurs</td>
<td>O</td>
<td>S. Hughson, Smith School of Business</td>
</tr>
<tr>
<td>IDIS 280/3.0 Interprofessional Practice in Healthcare</td>
<td>O</td>
<td>A. O’Riordan, School of Rehabilitation Therapy</td>
</tr>
</tbody>
</table>
Students who want to learn about creative and technical entrepreneurship may complete and count both ENIN 301/3.0 and CHEE 302/3.0 toward the 15.0 units required for this Certificate. For this reason, ENIN 301/3.0 and CHEE 302/3.0 are designed as complementary, with no significant overlap in their coverage of the ins-and-outs of entrepreneurship. Students who opt to complete and count both ENIN 301/3.0 and CHEE 302/3.0 need only complete 3.0 units from the list of eligible “Innovation-Centric” elective courses above.

When selecting classes from the option course list above, students must meet all course prerequisites and departmental requirements for enrolment.

To ensure access to required online Core and Option courses we will set a reserve capacity to allow Certificate students first access during the class selection period.

Having successfully completed ENIN 200/3.0, as well as either ENIN 301/3.0 or CHEE 302/3.0, and once registered in the QEIC program, students will take our capstone course ENIN 400/3.0: “Innovation Design Sprint.” This required capstone course is an opportunity for students to practice developing innovative, effective solutions to real-world business, social, and creative problems. Working in diverse teams and as individuals, students will identify an opportunity, propose a new product, service, business model, or experience, and then present it for peer and expert review. This intense experience will provide hands-on learning through a coordinated set of synchronous and asynchronous activities including online discussions, collaborative market research, financial modeling, prototyping, user testing, and pitching. The course is multi-disciplinary by design, and is suitable for students of all backgrounds, including but not limited to computing, business, creative arts, education, engineering, medicine, and health sciences. Delivered online as an intensive six-week summer course culminating in a 48-hour synchronous summer weekend IdeaFest event, ENIN 400/3.0 offers an additional experiential component to the Certificate and an opportunity for students to receive feedback from industry experts.

3.3 Course Descriptions - For each EXISTING and NEW undergraduate course that is part of the proposed certificate, provide a calendar description below and append/embed the course outline in Section 12. Also indicate if the course currently exists or is under development.

To provide a strong and coherent basis for this Certificate, we have existing and several new online courses: entrepreneurship foundations (ENIN 200/3.0), creative entrepreneurship (ENIN 301/3.0), technical entrepreneurship (CHEE 302/3.0), the “design sprint” capstone course (ENIN 400/3.0), disruptive technologies (ENIN 207/3.0), design thinking for STEAM (ENIN 205/3.0), public relations strategy (ENIN 204/3.0), explorations in creative thinking (ENIN 240/3.0), and a course on intrapreneurship (ENIN 340/3.0) – all of which are described in detail in Appendix A.

These courses will be designed and taught online by instructors and collaborators from the DDQIC, Faculty of Arts and Science, Smith School of Business, Faculty of Health Sciences, Faculty of Engineering and Applied Science, Faculty of Education and Faculty of Law.
3.4 **Certificate Timelines** – In a table or figure, summarize the expected progress through the certificate by term to completion. If both full-time and part-time studies are proposed, specify timelines for each.

**Table 2. Expected program progression through to completion (format is optional; modify as needed)**

<table>
<thead>
<tr>
<th>Fall Year 1</th>
<th>Winter Year 1</th>
<th>Summer Year 1</th>
<th>Fall Year 2</th>
<th>Winter Year 2</th>
<th>Summer Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core: ENIN 200 Foundations</td>
<td>Core Options: ENIN 301</td>
<td>Core: ENIN 200 Foundations</td>
<td>Core Options: ENIN 301</td>
<td>Core Options: ENIN 400</td>
<td>Core: ENIN 200 Foundations</td>
</tr>
<tr>
<td>Core Options: ENIN 301</td>
<td>Creative e-Ship</td>
<td>Core Options: ENIN 200</td>
<td>Creative e-Ship</td>
<td>Design Sprint</td>
<td>Creative e-Ship</td>
</tr>
<tr>
<td>Core Options: CHEE 310</td>
<td>Core Options: CHEE 302</td>
<td>Core Options: CHEE 310</td>
<td>Core Options: CHEE 302</td>
<td>Technical e-Ship</td>
<td>Core Options: CHEE 302</td>
</tr>
<tr>
<td>Elective Options: IDIS 280</td>
<td>Elective Options: BMED 271</td>
<td>Elective Options: ENIN 204</td>
<td>Elective Options: BMED 271</td>
<td>ENIN 204 Public Relations</td>
<td>Elective Options: IDIS 280</td>
</tr>
<tr>
<td>Interprofessional</td>
<td>Global</td>
<td>Public Relations</td>
<td>Global</td>
<td>BMED 271 Corporate</td>
<td>Global</td>
</tr>
<tr>
<td>BMED 271</td>
<td>BMED 471</td>
<td>ENIN 204 Public Relations</td>
<td>BMED 271 Corporate</td>
<td>BMED 471 Advanced Relations</td>
<td>ENIN 204 Public Relations</td>
</tr>
<tr>
<td>Global</td>
<td>Global</td>
<td>ENIN 204 Public Relations</td>
<td>BMED 271 Corporate</td>
<td>BMED 471 Advanced Relations</td>
<td>ENIN 204 Public Relations</td>
</tr>
<tr>
<td>ENIN 240 Explorations in</td>
<td>ENIN 205 Innovation for</td>
<td>ENIN 240 Explorations in</td>
<td>ENIN 205 Innovation for</td>
<td>ENIN 140 Design Thinking</td>
<td>ENIN 240 Explorations in</td>
</tr>
<tr>
<td>Creativity</td>
<td>STEAM</td>
<td>Creativity</td>
<td>STEAM</td>
<td></td>
<td>Creativity</td>
</tr>
<tr>
<td>ENIN 340</td>
<td>ENIN 207 Disruptive</td>
<td>ENIN 340</td>
<td>ENIN 207 Disruptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrapreneurship</td>
<td>Technologies</td>
<td>Intrapreneurship</td>
<td>Technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WRIT 250</td>
<td>WRIT 250</td>
<td>COMM 201</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Writing</td>
<td>Business Writing</td>
<td>Intro to Business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COCA 201</td>
<td>LAW 204 Corporate</td>
<td>LAW 204 Corporate</td>
<td>COCA 201</td>
<td>LAW 204 Corporate</td>
<td>LAW 204 Corporate</td>
</tr>
<tr>
<td>Computing &amp; Creative Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.5 **Other matters**– Comment on any special matters and innovative features.

**Adding Flexibility for Learners**

The proposed *Certificate* is intended to be taken either as a stand-alone credential, or in conjunction with a degree program. Since all the courses are degree-credit courses they can be applied to degrees, within the limitations placed by individual Faculties on these matters.
Courses will be offered in three terms: Summer, Fall and Winter. Learners may enrol in the courses of the Certificate program one or more at a time, and in any order, depending on the learner’s personal situation and educational and career goals.

To provide a strong and coherent basis for this Certificate, we plan to build and deliver three new “foundations” online courses in entrepreneurship (ENIN 200/3.0), creative innovation (ENIN 301/3.0), and technical innovation (CHEE 302/3.0). All three will be designed to easily scale and meet an anticipated high enrolment demand, since they will also be made accessible to learners who are not pursuing the Certificate but wish to take these courses as electives. These three courses will represent the first fully online opportunities for learners to study these topics at Queen’s, and they are also designed without any course prerequisites, which adds up to enormous flexibility for learners to add any one of these classes to their existing program. As well, today, entrepreneurial-minded Queen’s students have several opportunities to participate in team-based “hackathons” and “pitch days” - events that occur on the Kingston campus. We are excited to introduce a new flexible opportunity for more students to engage in such important and active learning activities, in the form of the ENIN 400/3.0 “Innovation Design Sprint” course. That course includes a culminating “IdeaFest” event that will take place online, so that students located remotely can fully participate and benefit from the collaborative “hack and pitch” experience.

4. Program Content

4.1 Explain how the curriculum of the proposed certificate addresses the current state of the discipline and/or profession.

The proposed Certificate responds to a growing need for expanded online learning in Canada, particularly in terms of the availability of fully online programs, not just individual courses, that can be completed at a distance (“2011 Outlook for On-line learning and Distance Education,” Contact North, Fast Forward: How Emerging Technologies are Transforming Education and Training”, Contact North, January 2011).

In addition, the Certificate allows students to acquire innovation and entrepreneurial thinking competencies that are very much in demand within the labour market. Having this Certificate will only make it more clear to future employers that these students have practical creativity, communication, and critical thinking skills that can be applied on the job, in the lab or office, or in their terminal degree program.

This program aligns with Queen’s goal of offering learners learning experiences that are transformational, inspiring, and intellectually challenging (Kolomitro & Gee, 2015). Recent research suggests employees who are able to demonstrate a proactive approach to learning, contribute to corporate goals, and fit into a company culture are more likely to be hired and/or singled out for promotion (CCCE, 2014). With 86% of graduates reporting that the skills they use in the workplace were learned at university (Council of Ontario Universities, 2015), the course design embraces principles of authentic learning as established by Herrington and Oliver (2000), and the inclusion of authentic activities associated with increased achievement and motivation for learning (Hickey, Moore, & Pellegrino, 2001).

To ensure program relevancy, we have designed many opportunities for the integration of industry experts, who offer valuable professional insights, connecting theory to practice, extending learning to current and relevant contexts, and applying collaborative skills in an online environment. For example, webinars with industry experts will take the subject matter out of the classroom and into the practical, real-world environment, adding value to the overall learning experience, and developing learners’ employability skills in the areas of communication, problem solving, initiative, decision-making and teamwork. Webinars provide learners with the opportunity to engage with professionals in the industry, which enhance and situate their learning, help them improve their understanding of key concepts, further develop the online learning community, and increase learner retention (Menchaca, Hoffman & Ho, 2012; Salzmann, Stewart & Panuwatwanich, 2014).

4.2 Identify any unique curriculum, innovations or creative components.

Innovative Packaging of Credentials

Undergraduate Academic Credential:

The proposed Certificate is a new program that will offer undergraduate learners an opportunity to earn a full...
academic credential in entrepreneurship and innovation from Queen’s University.

Digital Badges for Competency-Based Workshops:

The Certificate includes a series of 60-minute online interactive (non-credit) workshops focused on developing specific entrepreneurial skills and strategies that will be aligned with the program outcomes. These co-curricular, skills-based workshops will be offered free of charge for all current Queen’s learners, staff, faculty, and alumni, regardless of whether they are currently enrolled in the QEIC. Such “bite-sized” learning opportunities have been shown to increase students’ ability to absorb information effectively (Semingson, Crosslin & Dellinger, 2015; Avery, 2016; Jomah et al, 2016). From designing winning business pitches to conducting user testing, and from building website landing pages to completing a business model canvas, these free and interactive online workshops will offer participants the opportunity to “level-up” their innovation skill-sets.

Participants who successfully complete one of these workshops will earn a digital badge suitable for display on social networks including LinkedIn. As we saw when piloting these digital badges in Queen’s Arts and Science Online courses in 2015-16, learners report that receiving a badge to acknowledge their accomplishments is highly motivational. Participants can customize their learning experience and earn digital achievement badges to communicate specific competencies (including hard and soft skills). In the process learners will make their skills visible to prospective employers – thus increasing their employability (Hudgins & Holland, 2016). In the process, self-directed students learn to set goals, and feel inspired to complete tasks (Schenke, Tran & Hickey, 2013). Gamifying the learning experience in this way results in measurable benefits for online learners, insofar as it has been demonstrated to enhance user engagement, participation, self-efficacy, and academic outcomes (Wilson, Calongne & Henderson, 2016). Digital badges are an effective form of feedback that can increase learners’ awareness of their behaviour in an online learning environment, resulting in a positive impact on their study practices and overall results (Auvinen, Hakulinen & Malmi 2015).

This microcontent will be delivered in the form of “pop-up” live interactive webinars, which will be recorded for on-demand viewing later. Planned workshop topics include:

- Business Model Canvas Quickstart
- Better Brainstorming for Rapid Ideation
- Best Practices for High-Performance Collaboration
- Low-Fidelity Prototyping in a Nutshell
- Pitch Deck Ultimate Makeover
- User-Testing Tips, Tricks & Templates
- Trend Hunter’s Research Toolkit

Technology-Enhanced learning

Just-in-time instructional walk-through webinars:

Integrated within the online courses associated with this Certificate, we will offer “pop-up” live/synchronous webinars to help learners understand particular entrepreneurial academic research and design skills associated with their assignments. These completely optional “just-in-time” web events will be scheduled at various times to accommodate students in different time zones. These “walk-through” sessions will support learners at the point of greatest need, using an interactive “how-to” approach and demonstrating best practices using apps and digital platforms for composition, collaboration, and communication. The 60-minute online interactive meetings will give learners a chance to ask questions of, and share ideas with, the teaching team and get immediate feedback. All “pop-up” webinars will be recorded for on-demand and repeat viewing for learners located across time zones. This kind of customized, learner-directed online activity is an opportunity for learners to connect online with peers and professors in real-time, which should increase their engagement, motivation, and sense of community connection in a personal learning network (Baruah, 2013).

Digital Portfolios:

Learners in the QEIC program will emerge with an e-portfolio documenting their coursework, co- and extra-curricular learning activities, and meta-self-reflections on the experience. As they progress through each course associated with the Certificate, learners will complete assignments they can add to their OnQ (D2L) ePortfolio. Because of their highly visible nature, ePortfolios are effective to encourage learners to create their most imaginative
4.3 **Academic Integrity - Explain how the certificate educates students on the importance and role of academic integrity.**

All courses that comprise the Certificate include in their syllabi Faculty-specific regulations related to Academic Integrity. Courses that involve online learning components actively instruct students about the responsibilities required for professional online communication and the ethical dimensions of using digital media for educational ends. Whether students are engaged in online testing, digital collaboration via group work, media production and distribution, or peer review, conversations about copyright plagiarism, unauthorized crowdsourcing, identity theft, digital rights management, authorial intent, sampling and remixing media, or cyberbullying, academic integrity and digital citizenship are key aspects of the teaching and learning experience. In this sense, online courses are perhaps even better suited than traditional on-campus ones (especially those that do not employ social and digital media for educational purposes) to assist students in developing a deep understanding of, and personal commitment to, defining what academic integrity means at Queen’s and beyond, in the context of the rights and responsibilities of participatory digital citizenship. Put differently, online courses such as the ones included in this proposal do not just “educate” students about academic integrity, they make the issues real, relevant, and get students actively involved in shaping such expectations for participating in a digital class, community, and culture.
### 5. Assessment of Teaching and Learning

#### 5.1 Degree Level Expectations (DLE)

<table>
<thead>
<tr>
<th>DLE</th>
<th>Learning Outcomes</th>
<th>Relevant Courses, Academic Requirement</th>
<th>Indicators of Achievement</th>
</tr>
</thead>
</table>
| Depth and breadth of knowledge | 1. Approach situations with an entrepreneurial mindset, finding opportunities in, and novel solutions to, problems in the business, technology, engineering, creative, social, and health sectors | ENIN 140/3.0 Design Thinking  
ENIN 200/3.0 Foundations of Entrepreneurship  
ENIN 204/3.0 Public Relations  
ENIN 205/3.0 Innovation for STEAM  
ENIN 207/3.0 Envisioning Disruptive Technologies  
ENIN 240/3.0 Explorations in Creativity  
ENIN 301/3.0 Creative Entrepreneurship  
CHEE 302/3.0 Technical Entrepreneurship  
ENIN 400/3.0 Innovation Design Sprint  
ENIN 340/3.0 Topics in Innovation  
IDIS 280/3.0 Interprofessional Practice in Healthcare  
BMED 271/3.0 Global and Population Health  
BMED 471/3.0 Advanced Global and Population Health | Samples:  
Online quizzes  
Exams  
Weekly homework assignments  
Group and individual research projects  
Design sprint team research & design exercise  
Self-designed research projects  
Business Model Canvas exercises  
Research reports (legal, technological)  
Self-assessment survey reports  
ePortfolio design and description |
| 3. Apply a range of entrepreneurial and analytical approaches to multi-sectoral problems |  |  |  |
| Knowledge of methodologies | 1. Approach situations with an entrepreneurial mindset, finding opportunities in, and novel solutions to, problems in the business, technology, engineering, creative, social, and health sectors | ENIN 140/3.0 Design Thinking  
ENIN 200/3.0 Foundations of Entrepreneurship  
ENIN 204/3.0 Public Relations  
ENIN 205/3.0 Innovation for STEAM  
ENIN 207/3.0 Envisioning Disruptive Technologies  
ENIN 240/3.0 Explorations in Creativity  
ENIN 301/3.0 Creative Entrepreneurship  
CHEE 302/3.0 Technical Entrepreneurship  
ENIN 400/3.0 Innovation Design Sprint  
ENIN 340/3.0 Topics in Innovation  
IDIS 280/3.0 Interprofessional Practice in Healthcare  
BMED 271/3.0 Global and Population Health  
BMED 471/3.0 Advanced Global and Population Health  
LAW 204/3.0 Corporate Law | Samples:  
Project survey reports  
Self-assessment survey reports  
Research projects requiring demonstration of key methodologies and use of online research tools  
Design sprint team research & design exercise  
Exams and quizzes  
Business Model Canvas exercises  
Research reports (legal, technological)  
Quality of online discussion contributions (written) in OnQ forums  
Group brainstorming exercises  
Ideafest & Hackathon active learning events |
### Application of knowledge

| 1. Approach situations with an entrepreneurial mindset, finding opportunities in, and novel solutions to, problems in the business, technology, engineering, creative, social, and health sectors |
| 2. Collaborate effectively with clients and colleagues to find, define, examine and assess problems |
| 3. Apply a range of entrepreneurial and analytical approaches to multi-sectoral problems |
| 6. Communicate design solutions, data and information visually and verbally, using appropriate graphical forms |

| COMM 201/3.0 Introduction to Business for Entrepreneurs |
| ENIN 200/3.0 Foundations of Entrepreneurship |
| ENIN 204/3.0 Public Relations |
| ENIN 205/3.0 Innovation for STEAM |
| ENIN 207/3.0 Envisioning Disruptive Technologies |
| ENIN 240/3.0 Explorations in Creativity |
| ENIN 301/3.0 Creative Entrepreneurship |
| CHEE 302/3.0 Technical Entrepreneurship |
| ENIN 400/3.0 Innovation Design Sprint |
| ENIN 340/3.0 Topics in Innovation |

| Samples: |
| Group and individual research projects |
| Design sprint team research & design exercise |
| Self-designed research projects |
| Quality of online discussion contributions (written) in OnQ forums |
| Peer review exercises |
| Business Model Canvas exercises |
| Group brainstorming exercises |
| Ideafest & Hackathon active learning events |
| Multimodal literacy exercises |
| Interactive and 2D digital prototype design & iteration |
| Group and team projects and reports |
| User persona, journey map assignments |
| Pitch presentation, 3-2-1 presentations |
| Research poster/infographic assignment |

### Communication skills

| 1. Approach situations with an entrepreneurial mindset, finding opportunities in, and novel solutions to, problems in the business, technology, engineering, creative, social, and health sectors |
| 4. Apply relevant digital technological literacies for online research, design, and communication |
| 5. Implement research skills required for online research, communication, and digital design to |

| ENIN 200/3.0 Foundations of Entrepreneurship |
| ENIN 204/3.0 Public Relations |
| ENIN 205/3.0 Innovation for STEAM |
| ENIN 207/3.0 Envisioning Disruptive Technologies |
| ENIN 240/3.0 Explorations in Creativity |
| ENIN 301/3.0 Creative Entrepreneurship |
| CHEE 302/3.0 Technical Entrepreneurship |
| ENIN 400/3.0 Innovation Design Sprint |
| ENIN 340/3.0 Topics in Innovation |

<p>| Samples: |
| Quality of online discussion contributions (written) in OnQ forums |
| Peer review exercises |
| User persona, journey map assignments |
| Visual brief, pitch deck, kano analysis assignments |
| Multimodal literacy exercises |
| User testing exercise |</p>
<table>
<thead>
<tr>
<th>Awareness of limits of knowledge</th>
<th>ENIN 200/3.0 Foundations of Entrepreneurship</th>
<th>ENIN 204/3.0 Public Relations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENIN 205/3.0 Innovation for STEAM</td>
<td>ENIN 207/3.0 Envisioning Disruptive Technologies</td>
</tr>
<tr>
<td></td>
<td>ENIN 240/3.0 Explorations in Creativity</td>
<td>ENIN 301/3.0 Creative Entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>ENIN 340/3.0 Topics in Innovation</td>
<td>CHEE 302/3.0 Technical Entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>IDIS 280/3.0 Interprofessional Practice in Healthcare</td>
<td>ENIN 400/3.0 Innovation Design Sprint</td>
</tr>
<tr>
<td></td>
<td>BMED 271/3.0 Global and Population Health</td>
<td>ENIN 400/3.0 Innovation Design Sprint</td>
</tr>
<tr>
<td></td>
<td>BMED 471/3.0 Advanced Global and Population Health</td>
<td>ENIN 140/3.0 Design Thinking</td>
</tr>
<tr>
<td></td>
<td>ENIN 140/3.0 Design Thinking</td>
<td>LAW 204/3.0 Corporate Law</td>
</tr>
<tr>
<td></td>
<td>COMM 201/3.0 Introduction to Business for Entrepreneurs</td>
<td>COMM 201/3.0 Introduction to Business for Entrepreneurs</td>
</tr>
<tr>
<td></td>
<td>WRIT 250/3.0 Writing in Business Contexts</td>
<td>WRIT 250/3.0 Writing in Business Contexts</td>
</tr>
<tr>
<td></td>
<td>Ideafest &amp; Hackathon active learning events</td>
<td>Group brainstorming exercises</td>
</tr>
<tr>
<td></td>
<td>Group and team projects and reports</td>
<td>Pitch presentation, 3-2-1 presentations</td>
</tr>
<tr>
<td></td>
<td>Cross-platform research and communication design activities</td>
<td>Design sprint team research &amp; design exercise</td>
</tr>
<tr>
<td></td>
<td>Research poster/infographic assignment</td>
<td>Research poster/infographic assignment</td>
</tr>
<tr>
<td></td>
<td>ePortfolio design and description</td>
<td>ePortfolio design and description</td>
</tr>
<tr>
<td></td>
<td>Samples:</td>
<td>Samples:</td>
</tr>
<tr>
<td></td>
<td>Group and team projects and reports</td>
<td>Design sprint team research &amp; design exercise</td>
</tr>
<tr>
<td></td>
<td>Design sprint team research &amp; design exercise</td>
<td>Online quizzes</td>
</tr>
<tr>
<td></td>
<td>Online quizzes</td>
<td>Exams</td>
</tr>
<tr>
<td></td>
<td>Business Model Canvas exercises</td>
<td>Business Model Canvas exercises</td>
</tr>
<tr>
<td></td>
<td>Project survey reports</td>
<td>Project survey reports</td>
</tr>
<tr>
<td></td>
<td>Market and competitor research assignments</td>
<td>Market and competitor research assignments</td>
</tr>
<tr>
<td></td>
<td>Ideafest &amp; Hackathon active learning events</td>
<td>Ideafest &amp; Hackathon active learning events</td>
</tr>
<tr>
<td></td>
<td>Interactive and 2D digital prototype design &amp; iteration</td>
<td>Interactive and 2D digital prototype design &amp; iteration</td>
</tr>
<tr>
<td></td>
<td>Self-assessment survey reports</td>
<td>Self-assessment survey reports</td>
</tr>
<tr>
<td></td>
<td>Quality of online discussion contributions (written) in OnQ forums</td>
<td>Quality of online discussion contributions (written) in OnQ forums</td>
</tr>
<tr>
<td></td>
<td>Peer review exercises</td>
<td>Peer review exercises</td>
</tr>
<tr>
<td></td>
<td>Group brainstorming exercises</td>
<td>Group brainstorming exercises</td>
</tr>
<tr>
<td>Autonomy and professional capacity</td>
<td>ENIN 200/3.0 Foundations of Entrepreneurship</td>
<td>ENIN 204/3.0 Public Relations</td>
</tr>
<tr>
<td></td>
<td>ENIN 204/3.0 Public Relations</td>
<td>ENIN 205/3.0 Innovation for STEAM</td>
</tr>
<tr>
<td></td>
<td>ENIN 207/3.0 Envisioning Disruptive Technologies</td>
<td>ENIN 240/3.0 Explorations in Creativity</td>
</tr>
<tr>
<td></td>
<td>ENIN 301/3.0 Creative Entrepreneurship</td>
<td>ENIN 340/3.0 Topics in Innovation</td>
</tr>
<tr>
<td></td>
<td>CHEE 302/3.0 Technical Entrepreneurship</td>
<td>IDIS 280/3.0 Interprofessional Practice in Healthcare</td>
</tr>
<tr>
<td></td>
<td>ENIN 400/3.0 Innovation Design Sprint</td>
<td>BMED 271/3.0 Global and Population Health</td>
</tr>
<tr>
<td></td>
<td>ENIN 400/3.0 Innovation Design Sprint</td>
<td>BMED 471/3.0 Advanced Global and Population Health</td>
</tr>
<tr>
<td></td>
<td>ENIN 140/3.0 Design Thinking</td>
<td>ENIN 140/3.0 Design Thinking</td>
</tr>
<tr>
<td></td>
<td>LAW 204/3.0 Corporate Law</td>
<td>LAW 204/3.0 Corporate Law</td>
</tr>
<tr>
<td></td>
<td>COMM 201/3.0 Introduction to Business for Entrepreneurs</td>
<td>COMM 201/3.0 Introduction to Business for Entrepreneurs</td>
</tr>
<tr>
<td></td>
<td>WRIT 250/3.0 Writing in Business Contexts</td>
<td>WRIT 250/3.0 Writing in Business Contexts</td>
</tr>
<tr>
<td></td>
<td>Ideafest &amp; Hackathon active learning events</td>
<td>Ideafest &amp; Hackathon active learning events</td>
</tr>
<tr>
<td></td>
<td>Group and team projects and reports</td>
<td>Group and team projects and reports</td>
</tr>
<tr>
<td></td>
<td>Cross-platform research and communication design activities</td>
<td>Cross-platform research and communication design activities</td>
</tr>
<tr>
<td></td>
<td>Design sprint team research &amp; design exercise</td>
<td>Design sprint team research &amp; design exercise</td>
</tr>
<tr>
<td></td>
<td>Research poster/infographic assignment</td>
<td>Research poster/infographic assignment</td>
</tr>
<tr>
<td></td>
<td>ePortfolio design and description</td>
<td>ePortfolio design and description</td>
</tr>
<tr>
<td></td>
<td>Samples:</td>
<td>Samples:</td>
</tr>
<tr>
<td></td>
<td>Group and team projects and reports</td>
<td>Design sprint team research &amp; design exercise</td>
</tr>
<tr>
<td></td>
<td>Design sprint team research &amp; design exercise</td>
<td>Online quizzes</td>
</tr>
<tr>
<td></td>
<td>Online quizzes</td>
<td>Exams</td>
</tr>
<tr>
<td></td>
<td>Business Model Canvas exercises</td>
<td>Business Model Canvas exercises</td>
</tr>
<tr>
<td></td>
<td>Project survey reports</td>
<td>Project survey reports</td>
</tr>
<tr>
<td></td>
<td>Market and competitor research assignments</td>
<td>Market and competitor research assignments</td>
</tr>
<tr>
<td></td>
<td>Ideafest &amp; Hackathon active learning events</td>
<td>Ideafest &amp; Hackathon active learning events</td>
</tr>
<tr>
<td></td>
<td>Interactive and 2D digital prototype design &amp; iteration</td>
<td>Interactive and 2D digital prototype design &amp; iteration</td>
</tr>
<tr>
<td></td>
<td>Self-assessment survey reports</td>
<td>Self-assessment survey reports</td>
</tr>
<tr>
<td></td>
<td>Quality of online discussion contributions (written) in OnQ forums</td>
<td>Quality of online discussion contributions (written) in OnQ forums</td>
</tr>
<tr>
<td></td>
<td>Peer review exercises</td>
<td>Peer review exercises</td>
</tr>
<tr>
<td></td>
<td>Group brainstorming exercises</td>
<td>Group brainstorming exercises</td>
</tr>
</tbody>
</table>
technological literacies for online research, design, and communication

| ENIN 207/3.0 Envisioning Disruptive Technologies | Interactive and 2D digital prototype design & iteration |
| ENIN 240/3.0 Explorations in Creativity | Self-assessment survey reports |
| ENIN 301/3.0 Creative Entrepreneurship | Research reports (legal, technological) |
| CHEE 302/3.0 Technical Entrepreneurship | Design sprint team research & design exercise |
| ENIN 400/3.0 Innovation Design Sprint | Pitch presentation, 3-2-1 presentations |
| ENIN 340/3.0 Topics in Innovation | Business Model Canvas exercises |
| COCA 201/3.0 Computing and the Creative Arts | ePortfolio design and description |
| ENIN 140/3.0 Design Thinking | Engaging with guest speakers from industry/academe |
| WRIT 250/3.0 Writing in Business Contexts | Research poster/infographic assignment |

Use space below for comments on Table 3. Include discussion of how indicators of achievement associated with the certificate program differ from or overlap with those of the degree program(s) when the same courses are involved.

| N/A |

5.2 Describe how the proposed methods of assessing student achievement relate to the certificate’s learning outcomes and degree level expectations.

The Queen’s Entrepreneurship and Innovation Certificate includes courses that have much in common, most critically, a focus on innovation and entrepreneurship across sectors. However within this bundling of courses, there is much diversity for students in terms of course topics, modes of delivery, and course design components. These courses represent seven different disciplines, Faculties, and units across the campus, from law and business to medicine, to arts and science, to engineering, and including the writing program. In addition, we have purpose-built several courses with ENIN or CHEE codes for this Certificate – some are required core offerings, some are optional courses. Those new classes are all online, and all have a specific focus on building entrepreneurial mindsets and innovation competencies in interdisciplinary perspective.

With this amazing array of courses comes a rich diversity of methods for assignments and assessments that will vary from course to course, and complement each other. Students will be reading theoretical and historical texts, business reports and news media coverage, as well as biographies and blogs. In terms of active learning, students
will be asked to research, compose, and collaborate to create prototypes, pitch decks, infographics and other graphic design deliverables. Students will have many opportunities to work independently and as part of a team. Some learning will be synchronous (such as team meetings and webinars for lessons and presentations), and some will be asynchronous (such as OnQ forum discussions). Students who pursue the QEIC will be engaged in a variety of new critical and creative thinking activities while they assemble a digital portfolio that will enhance their employability.

5.3 Outline the plans for documenting and demonstrating the level of performance of students [Refer to UDLEs, Appendix 1 of QUQAP]

While engaged in this Certificate, students will be engaged in research and critical assessment of scholarship, to acquire a depth and breadth of knowledge about a variety of industries and cultural sectors, in contemporary and historical context. As well, they will be tasked with generating new knowledge as they master new cross-disciplinary and multimodal methods and apply them to innovation initiatives in which they have a personal interest. The majority of the courses listed in this proposal include creative, hands-on production assignments, activities that require students to apply their newfound knowledge to original research problems and cultural scenarios, to arrive at an original innovation solution, using a variety of media.

Professional capacity is a key objective of this Certificate. We believe every student at Queen’s would benefit from developing an innovation mindset, and likewise, by increasing their capacity to collaborate and communicate online. Students who complete the requisite number of courses in entrepreneurship and innovation, will have been exposed to a variety of professional challenges, activities, and events featuring guest speakers from industry and academe. From developing digital media literacy, to creating information objects and navigating the library databases, to acquiring a professional vocabulary and mastering tools to make ideas tangible and testable, students will graduate with the practical creative and critical thinking skills they’ll need to succeed post-graduation in the world of work.

The students completing courses associated with the Queen’s Entrepreneurship and Innovation Certificate will be expected to demonstrate their communication skills via standard research essays and reports, presentations and pitches, online discussion forums and live, in-class (mostly online) discussions, where appropriate.

In terms of developing an awareness of the limits of knowledge and an appreciation for other perspectives, interpretations, and methods, students will be expected to participate in comparative analyses of popular and theoretical texts, and to engage with each other in a course community. They will also practice their skills at user testing, empathic research and design, and building human-centered, social innovations.
6. Mode of Delivery

6.1 Explain how the proposed mode(s) of delivery meets the certificate’s learning outcomes and the DLEs. Comment on the relationship between mode of delivery and accessibility requirements.

Program Delivery

This Certificate employs the tools, technologies, and media that we have established for the delivery of the 125 online courses already offered through Faculty of Arts and Science Online at Queen’s in innovative ways to facilitate research-based pedagogies.

Activities such as case analyses, simulations, current events journals, webinars, self-assessments quizzes, job analyses, and weblogs employ effective and accessible technologies to deepen the acquisition of knowledge through problem-based, authentic, experiential, situated, cooperative, and assessment for/as learning that is transformative and empowering for learners. Technology effectiveness is assured through the use of evaluation methods that link utility, principles and practice by collecting and triangulating data at various stages of design, development, review, and implementation. Data sources include: diagnostic assessments, documentation (process and product), usability and implementation testing, assessment of learning outcomes, and evaluation of cost and sustainability (Cook & Ellaway, 2015).

By exposing students to a diverse range of course delivery methods, from on-campus seminars, to synchronous and asynchronous webinars and online office hours, to video lecture modules and on-demand quizzes, discussion boards, and peer reviews, students completing the Certificate will be challenged and supported to master new knowledge, and apply it in very practical ways. Online courses in particular are a productive opportunity for students to confront, negotiate, and appreciate the nuances of digital communication, diverse media publics, information flows, the power of rhetorics and images online, and the challenges of distributed professional collaborations and digital workstyles.

Accessibility

Online learning at Queen’s is particularly advanced in terms of offering technology-enhanced flexibility to students, allowing them to meet their personal learning objectives. Many courses use audio-enhanced digital books, online remote testing, lecture slides, outlines, transcripts and closed-captioned videos to help all students (not just those who require AODA accommodations) to succeed and make timely progress. It is a point of pride that ASO courses are developed at the outset according to principles of inclusive instructional design. To this end, online developers and instructors work closely with Queen’s Student Accessibility Services, with Queen’s Health Services, and with Queen’s IT Services to leverage educational technologies and deliver high-quality, personalized learning experiences to all students joining us online in the Queen’s community.

Just as importantly, in terms of educational access and flexibility, many of the courses in this proposed Certificate have no (or very few) prerequisites beyond “level 2 standing.” This means the Certificate welcomes part-time, life-long, and continuous learners to join us online at Queen’s to complete this new credential. Open, online learning opportunities such as this Certificate, unbundled from a full degree plan, are a very attractive option for those who may be returning to higher ed after a long absence, for transfer students, and for those who are seeking a bit of upgrading or “upskilling” to get ahead in their workplace or transition into a new career opportunity. We anticipate that part time students who “test the waters” with this Certificate will then continue on at Queen’s, taking advantage of the other flexible, accessible learning activities that Queen’s Arts and Science is working so hard to develop and deliver.

All course materials and activities in this program are carefully selected and developed to exhibit constructivist alignment with the course learning outcomes and assessment tools (Partlow & Gibbs, 2003), to adhere to the principles of Universal Design for Learning, and to be in compliance with the Accessibility for Ontarians with Disabilities Act. Queen’s Library supports compliance by providing services to adapt materials to meet accessibility standards, as well as providing copyright support by locating materials that meet the fair dealing policy requirements, and acquiring copyright permissions as needed.

The Learning Management System (LMS) will provide the home for course materials, including instructor’s weekly commentary, narrated PowerPoint presentations and links to interviews and video clips, as well as providing the platform for asynchronous interaction between learners and the instructor and TAs. Media-
streamed content related videos will be created by the instructor (with help from our multimedia expert) or selected from the library holdings or online sources (Vimeo, Khan Academy, YouTube). For group activities, learners will use the LMS discussion board; they may use tools of their choice (e.g. Skype, Microsoft OneDrive, Google Docs) for unmonitored collaboration. We will provide guided support on the use of these online services. In order to ensure flexibility for learners, there will be no requirement for any large group synchronous activity, but weekly options for synchronous sessions will use web conferencing apps.

Because we expect to attract participants from around the world to the online offerings in this Certificate, we will schedule meetings on alternate mornings, afternoons, and evenings, to accommodate different time zones. Moreover, we will offer recordings of all synchronous webinar sessions to provide future access for the learners.

Accessibility is an essential consideration when developing courses. To meet the needs of a broad range of learners, QEIC courses use audio-enhanced digital books, online remote testing, lecture slides, outlines, transcripts and closed-captioned videos to help all learners (not just those who require AODA accommodations) to succeed and make timely progress. At the outset courses are developed according to principles of inclusive instructional design. To this end, online developers and instructors work closely with Queen’s Learner Accessibility Services, with Queen’s Health Services, and with Queen’s IT Services to leverage educational technologies and deliver high-quality, personalized learning experiences to all learners joining us online in the Queen’s community.

Achievement of learning outcomes

Achievement of learning outcomes will be evaluated in several ways. During the development of the program, the design team including the instructors will create a curriculum map that aligns program level outcomes to course level outcomes and the course to various assessments. A document analysis will determine alignment among these items and also ensure that course activities reflect transferable skills. In addition, learning outcomes will be tracked with aligned assessments in the learning management system used through the program. This information will provide information on learner progress on learning outcomes during the program as well as achievement of learning outcomes.

To ensure the program continues to be relevant academically and reflect current best practices in design and delivery, an extensive review will take place after 3 years that will involve instructors, administrators, advisory board members, students and instructional designers, after which additional design work may take place.
6.2 **Distance Delivery** - Where students may take the same certificate or elements of it in two different modes of delivery, indicate how consistency in the certificate requirements and standards will be assured. Describe how a learning community will be fostered, how regular interactions with faculty, students, etc., will be assured, and comment on access to materials, resources, and technology.

### Consistency in the Quality of Instruction

Online instructors complete training via Queen’s Arts and Science Online when they are developing their courses, and they work with instructional designers and educational media technologists to ensure that the quality of the student experience online is consistent with the on-campus offering. All curriculum revisions to develop online sections of courses are passed by departmental committees before being reviewed by the Arts and Science Curriculum Committee, to ensure that learning objectives and the like are consistent and well thought-out.

### Academic and technical supports for student learning online and at a distance

Queen’s Arts and Science is committed to providing a coherent, consistent and equitable approach to learner support services. Learners in online courses receive ongoing instructional support from their instructor and TAs, academic advising, administrative and technical support from experienced staff in the Faculty of Arts and Science (and ASO) with specialized expertise in online learning and registration processes, as well as a broad range of support from established University services.

Learners in *Certificate* courses have access to the following:

- Faculty Academic Advisors with knowledge and experience with the particular issues affecting online learners;
- academic and personal support through distance access to the Learner Academic Support Services (Learning Strategies and the Writing Centre);
- Student Wellness Centre (Counselling and Accessibility Services) for appropriate academic accommodations for health and accessibility issues;
- resources to becoming an effective online learner, including Orientation, study skills and exam preparation webinars; and
- staff members in Arts and Science Online who assist learners with any course-related issue (including evenings and weekends).
- their instructor, who will provide synchronous and asynchronous options for contact such as office hours;
- TAs who have received training from Faculty of Arts and Science Online and the Centre for Teaching and Learning in active learning, online facilitation, and techniques for motivating learners;
- clear expectations for activities and assignments, including rubrics and exemplars, and timely and supportive feedback before the next assignment (Irons, 2008; Bangert, 2008);
- an extensive collection of e-resources including the Queen’s Library’s customized Inquiry Toolkit for Online Learning Environments to support inquiry-based activities;
- distance access to academic and personal support to the Student Academic Support Services (Learning Strategies and the Writing Centre); and
- general LMS support from IT Services (ITS), supplemented by staff in Faculty of Arts and Science Online, who liaise with ITS as well as assist learners directly by phone or email with any technical issues.

### Program Design Process

The program design team will be comprised of a core group of executive advisors; a program development academic and creative director; an educational design and development team comprising subject matter experts, an instructional designer, an educational developer, an educational technologist, a multimedia designer and a research assistant; and a market researcher/program approvals coordinator.

The program design team will:

- finalize the high-level intended learning outcomes and break down into detailed learning outcomes of the program;
- decide how content and skills development and key educational experiences will be integrated into a set of courses;
investigate how active, authentic learning approaches and reflective practice will be used to facilitate learning and achievement of course and program level learning outcomes;
create a curriculum map to convey the structure and progression of the program to achieve the program learning outcomes;
explore and test selected technologies that will support and enhance the learning experience e.g. what tools will best support reflective practice, effective collaboration, peer review, just-in-time access to course materials through mobile apps, and the unique requirements of online intensive courses (including the design sprint).

7. Anticipated Enrolment

7.1 Indicate how many new students the certificate program is expected to attract; describe the strategies to recruit students.

We expect to enrol 20 students in year one and achieve a steady-state of 100 students by year 5 (2022). We also anticipate a 5% attrition rate as students flow through into year 2 of the program.

Strategies for accommodating high demand/high enrolments

All of the core and options courses, and many of the electives seat 200 students (or more) per section. Two aspects of the learning experience need to be considered to ensure quality is maintained with such large enrolments: 1) pedagogical quality and 2) infrastructure. This Certificate will be designed to preserve the most important aspects of online pedagogy as enrolments increase. The purposeful development of diverse course materials means that quality interaction between the learner and the content will be maintained regardless of scale. Because the course development occurs prior to course delivery, the instructor and TAs can focus their time on interacting with learners. The use of technology-enabled assessments for quizzes and exams, frees up additional time for the instructor and TAs to focus on learner learning rather than marking. Learners will be provided access to just-in-time answers to questions, through clear and detailed descriptions of expectations using rubrics and exemplars, and a Q&A forum so that they can have access to support 24/7 from others in the course living around the world and in a range of time zones. Small groups will help establish and promote an online community. Studies indicate that learner-to-learner and instructor-to-learner interaction and a sense of an online community are essential for motivation and learner satisfaction (Harris and Martin, 2012; Sargeant et al, 2006).

The instructor’s role will undoubtedly present new challenges with scale. However, we intend to recognize the higher workload and time commitment associated with overseeing grading and organizing and guiding TAs, by assigning high enrolment courses a greater workload weight for the instructor. Increasing enrolments will require more TA support and we are committed to maintaining a maximum learner-to-TA ratio of 30:1. The peer interaction and group work that are essential to authentic learning will be preserved, supported by the additional TA resources. The Centre for Teaching and Learning will continue to build more capacity into the TA training service as the number of TAs rises.

Faculty of Arts and Science Online has a robust infrastructure to support learners and instructors, with current online course offerings attracting 10,000 learner enrolments annually, and individual online course enrolments as high as 1100 learners.
Together with University partners, we are committed to implementing the following strategies to ensure levels of service are maintained as enrolments grow:
- assign a course staff assistant to coordinate and manage logistics;
- enhance professional development support for faculty members teaching online courses; increase established learner academic services (academic advising, learning strategies, writing support) for online learners; and
- in collaboration with IT Services, Faculty of Arts and Science Online will provide a help-line 24 hours a day, 7 days a week to support learners and faculty.

**Promotion**

We have many ideas about promoting this new Certificate. First, we will work closely with the professionals at Queens’ Marketing and Communications (Annalisa Boccia), Arts and Science Director of Marketing and Communications (Lindsey Fair), and Arts and Science Online (Debbie Rogers) in our promotional efforts. With their input we plan to launch a social media and Google AdWords campaign (both of which are relatively low budget). Second, we will hold student creative competitions, such as photography, poster, and video contests, to increase awareness about the Certificate in the Queen’s community and beyond. Third, with help from a work-study student who has an interest in media and marketing, we plan to conduct surveys and publish whitepapers about entrepreneurial education and curricular as well as student innovation at Queen’s.

We plan to target these promotional activities to reach the following external and non-traditional market segments:
- Part-time students who see a 5-course Certificate as more achievable than a full undergraduate degree
- Distance students who prefer flexible, online program options
- International students interested in earning Queen’s credentials
- Professionals and job-seekers in the market for online professional development opportunities
- Queen’s faculty and staff members seeking a professional learning network and additional/alternative certifications and credentials
- Alumni whose lifelong engagement with Queen’s would be enhanced by continued online learning opportunities at their beloved alma mater
7.2 In Table 4 below, summarize the projected intake and enrolments by year until steady-state is reached (modify table as needed).

Table 4. Anticipated intake and enrolment in Certificate Program

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate Intake</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>Enrolment</td>
<td>0</td>
<td>19</td>
<td>38</td>
<td>57</td>
<td>76</td>
</tr>
<tr>
<td>Total Enrolment</td>
<td>20</td>
<td>59</td>
<td>98</td>
<td>137</td>
<td>176</td>
</tr>
</tbody>
</table>

Use space below for comments on Table 4. Include comments on whether enrolments in the existing degree program(s) might be affected in any way.

We expect enrolment in the Certificate to be approximately 20 students in the first year, and to grow to a steady state intake state of 100 students per year by Year 5. We also anticipate a 5% attrition rate as the students progress into Year 2 of the Certificate. It is assumed that students will complete the Certificate over 4 to 6 terms. If the above chart was expanded, there would be an intake of 100 students in year 6 and enrolment of 95 for a total enrolment of 195.

Impact on other departments:

No other programs must accommodate students completing the Certificate, and we do not anticipate any department being affected by this new proposal.

8. Resources

Provide evidence that the Academic Unit(s) has the necessary resources to implement and deliver the proposed new Certificate under the following headings (where applicable). A budget module and template (located on the QUQAP website) must be completed.

8.1 Faculty – Identify faculty members who will have involvement in the delivery of the proposed certificate program and comment on the adequacy of these resources. Complete Table 5 below.

Submit CVs (following the CV guidelines found on the QUQAP website) for all faculty that are not listed as core in the degree program(s) from which the certificate is derived. Core faculty is defined here as tenured, tenure-track, emeriti and continuing adjunct professors.

Table 5. Faculty associated with the proposed Certificate Program (add rows as needed)

<table>
<thead>
<tr>
<th>Faculty Member (Home Unit)</th>
<th>Rank/Status (Tenured, tenure track, continuing adjunct, term adjunct, special appt, emeritus, etc.)</th>
<th>Total Undergrad Teaching (incl new Program) (units)</th>
<th>Total Grad Teaching (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gregory Bavington, Dunin-Deshpande, Queen's Innovation Centre, Smith School of Business, Dan School</td>
<td>Term Adjunct</td>
<td>3.0 units</td>
<td>0.0</td>
</tr>
<tr>
<td>Rosemary Brander, School of Rehabilitation Therapy</td>
<td>Assistant Professor (Adjunct)</td>
<td>3.0 units</td>
<td>3.0 units</td>
</tr>
<tr>
<td>Jennifer Carpenter, Department of Emergency Medicine, Faculty of Health Sciences</td>
<td>Assistant Professor</td>
<td>6.0 units</td>
<td>0.0 units</td>
</tr>
</tbody>
</table>
Cormac Evans, Dan School  Term Adjunct  3.0 units  0.0

Peter Kissick, Law School  Tenured

P. James (Jim) McEIlveran, School of Engineering, Dunin-Deshpande Queen's Innovation Centre  Tenured  10.0 units

Sidneyeve Matrix, Dan School  Tenured

Elspeth Murray, Smith School  Tenured

Anne O’Riordan, School of Rehabilitation Therapy  Lecturer, Continuing Adjunct  6.0 units  6.0 units

Roel Vertegaal, School of Computing  Tenured

Ilka Luyt, Arts & Science  Term Adjunct  3.0 units

Dirk Rodenburg, Dan School  Term Adjunct  3.0 units

S.Hughson, Smith School of Business  Lecturer  3.0 units

*Use space below to comment on Table 5*

**Faculty subject matter experts (SMEs) responsibilities include:**

- Provide subject expertise and ensuring the course reflects the highest levels of scholarship in the discipline and subject area
- Adopt evidence-based practices for effective online teaching in the design of the course
- Determine the type of activities and interactive components to be included in the course and how these could best be structured
- Identify and establish achievable, measurable, and pedagogically sound learning outcomes and unit and lesson objectives
- Develop appropriate assessments to measure learning
- Ensure the course content is accurate and has an appropriate level of rigour
- Identify any additional instructional resource materials and consult with the University Copyright Advisory Office and Design Team on licensing agreements and online clearance
- Collaborate with the Design Team, review the course after its first offering, identify any changes and make revisions as needed before the next offering of the course

**Faculty Collaboration for Continuous Program Improvement**

Before and after it is launched, the instructors together with the Arts and Science Online team, administrators in the Faculty of Arts and Science and the Provost’s office, our various academic partners across campus, and online learner representatives, will collaborate to configure all aspects of this new *Certificate*. To ensure the success of *QEIC* and its relevance in light of quickly evolving academic, market, social, creative, and business trends, stakeholders will regularly meet as a group to brainstorm, prototype, and pilot updates to our courses and our program as a whole.

In our continuous innovation process, we will act as a team of “edupreneurs” engaged in regular iterations to increase and improve the programs’ learner-centredness, accessibility, academic rigor, interdisciplinarity, popularity, and appeal to participants near and far. We will collaborate to solve problems and reduce program “frictions” as they arise, and to implement and experiment with new value-added technologies and innovative pedagogies as they emerge.

This cohesive, continuously improving program design and delivery approach is intuitive to participants not only because of the nature of this innovative and intrapreneurial certificate project, and not only because of the many years of collaborative expertise among the Queen’s Arts and Science Online team. In addition, it is noteworthy that the
instructors involved in this online Certificate are also already teaching together in various courses and Queen’s programs including those at the Smith School of Business (Murray, Bavington, Matrix), the Dan School (McLellan, Bavington, Rodenburg, Matrix), and the Faculty of Health Sciences (Carpenter, O’Riordan, Brander).

8.2 Staff - Comment on the adequacy of the staff complement to support the certificate program (administrative, technical, IT, laboratory, etc.).

Roles of Team Members

The development team for this Certificate includes Faculty Members (as the subject matter experts), Instructional Designers, Multimedia Specialists, Learning Management Specialists, Subject Liaison Librarians, Quality Assurance Reviewers, Marketing Team, Teaching Assistants, and Student Services Staff.

Instructional Designers responsibilities include:
- Manage the project and coordinate the entire Development Team including the SME(s), Liaison Librarian, Multimedia Specialist, Learning Management Specialist, and others as appointed by Arts and Science Online
- Provide the SME(s) with expertise in online course design and in current recommended practices in online learning based on pedagogical research such as active learning and collaborative approaches in online learning
- Assist the SME(s) to establish learning outcomes, design engaging learning activities, and assessments aligned with learning outcomes
- Ensure the course is laid out with clear, logical sequencing and reasonable pacing
- Act as a project manager, maintaining established schedules and deadlines, and reporting on progress to Arts and Science Online
- Ensure best practices are employed throughout the development process from concept to production, to feedback and revision
- Assist the SME(s) to design assessments and activities that will facilitate regular and timely feedback to students by the instructor and teaching assistants
- Ensure a variety of media and formats (e.g. text, audio, photos, graphics)
- Ensuring an accessible and intuitive user interface

Learning Management Specialist responsibilities include:
- Maintain established schedules and deadlines, report on progress to Arts and Science Online
- Complete template course documents for the detailed course outline, technology and textbook requirements and important dates
- Gather and integrate all course assets (e.g. copy, photos, graphics, etc.) and post to LMS
- Organize course content in a consistent, graphically appealing, easily understood manner
- Set up automatically-graded online quizzes as necessary
- Create prototypes for design team to ensure usability for learners
- Test all course elements prior to start of term
- Initial set-up of the course grade book in the LMS

Multimedia Specialist responsibilities include:
- Provide guidance about media and formats (e.g. text, audio, photos, graphics)
- Make recommendations about prospective software used in courses
- Create multimedia content (e.g. video editing, activity creation, interactive material)
- Collaborate with learning management specialist to create prototypes of interactive material using innovative software
- Provide training to instructors and teaching assistants for webinar training/troubleshooting
- Ensure multimedia meets AODA compliance and standards (e.g. video captioning, transcripts)

Liaison Librarians responsibilities include:
- Educate design team about resources and references available
-  Ensure copyright is in compliance
- Collaborate with subject matter experts to select course material accessible to students
- Design tailored online library guides to support specific course activities
**Quality Assurance Reviewer** responsibilities include:

- Ensure *Quality Standards* of online teaching and learning excellence is adhered to for the program and course level
- Update Quality Standards to reflect most recent online learning pedagogical research
- Collaborate with team to create culture of excellence in program and course design
- Provide substantial and constructive recommendations to course and program design
- Consider the perspective of students to ensure clarity and usability
- Educate design team on recommended practices to improve quality and promote learning

**Market Researcher** responsibilities include:

- Investigate market activity and assessing future online learning trends and opportunities
- Formulate plans or proposals and present them to senior management
- Commission and conduct qualitative and quantitative surveys, which may involve field, online, interview or focus group assessments
- Manage budgets including advertising and promotional budgets
- Devise and deliver promotional campaigns to attract new students to Queen’s Arts and Science Online’s portfolio of programs
- Create media plans and manage interview requests from reporters, source experts including staff, faculty, and student spokespersons
- Publicize the strengths of the academic faculty affiliated with Queen’s Arts and Science Online
- Update and manage all Facebook and Twitter accounts and communities
- Create fresh and up-to-date website content
- Provide ideas and input into development of new marketing and public relations campaigns
- Write and produce marketing material (brochures, posters, flyers, websites, webinars, ads)
- Liaison with academic and administrative staff, and third-parties such as videographers

**Student TAs** responsibilities include:

- Provide grading assistance for large enrolment courses, including proctoring
- Act as student mentors
- Assist faculty with course management system operation as needed

---

### 8.3 Space Requirements

*Describe the space (work space, laboratory space, office, classrooms) and equipment needed to support students’ academic activities.*

No physical resources such as classroom space are needed, as new distance students admitted to the *Certificate* program will be taking courses online.

### 8.4 Program Administration

*Describe how the program will be administered (e.g. admissions, tracking progress, curriculum, etc.)*

This program will be administered by the Dan School of Drama and Music. A faculty member and an office administrator will serve as part-time coordinators to advise students, track progress, review curriculum through the normal CPR process.

The Faculty of Arts and Science will manage admission to the *Certificate* in collaboration with Undergraduate Admission following established infrastructure and processes used for other online programs.

Student performance and academic progress will be monitored by the Student Services division of the Faculty Office in the same way as for students in other Arts and Science programs. Existing infrastructure in the Faculty Office (Arts and Science Online, Student Services) will be used to support the offering of the program.
8.5 **Information Technology** - Describe the information technology needed to support the delivery of the program and to support the student’s scholarship. Indicate the resource implications for hardware, software/internet, audio-visual, telecommunications, etc. Provide contact person and date that consultation with IT staff took place.

It is anticipated that existing ITS support and infrastructure will be sufficient to mount and deliver this certificate program.

Currently, the University provides information technology to all faculty, staff and students by providing them with individual email, web space, the Microsoft Office suite and anti-virus software. Faculty are also offered services such as onQ (for courses), Wiki and QShare pages for individuals, departments and groups, as well as WebPublish for Departmental websites. Faculty and departmental administrators use PeopleSoft for class lists and entering grades, and managing their research accounts. Training for faculty on the various software packages is provided through ITServices online seminars, webinars, and web documentation as well as the hands-on training. ITServices supports various software packages and troubleshooting services to faculty, staff and students through a telephone IT Support Centre. Students are expected to have their own computers.

Given the evolving nature of technology, new software and applications are constantly being explored by Arts and Science Online in collaboration with Queen’s IT Services; courses in the certificate program will evolve to exploit these new technologies as they are adopted.

Jim Cranston, Acting CIO, reviewed the document on September 25, 2017 and will provide sign-off upon approval by Faculty Board.

**Date:**

8.6 **Library** - Provide information about library support holdings, availability of and access to library resources relevant to the proposed program(s).

The library collects information resources in all formats to support teaching, learning and research across the range of programs offered by Queen’s Faculties and consequently has materials to support this Certificate. This is a cross-disciplinary Certificate and the library collects a range of relevant and specific disciplinary areas including business, technical innovation, medical innovation, social and cultural industries, product and service design, user experience design, and the like. Materials supporting the courses in this Certificate program will be both disciplinary and interdisciplinary. The Library subscribes to an electronic package of technical books that would support the technical skills component of the Certificate and also the practical skills training to be offered through the optional workshops. Materials not owned can be ordered through our interlibrary loan service.

Indicate what new library resources will be needed (e.g. journals, print monographs, audio-visual material, historical documents, electronic databases, statistical/geospatial data).

The library will, within budget constraints, continue to collect in all formats in the relevant areas. The library will access new resources for purchase as they become available. The liaison librarians will be consulted about changes in course content and involved in the collaborative planning process for new directions in existing courses.

Additionally, a certificate-specific Library Guide will be created in conjunction with the liaison librarians, providing access to course materials. This Guide will be available online to all learners within the program, and to the wider population of Queen’s students, staff, and faculty who are interested in innovation and entrepreneurship, regardless of whether they are registered in the Certificate.
Queen's University Library currently has a liaison librarian for Dan School who provides research, teaching and collection services for music and drama studies. The multidisciplinary nature of the Certificate will necessitate cooperation and discussion with liaison librarians for other subject areas including Engineering, Medicine, and Business. (Mark Swartz)

Date: __________

8.7 Describe any additional resources required that are not currently available. Provide evidence of institutional commitment to supplement existing resources as needed. [Complete budget module]

**Additional Resources Required:**

This program will be designed to best utilize existing staff and faculty resources. Also, we have been awarded support from eCampus Ontario ($363,834).

Arts and Science Online will develop all new online courses except for CHEE 302/3.0, which will be developed by the Engineering in-house team.

Staff and faculty from Dan School will administer and manage the Certificate, in consultation with Queen’s Arts and Science Online. As demand increases, additional resources in the Dan School will be directed to support students in the program.

Please refer to budget appendix for more information.

9. Other Matters

9.1 Provide evidence of student demand for the certificate program and describe how this information was obtained.

**Existing Evidence of Demand**

The high level of demand for academic programs in innovation and entrepreneurship is demonstrated by the number of existing programs in Canada, and by the size of the unmet demand at Queen’s. Preliminary market research indicates that in Canada there are currently 10 undergraduate certificates and two graduate certificates in innovation and/or entrepreneurship, as well as nine full undergraduate degrees, and three diplomas.

The unmet demand at Queen’s is evidenced by the undergraduate interest in Smith’s School of Business’s Master of Entrepreneurship and Innovation Program, which this year received 1,800 applicants for 30 available seats in the incoming class. Those applicants represented a wide range of professional fields and academic disciplines from universities across Canada and from other countries. As well, at the undergraduate level, when a 6-week online “Design Thinking” course (ENIN 140/3.0) was piloted in 2016 Summer Term, 200 learners registered in the first month of pre-registration for this “innovation-centric” course, and they represented 45 different academic programs at Queen’s. When “Design Thinking” was next offered (in Winter Term 2018), 1100 Queen’s students enrolled. Finally, it is also noteworthy that when ENIN 301/3.0 (Creative Entrepreneurship) and ENIN 200/3.0 (Foundations of Entrepreneurship) were launched in 2017 Summer and Fall Terms respectively, the total enrollment was 1,080 Queen’s students.

**Evidence of Demand for Fully Online Program**

This proposed new Certificate program was inspired by the popularity and success of the Dunin-Deshpande Queen’s Innovation Centre (DDQIC) and their Summer Institute, the demand for admission to Smith School of Business’s Master of Management Innovation and Entrepreneurship Program, and the interest identified by our market research for Dan School’s new Master of Arts Leadership Program (graduate degree and diploma). However, unlike this proposed Certificate, all of the aforementioned Queen’s initiatives have a residential requirement, whereas the QEIC program can be completed 100% online.
Leaders in higher education recognize the essential role of online programming to meeting the education and training needs of adult learners for whom learning is an ongoing requirement to be successful in today’s workforce. Individuals seeking to update their knowledge and skills to adapt to the evolving employment landscape often do so while working, managing family life and assisting aging parents (Roby, Ashe, Singh, & Clark, 2013). In fact, even when overall enrollment numbers decline, registration in online learning continues to rise (Britto & Rush, 2013).

9.2 Explain how the certificate program will fulfill societal need.

Expected Demand

Beyond campus, as the lifecycle of industries shortens, graduates are entering an increasingly dynamic workforce. As is evident from the findings of The World Economic Forum’s 2016 ‘Future of Jobs’ report, over a third of skills that are considered important for today’s workforce will have changed by 2020. Most notably, that report indicates that creative thinking skill will move from the number 10 spot it currently occupies, to being one of the top three mission-critical business competencies for employers and employees alike. As a result, creative problem solving, ingenuity, and imagination are not considered ‘nice-to-have’ attributes, but are quickly becoming prerequisites for high performance companies and professionals—because the research shows that such ‘out-of-the-box’ thinking supports both individuals and organizations to innovate smarter and faster.

These results echoed the much-referenced 2010 IBM-sponsored study titled “Capitalizing on Complexity.” It surveyed more than 1,500 Chief Executive Officers from 60 countries and 33 industries worldwide, and found that CEOs identify creative thinking as the number one leadership competency required for business success in an era of rapid technological developments and constant change. However, two years later, when Adobe released their “State of Create” study in 2012, they found that only one in four employees believed they were living up to their creative potential in their professional lives. Notably, more than half of the Adobe survey respondents also said they felt creativity was being stifled by the education system. With too much emphasis on uniformity and standardization at school, Adobe researchers concluded, educators fail to enable learners to develop their natural creative powers, and young people learn to prioritize conformity over inventiveness and originality. In the conclusion of this research, Adobe pronounced a “workplace creativity gap.” As educators, it is precisely that “gap” that we seek to bridge for learners with the Certificate.

Employers, educators, employees, and learners know the importance of developing innovative problem solving and entrepreneurial skills to succeed in this shifting economy. This significance is evidenced by the success of The Dunin-Deshpande Queen’s Innovation Centre (DDQIC), which supports practical, skills-based experiences in learner-led innovation and entrepreneurship at Queen’s University. The DDQIC programming provides a platform for learners to develop the entrepreneurial skills that will allow them to be agile in their careers, and create their own opportunities. We point to the success of the DDQIC Summer Institute, which successfully “graduates” 40 learners per year, and receives many more applications than it can accommodate, as an indication of the interest in, and demand for, this new Queen’s Certificate in Entrepreneurship and Innovation.

Removal of Geographical Barriers

The fully online format of the Certificate will provide access to learners in Ontario, across Canada, and globally. For example, in Winter Term 2016, Queen’s Arts and Science Online supported learners from all Canadian provinces and territories, and 26 countries around the world and in a multitude of time zones.

Queen’s Arts and Science Online offers admission categories that provide pathways for learners from a wide range of educational backgrounds to take undergraduate courses and to enroll in degree and certificate programs, and a user-friendly online application process. This allows us to welcome part-time, life-long, and continuous learners to complete the Certificate.
9.3 For new professional certificate programs, provide evidence that the certificate is congruent with the regulatory requirements of the profession.

n/a

10. Equity, Diversity and Accessibility

10.1 Describe how the proposed new certificate program will address equity considerations, including (but not limited to) issues of particular concern for the groups identified in the university’s various equity programs.

**Fulfilling Needs of Underserved Populations**

The Certificate will be open to all new and continuing part-time undergraduate learners studying at Queen’s, and qualified distance learners – three groups of learners who often have fewer course options and opportunities to earn academic credentials. The Certificate will be intentionally organized so that several of the core and option courses are offered during the summer session when non-traditional learners from other (academic and non-academic) markets are more likely to seek and take Queen’s online classes.

As well, just the fact that this Certificate and its core courses will be offered online immediately opens up flexible opportunities for a range of special-needs and non-traditional demographics, insofar as it includes flexible scheduling, asynchronous activities, fully accessible high-tech multimedia learning assets (such as digital readings, captioned videos, recorded webinars), and accessible online laptop-and smartphone-friendly office hours and email-ready learner support services.

Importantly, QEIC learners will have the opportunity to work closely with peers who enrol from other universities in Canada and abroad. In this way, online courses offer a unique experience for Kingston-based residential Queen’s learners to study alongside part-time, mature, and distance learners located elsewhere. This diversity is a benefit to all learners, and aligns with the Queen’s Academic Plan mandate of “Reaching Beyond to embrace Globalism, Diversity, and Inclusion.”

Because of this demonstrated interest and existing demand, we expect the following external and non-traditional audience segments will benefit from the new fully online Certificate in Entrepreneurship and Innovation Program:
- Part-time learners who see a 5-course certificate as more doable than a full degree
- Distance learners who prefer flexible, online program options
- Professionals and job-seekers in the market for online professional development opportunities
- People in the workforce seeking to cultivate their entrepreneurial spirit by developing the knowledge and skills to start their own business
- Lifelong learners seeking a learning network and additional/upgraded certifications and credentials

**Accessibility**

We address issues of course design, inclusion and accessibility at length elsewhere in this proposal.

11. Quality and Other Indicators

11.1 Define indicators that will provide evidence of the quality of the faculty and how they will be used (e.g. qualifications, teaching effectiveness, supervisory/mentorship ability, research impact, innovation and scholarly record; appropriateness of collective faculty expertise to contribute substantively to the proposed certificate program).

**Ensuring Quality of Design and Delivery of Online Courses:**

All online courses in the Faculty of Arts and Science at Queen’s are developed (and delivered) using a collaborative team-based approach. The home academic department ensures academic quality—ensuring that the content and learning outcomes correspond to the on-campus version—and Queen’s Arts and Science Online provides expertise in course design and online pedagogy. The Faculty sets and implements quality standards, which are articulated in several policy documents and acknowledged through a Memorandum of Agreement between the academic department, the faculty member leading development, and Queen’s Arts and Science
Online. The Library is also actively involved in the development of online courses, with the relevant subject-specialist librarian advising on online content and resources from the outset of the development. In order to continue to enhance quality and support faculty members as they deliver online courses, Queen’s Arts and Science Online runs a series of Online Instructor Workshops throughout the year, focusing on such topics as Communication in Online Courses, and Designing Multimedia for Effective Learning.

In the individual online courses and the online Certificate as a whole, Queen’s Arts and Science staff will ensure that all aspects of production are complete by Fall 2018 and that online design quality standards are being met, using our Quality Checklist developed from Quality Matters and the Online Learning Consortium materials. (Queen’s has an institutional membership in Quality Matters.) Students will also be invited to provide feedback on course quality, to provide the instructors and design team with feedback to inform immediate small adjustments to the course. At the end of each course, students will complete the Student Evaluation of Online Teaching Effectiveness, a research-based online course evaluation tool designed by Art Bangert and adapted by Queen’s in an ongoing research collaboration in assessment (Bangert, 2008). Following established practice in Queen’s Arts and Science Online, this feedback will be incorporated into an annual post-offering review by the instructor and the design team. A more extensive review of each course will take place after 3 years, after which additional design work may take place.

To further ensure the ongoing quality of the courses in the QEIC, students who have completed all Certificate requirements will be asked to complete an exit survey that will inform subsequent annual program iterations and improvements. This is part of our commitment to building an innovative, design-driven certificate program – one that is user-centred, in constant “beta,” and responsive to evolving stakeholder needs.

To Measure Student Satisfaction and Quality of Instruction and Teaching Effectiveness:

The traditional measure of quality teaching and learning at Queen’s is the USAT, which we will use for our on-campus offerings. As this tool is not set up to be administered online and not suitable for online courses, the Student Evaluation of Teaching Effectiveness at Queen’s, piloted through Arts and Science Online, will be available to obtain student feedback to gauge student satisfaction, and the effectiveness of both course design and the teaching methods.

Also, many faculty teaching in the Certificate will take advantage of the functions of the onQ/Brightspace learning management system, to deliver questionnaires and informal surveys to students, asking for just-in-time feedback about their experience in the course. This kind of feedback will be used to innovate the courses and program as a whole. We may also anonymized excerpts and share them as testimonials on the DDQIC, Dan School, and Arts and Science Online websites, to encourage students to consider applying to the Certificate.

Because we are dedicated to building and delivering a student-centred learning experience, and we prefer to use a collaborative approach to innovation, we will be asking students for feedback at many points along their learning journey. For example:

At the outset of each course:

A pre-course survey will be sent to all learners exploring what they are hoping to get out of the course, their key learning goals, as well as their key concerns. During each course offering, learners will complete a self-assessment aligned with course activities. The multiple-choice questions will allow them to rate their current knowledge on the subject and open-ended questions will provide an opportunity for them to convey their expectations and concerns about the course.

At week 3 of each course:

Learners will be invited to complete a brief survey in the third week of term, providing the team with insight into the learner experience of the structure, technological support, and interactive elements of the course, and enabling the course design team to make any adjustments necessary to improve the online environment. This data will be analyzed holistically to inform decisions about delivery modifications and improvements.

At the end of each course:
At the end of each course, learners will complete the Learner Evaluation of Online Teaching Effectiveness, a research-based online course evaluation tool. This survey will be distributed online and completed anonymously. The design team will review and incorporate this feedback into a collaborative, post-offering review by the instructor and design team, several weeks after the completion of the course.

As they conclude the certificate program:

To further ensure the ongoing quality of the courses in the QEIC, learners who have completed all certificate requirements will be asked to complete an exit survey that will inform subsequent annual program iterations and improvements.

Plan for Program Sustainability

The partnership will be formalized through a five-year Memorandum of Agreement (MOA) between Faculty of Arts and Science and our collaborating Schools and Faculties. That agreement will describe the responsibilities and expectations of each of the parties around program planning, course development and program evaluation and review. The MOA will include a commitment from both parties to meet annually and communicate about what has worked and what hasn’t worked from the academic and program perspective, and to review the collaboration process itself from a working relationship perspective. The MOA will also commit the parties to conduct a full review of the program and courses in the fifth year of the MOA.

Plan for ongoing maintenance of content currency

To ensure courses continue to be relevant academically and reflect current best practices in design and delivery, an extensive review of each course takes place every 3 years. This review is initiated by Arts and Science Online with the Department Head of the academic unit to which the course resides, and involves the instructor, another member of the academic department, and the instructional design team. At the end of this process, additional design work and updating of content will be agreed upon and carried out.

All the faculty are committed to updating course content and introducing innovative approaches to learning in their courses, including learner team-based learning, simulations, case study learning approaches, and incorporating new advances in technology. In addition, all courses in this Certificate implement the following strategies to ensure that content remains current and has real-world relevance:

1. The use of “Weekly Updates” in which instructors highlight current events in labour relations and human resource management by sharing recent cases, articles, podcasts, webinars, blogs, etc. in the field;

2. The integration of industry experts, who offer valuable professional insights, connecting theory to practice, extending learning to current and relevant contexts, and applying collaborative skills in an online environment. The use utilization/leveraging of relevant social media platforms (such as LinkedIn and Twitter)

3. The incorporation of blogging that allows learners to be creative participants in linking course concepts to current issues and events, while engaging in deep, continuous learning through regular reflection (Farmer, Yue, & Brooks, 2008).

Evidence of Collective Faculty Expertise: Collaboration within Queen’s

The Queen’s Entrepreneurship and Innovation Certificate is a uniquely collaborative academic initiative. It will bring together a diverse participant group involved in designing and delivering courses including instructors from the Dan School of Drama and Music, the Faculty of Engineering and Applied Science, the Faculty of Education, the Faculty of Law, the Smith School of Business, the School of Computing, the DDQIC, the School of Medicine, and the Faculty of Arts and Science Online. Our goal is to meet the needs of learners regardless of their location by offering multidisciplinary online courses in innovation and entrepreneurship that adhere to evidence-based best practice principles in online learning (Moore & Kearsley, 2011) and reflect the high quality of education associated with Queen’s University. Annual program evaluations will provide quantitative and qualitative data to guide our collaborative process.

The subject matter experts who are involved in offering new online courses for this Certificate will work collaboratively with an instructional design team led by an instructional designer to design and develop the
courses. These faculty members will also teach the courses, and as such, the individual Schools or Faculties they are associated with will be responsible for the academic quality of the courses they administer. Faculty participants and learners registered in the QEIC will also participate in the Program evaluation.

Quality Assurance: The Core Design Team

The program design team will be led by the Program Development Academic and Creative Director, Sidneyeve Matrix. The course design team will be led by the instructional designer, Wanda Beyer. Matrix and Beyer will meet on an ongoing basis with the program team to ensure consistency, and with the core members of each course design team.

Program Development Academic and Creative Director: Sidneyeve Matrix (PhD) has 8 years of experience in the development and delivery of online courses at Queen’s University. She has served in a creative director role while collaborating with Arts and Science Online to launch other online programs including the Master’s of Engineering and Environmental Leadership Program, and the Dan School of Drama and Music Arts Leadership Program. The Academic Director oversees the program design team, Ensures the program-level learning outcomes and detailed outcomes reflect needs of stakeholders: learners, community entrepreneurs, and employers, manages the proposed timeline for program development and ensures deadlines in the program approval process are met, and coordinates all program evaluation and reporting.

Instructional Designer: Wanda Beyer (M.Ed. Cognitive Studies) has 9 years of experience in instructional design, development and delivery of online courses at Queen’s University. She has completed the Quality Matters Courses, Applying the Quality Matters Rubric. The Instructional Designer will manage the project and coordinate the entire Educational Design and Development team, including the Subject Matter Experts (SME)(s), Multimedia Specialist, and others as appointed by Arts and Science Online, and provide the SME(s) with expertise in online certificate design and in current recommended practices in online learning based on pedagogical research such as active learning and collaborative approaches in online learning. She will assist the SME(s) to establish learning outcomes, design engaging program-level learning activities and assessments aligned with learning outcomes, and ensure the program is laid out with clear, logical sequencing and reasonable pacing. She will also act as a Project Manager, maintaining established schedules and deadlines, and reporting on progress to Arts and Science Online, while promoting best practices throughout the development process from concept to production, to feedback and revision.

Educational Developer: Klodiana Kolomitro (PhD) works at the Centre for Teaching and Learning. As Educational Developer she will offer the design team and SME(s) her expertise in active learning pedagogies, strategies for assessing learning, and program evaluation.

Learning Management Specialist: Erik Bigras (BA Anthropology) has worked at Queen’s for a year creating and maintaining academic courses in various learning management systems. He previously researched and designed technological platforms for online collaborative work in the social sciences at Rensselaer Polytechnic Institute and University of California, Irvine. He has experience in web design and information architecture as well as being proficient in various web languages such as HTML, Javascript, and CSS.

Multimedia Specialist: Julian Enright (BScH, BA) has worked at Queen’s for 4 years assisting with the creation of customized activities and course content using various educational enhancement tools. He supports customized activities and services aimed at enhancing the online learning experience. As the Multimedia Specialist he will offer his expertise in learning technologies, and identify and assess the most effective tools to support learning within the context of this certificate program.

Market Researcher and Program Approvals Coordinator: Cormac Evans (BA, Diploma in Public Relations) is the Director of Strategic Initiatives in the Faculty of Arts and Science. As Market Researcher he will confirm the topics and themes of greatest relevance to our potential students and any requirements for transferable accreditation through surveys distributed to our target markets and conversations with potential professional accreditation bodies. He will communicate feedback, where appropriate, to the Deans, the Program Heads, SMEs, and instructional designers to incorporate into program and course development. And he will assist the Director with creating documentation for and shepherding the program through the QUCAPS approvals process.

Subject Librarian Liaisons:
1. Constance Adamson (Business)
Comment on the certificate program structure and faculty attributes (including research activity) that will ensure the intellectual quality of the student experience.

The faculty teaching the courses that comprise this Certificate have lengthy and prestigious research records, and many have years of entrepreneurial and industry experience to contribute. Many also have a wealth of experience teaching online. The following list provides background information on the subject matter experts who will be teaching in the Certificate program:

**Mr. Gregory Bavington** is the Executive Director of the Dunin-Deshpande Queen’s Innovation Centre. He has served as an elected member of Queen’s University Council and on the Queen’s Engineering Society Board of Directors. Mr. Bavington teaches in The Smith School of Business Masters in Entrepreneurship and Innovation Program. He has extensive experience as a senior design engineer on major engineering design projects around the world, and as a senior business executive in the manufacturing sector. **Teaching:** ENIN 200/3.0 “Foundations of Entrepreneurship”

**Dr. Sidneyeve Matrix** is a Queen’s National Scholar and Associate Professor. She has been teaching for Queen’s University Arts and Science Online since 2011. She teaches courses in digital communications, culture, and commerce. Dr. Matrix also teaches in the Masters Program in Entrepreneurship and Innovation at Smith School of Business, the Arts Leadership Graduate Program at the Dan School of Drama and Music, and serves on the Dunin-Deshpande Queen's Innovation Centre Executive Team. An Educator in Residence at The Centre for Teaching and Learning at Queen's, Dr. Matrix is the recipient of the OUSA Award for Excellence in Teaching at Queen's University, by the Alma Mater Society and the Ontario Undergraduate Student Alliance. Her educational technology design initiatives and research have been featured in University Affairs, Macleans, Evolution magazine, Academic Matters, Yahoo!, MSN.ca, Canada.com, Toronto Star, Globe and Mail and elsewhere. Her scholarship on teaching and learning online has been published in Open Education Europa: eLearning Papers, Issues and Trends in Educational Technology, EDUCAUSE Review, The Journal of Global Literacies, Technologies, and Emerging Pedagogies, The Journal of Pedagogic Development, and as a chapter in: Increasing Productivity and Efficiency in Online Teaching. **Teaching:** ENIN 301/3.0 “Creative Entrepreneurship” / ENIN 140/3.0 “Design Thinking” / ENIN 240/3.0 “Explorations in Creativity” / ENIN 340 “Topics in Entrepreneurship” / ENIN 205/3.0 “Innovation for STEAM” / ENIN 400/3.0 “Design Sprint”

**Dr. P. James McLellan** has served as Head of the Chemical Engineering department for the periods July 2006 - June 2011 and July 2012 - June 2017. He is also cross appointed to Department of Mathematics and Statistics. Dr. McLellan is the Academic Lead of the Dunin-Deshpande Queen's Innovation Centre, and founder of the Queen’s Summer Innovation Initiative. Prior to joining Queen’s in 1990, he worked for Petro-Canada as a control applications engineer. He is an active researcher and consultant in the fields of statistical model building and process control, helping countless North American biomedical, aluminum smelting and rolling, and petrochemical companies transform their business processes. Dr. McLellan is committed to building innovation and entrepreneurship programming at Queen’s and to growing a vibrant entrepreneurial culture in the Kingston region. **Teaching:** CHEE 302/3.0 “Technical Entrepreneurship” / ENIN 205/3.0 “Innovation for STEAM”

**Dr. Elspeth Murray** is an Associate Professor of Strategy and New Ventures and the Associate Dean of MBA and Masters Programs at Smith School of Business. She is also the Director of Queen’s Centre for Business Venturing (QCED/QCBV), the entrepreneurship centre at the Smith School of Business. Dr. Murray is the CIBC Faculty Fellow in Entrepreneurship at Smith School of Business. Prior to joining Queen's in 1996, she worked in industry for seven years. In addition to her teaching and research activities, Dr. Murray is an active consultant for both private and public sector organizations. She has worked extensively with clients as diverse as the Auditor General for Canada, the Ontario Ministry of Finance, and BMW Canada. She is also a Director for Parteq, the commercialization organization for Queen’s University, and an advisor to several start-ups. Dr.
Murray is also on the Executive Board of the Dunin-Deshpande Queen's Innovation Centre, and she teaches in The Smith School of Business Masters in Entrepreneurship and Innovation Program. **Member of the teaching team for ENIN 400/3.0 “Innovation Design Sprint”**

**Mr. Cormac Evans** is the Director of Strategic Initiatives in the Faculty of Arts and Science. He is responsible for strategic planning for new program initiatives and for supporting decision-making related to program opportunities within the Faculty of Arts and Science. Cormac’s previous positions included several years working at the Smith School of Business as Associate Director, Corporate Relations, Student Programming in the Business Career Centre, and Alumni Engagement. He also served as a Senior Development Officer at Queen’s, and as a Business Development Manager with Routes to Learning Canada and Manager of Corporate Communications and Partnerships with the Kingston Economic Development Corporation. He holds a BA from Mount Allison University and a diploma in Advertising and Public Relations from St. Lawrence College. **Teaching: ENIN 204/3.0 “Public Relations”**

**Jennifer Carpenter, MD, FRCPC, CCFP, Department of Emergency Medicine, Faculty of Health Sciences.** Dr. Jenn Carpenter graduated from Queen’s Medicine in 1997. She completed her Emergency Medicine fellowship exam in 2003, MSc (Community Health) in 2008 and her CCFP in 2012. She has been Co-Director (Education) of the Office of Global Health since it opened in 2008. Dr. Carpenter is the Advocacy Lead for the Undergraduate Medicine program and she designed and teaches in the Population and Global Health course for UGME. She is also the Director of the Certificate of Global Health, an optional program for medical students, and is the lead for two Population and Global Health courses in the new Bachelor of Health Sciences (Honours) Degree at Queen’s. Dr. Carpenter is the Medical Director and co-founder of Pamoja Tunaweza Women’s Clinic in Moshi Tanzania and travels there three times per year to teach Canadian and Tanzanian learners and to lead volunteers in providing free medical care for under-serviced Tanzanians in the rural Kilimanjaro Region. **Teaching: BMED 271/3.0 “Global and Population Health” and BMED 471/3.0 “Advanced Global and Population Health”**

**Ms. Anne O’Riordan** is part of a group of faculty exploring the area of Interprofessional Education and Collaborative Practice and is particularly interested in the patient/client perspective. Ms. O’Riordan is a Lecturer in Queen’s Occupational Therapy Program. She coordinates the Lived Experience of Disability course, and is the lead coordinator for interprofessional education opportunities within the School of Rehabilitation Therapy at Queen’s School of Medicine. Ms. O’Riordan was the Clinical Educator in the Office of Interprofessional Education and Practice (OIEP) for 10 years in the Faculty of Health Sciences with primary responsibility for providing a clinical perspective and expertise to Interprofessional activities and projects. As part of this role, Ms. O’Riordan was Project Manager for two Health Force Ontario-funded research projects exploring collaborative practice. Ms. O’Riordan has also been involved in international projects with the International Centre for Community Based Rehabilitation (ICACBR) in Bosnia-Herzegovina and Bangladesh, and was a facilitator in the online certificate program Community Based Rehabilitation and International Development. Ms. O’Riordan was part of the research team working on the Compassionate Collaborative Primary Care project funded by the AMS Phoenix Calling to Caring Project. She also co-teaches the Interprofessional Collaborative Education course at the Bader International Study Centre in the UK. **Teaching: IDIS 280/3.0 “Interprofessional Practice in Healthcare”**

**Dr. Rosemary Brander** is Director, Office of Interprofessional Education and Practice, and Assistant Professor, School of Rehabilitation Therapy at Queen's University, Kingston. She is also the Senior Researcher and Program Evaluator, Centre for Studies in Aging and Health at Providence Care, Kingston. Her research interests include collaborative practice and customer service in healthcare environments, interdisciplinary practice and education, and organizational processes for improved health outcomes. She has held a variety of health leadership roles in the public sector and is an experienced clinical physiotherapist with individuals living with chronic pediatric and neurologic disabilities. Dr. Brander served as co-lead for Queen’s University on the Canadian Interprofessional Health Leadership Collaborative (CIHLC). Dr. Brander received her BSc in Physiotherapy from Queen’s University in 1981 and an MSc from the University of Western Ontario in 1991. In 2012, she completed her doctoral studies and received a Ph.D from Queen’s. For more than 30 years, Dr. Brander has been involved in a wide spectrum of patient-care, practice development and training in the field of physiotherapy, including; elder care, child development, acquired brain injury/acute care, physiotherapy, community services, orthopedics and pediatric care. She has contributed to these areas, as a leader, administrator, advocate, therapist, trainer and scholar. **Teaching: IDIS 280/3.0 “Interprofessional Practice in Healthcare”**
Dr. Roel Vertegaal is a Professor of Human-Computer Interaction (HCI) at Queen's University's School of Computing, and director of the Human Media Laboratory. He is also CEO of Xuuk, inc., a startup that develops ubiquitous eye input applications. His first degree is in electronic music from Utrecht Conservatory in The Netherlands. He did an MSc in computing in Britain, studied design in the hague, and holds a PhD in HCI from Twente University. Dr. Vertegaal is one of the world's experts on eye communication between humans, and between humans and technology. His work on Attentive User Interfaces (AUI) was featured in media across the globe, from Good Morning America to Scientific American. Dr. Vertegaal helped create the first North-American conference on eye tracking (ACM ETRA), established alt.chi as the alternative papers venue at the annual ACM CHI conference, and advised the National Academy of Sciences. His current research interest is in Organic User Interfaces (OUI). Dr. Vertegaal has a Ph.D. in Computer Science from The University of Twente, The Netherlands, and a MPhil. in Computer Science from The University of Bradford, United Kingdom. Teaching: COCA 201/3.0 “Computing and the Creative Arts”

Mr. Peter Kissick has a Master of Laws (LL.M) degree from Queen’s University. He has practiced in the field of business law since 1990, more specifically in the areas of securities law, banking, intellectual property and most recently electronic business and business start-ups. For the past 17 years, he has taught business law in the undergraduate Commerce and MBA programs at Queen's University. He is also currently teaching the Commerce Program's Ethics and Corporate Social Responsibility course. In the Faculty of Law, Mr. Kissick has taught various courses, and has been a Lead Instructor in Queen’s Law’s introductory course in law for undergraduate students. He is also the Past Director and of the Queen's Business Law Clinic, which he founded in 2009. Mr. Kissick has received faculty awards for his teaching, as well as several nominations for university-wide teaching awards at Queen's. He is a past Director of the Queen's Commerce Program. Since his call to the Ontario Bar in 1990, Mr. Kissick has practiced as an associate at the Toronto law firm Smith, Lyons, after which he joined the in-house legal department of The Toronto-Dominion Bank. Currently, in addition to his work at Smith, he has his own consultative business law practice in which he specializes in providing advice to smaller entities at various stages of their growth, and he has participated on the advisory boards of several companies and organizations. Mr. Kissick is a member of the Law Society of Upper Canada and the Ontario and Canadian Bar Associations. Teaching: LAW 204/3.0 “Corporate Law”

Dr. Ilka Luyt is an adjunct instructor in The Writing Program, Queen’s Faculty of Arts and Science. Her scholarship on teaching and learning online explores how students and teachers integrate technology into writing courses as a way to increase student satisfaction and retention. Dr. Luyt has over a decade of experience teaching composition and rhetoric at the post-secondary level in both Canada and the United States. Doctor of Philosophy (PhD) from the Faculty of Education at Queen's University, with a special concentration in Cultural and Policy Studies. Her doctoral research focused on English composition and distance education, exploring how students become rhetorical agents in asynchronous online courses where time, space, and technology change the quantity and quality of interpersonal communication. Teaching: WRIT 250/3.0 “Writing in Business Contexts”

Dr. Dirk Rodenburg is an Educational Consultant with the Queen's University Schools of Medicine and Rehabilitation, and a Term Adjunct Professor with the Faculty of Engineering's Department of Chemical Engineering. He has twenty years of experience as a software entrepreneur within academia, educational technology, financial services, biotechnology and scientific instruments. Dirk's research interests include human performance, expertise, cognition, real time data analytics, data feedback, human-computer interaction and ethics and privacy. Dirk holds an MA in Adult Education from the University of British Columbia and a PhD from the Faculty of Information from the University of Toronto. Teaching: ENIN 207/3.0 “Envisioning Disruptive Technologies”

Ms. Shari Hughson is the Director, Master of Management Innovation & Entrepreneurship with the Queen’s University Smith School of Business, a Lecturer and Student Coach/Menor. Teaching: COMM 201/3.0 “Introduction to Business for Entrepreneurs”

12. Supporting Documentation – Unit(s) Input

In this section please append (or provide hyperlinks to) any additional information that is pertinent to the program(s) and that supports the narratives in Part B (Sections 1-11). For example, as relevant and available, append/embed the following:
[This is not a complete list or exhaustive list, and is only intended to provide examples]

- QEIC Calendar copy.
- Letters of support
- Calendar course descriptions
- Course outlines
- Budget

### Part C – Administration & Government Reporting Information

Part C is to be completed by the Department(s)/Faculty(s) in consultation with the Office of the University Registrar and the Faculty Office(s).

### 13. Information for and/or from the Office of the University Registrar and/or the Faculty Office(s)

**13.1. Academic Administration**

<table>
<thead>
<tr>
<th>Academic Career</th>
<th>UGRD, DIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan School of Drama and Music</td>
<td></td>
</tr>
</tbody>
</table>

Proposed Start Date: Sept 2018

| Program duration | 4 to 6 terms |

Expected enrolment:

- Initial Year: 20
- Steady State: 100

Program duration is flexible depending on the rate at which student chooses to complete courses. Minimum one year.

Program Name: Certificate in ...(max 50 characters) (e.g. Certificate in Business)

**Queen’s Entrepreneurship and Innovation Certificate (QEIC)**

- QEIC-C-ENT (UGRD)
- QEIC-C-EN1 (DIST)

**13.2. Complete the following:**

<table>
<thead>
<tr>
<th>Will students be admitted part-time?</th>
<th>x Yes</th>
<th>☐ No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will all or part of the program be offered at the BISC campus?</td>
<td>☐ Yes</td>
<td>x No</td>
</tr>
<tr>
<td>Will all or part of this program be offered via distance learning (e.g. online or blended learning?)</td>
<td>x Yes</td>
<td>☐ No</td>
</tr>
</tbody>
</table>

**14. Course Information**

New Courses with new subject code required? | ☐ Yes | x No |

If yes, suggested Subject Code:

**15. Tuition and Student Activity Fees**

| Tuition Fee |
|-------------|-------------|
| Regular domestic and international Faculty-specific per unit tuition fee |
Fee Assessment Protocol
(Annual? Per term Or per course?)

<table>
<thead>
<tr>
<th>Fee Assessment Protocol</th>
<th>$218.97 per unit domestic or $1249.67 per unit international</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Activity Fees</td>
<td>UGRD-AMS</td>
</tr>
<tr>
<td>Non-Tuition Fees</td>
<td>n/a</td>
</tr>
</tbody>
</table>

16. Government Reporting

<table>
<thead>
<tr>
<th>Proposed FORPOS</th>
<th>Multidisciplinary/Interdisciplinary studies, other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Weight (BIUs)</td>
<td>1</td>
</tr>
<tr>
<td>Proposed CIP Code</td>
<td>30.9999 Multidisciplinary/Interdisciplinary studies, other</td>
</tr>
</tbody>
</table>

Part D – Government Reporting Information

Part D is to be completed by the unit/faculty

17. Describe how the program is consistent with an area of strength and/or growth identified in the Strategic Mandate Agreement (SMA). If not aligned, describe how the program is consistent with the mission, aims, objectives and existing strengths of the university

The Certificate in Entrepreneurship and Innovation aligns with Queen’s Strategic Mandate Agreement with the Ministry through our institutional strengths in Program Offerings—Arts and Science: Humanities, Business, Engineering and Applied Science, and Medicine—and in Technology-enhanced Learning. This new Certificate program will enable learners to develop an entrepreneurial mindset, and to execute intrapreneurial innovation (i.e. innovation that takes place within a large corporation by its employees) as part of an organizational team working within the STEAM (Science, Technology, Engineering, Arts, and Mathematical) disciplines, industries, and sectors.

Furthermore, this program will enable learners to develop skills in research and ideation, creativity and problem solving, communication and collaboration – proficiencies required for the innovation and entrepreneurship process. The fully online delivery model will make this innovative program accessible to learners across Ontario and Canada.

18. Explain how the proposed program fits with Queen’s current program offerings and the university’s capacity to deliver the proposed program

On “Fit”:

The QEIC will complement existing offerings in entrepreneurship and innovation at Queen’s University. It will also act as a laddering credential for students who may be considering graduate studies at Queen’s in Dan School or Smith School. Specifically:

SMITH: For example, Queen’s currently offers the Smith’s School of Business’s Master of Management Innovation and Entrepreneurship Program (MMEI), which this year received 1,800 applicants for 30 available seats in the incoming class. Those applicants represented a wide range of professional fields and academic disciplines from universities across Canada and from other countries. That credential is not offered 100% online. The QEIC should act as a ladder to the MEI program.

DAN: As part of their new Diploma in Arts Management and Masters of Arts Leadership programs, The Dan School of Drama and Music has developed a course on Creative Entrepreneurship. At the same time, Dan School had launched an undergraduate version of ARTL 814 “Creative Entrepreneurship,” specifically for this Certificate. ENIN 301/3.0 “Creative Entrepreneurship” will be a core course for the QEIC. This course will act as a ladder into their graduate programs in Arts Leadership. Both courses are offered entirely online.
Engineering offers CHEE 310/3.0 “Engineering Innovation and Entrepreneurship” which is part of their accreditation program and is taught by Dr. Jim McLellan. FEAS is planning to launch CHEE 302/3.0 “Technical Entrepreneurship” which will be a slightly more general (interdisciplinary) version of CHEE 310/3.0 -- as a core offering of the QEIC. This will satisfy the demand for seats in CHEE 310/3.0, which currently attracts interest from students across the disciplines. The two courses will have overlapping content and thus will be identified as exclusions in the Calendar.

Moreover, the Queen’s Entrepreneurship and Innovation Certificate aligns with Queen’s Strategic Mandate Agreement with the Ministry through our institutional strengths in Program Offerings—Arts and Science: Humanities, Business, Engineering and Applied Science, and Medicine—and in Technology-enhanced Learning. This new Certificate program will enable learners to develop an entrepreneurial mindset, and to execute intrapreneurial innovation (i.e. innovation that takes place within a large corporation by its employees) as part of an organizational team working within the STEAM (Science, Technology, Engineering, Arts, and Mathematical) disciplines, industries, and sectors. Furthermore, this program will enable learners to develop skills in research and ideation, creativity and problem solving, communication and collaboration -- proficiencies required for the innovation and entrepreneurship process. The fully online delivery model will make this innovative program accessible to learners across Ontario and Canada.

On “Capacity”:

As part of this certificate, Queen’s Faculties are designing and will be delivering 8 new online courses, each with a capacity of 200 seats or more. All of these courses (with the exception of the capstone) are open to students at Queen’s (full- and part-time) regardless of whether or not they are pursuing the QEIC. The development teams for these courses include faculty members (as the subject matter experts), instructional designers, multimedia specialists, learning management specialists, Subject Liaison Librarians, and Internal Quality Assurance Reviewers from FEAS and FAS.

This program will be administered by the Dan School of Drama and Music. A faculty member (Sidneyeve Matrix) and an office administrator (Julia Stroud) will serve as part-time coordinators to advise students, track progress, review curriculum through the normal CPR process. As well, as part of her service requirement, Sidneyeve Matrix will serve as the Creative Director for the Certificate, to manage and promote this certificate. Dr. Matrix will also be available to mentor faculty who may be teaching online for the first time, and to advise students.

The Faculty of Arts and Science will manage admission to the QEIC in collaboration with Undergraduate Admission following established infrastructure and processes used for other online programs. Student performance and academic progress will be monitored by the Student Services division of the Faculty Office in the same way as for students in other Arts and Science programs. Existing infrastructure in the Faculty Office (ASO, Student Services) will be used to support the offering of the program.

In terms of other resources, such as technology, no additional resources will be needed to support the delivery of the program or the students’ scholarship. In terms of space, no physical resources such as classroom space are needed as the courses are delivered online, and any new Distance students admitted to the Certificate program will be taking courses online rather than on campus.

In terms of the capacity to ensure quality, all online courses in the Faculty of Arts and Science at Queen’s are developed (and delivered) using a collaborative team-based approach. The home academic department ensures academic quality—ensuring that the content and learning outcomes correspond to the on-campus version—and Queen’s Arts and Science Online provides expertise in course design and online pedagogy. The Faculty sets and implements quality standards, which are articulated in several policy documents and acknowledged through a Memorandum of Agreement between the academic department, the faculty member leading development, and Queen’s Arts and Science Online. The Library is also actively involved in the development of online courses, with the relevant subject-specialist librarian advising on online content and resources from the outset of the development. In order to continue to enhance quality and support faculty members as they deliver online courses.

19. Provide at least two external comparator programs outside of Queen’s used to derive the proposed tuition fee (program name, university and most recent tuition fee exclusive of additional fees). Comparators should ideally be similar credentials and/or programs in Ontario or Canada if none in Ontario. Justify reasoning for proposed tuition; if higher than comparators how will the impact on accessibility be mitigated?
The QEIC credential is priced the same as other similar offerings on the market in post-secondary education in Ontario. Students must complete 5 courses to earn the QEIC, which would mean for an Arts and Science student the total cost would be $3,250 if courses are priced at $650 each. However, FAS students are allowed to double-count 6.0 units of this Certificate toward their degree program, which reduces the cost by half — making this Certificate significantly less costly than our competitors’ offerings.

Competitor 1 Ryerson. The Certificate in Entrepreneurship and Small Business requires 6 courses (compared to ours, which requires 5) priced at $605 each. None of these courses focuses on creative arts or includes marketing or public relations.

Link: http://ce-online.ryerson.ca/ce/calendar/default.aspx?section=program&sub=cert&cert=ENTMUL00&mode=program

Competitor 2 Western. Like the QEIC, Western's Certificate in Entrepreneurship and the Certificate in Technical Entrepreneurship each have 5 required courses, however the former credential is available exclusively to business school students and the latter is available only to engineering students. None of the Western courses focus on creative arts.

Link: https://www.ivey.uwo.ca/entrepreneurship/students/entrepreneurship-certificate/
http://www.eng.uwo.ca/undergraduate/certificates/TEC.html?trk=profile_certification_title

Competitor 3 Toronto. The Certificate in Entrepreneurship offered by the Faculty of Engineering requires 3 courses, and this is less expensive than the QEIC, but is only open to engineers. Continuing Studies at University of Toronto also offers a certificate, with 6 courses required. Each is priced at $495, which is about $100 less (each) than ours. However none of those courses are offered online.

Link: http://learn.utoronto.ca/courses-programs/business-professionals/certificates/entrepreneurship

20. (a) Justify the duplication with comparator programs and others (list programs, why is adding a new program justifiable, evidence of consultation, evidence that there is sufficient demand, sufficient opportunities for experiential learning, etc.)

**Duplicate Programs Justification:**

Our proposed Certificate differs from existing offerings at other universities and colleges in several important ways: disciplinary breadth, flexible online delivery, reduced course requirements, unbundled undergraduate opportunity, and innovative credential packaging.

**Confirming Demand Expectations:**

In order to reconfirm that the proposed program meets the needs of the market, we intend to conduct additional research involving a variety of stakeholders, such as focus group sessions with employers, alumni, current learners, and entrepreneurs in the community. Looking ahead, this process will involve “exit interviews” with each cohort of QEIC graduates to gather insights that will direct the ongoing innovation and iteration of this program.

We also plan to complete a fuller environmental scan to ensure that as it evolves, the program curriculum, activities, technologies, and learning objectives are thoroughly relevant and aligned to the necessary requirements to prepare graduates for active participation in Canada’s innovation economy.

Our advisory committee, composed of learners, administrators, entrepreneurs, and academics, will meet regularly to brainstorm ways to keep this program cutting-edge, in terms of its programming and pedagogies.

20 (b) Comment on any differences between the proposed program and comparators (number of credits/courses, structure, etc.)

**Program Differentiation:**

*Innovation Beyond Business:* Most universities and colleges in Canada have some form of opportunity for students to study and/or practice entrepreneurship skills, however according to a recent survey, most innovation activities take place as value-added extracurricular events on campus rather than in the form of courses, certificates, or degree programs (HEQCO 2014). Where a credential is available, it is usually offered through the institution’s business school (e.g.
Offensive, Simon Fraser, Western University, Carleton, Toronto, Ryerson), and open to Commerce students exclusively. Not surprisingly, almost all existing Canadian undergraduate and graduate degrees, diplomas, and certificates in entrepreneurship are composed of exclusively business-themed curricula. Two notable exceptions are Simon Fraser, where entrepreneurial-minded undergraduate students at the Beedie School of Business can study innovation in the business or health care sectors, and the Ivey Business School at Western University, where MBA students can specialize in medical innovation. At nearly every campus across the country, students pursuing a certificate in entrepreneurship must study accounting, marketing, management, and finance – but have no opportunity to delve into the creative arts or humanities to complete their credential.

Notably, this proposed Queen’s offering is specifically configured to be much more diverse and multifaceted than any similar existing PSE certificate, insofar as it integrates learners, courses, and faculty from across the disciplines, from every corner of our campus and beyond. The QEIC plan will incorporate a variety of pre-existing online and on-campus courses as options. This configuration will make a range of existing, relevant Queen’s undergraduate course offerings more visible to current and potential students. By “connecting the dots” between these courses in a pan-university perspective, QEIC participants will experience a cohesive, broad, and personalized overview of the fundamental skills required to succeed as an entrepreneur – which we at Queen’s believe benefits from a STEAM approach (encompassing Science, Technology, Engineering, Arts, and Mathematical disciplines, industries, and sectors).

Flexible, Accessible Delivery Online: Unlike existing offerings at other universities (and colleges), students can conceivably complete the QEIC program in one calendar year, since all required and most option courses will be offered annually. Importantly, our program will be only the fourth in Canada and the second in the university sector that is 100% achievable online (the others are offered at Seneca College, Centennial College, and Ryerson University). A closer look at those three existing fully online programs indicates they are uniformly organized around an exclusively business-related curriculum (e.g. organizational behaviour, marketing, law, finance and accounting). In contrast, the QEIC curriculum is purpose-built to deliver a program that balances consideration of innovation across sectors, with examples of entrepreneurial initiatives in, and strategies for, the corporate, medical, socio-cultural, and creative industries.

Fewer Course Requirements: The QEIC program is designed to be completed in 4 academic terms, and requires students to complete 5 courses, which significantly reduces the cost of obtaining this extra credential. In comparison, most other certificates require students to complete 6 courses (University of Waterloo, Mount Royal University, Ryerson University, University of Toronto, Seneca College, Lakehead University, or more (7 at University of Saskatchewan and Simon Fraser University, 10 at McGill University, 14 at Centennial College). Other existing programs in Canada extend for two years of full time study in order to earn a diploma in entrepreneurship (e.g. Durham College, Georgian College), while the QEIC credential is designed to be completed either as a standalone part-time program, or layered on top of an existing degree program, without extending time to degree completion.

An Unbundled Undergraduate Opportunity: Students seeking a post-secondary credential in entrepreneurship and innovation will quickly discover that at many Canadian campuses the opportunity to study in this area is reserved for graduate students only. Approximately half of the diplomas, degrees, and certificates our market scan turned up were offered exclusively as post-graduate credentials (e.g. U Alberta, U. Western Ontario, U Victoria, U Waterloo). Furthermore, some of the remaining undergraduate opportunities are restricted to full-time students enrolled in a business degree (Carleton, U Ottawa, U Saskatchewan). The proposed QEIC credential at Queen’s is “unbundled” from any particular faculty, school, or degree program and welcomes full- and part-time students from any academic background, as well as those returning students pursuing professional “upskilling” or seeking a continuous lifelong learning experience.
**Part E - Authorizations**

Part E is to be completed by the faculty office(s) following Faculty Board approval and then sent to the provost’s office for approval and signature.

<table>
<thead>
<tr>
<th>Date Approved by Faculty Board (or equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department/Unit Head(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vice-Provost and University Librarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University Registrar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Dean(s) or delegate(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate Vice-Principal (Planning and Budgeting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provost and Vice-Principal (Academic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Approved by SCAD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Approved by Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

References


Avery, A. (2016). What is the impact of blended learning including micro-learning on manager learning and behavior change vs. impact of classroom learning? Online: http://digitalcommons.ilr.cornell.edu/learner/100


Entrepreneurship and Innovation – Certificate
QEIC-C-QEI

Subject: Administered by the Dan School of Drama and Music.

Plan: Consists of 15.0 units as described below.

Program: The Plan will lead to a Certificate in Entrepreneurship and Innovation

<table>
<thead>
<tr>
<th>1. Core</th>
<th>(6.0 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>6.0 units in</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Option</th>
<th>(9.0 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>3.0 units from</td>
</tr>
<tr>
<td>B.</td>
<td>6.0 units from</td>
</tr>
</tbody>
</table>

| 3. Supporting | (0.0 units) |

| 4. Additional Requirements |

<table>
<thead>
<tr>
<th>5. Substitutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Students may substitute CHEE 310/3.0 for CHEE 302/3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. No more than 6.0 units of core and option courses may be counted toward the requirements of both the Certificate and another program.</td>
</tr>
<tr>
<td>B. No more than 6.0 units of core and option courses may be transfer credits from outside Queen’s University.</td>
</tr>
<tr>
<td>C. Students who want to learn about creative and technical entrepreneurship may complete and count both ENIN 301 and CHEE 302 toward the 15.0 credits required for this Certificate. Students who opt to complete and count both ENIN 301 and CHEE 302 only need to complete 3.0 credits from the list of eligible “Innovation-Centric” courses above.</td>
</tr>
</tbody>
</table>

Innovation and Entrepreneurship Certificate Course List
The following list contains courses offered through other Departments. In accordance with Academic Regulation 2.5 (Access to Classes), students do not have enrolment priority in all of these courses. Access to these courses may only be made available during the Open Enrolment period, and then only if space permits.

INOV_Options

Innovation-Centric Options

BMED 271/3.0; BMED 471/3.0; COCA 201/3.0; COMM 201/3.0; ENIN 140/3.0; ENIN 204/3.0; ENIN 205/3.0; ENIN 207/3.0; ENIN 240/3.0; ENIN 340/3.0; IDIS 280/3.0; LAW 204/3.0; WRIT 250/3.0
Hello Craig and Bev,

Here is the requested information for the Certificate in Entrepreneurship and Innovation:

1. Letter of Support

To the members of SCAD,

I am writing in support of the proposal by the Faculty of Arts and Science to develop a new undergraduate Certificate in Innovation and Entrepreneurship.

As a Law Faculty, we recognize that the ‘traditional’ labour model is continuously being disrupted and challenged by rapidly evolving technological and global economic drivers, but we also recognize that for students with the right skills, the result can be a wealth of opportunities. The proposed Certificate will clearly offer significant value to those choosing to participate.

We are also strongly supportive of the Certificate as a multi-disciplinary program, and as an initiative driven by Arts and Science. The integration of arts, culture and technology is dynamic and fertile ground for innovation and entrepreneurship, and the rich pool of online courses being offered as part of the Certificate will enable students distributed across Ontario to help build a strong foundation for participation in the emerging economy.

Yours truly,

Bill Flanagan
Dean, Faculty of Law
Queen’s University
February 23, 2017

Dr. Craig Walker
Director of the Dan School of Drama and Music
Theological Hall
Queen’s University
Kingston, Ontario  K7L 3N6

Dear Dr. Walker,

It is my distinct pleasure to provide this letter of support to you for the new fully online certificate program in entrepreneurship and innovation. I believe that this certificate program, which is in itself innovative, will be a very attractive offering to students both at Queen’s and from a distance.

The unique nature of the program, which brings together expertise from across multiple disciplines at Queen’s, is a bold and exciting initiative. I am very pleased that the Faculty of Health Sciences has been invited to participate in this program. The proposed approach to this program, including an Outcomes-Based Educational Model, an emphasis on innovative technology in the program and the implementation of a competency-based framework are all very consistent with our philosophy of a student-centered approach to higher education.

This program promises to provide students with an opportunity to enhance their present studies, or work lives, with a very creative approach to entrepreneurship and innovation. This certificate program will fill a gap for many individuals who are seeking a new and refreshing approach to higher education. It will pair the excellence of education in the Queen’s tradition with an online educational program that excels in content, delivery modality and quality of presentation.

In summary, we are extremely pleased to be part of this new certificate program and believe that it will be a very valuable addition to the program offerings at Queen’s University.

Sincerely,

Leslie Flynn, MEd, MMus, MD, CCFP, FRCPC
Vice-Dean, Education
Faculty of Health Sciences
Associate Professor, Departments of Psychiatry and Family Medicine
Clinician Educator, Royal College of Physicians and Surgeons of Canada
Macklem House, 18 Barrie Street
Queen’s University
Kingston, Ontario  K7L 3N6

cc: Dr. Richard Reznick, Dean, Faculty of Health Sciences

LF/cm
LoS Entrepreneurship & Innovation
Course Descriptions

ENIN 200/3.0 Foundations of Entrepreneurship
Prerequisites: Level 2 standing
The aim of this course is to provide learners with theoretical and applied knowledge on the economics and organizational dimensions of innovation and entrepreneurship. Learners will be challenged to apply principles, concepts and frameworks to real world situations. Various types of market research will be introduced to demonstrate the multifaceted uses of different types of innovations.

By way of introduction, this course will cover frameworks used to evaluate how disruptive and incremental innovations bring about changes in the market by prompting new business models, technologies, and paradigms. Additionally, this course will explain the foundational concepts required to understand the dynamics of today’s multi-sided markets and how to tap into the innovative and entrepreneurial opportunities they make possible. These foundational strategies will be accomplished through online lessons and case studies that focus on specific real world companies, organizations, and initiatives.

Learners will then practice generating ideas that form the basis for potential new businesses and social initiatives. They will practice transforming those ideas through market research, into business pitches – the feasibility of which the class will assess collaboratively. As a result, when learners complete this course they will have a firm grasp on the foundational strategies they need to launch their own entrepreneurial venture and/or successfully innovate within an existing organization.

ENIN 204/3.0 Publicity and Media Relations
Prerequisites: Level 2 standing
This course develops an understanding of the basic principles, processes and applications of public relations and marketing communications in the arts and entertainment sectors, and across the creative industries. From arts marketing, fundraising, and publicity, to talent and music management, and event planning, the course covers how public relations can be applied to many fields. Learners will examine the role of promotion and publicity within arts and media organizations and explore the role and duties of creative PR practitioners. The course focuses on the theoretical context of different types of PR activity, supplemented by intense practical assignments to encourage a ‘learning-by doing’ approach. As part of the course, learners will collaborate to gain experience in the practical and creative aspects of planning and developing public relations campaigns. Learners will research, compose, design and edit media releases, photo calls, and public service announcements. They also prepare and plan media strategies including events, lists, angles and pitches and a social media kit, with a focus on building sustained and high-engagement relationships with audiences via online and offline platforms.

ENIN 205/3.0 Innovation for STEAM
Prerequisites: Level 2 standing
Because some of the very best ideas emerge at the intersection of technology and the humanities, this course seeks to bridge disciplinary divides and leverage the power of diverse perspectives to unlock fresh ways of knowing. The course welcomes students from any background to collaborate and explore the overlapping practices, paradigms, and points of divergence between the arts and STEM disciplines (Science, Technology, Engineering, and Mathematics). A “STEAM” approach combines what may at first appear to be opposite methods and processes, by emphasizing the importance of creativity, collaboration, and critical analysis to art and science. Students will explore and create a range of concepts, cases, models, and applications for innovation across creative
and scientific sectors. In the process they will develop their skills in ideational thinking, which is the capacity to
generate and combine ideas from a variety of perspectives into new and unique configurations. Co-authored by
two instructors, each located in one of C. P. Snow's "two cultures" of art and engineering, and delivered online over
six weeks, in this course we'll review principles, approaches, methods and theories useful for building and
communicating innovative solutions for difficult technical and creative problems alike.

**ENIN 207/3.0 Disruptive Technologies**
Prerequisites: Level 2 standing
This course illustrates the concept of disruptive technology -- where the pace of technological progress easily
exceeds the rate of performance improvement that customers in a market demand. Real world case studies will
highlight the implications of such innovation on the research, design, promotional, and business strategies
involved.

Learners will be introduced to the concept of disruptive technologies and, through the analysis of a number of case
elements, will grow to understand the ways in which the accepted orthodoxies and limitations (implicit and
explicit) in a given context can be challenged and overcome. Learners will develop an awareness of the social,
economic and technical forces at play in supporting or preventing the emergence of disruptive technologies.
Learners will then be asked to form teams, choose a target area, and begin to apply their understanding to
envisioning and developing disruptive technologies of their own.

**ENIN 240/3.0 Explorations in Creativity**
Prerequisites: None
In this course students will examine four aspects of creativity—the creative person, process, product, and press—
to increase the degree to which they recognize and nurture their own creative potential. Supported by
interdisciplinary research and theory, students will assess the increasing importance and global context of
creativity skills in the 21st century. Through interactive lectures, experiential learning activities, written
assignments and e-presentations, students will explore and execute on a range of foundational concepts in
creativity studies. In the process learners will enhance their own creative capacities and creative confidence.

**ENIN 301/3.0 Creative Entrepreneurship**
Prerequisites: Level 2 standing
This course will be of interest to learners planning to work in creative fields such as the fine and applied arts, design,
theatre, teaching, advertising, film/video, music, and publishing. It offers a primer on personal and organizational
creativity, and is designed to support learners to develop entrepreneurial mindsets. Learners will study emerging
theories of creative thinking, and develop a deep understanding of, and engagement with, discourses and methods
of innovation in the creative industries.

Learners will practice idea generation techniques, conduct interdisciplinary creative research to discover
opportunities, learn how to invent and present innovative solutions to "wicked" (persistent, ambiguous) business
problems, engage with and manage diverse co-creative teams, and effectively promote new initiatives to secure
stakeholder buy-in and user engagement.

On completing the course learners will have a working knowledge of some of the methods used for kick-starting
successful entrepreneurial and intrapreneurial innovations. They will have hands-on experience designing and
delivering user-tested prototypes of new creative products, processes, services, and ventures suitable for a range of
creative sector businesses and organizations.
ENIN 400/3.0 Innovation Design Sprint
Prerequisites: ENIN 200/3.0 and (ENIN 201/3.0 or CHEE 302/3.0) and registration in QEIC.

In today’s fast-paced world, speed and agility are critical to generating business value, and corporations and startups alike must continuously innovate at rapid speed. This required capstone course is designed as an intense, experiential learning expedition. Learners will have the opportunity to practice developing innovative, effective solutions to real-world business, social, and creative problems.

Working in diverse teams and as individuals, learners will identify an opportunity, propose a new product, service, business model, or experience, and then present it for peer and expert review. This intense experience will provide hands-on learning through synchronous and asynchronous activities including online discussions, collaborative market research, financial modeling, prototyping, user testing, and pitching.

The course is multi-disciplinary and is suitable for learners of all backgrounds, including but not limited to computing, business, creative arts, education, engineering, medicine, and health sciences.

ENIN 340/3.0 Thinking Inside the Box: Intrapreneurial Innovation Strategies
Prerequisites: Level 2 or above

Description: Organizations big and small must continuously innovate in order to survive and thrive. Intrapreneurs are those people who adopt an entrepreneurial mindset and apply start-up practices within established organizations. Intrapreneurs are always looking for ways to make things better, and become adept at using creative thinking skills to arrive at new and innovative solutions to persistent problems. This course will cover creative and critical thinking strategies entrepreneurially-minded employees can use for identifying and eliminating bottlenecks, communicating ideas, securing buy-in from colleagues and leadership teams, and implementing innovations that complement existing organizational structures and advance organizational goals. Learners will develop knowledge on how to navigate the barriers to creating, developing, and sustaining innovative new initiatives within existing organizations. For internal ("corporate") entrepreneurship to succeed, the individual champions of innovation must be comfortable with uncertainty and risk, and have high levels of human initiative and persistence. Thus this course will also cover related topics of wellness innovation strategies to support intrapreneurial individuals to sustain their resilience, focus, productivity, and success.

Students will examine current innovation and entrepreneurship trends, practices, styles, theories, texts, and discourses. Through online research, assigned readings, creative assignments, and participation in group projects and self-directed learning, students will engage in creative exploration of innovative products, services, business models, and individual innovators themselves.

The course will encourage and support participants to uncover, synthesize and interpret current data, utilize digital research and information design tools, and develop an entrepreneurial mindset. The class will combine theoretical readings with samples of cases and studies, supporting students to learn and apply analytic concepts to contemporary innovation scenarios. Course materials are drawn from a variety of sources, to reflect student interests, and evolving trends in the literature and marketplace, including biographies, qualitative and quantitative studies, educational research, popular media, and guest speakers.

BMED 271/3.0 Global and Population Health
Prerequisites: 24.0 units or Level 2 standing or permission of the instructor.
In this course, emphasis will be placed on population health, instead of the health of individuals. Population and global health prioritize partnerships and resource sharing, instead of unilateral relationships, and focuses on advocacy.

BMED 471/3.0 Advanced Global and Population Health
Prerequisites: Minimum 4th year (Level 4) standing + IDIS 271/3.0 or permission of instructor
Students will take knowledge gained from IDIS 271 Global and Population Health, and apply it in this course, Advanced Global and Population Health, which will focus on more advanced topics of population and global health, as well as provide experiential learning.

IDIS 280/3.0 Interprofessional Practice in Healthcare
Prerequisites: 24.0 units or Level 2 standing or permission of the instructor.
This course aims to prepare learners with interprofessional competencies, including patient/family/community-centred care, interprofessional communication, role clarification, team functioning, interprofessional conflict resolution and collaborative leadership. These competencies, developed by healthcare experts and leaders in Canada, are described in The National Interprofessional Competency Framework, and are mapped to CanMEDS roles and comparable health discipline competencies. The course is designed as a series of online modules, introducing the basics of collaborative practice in healthcare and the six interprofessional competencies, culminating in the application of knowledge to authentic patient scenarios and effective teamwork.

CHEE 302/3.0 Technical Entrepreneurship
Prerequisites: Level 2 standing
This course will help learners from all disciplines learn to identify sources, rates, and directions of technological change, and understanding the role and challenges of high-tech innovation across sectors, countries, and organizations. Learners will investigate the relationships between innovation and industrial dynamics, and seek to understand the fundamental forces that drive the science and technology industries' evolution and industry life cycles. In the process, learners will learn about frameworks and tools used to analyze new technology adoption and to predict technology diffusion patterns. As they analyze case studies that focus on issues of the strategic value of technological innovation, learners will practice developing an entrepreneurial mindset capable of turning problems into opportunities.

CHEE 310/3.0 Engineering Innovation & Entrepreneurship
Prerequisite: None
This course provides a basic understanding of the innovation process, entrepreneurial thinking, and the financial and market contributors to successful technology-based business opportunities. Course topics include: identifying opportunities, project management skills and intellectual property issues, understanding customers to define potential markets and arrive at clear value propositions, product positioning, competitive analysis, fundamental financial principles and financial statements, performance of financial feasibility analyses and identification of appropriate business models for commercialization. Using a multidisciplinary approach, students craft business strategy and make tactical and commercial decisions using an on-line business simulation game and evaluate the commercial feasibility of innovative research by developing a business case for an innovation in their concentration area.
COCA 201/3.0 Computing and the Creative Arts
Prerequisite: A 100-level course in Art, Drama, Film and Media, or Music.
Pre- or Co-requisite: CISC 101* or CISC 110* or CISC 121*, or permission of the School of Computing.

A multidisciplinary studio-oriented overview of computer-based applications in Art, Music, Drama and Film. For each topic, students would be exposed to a suitable tool to experiment with and would be asked to create multimedia art works in small groups using these tools. Topics include: Critical and philosophical issues. Animation. Virtual reality. Computer-aided design. Computer games.

COMM 201/3.0 Introduction to Business for Entrepreneurs
Prerequisite: None

This course introduces students to the language of business, as well as the main functional areas of business, and demonstrates how these areas interact to produce and market products and/or services in an economically viable manner. An emphasis is placed on both strategic and tactical development and execution in entrepreneurial contexts. The course also assists students in developing an understanding of the nature of the modern entrepreneurial enterprise in Canadian and international contexts, and of the tasks, practices, and responsibilities of its leaders. Of particular importance is the use of a capstone simulation – like the Capsim Strategy Simulation, but one geared towards entrepreneurial ventures – whose focus lies in the development and application of fundamental strategic management skills and financial analysis interpretation for decision-making purposes. The approach of the course is to challenge students to strive to develop a base-level competency in business principles which they can effectively transfer to their future entrepreneurial venture.

This course is not open to student enrolled in the Commerce Program.

COMM 103 and COMM 200/600 are exclusions.

ENIN 140/3.0 Design Thinking
Prerequisite: None

This course aims to help students learn design thinking techniques and apply them to real-life case studies. The course will take a cross-disciplinary approach wherein students from various academic and professional backgrounds will engage in co-creation, peer review, online discussions, and brainstorming and prototyping activities.

This course is designed for students from various arts and science, engineering, health science, education and commerce backgrounds at all levels of post-secondary education as well as full- or part-time distance students. This course is an interdisciplinary introduction to basic concepts of design thinking as a creative process and research method. It provides students with the theory and operational skills needed to use visual and conceptual tools to solve problems and support innovation in business, academia, and the creative industries. The unique features of this course lie in its collaborative social learning opportunities and creative thinking assignments, which will engage and challenge students. By the end of the course students will have improved their critical observation and creative thinking skills, online communication and visual communication competencies. Students will learn transferable, take-away techniques to apply the knowledge and practical problem-solving, and digital research skills gained in this course in various academic disciplines and in their postgraduate careers.
LAW 204/3.0 Corporate Law
Prerequisite: Second-year standing

This course introduces legal concepts that are essential to developing a business in Canada. This course will provide foundational knowledge in setting up and financing a business and will introduce legal content, analytical and practical skills relevant to a potential entrepreneur. Law 204 will provide students with an understanding of business associations, securities regulation and banking, as well as examining sources of business regulation. Taught on the assumption that the student has little to no knowledge of business or corporate law, Corporate Law will introduce students to the basic legal concepts associated with business and corporate structures, shareholder and partnership agreements, corporate governance and financing. The course will also introduce students to statutes and cases that relevant in this area such as the CBCA and Solomon. Similar to the approach employed by business schools which emphasize case based analysis, the course will ask students to apply the concepts learning to specific case and problem scenarios. Although Law 201 will not be a prerequisite, students wishing to take Corporate Law will be encouraged to do so only after having taken Law 201, since it will help lay the conceptual groundwork for legal reasoning and methodologies.

WRIT 250/3.0 Writing in Business Contexts
Prerequisite: WRIT 120/3.0 or WRIT 125/3.0 or permission of the instructor.
This course focuses on the principles of business writing. Students analyze workplace contexts and identify writing strategies best suited to address business problems. Students research, organize, design, and create reader-centred documents and various electronic and print texts that relate to practical situations they will encounter in the business world.
CHEE302: Technical Entrepreneurship (F K3.5)

Calendar Description

This course will help learners from all disciplines develop an entrepreneurial mindset capable of turning problems into opportunities. Learners will identify sources, rates, and directions of technological change, and begin to understand the role and challenges of technological innovation across sectors, countries, and organizations. Learners will investigate the relationships between innovation and industrial dynamics, and seek to understand the fundamental forces that drive the science and technology industries’ evolution and industry life cycles. In the process, learners will explore frameworks and tools used to analyze new technology adoption, predict technology diffusion patterns, and assess the strategic value of technological innovation. 0/0/42/0/0

Exclusion: CHEE 310 (Engineering Innovation and Entrepreneurship).

Rationale

CHEE 302 – Technical Entrepreneurship is a core course in the Queen’s Entrepreneurship and Innovation Certificate (QEIC) that will be offered through the Department of Chemical Engineering. This course will be offered as a fully online course. It is intended for a general audience of students from across the university.
Course-level Learning Outcomes (CLOs)

<table>
<thead>
<tr>
<th>Course-Level Learning Outcomes (CLOs)</th>
<th>Undergraduate Degree-Level Expectations¹ (UDLEs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe how technical innovation arises from advances in knowledge and the motivation of necessity or opportunity;</td>
<td>1, 2</td>
</tr>
<tr>
<td>2. Identify problems and generate ideas using design and systems thinking tools;</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
<td>3. Identify how to take an innovation to commercialization using a structured design process;</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>4. Identifying time, risk, and capital scales for a technological innovation; and</td>
<td>1, 3</td>
</tr>
<tr>
<td>5. Communicate the value of technical innovation to stakeholders.</td>
<td>4, 5</td>
</tr>
</tbody>
</table>

Content Delivery Strategies

The design of CHEE 302 will allow for a learning experience where the instructor acts as a facilitator of the course. In this design, the content is broken down into a series of modules, with some modules spanning multiple weeks. Learners will experience a variety of content delivery strategies, including key readings, annotated slide videos, lightboard videos, live-action videos in the field, and other external links to create a well-rounded learning strategy.

Materials

The required textbooks for this course are:


  http://books.wwnorton.com/books/978-0-393-07899-2/

Along with other optional resources posted in onQ, these books are also recommended for students:

  http://www.chelseagreen.com/thinking-in-systems

<table>
<thead>
<tr>
<th>Assessment Tool</th>
<th>Description</th>
<th>Frequency</th>
<th>Weight</th>
<th>Alignment with CLOs</th>
<th>Alignment with UDLEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz (1)* (Individual)</td>
<td>Online test that includes multiple kinds of questions as a way for learners to receive immediate feedback on their knowledge.</td>
<td>4</td>
<td>10%</td>
<td>3, 4</td>
<td>1</td>
</tr>
<tr>
<td>Short Assignments (4)*</td>
<td>Individual and group-based activities that apply key concepts (e.g. Photo journal, pitch-deck, pitch for innovation of social need).</td>
<td>2, 3, 8, 12</td>
<td>25%</td>
<td>1, 2, 5</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>Discussions (2) (Individual)</td>
<td>Topic-based discussions.</td>
<td>1, 10</td>
<td>20%</td>
<td>1, 5</td>
<td>4, 5</td>
</tr>
<tr>
<td>Research Project (1)**</td>
<td>Multi-step project in teams of 2-3 students.</td>
<td>6, 11, 12</td>
<td>45%</td>
<td>4</td>
<td>3, 4, 5, 6</td>
</tr>
</tbody>
</table>

* Formative assessment
** Summative assessment
## Course Timetable

<table>
<thead>
<tr>
<th>Week</th>
<th>Learning Outcomes</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODULE 1 – INNOVATION AND CHANGE</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1 | **Innovation and Change**<br>On completing this week, learners should be able to:  
  - Identify innovations and their distinctive characteristics [CLO 1, 2]<br>  - Distinguish between innovations in the social and commercial spheres [CLO 1, 2]<br>  - Describe an innovation and the social forces behind it [CLO 1, 2] | Discussion Forum 1: 2D prototype (1 slide) – describe an innovation and social forces (10%) |
| **MODULE 2 – DESIGN & SYSTEMS THINKING METHODS** | | |
| 2 | **Design Thinking**<br>On completing this week, learners should be able to:  
  - Explain the steps in the Design Thinking Methodology [CLO 2]<br>  - Develop solutions using the Design Thinking Methodology [CLO 1, 2] | Short Assignment 1: Photo-journal (individually) (5%) |
| 3 | **Systems Thinking**<br>On completing this week, learners should be able to:  
  - Explain Systems Thinking elements [CLO 2]<br>  - Apply Systems Thinking Methodology to physical and social systems [CLO 2, 3] | Short Assignment 2: Short pitch deck applying systems thinking to phys/social (groups of 2) (10%) |
| **MODULE 3 – BUSINESS MODELS FOR TECHNICAL INNOVATION** | | |
| 4 | **Business Models and Business Model Canvas**<br>On completing this week, learners should be able to:  
  - Describe the difference between social ventures and for-profit ventures [CLO3, 4]<br>  - Identify and describe the elements of the business model canvas framework [CLO 3, 4] | Quiz (1-2 hours); (10%) |
<table>
<thead>
<tr>
<th>Week</th>
<th>Learning Outcomes</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 5    | **Designing Business Models**  
On completing this week, learners should be able to:  
- Assess business model structure for existing businesses and social ventures using the business model canvas framework [CLO 3]  
- Develop a venture idea using brainstorming, visual thinking, storytelling techniques  
- Develop a business model for a new venture using the business model canvas framework [CLO 3, 4] | - no weekly assessment. Students will use this time to work on Research Project Deliverable 1 |
| 6    | **Building Customers**  
On completing this week, learners should be able to:  
- Develop customer segments and associated value propositions [CLO 3, 4]  
- Develop personas and journey maps for customer segments [CLO 3, 4] | Research Project Deliverable 1: Venture proposal with business model elements - has an IP component (small group of 2) (20%) |

**MODULE 4 – STRATEGIC ADVANTAGE OF IP**

| 7    | **Scale and Adoption of IP**  
On completing this week, learners should be able to:  
- Characterize different types of innovations in terms of their time, capital, and risk scales [CLO 4]  
- Describe the adoption use stages of an innovation [CLO 3, 4] | - no weekly assessment. Students will use this time to work on Short Assignment 3 |

| 8    | **Protecting Strategic Advantage of IP**  
On completing this week, learners should be able to:  
- Assess the patent landscape for a given innovation [CLO 3]  
- Propose strategies for protecting strategic advantage of IP (e.g., patents vs. trade secrets) [CLO 3] | Short Assignment 3: Short presentation (same group of 2) – IP landscape assessment for their venture + adoption strategy (5%) |

**MODULE 5 – DESIGN TO COMMERCIALIZATION**
<table>
<thead>
<tr>
<th>Week</th>
<th>Learning Outcomes</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td><strong>Raising Capital</strong>&lt;br&gt;On completing this week, learners should be able to:&lt;br&gt;• Project capital and other resource needs to bring an innovation to implementation [CLO 3, 4, 5]&lt;br&gt;• Propose strategies for raising capital and ensuring financial liability for a given innovation [CLO 3]</td>
<td>- no weekly assessment. Students will use this time to work on Research Project Deliverable 2 and 3</td>
</tr>
<tr>
<td>10</td>
<td><strong>Protecting Advantage</strong>&lt;br&gt;On completing this week, learners should be able to:&lt;br&gt;• Propose a strategy for securing and managing strategic advantage of IP [CLO 3, 4]&lt;br&gt;• Recommend whether or not an open innovation approach should be used [CLO 3,4]&lt;br&gt;• Identify and assess the importance of strengths, weaknesses, threats and opportunities [CLO 3,4]</td>
<td>Discussion Forum 2: Merits of an open innovation strategy for a given example (individual) (5%)</td>
</tr>
<tr>
<td>11</td>
<td><strong>Managing Innovation</strong>&lt;br&gt;On completing this week, learners should be able to:&lt;br&gt;• Develop a stage-gate plan to implement a venture [CLO 3]&lt;br&gt;• Develop an iterative build-measure-learn strategy using a minimum viable product [CLO 3]&lt;br&gt;• Distinguish between engineering development and Lean Startup methodologies [CLO 3]</td>
<td>Research Project Deliverable 2: Research project (same group of 2) – project capital needs, strategy for protecting IP advantage, implementation strategy (2 weeks, in by end of week 12) (20%)</td>
</tr>
<tr>
<td>12</td>
<td><strong>Managing Social Context</strong>&lt;br&gt;On completing this week, learners should be able to:&lt;br&gt;• Identify the important legal and regulatory challenges in developing a venture [CLO 1, 4, 5]&lt;br&gt;• Examine how professional obligations impact ventures [CLO 1, 4, 5]&lt;br&gt;• Develop a strategy to build a social license to operate [CLO 4, 5]</td>
<td>Research Project Deliverable 3: 2D prototype (1 slide) – strategy for building social license (group of 2) + Discussion forum + reflection (10%)&lt;br&gt;Short Assignment 4: Pitch on innovation for social need (video, 2 min) (5%)</td>
</tr>
</tbody>
</table>

**MODULE 6 – LEGAL AND ETHICAL IMPLICATIONS**
Expanded Course Details: ENIN 400/ 3.0

Course Title: Innovation Design Sprint

Note:
This course is owned and operated by the Dan School of Drama and Music.

Course Introduction:

In today’s fast-paced world, speed and agility are critical to generating business value, and corporations and startups alike must continuously innovate at breakneck speed. This required capstone course is designed as an intense, short-burst, experiential learning expedition. It is an opportunity for students to practice developing innovative, effective solutions to real-world business, social, and creative problems.

Working in diverse teams and as individuals, over six weeks in the summer session, students will identify an opportunity, propose a new product, service, business model, or experience, and then present it for peer and expert review. This intense experience will provide hands-on learning through a coordinated set of synchronous and asynchronous activities including online discussions, collaborative market research, financial modeling, prototyping, user testing, and pitching.

This course is multi-disciplinary in tone, and is suitable for students of all backgrounds, including but not limited to computing, business, creative arts, education, engineering, medicine, and health sciences.

Course Design:

Delivered in an innovative format, this 3.0 unit, six-week course includes an experiential component to provide students with an entrepreneurial experience. It includes a culminating hackathon-style online event unfolding live over a summer long-weekend or a 3-day period during fall, winter, or spring term. Students will participate in groups, and engage synchronously and asynchronously throughout the hackathon, which we are calling an IdeaFest, depending on their time zone and availability.

Prerequisites:

Level 3 standing. In addition, before enrolling in this capstone course students must have successfully completed ENIN 200, as well as either ENIN 301 or CHEE 302, and they must also be registered in the QEIC program.

Application:

This course is available online to Queen’s full- and part-time learners, distance- and residential students, including international students in Canada and abroad. It is a core offering (capstone course) in the Queen’s Entrepreneurship and Innovation Certificate, which is open to students from every Faculty and School at Queen’s.

Course Capacity: 200 students

Timing of Change: Summer 2019, annual offering

Teaching Team:
“Innovation Design Sprint” will be designed and coordinated by Sidneyeve Matrix, and will be delivered with help from the QEIC advisory board, which includes Jim McLellan (FEAS), Greg Bavingston (DDQIC), Elspeth Murray (Smith), and Benoit-Anton Bacon (Provost). The course involves guest speakers and a panel of judges for the IdeaFest online weekend event, which will include entrepreneurs from Kingston and beyond, and professors teaching entrepreneurship and innovation from other universities and colleges.

Learning Outcomes

**TABLE 1: INTENDED LEARNING OUTCOMES**

<table>
<thead>
<tr>
<th>Number</th>
<th>To complete this course students will demonstrate their ability to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gather, organize, synthesize, and summarize information necessary to appropriately study a complex design problem</td>
</tr>
<tr>
<td>2</td>
<td>Conduct online and library research using popular, scholarly, and trade resources as appropriate</td>
</tr>
<tr>
<td>3</td>
<td>Demonstrate understanding of key concepts in innovation and entrepreneurship</td>
</tr>
<tr>
<td>4</td>
<td>Demonstrate visual communication skills by creating and presenting a multimedia digital slide presentation</td>
</tr>
<tr>
<td>5</td>
<td>Compose and communicate a compelling business story to translate and articulate the value of social, commercial, technical, or creative innovation to stakeholders</td>
</tr>
<tr>
<td>6</td>
<td>Communicate professionally online verbally and in writing in a clear, coherent, and logical style</td>
</tr>
</tbody>
</table>

Instructional Methods/ Assessment

Learning outcomes and assessment will be closely aligned, with the instructor using summative and formative assessments to identify learning patterns, modify instruction, and provide timely feedback.

This is an online-only course offering. Students will be provided with a number of learning resources including online readings, video lectures, webinars, case studies, templates and exemplars, group discussions, individual and group exercises, and online office hours. To complete these assignments, students will use the learning management system, the university library website, and a series of free, cloud-based collaboration and communication tools. Online discussion will take place in an OnQ or Brightspace online forum and will involve peer-to-peer collaborative conversation about course-related issues, with facilitation assistance from the faculty, instructional designer, and TA moderators. Guest lectures and live pitches take place via webconference.

**TABLE 2: ASSESSMENT OF LEARNING OUTCOMES**

<table>
<thead>
<tr>
<th>Assessment Tools</th>
<th>Formative or Summative</th>
<th>Weight</th>
<th>Alignment with Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Participation + Peer Review</td>
<td>Summative/Formative</td>
<td>15%</td>
<td>1, 6</td>
</tr>
<tr>
<td>Market Research Assignment (individual)</td>
<td>Summative/Formative</td>
<td>15%</td>
<td>1, 2, 3, 5, 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------</td>
<td>--------</td>
<td>----</td>
</tr>
<tr>
<td>Quizzes 2 x 12.5%</td>
<td>Summative</td>
<td>25%</td>
<td>3</td>
</tr>
<tr>
<td>IdeaFest Pitch &amp; Project (group activity)</td>
<td>Formative</td>
<td>35%</td>
<td>1, 2, 3, 4, 5, 6</td>
</tr>
<tr>
<td>Group Assessment Survey</td>
<td>Formative</td>
<td>5%</td>
<td>1, 6</td>
</tr>
<tr>
<td>Self-Assessment Survey</td>
<td>Formative</td>
<td>5%</td>
<td>1, 6</td>
</tr>
</tbody>
</table>

**Online participation** will involve two important activities: ongoing discussion and timely participation between team-members, and thoughtful intra-team online engagement and value-added responses to questions, issues, and ideas posted by the professor and peers in the general discussion forum on OnQ/Brightspace. Students will be evaluated individually based on their cumulative online active participation.

This very unique course is intensely collaborative by design, and thus peer-review and student-to-student cooperation and co-creation are critical skills for students to master and demonstrate. Students will have multiple opportunities to offer feedback to each other (and to receive and benefit from it) in a variety of ways at numerous points throughout the course activities.

From the outset, groups will be engaged in peer-to-peer “blue sky” brainstorming, which involves not only divergent but also convergent thinking (ranking, synthesis, and assessment of ideas). As they research and co-design their entrepreneurial pitches, this group-critique and creative ideation/conversation will be ongoing. In the process, students will experience the free flow of ideas exchanged between team members who have diverse disciplinary perspectives and experiences (which the professor, who assembles teams, will ensure). As a result, every student will greatly benefit, expanding their creative and critical thinking and communication skills by listening, reflecting on, and learning from each other.

**The market research assignment** is an opportunity for students to complete an individual research project, by analyzing the market fit for a proposed offering. Through online research and using free, cloud-based data visualization tools, students will compose a short report to make a preliminary business case for their new service or product idea.

**The pitch presentation** is the major assignment activity for this course. It will be assessed in terms of both its style and content:

- **In terms of style**, the pitch presentation would be assessed according to the quality and design the following elements: a pre-prototype napkin sketch (e.g. mock-up, flowchart, journey-map, wireframe, business model canvas), the presentation slide layout (e.g. clarity of tables and charts, legibility of font treatment, professionalism and resolution of embedded illustrations, slide theme/animations/color scheme), and the overall pitch narrative (e.g. well-written, smoothly flowing, clear transitions, addresses key points and FAQs, shows both creative and critical thinking). Group projects will also be assessed for the style of the presentation performance itself, with special attention paid to the overall preparedness of speakers, and equal distribution of roles and responsibilities within the group.

- **In terms of content**, the pitch presentation will be assessed into terms of the overall quality of the thought expressed, and the level of detail apparent in both the deliverables and the live presentation itself. The quality, quantity, and originality of the background and market research will be evaluated as part of its content. The comprehensiveness, accuracy, and clarity of business data presented, as well as the thoroughness of the market research and the promotional plan is also assessed as part of the content of this assignment.
All group members receive the same grade for their teams’ pitch presentation project. As stated above, students will have a chance to submit an ungraded survey statement via OnQ, to comment on the dynamics of the team activity and each members’ unique contributions.

During the end-of-course IdeaFest event, a peer-review online voting system will offer teams feedback about their idea and its potential, as well as the team dynamics and professional communication style. This feedback will be both summative (insofar as students will receive actionable takeaways for future venture development) and formative in the sense that the top ranked teams will be awarded extra recognition. Peer-to-peer feedback will not directly impact students’ final grades.

At the end of the course, each student will complete a short (ungraded but required) questionnaire survey reviewing the performance of their team members, evaluating individuals’ contributions, and including a self-reflection statement on how their own group work added value and could be improved. In these two instances, the online feedback process is purely summative. This peer-to-peer group assessment feedback will be anonymized (authors’ names removed) and shared with the team, but it will not directly impact students’ final grades.

The Library Self-Study Modules will support students to discover and access online resources relevant to entrepreneurial research and innovation initiative development. They will be delivered via OnQ, and co-authored by the Liaison Librarians, the instructional designer, the teaching assistant and the subject matter experts. Library module quizzes are optional and provided for self-study only, so students can test their comprehension of the modules. These quiz scores are not incorporated as part of students’ formal grades.

The Quizzes are composed of multiple choice questions and are designed to allow students to demonstrate their mastery of key concepts form the lectures and readings. They are open book and delivered online via OnQ.

Innovative Educational Technologies and Pedagogical Approaches:

ENIN 400 is designed as the final core course for the Entrepreneurship and Innovation Certificate, a capstone student experience. As such, we will be pulling out the stops to incorporate the very best and most innovative, effective, and relevant technological tools and proven pedagogies to ensure that students enjoy an intensely rewarding academic and practical entrepreneurial experience. These will include for example:

- **Online IdeaFest Event:** In order to increase excitement and engagement for students in this course, it will include a fun innovation pitching “IdeaFest” event wherein teams will present their innovative ideas live online to peers, profs, and other publics including potential partner organizations and individuals. Two prizes are available: the winning team selected by a peer voting process will earn a “People’s Choice” award; secondly, the winning team selected by an expert voting panel will be recognized with a “Top Team” innovation award.

- **Digital Communications Technologies:** Students will be encouraged to use web communications tools such as email and Skype, Adobe Connect, Zoom Meetings, and/or Google Docs/Handouts to meet, brainstorm, communicate, peer-review, and transfer digital files synchronously and asynchronously over the web. We will provide tech-support for students new to these tools.

- **Team-Based Online Platforms:** Students will assemble the bulk of their project research, design, and delivery via a shared online platform. Doing so will provide invaluable experience for them to use in the workplace where global online collaboration is becoming the norm. To facilitate this, students will be provided with a range of free and easy-to-use cloud-based platform applications to support group
activities as they collaborate and co-design their entrepreneurial ventures. These will be provided at no extra cost to students. ENIN 400 does not require students to pay any ancillary fees.

- **Learning Management System:** We will also leverage the campus learning management system (OnQ) to support additional course-wide impromptu and scheduled live meetings, to post course updates, and to securely deliver the course materials, electronic readings, and student grades. This kind of online activity promotes course community and cohesion, and enables students to feel comfortable asking questions of peers and prof (and offering peer troubleshooting) at their point of greatest need. The learning management system will also be the gateway to our final IdeaFest course activity where teams will pitch their innovations online to each other, the professor, and a panel of industry experts. This is because the LMS platform is private and secure, is supported by Queen’s IT Services, and because is robust and multimedia-ready to support synchronous high-engagement for groups, at scale.

- **Online and Mobile-Ready Office Hours:** All courses in the QEIC program will provide students with online, live, and smartphone-ready mobile-optimized office hours. Students can connect with the professor and teaching assistants during posted office hours to ask questions, show their work-in-progress, and ask for improvised, individual support (in the event of illness, family emergency, disability accommodations, or technological catastrophe).

**Learning Hours:** Total 118 (12 Lect; 36O; 70P)

**TABLE 3:**

### LEARNING HOURS

<table>
<thead>
<tr>
<th>Instructional methods</th>
<th>Average hours per week</th>
<th>Number of weeks</th>
<th>Autofill Total hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing</td>
<td>New</td>
<td>Existing</td>
</tr>
<tr>
<td><strong>In-class hours</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutorial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual instruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online activity</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Off-campus activity</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private study</td>
<td>10</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Total hours on task</strong></td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Funding:**

Funds to design and deliver this course will be covered by FAS and eCampus.
### Program Name: Certificate in Entrepreneurship & Innovation

#### Income by Source

<table>
<thead>
<tr>
<th>Source</th>
<th>2017-18 Forecast</th>
<th>2018-19 Forecast</th>
<th>2019-20 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name</td>
<td>$6,761</td>
<td>$6,657</td>
<td>$7,159</td>
</tr>
<tr>
<td>Tuition - FAS</td>
<td>$6,761</td>
<td>$6,657</td>
<td>$7,159</td>
</tr>
<tr>
<td>Tuition - Distance Students</td>
<td>6,615</td>
<td>32,010</td>
<td>70,210</td>
</tr>
<tr>
<td>Tuition - Engineering</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Tuition - Commerce</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Tuition - Law</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Tuition - Dept of Medicine/Nursing</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Non-tuition</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Expenditure by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>2017-18 Forecast</th>
<th>2018-19 Forecast</th>
<th>2019-20 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition - FAS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tuition - Distance Students</td>
<td>6,615</td>
<td>32,010</td>
<td>70,210</td>
</tr>
<tr>
<td>Tuition - Engineering</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Tuition - Commerce</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Tuition - Law</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Tuition - Dept of Medicine/Nursing</td>
<td>1,952</td>
<td>3,444</td>
<td>5,936</td>
</tr>
<tr>
<td>Non-tuition</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Notes:
- Estimated Certificate, 2 years to complete.
- Costs are incremental.
- All costs are incremental.
- 2018-19 costs are incremental.
- 2019-20 costs are incremental.
- Law: Costs are incremental.
- Law: Costs are incremental.
- Total in program.
- 5% all units are incremental.
- 5% all units are incremental.
- 5% all units are incremental.
- Total new from program.
This module is to be completed by the Academic Units in consultation with the Faculty Office(s) and/or School of Graduate Studies as appropriate as well as the Office of Planning and Budgeting.

<table>
<thead>
<tr>
<th>Summarize the additional resources needed to implement the program under the following headings (where applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Faculty</strong> <em>(e.g. number of 0.5-credit courses)</em></td>
</tr>
<tr>
<td><strong>Staff</strong> <em>(include number or fraction of FTEs)</em></td>
</tr>
<tr>
<td><strong>Teaching Assistants</strong> <em>(include number of TA hours)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Non-Academic University Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Indicate which of the following Services will be needed. Provide details as needed.</em></td>
</tr>
<tr>
<td><strong>Financial Services</strong></td>
</tr>
<tr>
<td><strong>Human Resources</strong></td>
</tr>
<tr>
<td><strong>Advancement</strong></td>
</tr>
<tr>
<td><strong>Student Services</strong></td>
</tr>
<tr>
<td><strong>Residences</strong></td>
</tr>
<tr>
<td><strong>Administrative services</strong></td>
</tr>
<tr>
<td><strong>Other</strong></td>
</tr>
</tbody>
</table>
# Budget Module and Narrative

Complete the budget template found on the QUAP website in consultation with the Faculty Financial Officer and the Registrar detailing one-time expenses (monies that will only be required once for start-up), base funds (year after year expenses), all other expenses and revenues from all sources for each year until steady state is reached. Consultations with the Office of Planning and Budgeting are also recommended.

**Include a narrative to accompany the budget template [maximum 2 pages; use of subheadings suggested].**

The program has been designed to best utilize existing staff and faculty resources. However, some additional resources will be required to mount the program, including investments in adjunct faculty $32,000 in year 1, growing to $67,000 in year 5 and beyond. The program also received $363,828 in funding from e-campus Ontario to support the development of the 6 on-line courses required to mount the program. The budget also accounts for $15,000 in year 2 for on-line course maintenance and updating growing to roughly $32,000 in year 5 and beyond. To support the marketing of the program, $10,000 will be required annually and $20,000 has been allocated for administrative support.

If other sources are needed, list the sources and indicate if the funds have been applied for and if they have been secured.

---

## Net Impact of the Proposed Program

**Summarize any other resource or funding implications of the proposed program.**

Revenue for this proposed program will come primarily from the new tuition fees and BIU funding. As stated above, the Faculty also received $363,828 in funding from e-campus Ontario to off-set the costs associated with the development of the 6 on-line courses required to mount the program. It is anticipated that the proposed program will steadily grow over the next few years and will reach an annual intake of 100 students. It is also anticipated that there will be a 5% attrition rate as students flow through into year 2 of the program and it is anticipated that it will take students two years to complete the certificate requirements (15 units). As a result, it is anticipated that all initial start-up and administration costs will be recovered in Year 3 and a net positive revenue to the University of approximately $33,000 in Year 3 and just shy of $116,000 in Year 5.
NEW UNDERGRADUATE FOR-CREDIT CERTIFICATE PROPOSAL

Expedited Approval Submission Form

Once the pre-approval process for a new undergraduate program is completed, and permission obtained from the provost’s office to submit a full proposal for an expedited approval, this template is to be used for a new for-credit Senate-approved undergraduate certificate. This is normally defined as a coherent subset of an existing degree program. New undergraduate certificate submissions must receive the approval of the appropriate Faculty Board(s) (or equivalent) and the provost prior to submission to the secretary of the Senate Committee on Academic Development (SCAD). SCAD will make its recommendations to Senate regarding the certificate’s approval. Academic units are strongly advised to contact the appropriate faculty associate dean(s) with any questions that arise during this proposal development. Please refer also to the Guide to QUPAP.

NOTE: the textboxes in this template will expand as needed

Part A – General Summary

| Name of Proposed Certificate: | Certificate in Urban Planning Studies |
| Academic Unit(s): | Department of Geography and Planning (Undergraduate Program) |
| Proposed Start Date: | Fall 2018 |
| Type of Study: | Full-time |
| (full-time, part-time, both) |

Contact Information (1)          Contact Information (2)

| Name: | Beverley Mullings | Name: | Leela Viswanathan |
| Title: | Associate Head, Undergraduate | Title: | Associate Professor |
| Unit: | Geography and Planning | Unit: | Geography and Planning |
| E-mail: | mullings@queensu.ca | E-mail: | leela.viswanathan@queensu.ca |

Executive Summary (1 page maximum suggested – minimum font size 11)

Briefly summarize the rationale for introducing this new undergraduate certificate and how it is consistent with the university’s Academic Plan and Strategic Framework as well as the academic goals of the faculty/school. Briefly describe the educational goals and learning outcomes; internal or external collaboration required to deliver this program; how the program relates to the existing undergraduate program(s); what is the target market; how the relevant stakeholders (e.g. faculty, staff, students) were consulted in preparing the proposal; and additional resources required.

Rationale:

Cities have become key sites for understanding contemporary social life. The majority of the world’s population now lives in cities and the city is one of the most fundamental of human institutions. Cities are sites of innovation and creativity in economic, cultural and political life but they are also sites of striking inequality, poverty and conflict that pose a challenging array of planning, governance and environmental issues. Communities within cities are also complex entities with their own needs, structures and processes. Planners play a vital role alongside governments and social groups to guide the design and
operation of cities and promote their growth. Drawing on their skills and understanding of planning concepts and strategies, planners create and implement policies and plans that can develop and enhance cities as well as regional, urban, suburban and rural communities.

Until recently, there were no undergraduate courses in Urban Planning in the Faculty of Arts and Science (FAS), but every year students indicate an interest in learning more about the planning profession and ways that planners are addressing many of the challenges associated with cities and urban development. The desire to introduce students to urban planning perspectives is the major motivation behind this Unit’s commitment to develop a suite of undergraduate courses that will serve as the foundation for the proposed Certificate in Urban Planning Studies. Through this introduction, we believe that the proposed program will meet the needs of students across the Faculty of Arts and Science as well as Civil Engineering students who wish to connect their discipline’s focus (the design, construction, and maintenance of the physical and naturally built environments, including works like roads, bridges, canals, dams, and buildings) to the planning and development of communities.

The recent amalgamation of the Department of Geography and the School of Urban and Regional Planning into the Department of Geography and Planning raises opportunities for new program development in urban planning studies. In Fall 2016 the Department of Geography and Planning began to offer urban planning-related courses at the undergraduate level; prior to this, our undergraduate courses were focused primarily in urban geography. There are currently eight faculty members who teach urban planning-related courses at the undergraduate level, five of whom are also professional planners. There are also six core faculty members who teach graduate level courses in the professional planning degree program. Queen’s has had the professional planning program leading to a Masters of Urban and Regional Planning (MPL) degree at the graduate level since 1970.

Understanding that students benefit from multiple approaches to and options for learning, including both topical and in-depth approaches to learning about cities, this Certificate is one of a series of “products” delivered through the Department of Geography and Planning that offer students an opportunity to gain recognition for the study of cities (i.e., other options include the combined degree program in Urban and Regional Planning and a proposed interdisciplinary minor in Urban Studies).

We expect our first cohort of students to begin taking courses for the Certificate in September 2018. The normal timeline for Queen’s students to complete the Certificate is 4 courses over years 2, 3, and 4 of their existing degree programs. Students who register for the Certificate will also have the opportunity to attend the SURP Seminar Series, urban studies related seminars hosted by the Geography and Planning Department, and also through the Studies in National and International Development (SNID) Lecture Series.

In keeping with the University’s and the Faculty’s certificate policies; students will be permitted to count up to 50% of the courses required for the certificate (i.e. 6.0 units), towards their degree (major) plan.

In April 2016, Canadian Business declared that urban planning jobs are ranked #2 in terms of the best jobs in Canada and jobs that are in demand. http://www.canadianbusiness.com/lists-and-rankings/best-jobs/2016-urban-planner/. This information allows the Department of Geography and Planning to offer undergraduate students an opportunity to explore and examine issues that emerge in the context of urban planning policy and practice. This Certificate will therefore offer students a credential that will make them more competitive in the job market.

Alignment with Academic Plan and Strategic Framework
The proposed Certificate in Urban Planning Studies aligns with two pillars of Queen’s University’s Academic Plan in the following ways:

Student learning experience – Understanding that students benefit from multiple approaches to and options for learning, including both topical and in-depth approaches to learning about cities, this Certificate is one of a series of programs that the Department of Geography and Planning intends to develop over the next couple
of years that offer students an opportunity to gain recognition for the study of cities (i.e., other options including the combined degree program in urban and regional planning and a proposed interdisciplinary minor in urban studies). In keeping with the University’s commitment to promoting a balanced academy that offers an outstanding undergraduate experience, the program will provide a recognized, relevant certificate that complements students existing programs of study and expands student employment possibilities.

**Disciplinarity and interdisciplinarity** – The Certificate strikes a balance between courses that are foundational to urban geography and those that offer an initial insight into issues in urban planning studies that relate to current careers in urban and regional planning, real estate, public health, social service planning, public transit planning, municipal services, and policy analysis, and urban governance.

**Reaching Beyond: Globalism, Diversity and Inclusion** – Many conflicts within cities are linked to questions of inequity and exclusion. All of the courses in this Certificate offer students an opportunity to consider the role of the planner in urban spaces that are rapidly changing culturally, economically and politically, and in so doing to empower students to think about urban interventions in an ‘informed and responsible manner’.

**Alignment with Strategic Mandate Agreement**

The Certificate in Urban Planning Studies aligns with Queen’s Strategic Mandate Agreement (2014-2017) with the Ministry through our institutional strength in Program Offerings – Arts and Science: Social Sciences (Section 5).

In addition, the proposed Certificate in Urban Planning Studies aligns with the Queen’s University Strategic Mandate agreement primarily in relation its provision of a *high-quality undergraduate student learning experience* that promotes intercultural competence, and social and civic responsibility through active and collaborative learning.

This Certificate is balanced in offering insights into the ideas or theories that inform studies of urban planning and cities, but also research skills that inform the creation of plans, briefing notes, and processes for public engagement in urban contexts.

It provides opportunities for interdisciplinary studies at the undergraduate level. Geography is an inherently inter-disciplinary field and the certificate will engage students from other departments and faculties and in so doing promote learning across disciplinary perspectives.

The Certificate will provide students with fundamental academic skills identified in the Academic Plan - critical reading; effective writing and communication; numeracy; inquiry; critical thinking; problem solving, and will provide students with the opportunity for new expanded credentials that will prepare them for careers after leaving Queen’s.
Part B – Evaluation Criteria

Part B is to be completed by the unit/faculty.

In accordance with Queen’s University Quality Assurance Processes (QUQAP), the criteria should be regarded as the minimum criteria upon which the new program submission will be assessed. Further information can be found in the Queen’s University Quality Assurance Processes.

1. Introduction

1.1 List the objectives of the certificate and specify the anticipated learning outcomes and career paths. [Refer to UDLEs, Appendix 1 QUQAP].

The Certificate in Urban Planning Studies provides an introduction to urban planning-related issues grounded in an appreciation of city life and city structures, and prepares students for advanced studies and careers related to urban planning, such as community development, real estate, municipal governance, international development, or education.

The objectives of the Certificate in Urban Planning Studies include preparing students for advanced studies and careers in urban planning.

Depth and breadth of knowledge:
Students who successfully complete the Certificate in Urban Planning Studies will be expected to:

- Demonstrate a broad understanding of the major issues shaping patterns of uneven development in cities in the 21st century;
- Describe the integral role that space plays in shaping how urban residents express their social and cultural values;
- Identify and interpret the rationale behind key urban and city planning policies, municipal regulations, environmental management and modes of community development and conflict resolution.

Knowledge of methodologies:
Students who successfully complete the Certificate in Urban Planning Studies will be able to:

- Use appropriate methods to assess urban issues through case studies, simulations, group discussions, and team projects;
- Effectively extract, interpret and analyze qualitative, quantitative and spatial information from a range of academic and nonacademic sources to explore urban planning issues;
- Apply well-established ideas and strategies to devise solutions to problems in the fields of urban planning.

Application of knowledge:
Students who successfully complete the Certificate in Urban Planning Studies will be able to:

- Make connections between periods, locations, national traditions to delineate intellectual trends in our understanding of urbanization and city development across spans of time and space;
- Apply critical thinking and problem solving skills to complex problems in urban planning;
- Identify key challenges in urban planning from a variety of disciplinary perspectives and the appropriateness of different urban policy strategies for addressing them.

Communication skills:
Students who successfully complete the Certificate in Urban Planning Studies will be able to:

- Demonstrate effective communication skills orally and in writing through individual and group
work;
- Communicate complex arguments and counterarguments related to urban planning issues in the real world to lay audiences;
- Undertake active listening strategies to provide feedback to a variety of audiences.

1.2 Explain how the objectives will be achieved (e.g. course work, teaching and research seminars, independent research, laboratory and technical training, internships, practica, major research papers, and thesis).

Graduates of the Certificate in Urban Planning Studies will demonstrate a broad understanding of major challenging issues and skills in city planning and urban development. Through course readings, in-class learning activities such as case studies, simulations exercises, group/team projects and presentations, individual assignments and examinations. Students who successfully complete the Certificate in Urban Planning Studies will be able to devise and sustain persuasive arguments and solve problems using a variety of disciplinary approaches.

2. Program Regulations

2.1 Admission Standards - Describe the admission standards for the proposed certificate program, including degree, diploma and/or course requirements, and any other specific standards with reference to the learning outcomes and expectations of the program. Provide the rationale for standards that differ from those set by the faculty for degree programs and departmental requirements for entry to undergraduate degree programs. If applicable, indicate policies/procedures to encourage applications from qualified under-represented groups (e.g. Aboriginal people, visible minorities or persons with disabilities).

The Certificate in Urban Planning Studies program will be open to all registered full- and part-time undergraduate students in 2nd through 4th year.

The program will be offered on-campus, and so can be taken in conjunction with a degree program from any Faculty, and any degree Plan in Arts and Science:

i. Current Queen’s Arts and Science students who have completed at least one year of study (a minimum of 24.0 units passed) will apply to the Certificate Program through a web application that will be available on the Arts and Science website during Program/Plan selection in May. Students must have a minimum cumulative GPA of 1.60.

ii. Current Queen’s undergraduate students in other Faculties and Schools who have completed at least one year of study (a minimum of 24.0 units passed) will apply to the Certificate Program through a web application on the Undergraduate Admission website during Program/Plan selection in May. Students must have a minimum cumulative GPA of 1.60.

iii. Students who hold an Arts and Science undergraduate degree from Queen’s may register in the Certificate program by completing a Return to Studies form.

iv. Students who hold an undergraduate degree from another Faculty or School at Queen’s will apply through the Undergraduate Admission website.

All students who enrol in the Certificate in Urban Planning Studies program, must meet the Faculty of Arts and Science progression criteria.
3. **Certificate Structure and Requirements**

Describe the certificate under the following headings (as applicable)

### 3.1 General Certificate Requirements

Describe the program duration and rationale, total number of courses, examinations, progress reports, advisory committees, etc.

Students who wish to pursue the Certificate in Urban Planning Studies offered through the Department of Geography and Planning will be required to complete 12.0 units (i.e., 4 courses of 3.0 units each, for a total of 12.0 units).

Two courses will be required at the 200-level-
- GPHY 227/3.0 Cities: Geography, Planning and Urban Life;
- GPHY 228/3.0 Geographies of the Global Political Economy;

Any two courses in the following list will be required-
- GPHY 243/3.0 Geographic Information Science;
- GPHY 330/3.0 Transportation Geography;
- GPHY 332/3.0 Cities and Planning for Sustainable Development;
- GPHY 336/3.0 Geography, the Environment and Human Health;
- GPHY 337/3.0 Regional Development Theory and Policy;
- GPHY 338/3.0 Urban Political Geography;
- GPHY 370/3.0 Special Topics in Human Geography*

* Topics need to be approved by the Associate Head of Undergraduate Studies.

The courses will be taken over a period of 2½ to 3 years. The specific course requirements and assessment methods, and balance among the requirements and assessment methods varies across courses, but typically will include a combination of mid-term examinations, case analyses, project(s) or assignment(s) and/or final examinations. GPHY 227, GPHY 228 and GPHY 243 are courses that will be offered every year, and students will be able to take GPHY 227 either in-class or online. The 300-level courses are offered a minimum of once every other academic year. We will also consider the addition of a 300-level project-based course to the Certificate requirement at a later date. We envisage that this course will offer students an opportunity to participate in a group project that addresses an urban planning-related topic. The proposed project-based course will not only help students who register for the certificate to develop a range of research and communication skills, it will also provide them with a first-hand sense of the collaborative nature of planning.

The course instructor will monitor student progress in each course that forms part of the Certificate program; and at the end of each academic year the Faculty Office reviews ASC students and their progression.

### 3.2 Course Requirements

In Table 1 below, list core (required) courses, optional courses (e.g. select X from the following list) and elective courses (indicate level and disciplines).

<table>
<thead>
<tr>
<th>Course/Credit (Number and name)</th>
<th>(C)ore, (O)ptional or (E)lective</th>
<th>Proposed Instructor(s) and Home Academic Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPHY 227/3.0 Cities: Geography, Planning and Urban Life</td>
<td>C</td>
<td>Betsy Donald, Geography and Planning</td>
</tr>
<tr>
<td>GPHY 228/3.0 Geographies of the Global Political Economy</td>
<td>C</td>
<td>Beverley Mullings, Geography and Planning</td>
</tr>
<tr>
<td>GPHY 243/3.0 Geographic Information Science</td>
<td>O</td>
<td>Paul Belanger, Geography and Planning</td>
</tr>
<tr>
<td>GPHY 330/3.0 Transportation Geography</td>
<td>O</td>
<td>Ajay Agarwal, Geography and Planning</td>
</tr>
<tr>
<td>GPHY 332/3.0 Cities and Planning for Sustainable Development</td>
<td>O</td>
<td>David Gordon, Geography and Planning</td>
</tr>
<tr>
<td>GPHY 336/3.0 Geography, the Environment and Human</td>
<td>O</td>
<td>Patricia Collins, Geography and Planning</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td>John Meligrana, Geography and Planning</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>GPHY 337/3.0 Regional Development Theory and Policy</td>
<td>O</td>
<td>Leela Viswanathan, Geography and Planning</td>
</tr>
<tr>
<td>GPHY 338/3.0 Urban Political Geography</td>
<td>O</td>
<td>All Faculty, Geography and Planning</td>
</tr>
<tr>
<td>GPHY 370/3.0 Special Topics in Human Geography</td>
<td>O</td>
<td></td>
</tr>
</tbody>
</table>

Use space below to comment on Table 1
### 3.3 Course Descriptions

For each EXISTING and NEW undergraduate course that is part of the proposed certificate, provide a calendar description below and append/embed the course outline in Section 12. Also indicate if the course currently exists or is under development.

#### EXISTING

**GPHY 227/3.0 Cities: Geography, Planning and Urban Life**
The city from a geographical and planning perspective. Topics include origins of urbanism; mega; migrant, and global cities; urban competitiveness; land use planning and design; suburbanization and sprawl; new urban identities and culture; retailing transport; public space; private and temporary cities; urban poverty; politics and governance; sustainable urban futures.

**NOTE** Also offered online. Consult Arts and Science Online. Learning Hours may vary.

**PREREQUISITE** Level 2 or above or permission of the Department.

**GPHY 228/3.0 Geographies of the Global Political Economy**
This course examines how geographers understand the global economic system. Topics include globalization, regional economic integration, transnational production and marketing strategies of firms, new patterns of consumption, the rise of the service economy, and work and employment in the new economy.

**PREREQUISITE** Level 2 or above or permission of the Department.

**GPHY 243/3.0 Geographic Information Science**
An introduction to the basic principles, techniques and applications of Geographic Information Science. Students will learn concepts of Global Positioning Systems (GPS), georeferencing, vector and raster based models and the nature of geospatial data.

**PREREQUISITE** (GPHY 101/3.0 and GPHY 102/3.0) or (BIOL 102/3.0 and BIOL 103/3.0) or (GEOL 104/3.0 and GEOL 107/3.0) or permission of the Department.

**GPHY 330/3.0 Transportation Geography**
The course provides a systematic examination of urban transportation in the context of general economic, social and spatial trends. Particular focus is placed on the role of the built environment in explaining travel behaviour. The aim is to provide a fair understanding of transportation planning and policy issues and explore potential solutions.

**PREREQUISITE** Level 3 or permission of the Department.

**GPHY 332/3.0 Cities and Planning for Sustainable Development**
Contemporary community planning and urban development from the perspectives of social sciences, planning and real estate development. Emphasis on understanding actors in the process and creating projects that are socially, environmentally and economically sustainable. Informed by international perspectives, but focused on Canadian cities.

**NOTE** Case Materials: Approximate $30.

**NOTE** Optional field trip may be undertaken in some years; approximate cost up to $300.

**PREREQUISITE** GPHY 227/3.0 and (GPHY 228/3.0 or GPHY 229/3.0 or DEVS 230/3.0) or permission of the Department.

**GPHY 336/3.0 Geography, the Environment and Human Health**
Examines the relationship between human health and built, physical, and social environments. Focus is influence of local environmental conditions on population health outcomes within the North American urban context. Policy and programming options for improving local conditions are explored.

**PREREQUISITE** Level 3 and (3.0 units from BIOL 243/3.0; CHEE 209/3.0; COMM 162/3.0; ECON 250/3.0; GPHY 240/3.0; GPHY 247/3.0; KNPE 251/3.0; NURS 323/3.0; POLS 385/3.0; PSYC 202/3.0; SOCY 211/3.0; STAT 263/3.0; STAT 267/3.0; STAT 367/3.0) or permission of the Department.
GPHY 337/3.0 Regional Development Theory and Policy
The elements of the regional development process and regional policies. Principal theories and methods of regional analysis. Assessment of strategies of regional development and the use of policy instruments in regional development programs in North America and western Europe.
PREREQUISITE  GPHY 228/3.0 and (GPHY 227/3.0 or GPHY 247/3.0 or 3.0 units in DEVS at the 200 level or above), or permission of the Department.

GPHY 338/3.0 Urban Political Geography
The forces involved in shaping the political environment and spatial structure of urban areas. Emphasis on the significance of decisions concerning public goods in the distribution of income and equity within the city.
PREREQUISITE  6.0 units from GPHY 227/3.0; GPHY 228/3.0; GPHY 229/3.0 or permission of the Department.

GPHY 370/3.0 Special Topics in Human Geography
Course offered by visiting faculty on Geography topics related to their research interests. Consult the departmental homepage for further details of specific course offerings each academic year.
PREREQUISITE  Level 3 in a GPHY Plan, or permission of the Department.

For the complete course outline, please see Appendix 1: Course Outlines
For the complete Calendar Copy, please see Appendix 2: Calendar Copy

3.4 Certificate Timelines – In a table or figure, summarize the expected progress through the certificate by term to completion. If both full-time and part-time studies are proposed, specify timelines for each.

<table>
<thead>
<tr>
<th>Year 1 of certificate program</th>
<th>Year 2 or Year 3 of certificate program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Winter</strong></td>
</tr>
<tr>
<td>GPHY 227 or GPHY 228</td>
<td>GPHY 227 or GPHY228</td>
</tr>
<tr>
<td><strong>Year 1 or certificate program</strong></td>
<td><strong>Year 2 or Year 3 of certificate program</strong></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Winter</strong></td>
</tr>
</tbody>
</table>

3.5 Other matters - Comment on any special matters and innovative features.

Table 2 provides the projected pattern of study in the Certificate for a full-time student undertaking a normal overall 4-year study pattern in a BA (Hons.) degree program. The timeline assumes a typical full-time student taking a single course per term to complete the Certificate in two years. The actual frequency of course offerings may provide for a more accelerated completion of the 12.0-unit Certificate.
4. **Program Content**

<table>
<thead>
<tr>
<th>4.1</th>
<th>Explain how the curriculum of the proposed certificate addresses the current state of the discipline and/or profession.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban Planning is increasingly complex because of the combination of land use policy, legal, behavioral, and social skills and knowledge that must be mastered in order to successfully work in the field. The <em>Certificate</em> provides a balanced, multi-disciplinary approach to the study of cities by incorporating the main disciplinary foundations of the study of urban planning including social planning, municipal regulation, transportation, real estate law, resource management, land use planning, and community relations. The <em>Certificate</em> provides students with the opportunity for focused, advanced study of city planning and city development, combined with skills regarding the practice of urban planning that will support them should they decide to complete a professional degree in this field. This <em>Certificate</em> addresses the current multidisciplinary state of the discipline by offering a specialization in urban planning studies that will be accessible to students from a variety of Arts and Science disciplines.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.2</th>
<th>Identify any unique curriculum, innovations or creative components.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The course curriculum includes a combination of case analysis, team projects, and lecture formats. In addition, one of the courses is available in an online format. If we are able to introduce a third-year project-based course in future years, it will be based on a year long project that is community-based.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.3</th>
<th>Academic Integrity - Explain how the certificate educates students on the importance and role of academic integrity.</th>
</tr>
</thead>
</table>
5. Assessment of Teaching and Learning

5.1 Degree Level Expectations (DLE) – In Table 3 below, summarize how the certificate’s structure and requirements address each DLE listed as well as any additional program-specific UDLEs [Refer to Appendix 1 of QUQAP for more information.]

Table 3. Mapping curriculum and degree level expectations (DLEs) *(add rows as needed)*

By the end of the program, successful students will be able to:

<table>
<thead>
<tr>
<th>DLE</th>
<th>Learning Outcomes</th>
<th>Relevant Courses, Academic Requirement</th>
<th>Indicators of Achievement</th>
</tr>
</thead>
</table>
| **Depth and breadth of knowledge** | • Demonstrate a broad understanding of the major issues shaping patterns of uneven development in cities in the 21st century;  
• Describe the integral role that space plays in shaping how urban residents express their social and cultural values;  
• Identify and interpret the rationale behind key urban and city planning policies, municipal regulations, environmental management and modes of community development and conflict resolution. | GPHY 227, GPHY 228, GPHY 330, GPHY332, GPHY336, GPHY337, GPHY338, GPHY370 | Students will demonstrate the ability to identify and describe key urban planning principles and their applications to real world issues via assignments, case analyses, discussions, negotiations, simulations, presentations, and examinations. |
| **Knowledge of methodologies** | • Use appropriate methods to assess urban issues through case studies, simulations, group discussions, and team projects;  
• Effectively to extract, interpret and analyze qualitative, quantitative and spatial information from a range of academic and nonacademic sources to explore urban planning issues;  
• Apply well-established ideas and strategies to devise solutions to problems in the fields of urban planning. | GPHY 227, GPHY 228, GPHY243, GPHY 330, GPHY332, GPHY336, GPHY337, GPHY338, GPHY370 | Students will select appropriate methods to complete case studies and other assignments, which assess real world challenges and problems. |
| **Application of knowledge** | • Make connections between periods, locations, national traditions to delineate intellectual trends in our understanding of urbanization and city development across spans of time and space;  
• Apply critical thinking and problem solving skills to complex problems in urban planning;  
• Identify key challenges in urban planning from a variety of disciplinary perspectives and the appropriateness of different urban policy strategies for addressing them. | GPHY 227, GPHY 228, GPHY 330, GPHY332, GPHY336, GPHY337, GPHY338, GPHY370 | Through individual and group assignments, students will apply analytical frameworks to define problems and propose solutions to real world urban planning challenges. |
| **Communication skills** | • Demonstrate effective communication skills orally and in writing through individual and group work;  
• Communicate complex arguments and counterarguments related to urban planning issues in the real world to lay audiences;  
• Undertake active listening strategies to provide feedback to a variety of audiences. | GPHY 227, GPHY 228, GPHY243, GPHY 330, GPHY332, GPHY336, GPHY 337, GPHY 338, GPHY 370 | Students will demonstrate effective communication skills through written assignments, oral presentations, and online discussions. |
| Awareness of limits of knowledge | • Recognize the complexities of urban planning and community relations.  
• Identify and understand the dynamics of cooperation and conflict in workplace settings and the limits of effective urban planning practices. | GPHY 227, GPHY 228, GPHY 330, GPHY332, GPHY336, GPHY337, GPHY338, GPHY370 | Students will be required to analyze urban issues from a variety of disciplinary and stakeholder perspectives. Students will identify the limitations and challenges within specific sub-disciplinary fields in developing solutions to real world problems within cities. |
| Autonomy and professional capacity | • Recognize the importance of personal reputation and trust in the context of urban planning practices.  
• Exercise personal responsibility and professional ethics whilst working with others. | GPHY 227, GPHY 228, GPHY 330, GPHY332, GPHY336, GPHY337, GPHY338, GPHY370 | Students will demonstrate an appreciation for ethical behaviour and personal reputation in team project, simulation exercises, and individual assignments. Issues of trust and ethics are central topics in GPHY 227 Cities: Geography, Planning and Urban Life and GPHY 338 Urban Political Geography. |

Use space below for comments on Table 3. Include discussion of how indicators of achievement associated with the certificate program differ from or overlap with those of the degree program(s) when the same courses are involved.

While all of the courses that count towards the Certificate also count towards the Geography Degree Program, students who register for the Certificate program will be required to orient all of their assignments in their 300-level courses towards an issue related to urban planning practices. Combined, the courses in this Certificate focus student learning on issues of specific importance to the urban planning practice.
5.2 Describe how the proposed methods of assessing student achievement relate to the certificate’s learning outcomes and degree level expectations.

The Faculty Office will review student progression annually.

5.3 Outline the plans for documenting and demonstrating the level of performance of students [Refer to UDLEs, Appendix 1 of QUQAP]

The Certificate in Urban Planning Studies consists of four (4) courses weighted at 3.0 units each. Student performance will be documented through multiple assessment methods, primarily focused on written assignments and examinations, but also including presentations, group projects and simulation exercises within each course. In order to successfully complete the Certificate, students will require a minimum GPA of 1.6 on the 4 courses required for the Certificate.

<table>
<thead>
<tr>
<th>6.</th>
<th>Mode of Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Explain how the proposed mode(s) of delivery meets the certificate’s learning outcomes and the DLEs. Comment on the relationship between mode of delivery and accessibility requirements.</td>
</tr>
</tbody>
</table>

Normal lecture format: Students are taught the theoretical frameworks associated with each sub-disciplinary course. The lectures also teach the key concepts, systems and processes in urban planning studies that will enable students to demonstrate problem identification, critical analysis, and creative problem solving.

In-class and online discussions: To help reinforce the concepts being taught, class discussion enables students to explore key concepts and understand how the theory and concepts being discussed apply to real world situations in urban planning and community relations.

Simulation exercises and case studies: The courses will create opportunities for students to apply knowledge of urban issues to real world challenges and scenarios.

Group/Team work: In addition to individual and self-directed studies, group activities will expose students to the concepts, dynamics and processes associated with team-based work. Group work will include simulation exercises, creating the opportunity for students to apply the course content to realistic scenarios.

Writing assignments: Developing effective communication is an important learning outcome that will be supported through a variety of writing assignments. Feedback given on assignments will allow students to improve their writing and communication skills.

Accessibility Requirements: Universal design principles will be used possible and, in all cases, students with disabilities that affect their learning will be accommodated as determined by the Queen’s Accessibility Services Office.
6.2 **Distance Delivery** - Where students may take the same certificate or elements of it in two different modes of delivery, indicate how consistency in the certificate requirements and standards will be assured. Describe how a learning community will be fostered, how regular interactions with faculty, students, etc., will be assured, and comment on access to materials, resources, and technology.

The online and on campus versions of GPHY 227 courses share the same learning outcomes; and the same teaching materials as that provided through in-class delivery. The faculty member teaching the online course Dr. Betsy Donald will also be the same faculty member who teaches the in-class version, promoting consistency across delivery modes. All online courses in the Faculty of Arts and Science follow a quality assurance process and are designed such that they require opportunities for peer-to-peer and peer-to-instructor interaction.

7. **Anticipated Enrolment**

7.1 *Indicate how many new students the certificate program is expected to attract; describe the strategies to recruit students.*

We expect that enrollment in the Certificate will grow from 10 students in the initial intake to an intake of 20 students annually. The Certificate will be included in the Faculty of Arts and Science’s marketing activities for new programs and courses. No new students will need to be accommodated by other departments.

7.2 *In Table 4 below, summarize the projected intake and enrolments by year until steady-state is reached (modify table as needed).*

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Enrolment</td>
<td>0</td>
<td>10</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Total Enrolment</td>
<td>10</td>
<td>25</td>
<td>34</td>
<td>39</td>
</tr>
</tbody>
</table>

*Use space below for comments on Table 4. Include comments on whether enrolments in the existing degree program(s) might be affected in any way.*

It is anticipated that the proposed program will steadily grow over the next few years and will reach an annual intake of 20 students with 5% attrition expected. It is anticipated that it will take students two years to complete the Certificate requirements (12 units) but we acknowledge that some students may require extra time. Based on our demand survey we do not anticipate that enrolments in our existing degree programs will be affected by the Certificate program as students view the Certificate in Urban Planning Studies as a supplementary qualification that could improve their chances of employment upon graduation and getting into a graduate Urban Planning Degree program in the future.
8. Resources

Provide evidence that the Academic Unit(s) has the necessary resources to implement and deliver the proposed new Certificate under the following headings (where applicable). A budget module and template (located on the QUAP website) must be completed.

8.1 Faculty – Identify faculty members who will have involvement in the delivery of the proposed certificate program and comment on the adequacy of these resources. Complete Table 5 below.

Submit CVs (following the CV guidelines found on the QUAP website) for all faculty that are not listed as core in the degree program(s) from which the certificate is derived. Core faculty is defined here as tenured, tenure-track, emeriti and continuing adjunct professors.

Table 5. Faculty associated with the proposed Certificate Program (add rows as needed)

<table>
<thead>
<tr>
<th>Faculty Member (Home Unit)</th>
<th>Rank/Status (Tenured, tenure track, continuing adjunct, term adjunct, special appt, emeritus, etc.)</th>
<th>Total Undergrad Teaching (incl new Program) (units)</th>
<th>Total Grad Teaching (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Ajay Argawal</td>
<td>Assoc Prof/ tenured</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Dr. Paul Belanger</td>
<td>Adjunct / Assoc Prof/tenured</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Dr. Patricia Collins</td>
<td>Assoc Prof/ tenured</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Dr. Betsy Donald</td>
<td>Prof / tenured</td>
<td>1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Dr. David Gordon</td>
<td>Prof/ tenured</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Dr. Beverley Mullings</td>
<td>Assoc Prof/ tenured</td>
<td>1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Dr. John Meligrana</td>
<td>Assoc Prof/ tenured</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Dr. Leela Viswanathan</td>
<td>Assoc Prof/ tenured</td>
<td>0.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Use space below to comment on Table 5

The total complement of faculty, along with adjuncts, is sufficient to account for periodic leaves. Please see Appendix 3: Faculty CVs.

8.2 Staff - Comment on the adequacy of the staff complement to support the certificate program (administrative, technical, IT, laboratory, etc.).

The current regular administrative staff complement is adequate to support the operational needs of the Certificate program. GPHY 227 (also offered as an online course) is managed by the Faculty of Arts and Science Online.

8.3 Space Requirements - Describe the space (work space, laboratory space, office, classrooms) and equipment needed to support students’ academic activities.

No additional space is required to run this Certificate program. All of the courses to be counted towards the Certificate already exist as courses on our books and are offered either every year (GPHY 227, 228, 243), or every other year (GPHY 330, 336, 337, 338). Course classroom and laboratory space will be made available through the Queen's University-Central Room Reservation system.
### 8.4 **Program Administration** – Describe how the program will be administered (e.g. admissions, tracking progress, curriculum, etc.)

The *Certificate* Program will be administered through the Department of Geography and Planning. The Department’s Associate Head of Undergraduate Studies will administer admission. Administrative requirements to monitor student progress in the Certificate program will be provided by existing administrative support staff; and the Faculty Office.

The Undergraduate Committee of the Department of Geography and Planning will conduct any subsequent curriculum development and review on an as needed basis, and any changes will be subject to a vote of all core faculty members in the department.

### 8.5 **Information Technology** - Describe the information technology needed to support the delivery of the program and to support the student’s scholarship. Indicate the resource implications for hardware, software/internet, audio-visual, telecommunications, etc.

Provide contact person and date that consultation with IT staff took place.

It is anticipated that existing ITS support and infrastructure will be sufficient to mount and deliver this program. Currently, the University provides information technology to all faculty, staff and students by providing them with individual e-mail, web space, the Microsoft Office suite and anti-virus software. Faculty are also offered services such as OnQ (for courses), Wiki and QShare pages for individuals, departments and groups, as well as WebPublish for Departmental websites. Faculty and departmental administrators use PeopleSoft for class lists and entering grades, and managing their research accounts. Students have access to several public and semi-public computing sites across campus, as well as computers and software in the Libraries. Training for faculty on the various software packages is provided through ITServices on-line seminars, webinars, and web documentation as well as the hands-on training.

Geography and Urban Planning faculty offices are all equipped with Ethernet connections, and classrooms are equipped with both Ethernet connections and Wifi. Our larger classrooms are also equipped with multimedia projectors and multi-region DVD/VCR machines. ITServices provides telephones in each of the classrooms to contact the Electronic Classroom Support Centre, as well as on-site support when issues arise.

ITServices supports various software packages and troubleshooting services to faculty, staff and students through a telephone IT Support Centre. The Department provides computers for the administrative assistants and the Head of the Department, and used computers for Continuing Adjunct Faculty and term adjuncts that have been donated through the Faculty Office of Arts and Science. FTE members are expected to purchase their computers through either a research grant or their professional expense accounts.

Students are expected to have their own computers. For those students who do not have portable ones, the Department has laptops that both faculty and students can sign out, from the Departmental General Office, for use during class.

Jim Cranston, Acting CIO, reviewed the document on September 25, 2017 and will provide sign-off upon approval by Faculty Board.

### 8.6 **Library** - Provide information about library support holdings, availability of and access to library resources relevant to the proposed program(s).

There are no additional library resources required to run this *Certificate* program. All of the courses to be counted towards the *Certificate* already exist as courses on our books and are offered either every year (GPHY 227, 228 and 243), or every other year (GPHY 330, 336, 337, 338).
Indicate what new library resources will be needed (e.g. journals, print monographs, audio-visual material, historical documents, electronic databases, statistical/geospatial data).

Although there are no new resources needed to support this program at present we will monitor along with our librarian whether additional library resources might be needed as we further develop the curriculum.

8.7 Describe any additional resources required that are not currently available. Provide evidence of institutional commitment to supplement existing resources as needed. [Complete budget module]

No additional resources will be required in the initial offering of the program. In subsequent years the projected surplus may be used to hire additional instructors or to bring on new faculty for succession planning purposes should the demand for the Certificate increase.

For a complete overview the program’s proposed budget, please see Appendix 4: Proposed Budget

9. Other Matters

9.1 Provide evidence of student demand for the certificate program and describe how this information was obtained.

On April 13, 2017, the Department of Geography and Planning distributed a survey among 423 students to assess student interest in a Certificate in Urban Planning Studies. The survey provided background information on the purpose of the certificate and asked students to indicate their preference for a Certificate in Urban Planning Studies or a Minor degree in Urban Planning Studies. The survey was closed on April 19th, 2017. During this period we collected 107 responses (26% returned). The majority of the respondents (48%) were GPHY Majors.

Forty-two per cent of our respondents indicated that a proposed Certificate in Urban Planning Studies would suit their career goals and interests more than a minor in urban studies would. Comments suggested a high degree of support for the Certificate with students stating: “The Planning Certificate is SUCH a good idea!” and “This is amazing!! I wish I could have done this during my undergrad”.

For a complete overview of the student demand survey, please see Appendix 5: Student Interest Survey.
9.2 Explain how the certificate program will fulfill societal need.

The *Certificate in Urban Planning Studies* will help meet the demand for education in urban studies and urban planning, by providing a highly marketable and job-relevant credential for undergraduates. The certificate will also help to establish Queen’s as a leading university program for teaching and research in the field of Urban Studies and Urban Planning.

The *Certificate in Urban Planning Studies* will also help promote the MPL graduate degree program among undergraduate students at Queen’s and at other universities. Students who take courses in the Certificate program will gain a better awareness of the field and may develop an interest in pursuing graduate studies in cognate fields that include urban planning, community development, real estate, municipal governance, international development or education. At the same time, faculty members in the unit will have the opportunity to identify potential applicants to the graduate program.

In addition, Canadian Business ranked ‘urban planner’ as the 18th best job in Canada for 2017, based on salary, number of employees, and occupational growth. There’s been a hike in demand for urban planners from governments and developers in recent years, as land use issues have become increasingly complicated in both rural and urban regions.

The median salary of an urban planner in 2016 was $86,320. Entry-level jobs start at around $50,000, and compensation generally reaches around $100,000 for those in their late careers, according to PayScale Canada. From 2010 to 2016, urban planners experienced a 15% increase in salary. There are approximately 10,200 people currently working as urban planners in Canada, which is up 27% from 2010. For the 2016-2018 period, the employment outlook is expected to be fair for urban and land use planners in Ontario.

According to Canadian Business, the burgeoning demand for urban planning expertise has brought about a greater degree of specialization within the profession. Private planning consultancies and even law firms now routinely employ planners who focus exclusively on appeals to the Ontario Municipal Board, a quasi-judicial body that polices the land use decisions made by municipal council. Other firms have carved out niches in urban design, project management and public consultation, a sideline of planning that focuses on attracting, synthesizing and then interpreting community feedback.

Additionally, planners, because they work so often with members of the public, need to be versed not just in the technical elements of the job; they must also possess exemplary communications skills, and have to be able to respond to criticism or skepticism from residents. Away from public meetings, more planners also find themselves working with new forms of real-time urban data and analytics techniques to assist with their work.

What seems clear is that Canada’s planning profession is poised to continue along its brisk growth trajectory, even if there’s a contraction or correction in the red-hot property development markets in cities like Toronto and Vancouver. The reason? While engineering and architecture firms tend to be exposed to development downturns, most private planning companies do a lot of business with municipalities and their agencies. Given the billions in stimulus dollars that will be spent in coming years on infrastructure projects, demand for planners is likely to grow in lockstep with the flow of federal and provincial dollars to social housing, transit, public spaces and recreational amenities.
9.3 *For new professional certificate programs, provide evidence that the certificate is congruent with the regulatory requirements of the profession.*

This undergraduate *Certificate* is not a professional accreditation, however, students who enrol in this *Certificate* will build skills that are related to the kinds of issues and topics that are the primary focus of professionally accredited urban planners.

---

10. **Equity, Diversity and Accessibility**

10.1 *Describe how the proposed new certificate program will address equity considerations, including (but not limited to) issues of particular concern for the groups identified in the university’s various equity programs.*

Our unit strives to promote a positive climate that respects equity and diversity that is reflective of Canadian society, and an inclusive and supportive learning environment for all students. Our faculty and staff are committed to ensuring fair and equitable admissions practices. All of our core faculty have taken the relevant equity training and one is an acknowledged expert on equity issues. In addition, human rights law and practice is a part of the curriculum in the proposed Certificate program. Additionally, in compliance with the Accessibility for Ontarians with Disabilities Act (AODA), Queen’s University requires all faculty, staff and students will have completed the University’s online training in Accessible Customer Service at Queen’s.

There is a keen awareness among instructors and teaching assistances of the need for inclusive teaching, of the need to address accommodation issues in the classroom, and of the need to develop a curriculum that is not only inclusive but that explicitly addresses issues of equity and human rights. In 2014 the University Survey of Student Assessment of Teaching (USAT) revealed that Geography students consistently agreed that their instructors showed “sensitivity to the needs and interests of students from diverse groups”.

A number of the courses that are part of the *Certificate* (GPHY227, GPHY228, GPHY336 and GPHY338) explicitly address indigenous, anti-racist, feminist issues, as well as with human rights questions and issues related to social and environmental justice in Canada as well as internationally.
11. **Quality and Other Indicators**

11.1 *Define indicators that will provide evidence of the quality of the faculty and how they will be used (e.g. qualifications, teaching effectiveness, supervisory/mentorship ability, research impact, innovation and scholarly record; appropriateness of collective faculty expertise to contribute substantively to the proposed certificate program).*

Queen’s is a leader in Urban Planning in Canada because of the acknowledged expertise of the faculty, the academic strength and integrity of the graduate program curriculum, and the particularly high degree of career success of Queen’s MPL graduates. The merger between the School of Urban and Regional Planning and the Department of Geography has provided a unique opportunity to develop a leading undergraduate certificate program for non-specialists in Urban Planning Studies. A combination of factors, including the fact that there isn’t currently an undergraduate course in urban planning being offered in the FAS, make this initiative especially important and timely.

All core faculty members in this proposed *Certificate* program are noted scholars in their respective areas of expertise within the broader field of urban geography and urban planning. The core faculty all hold PhDs in cognate fields and all have successful track records of teaching at the undergraduate graduate level in Geography and the majority teach students in MPL degree program. In these programs, the faculty fulfills both formal and informal mentoring roles on an ongoing basis; as well as formal supervisory roles.

All core faculty have demonstrated research excellence in their respective areas of expertise, including publications in academic journals and books, and in attracting research funding and their research is cited widely; and their research has had broader societal relevance in terms of the urban studies and urban planning. Taken together, the core faculty has the qualifications, demonstrated teaching effectiveness, and research calibre to successfully administer and substantively contribute to the proposed *Certificate* Program.

We are also very fortunate to have a number of talented adjunct faculty within Kingston who are noted and acknowledged leaders in their particular areas of expertise within the field of urban planning studies. They have graduate degrees directly related to the field, practical experience in the field, and extensive experience as successful instructors, and have served the Department extremely well on a regular basis.
11.2 Comment on the certificate program structure and faculty attributes (including research activity) that will ensure the intellectual quality of the student experience.

The majority of the core faculty who are associated with the proposed Certificate program (see Section 8.1) teach graduate-level courses in their respective areas of expertise that relate to Urban Studies. All the faculty are committed to updating course content and introducing innovative approaches to learning in their courses, including student team-based learning, simulations, case study learning approaches, and incorporating new advances in technology. Collectively, the core faculty have considerable expertise in teaching in the field and have extensive knowledge and capability in the art of teaching as evidenced by the fact that three of the core faculty have won teaching awards recognized by the Faculty of Arts and Science, and two have won mentoring and diversity awards recognized by the American Association of Geographers.

All faculty have active ongoing research programs and track records of publishing in leading academic refereed journals in their respective field areas. The faculty are all current on research developments in their fields, including theory, evidence and methodology, and are noted for conducting research that is considered “leading edge.” They are also active in attending and presenting their research at conferences and other public venues. The faculty also all engage in research that relies upon qualitative and quantitative research methods and they rely in their teaching on rigorous, evidence-based approaches.
### 12. Supporting Documentation – Unit(s) Input

*In this section please append (or provide hyperlinks to) any additional information that is pertinent to the program(s) and that supports the narratives in Part B (Sections 1-11). For example, as relevant and available, append/embed the following:*

- Appendix 1: Course Outlines
- Appendix 2: Calendar Copy
- Appendix 3: Program Budget
- Appendix 4: Student Interest Survey
## Part C – Administration & Government Reporting Information

Part C is to be completed by the Department(s)/Faculty(s) in consultation with the Office of the University Registrar and the Faculty Office(s).

### 13. Information for and/or from the Office of the University Registrar and/or the Faculty Office(s)

#### 13.1. Academic Administration

<table>
<thead>
<tr>
<th>Academic Career</th>
<th>UGRD</th>
</tr>
</thead>
</table>

Department(s)/Academic Unit(s)

Geography and Planning

<table>
<thead>
<tr>
<th>Proposed Start Date</th>
<th>Fall 2018</th>
<th>Program duration</th>
<th>2 years</th>
<th>Open</th>
</tr>
</thead>
</table>

Expected enrolment

- Initial Intake 10
- Steady State Intake 20

Program Name: Certificate in ...(max 50 characters) (e.g. Certificate in Business)

Certificate in Urban and Regional Planning Studies

URPS-C-URP

#### 13.2. Complete the following:

- Will students be admitted part-time? ☑ Yes ☐ No
- Will all or part of the program be offered at the BISC campus? ☐ Yes ☑ No
- Will all or part of this program be offered via distance learning (e.g. online or blended learning?) ☑ Yes ☐ No

### 14. Course Information

- New Courses with new subject code required? ☐ Yes ☑ No

If yes, suggested Subject Code: __________________________

### 15. Tuition and Student Activity Fees

<table>
<thead>
<tr>
<th>Tuition Fee</th>
<th>$218.97 per unit domestic and $1249.67 international</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee Assessment Protocol (Annual? Per term Or per course?)</td>
<td>per course</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Student Activity Fees</td>
<td>UGRD - AMS</td>
</tr>
<tr>
<td>Non-Tuition Fees</td>
<td></td>
</tr>
</tbody>
</table>

**16. Government Reporting**

<table>
<thead>
<tr>
<th>Proposed FORPOS</th>
<th>103.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Weight (BIUs)</td>
<td>1.5</td>
</tr>
<tr>
<td>Proposed CIP Code</td>
<td>04.0301</td>
</tr>
</tbody>
</table>
### Part D – Government Reporting Information

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part D is to be completed by the unit/faculty</strong></td>
<td></td>
</tr>
<tr>
<td><strong>17. Describe how the program is consistent with an area of strength and/or growth identified in the Strategic Mandate Agreement (SMA). If not aligned, describe how the program is consistent with the mission, aims, objectives and existing strengths of the university</strong></td>
<td></td>
</tr>
<tr>
<td>The Certificate in Urban Planning Studies aligns with Queen’s Strategic Mandate Agreement (2014-2017) with the Ministry through our institutional strength in Program Offerings – Arts and Science: Social Sciences (Section 5). The Certificate in Urban Planning Studies will advance the academic mission of the university, as outlined in the academic plan, with respect to the following guiding principles:</td>
<td></td>
</tr>
<tr>
<td>1. Promoting “…a balanced academy that offers an outstanding undergraduate experience…” by providing a high quality program that will yield a recognized, relevant certificate that complements students existing programs of study and supports student employment aspirations;</td>
<td></td>
</tr>
<tr>
<td>2. Providing an opportunity to undertake interdisciplinary studies at the undergraduate level. Urban Planning studies is an inherently inter-disciplinary field and the Certificate will be designed to engage students from across departments and faculties, further promoting inter-disciplinary perspectives and learning in the classroom;</td>
<td></td>
</tr>
<tr>
<td>3. Supporting the key recommendations for nurturing the student learning experience at Queen’s University by providing students with the Fundamental Academic Skills identified in the Academic Plan (critical reading; effective writing and communication; numeracy; inquiry; critical thinking; problem solving); these academic skills represent some of the most important core competencies in the field of Urban Planning. The proposed Certificate is also well-aligned with the University’s Strategic Mandate Agreement (SMA). Thus, taken together, the Certificate will provide students with the opportunity for new expanded credentials that will help:</td>
<td></td>
</tr>
<tr>
<td>1. students develop both general and specific skills that meet their particular career needs; and</td>
<td></td>
</tr>
<tr>
<td>2. address society’s needs by preparing students appropriately for careers that they will pursue after leaving Queen’s.</td>
<td></td>
</tr>
<tr>
<td><strong>18. Explain how the proposed program fits with Queen’s current program offerings and the university’s capacity to deliver the proposed program</strong></td>
<td></td>
</tr>
<tr>
<td>The proposed program complements the BAH in Geography by providing students with the opportunity for new expanded credentials. All of the courses that are part of the Certificate are already-existing courses in the Department of Geography and Planning’s curriculum and taught by professors in the department. We anticipate that the proposed program will therefore serve as an important gateway for students who would like to enter the graduate program in Urban Planning. The Certificate will also provide an opportunity for specialization that will complement our plan to develop a minor degree in Urban Studies in the future.</td>
<td></td>
</tr>
<tr>
<td><strong>19. Provide at least two external comparator programs outside of Queen’s used to derive the proposed tuition fee (program name, university and most recent tuition fee exclusive of additional fees). Comparators should ideally be similar credentials and/or programs in Ontario or Canada if none in Ontario. Justify reasoning for proposed tuition; if higher than comparators how will the impact on accessibility be mitigated?</strong></td>
<td></td>
</tr>
</tbody>
</table>
There is currently no other institution in Ontario that offers a Certificate in Urban Planning Studies. The nearest comparator institution is York University that offers a General Certificate in Urban Studies. The program at York University focuses primarily on understanding cities and city life — how they function and the current and future concerns of their residents from a range of interdisciplinary perspectives. The proposed program at Queen’s focuses distinctly on the Urban Planning challenges and approaches that professional planners typically address, and is centered within the discipline of Geography. The program at York University requires 24 course credits and consequently overall a much higher tuition fee $6,018.72 than that proposed for the Urban Planning Certificate.

20. (a) Justify the duplication with comparator programs and others (list programs, why is adding a new program justifiable, evidence of consultation, evidence that there is sufficient demand, sufficient opportunities for experiential learning, etc.).

The proposed Certificate in Urban Planning Studies Program is not a duplication of the programs offered at York University, even though there may be required foundational courses that all of the programs share in common.

As outlined above, a general market scan has revealed there to be justifiable duplication in the space, since there is only one main competitor for the proposed program, which is at York University. In addition, as indicated in Section 9.2 there is a strong labour market demand for students graduating with the credential but a limited number of institutions providing the educational training.

20 (b) Comment on any differences between the proposed program and comparators (number of credits/courses, structure, etc.)

The certificate program at York University requires students to take a 6 credit introductory course that is similar in content to GPHY 227 and an additional 18 credits from a list of approved urban studies courses, of which at least 6 credits, must be at the 4000 level. The proposed program requires students to take two 3 credit courses (GPHY 227 and GPHY 228) and an additional 6 credits from a provided list of courses.

York University – Certificate – Urban Studies

The program’s courses encourage a critical appreciation both of the everyday life that we experience as Canadian city-dwellers today, as well as of the modern city in historical and comparative context.

- Admission: current York student in a degree program
- Requirements: 24 credits
- Courses: world of cities: journey through urban space and time, city lives and city forms: an introduction to urban studies
- Cost: $6018.72 ($250.78 per unit x 24 units)
- Delivery: in-person, full-time

Queen’s University – Certificate in Urban Planning Studies

The Certificate in Urban Planning Studies will be open to undergraduate degree students at Queen’s University and can be taken in conjunction with any degree program, in the Faculty of Arts and Sciences Alternatively, the Certificate can be earned as a stand-alone credential (Students from faculties other than Arts and Sciences). All students who enrol in the Certificate in Urban Planning Studies program, must meet the Faculty of Arts and Science progression criteria. Students who wish to pursue the Certificate in Urban Planning Studies will be required to complete 12.0 units (i.e., 4 courses of 3.0 units each, for a total of 12.0 units).
- Admission: current Queen’s students in a degree program; Queen’s graduates
- Requirements: 12.0 units
- Courses: Core includes, Cities: Geography, Planning and Urban Life; Geographies of the Global Political Economy; + 2 options from a select list
- Cost: $2627.64 ($218.97 per unit x 12 units)
- Delivery: in-person, full-time
Part E - Authorizations

Part E is to be completed by the faculty office(s) following Faculty Board approval and then sent to the provost’s office for approval and signature.

<table>
<thead>
<tr>
<th>Date Approved by Faculty Board (or equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department/Unit Head(s)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature</td>
<td>October 16, 2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vice-Provost and University Librarian</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University Registrar</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Dean(s) or delegate(s)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate Vice-Principal (Planning and Budgeting)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provost and Vice-Principal (Academic)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Approved by SCAD</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date Approved by Senate</th>
</tr>
</thead>
</table>

COURSE OVERVIEW

This course provides a systematic examination of urban transportation in the context of general economic, social and spatial trends. Particular focus is placed on the role of the built environment in explaining travel behaviour. The aim of this course is to provide a fair understanding of the nature of the transportation “problem,” why travel behaviour is so difficult to alter, and why superficial interventions may not work. Potential topics related to the issue far exceed what can be covered in one term; the course provides only a partial treatment.

LEARNING OUTCOMES

• To provide an understanding of key concepts related to urban transportation planning
• To examine the association between land use and transportation
• To understand the economic, social, and environmental impacts of present travel patterns
• Explore the ways in which transportation “problems” could be addressed

COURSE TOPICS


COURSE TEXT

COURSE OVERVIEW

This course exposes students to the numerous ways in which the spaces and places we live, work, and play shape human health. The focus of the course is on the health impacts of built environments, since the built form has tremendous implications on our social relations and the conditions of natural environments. The course begins by examining historical connections between health and the environment, and the importance of changing conceptualizations of disease on community planning and design. Students learn about various domains through which local environments impact health, as well as contemporary approaches to creating healthier spaces and places that support healthy living for all.

LEARNING OUTCOMES

• To identify historical and contemporary links between human health, health determinants, and place at the local level
• To understand the interplay between local environmental conditions and how they combine to impact on health
• To develop analytical skills for predicting how local environmental conditions may contribute to population health disparities
• To hone scholarly skills in reviewing academic and non-academic literature, conducting field observations, written and oral communication

COURSE TOPICS

Historical connections between health and local environmental conditions; diseases and health issues linked to local environments; health implications of local environments (e.g., neighbourhoods, transportation systems, housing, workplaces and schools, food, water, and air); local environments and vulnerable populations; approaches to creating healthier spaces and places. Emphasis will be placed on the Canadian context.

SELECTED COURSE TEXTS & READINGS


Additional readings will be made available on OnQ throughout the semester.
COURSE DESCRIPTION
The course is an introduction to the city from a social science and humanities perspective, with particular insights on how urban geographers have approached the city. Most people around the world now live and work in cities and this course serves as an introductory class for how to understand the city and its place in the modern, globalizing world. GPHY227 gives students the opportunity to learn about the city in the abstract, and apply concepts to specific case studies on topics such as gentrification, population decline, immigration, housing affordability, the digital city, sustainable land use and transportation. The course draws on examples from around the world, but also offers Canadian case studies for students to engage.

The course is a required course for students in human geography and a foundation course for students pursuing a degree in urban planning and urban studies. The course is also designed as an elective course for students from a variety of backgrounds and programs, including General Arts and Science, Commerce and Engineering.

The unique feature of this course lies in its inter-disciplinary approach to understanding the city. The course material comes from a variety of book chapters, articles and webcasts, although the main textbooks are Jonas et al. (2015) *Urban Geography: a critical introduction* (Wiley) and Bunting et al. (2015) *Canadian Cities in Transition* (OUP).

LEARNING OUTCOMES
By the end of the course, you should be able to:

• Articulate the rationale for several approaches to urban geography and how it is possible to gain urban insights from each.
• Define the concepts of space, place, scale, urbanization, urbanism and planning and understand how they help us study cities from a geographical perspective.
• Describe current urbanization trends and projects for countries around the world, with a particular knowledge of the post WWII and contemporary Canadian urban context.
• Compare various approaches to land use, housing, and transportation issues.
• Demonstrate the integral role that space plays in shaping how urban residents express their social and cultural values.
• Analyze how cities are governed and how they could be more sustainable in the future.
• Demonstrate active listening skills to consider peers’ perspectives and to articulate effective communication with peers.

COURSE TOPICS
The course is an introduction to urban geography. It covers key concepts like urbanization, urbanism, planning, space, place, and scale. It draws on examples from North America and around the world. Themes covered include the process of urbanization, theories and approaches of urban geography; global, mega and migrant cities; urban economies; the built environment; inequality; representations of the city; social identity and urban space; marketing and city cultures; urban nature, the digital city, public space, urban politics; and urban futures.

COURSE TEXT
Course Instructor: Dr. David Gordon  
Email: david.gordon@queensu.ca

Office: Macintosh-Corry Hall D321

Contact Time: One 3 hour session per week, with breaks

Format: Lectures, simulations, case study discussions and videos

Class Assessment:
- In-class negotiation exercises (best 2 out of 4) 20% Weeks 3-12
- Final role play exercise and journal: 20% Week 10
- Four-page plan comparison 20% Week 6
- Two-page paper proposal for term paper or briefing note 10% Week 10
- Term paper / Case study 25%; after Week 12
- Attendance, Group Work and Participation 5%

COURSE OVERVIEW
Some of the questions that will be addressed in the course include:
- How are cities and suburbs built in in the twenty-first century?
- Who are the key actors in this urban development process and what are their motivations and interests?
- How do these actors interact in the development process?
- Are the results of the urban development process socially, economically or environmentally sustainable?
- How does contemporary community planning practice interact with the urban development process?
- How can the public sector encourage more sustainable outcomes during a neoliberal era of reduced public funding for urban redevelopment?

The course will be informed by international perspectives, but will focus on Canadian cities and metropolitan regions.

LEARNING OUTCOMES
By the end of this course, students will be able to:
- Understand and critique key concepts related to urban development and community planning.
- Identify the actors in this urban development process and critique their motivations and interests.
- Compare the content and quality of community plans adopted by public agencies.
- Improve their negotiation skills for public disputes.
- Select and integrate information for research purposes from various sources, including government documents, academic journal articles and book chapters, and news media, in electronic and / or print formats.
- Write a concise briefing note and case comparison.

COURSE TOPICS
Contemporary community planning and urban development from the perspectives of social sciences, planning and real estate development. Emphasis on understanding actors in the process and creating projects that are socially, environmentally and economically sustainable.

Participants: Local governments; community organizations; private and public developers; financial institutions; consultants
Plans: Comprehensive plans; land use and environmental regulations.
Processes: Urban redevelopment; greenfield suburban development.

SELECTED COURSE TEXTS & READINGS
Case materials to be purchased ($30 course materials fee)
Selected readings to be posted on OnQ; some chapters to be drawn from:
COURSE OVERVIEW
This course examines the geographies of the contemporary global economy from a broadly political economy perspective. It introduces a series of theories, debates and case studies designed to help you better understand the global political economic system in which we live. The course is divided into four sections. The course begins with an overview of common concerns of economic and social inequality, uneven patterns of geographical development and the search for equity that faces all regions and peoples of the world. We discuss competing approaches to theorizing how the market (capitalist) economy works and introduce you to political economy; the perspective that informs much of the lecture and reading material discussed in the course. The opening section concludes with a brief historical overview of the gradual evolution of the world economy over a period of nearly five hundred years. In Section Two, we focus on the events in the period since the end of the Second World War (1945); in this, we are interested in issues such as the uneven spatial and temporal (booms and recessions) nature of global capitalism, new technologies and management methods, gender issues and the social and environmental implications of neo-liberal globalization. In Section Three, we discuss selected aspects of the present-day global economy including the development of global production systems for food and manufactured goods, the internationalization of retailing and services, changes in the composition of the workforce and the organization of work, and the re-scaling of the economy and political institutions. Finally, we examine how people in their search for greater equity and security in their daily lives have mobilized against globalization and speculate on the possible impacts on the global economy of spatial shifts in economic power, what many are describing as the backlash against globalization and alternatives for a post-neoliberal world.

LEARNING OUTCOMES
At the end of this course students will be able to:
1. Critically assess competing theories of globalization to determine the relationship between capitalist systems and patterns of uneven geographical development.
2. Make connections between periods, locations, national traditions to delineate intellectual trends in our understanding of capitalism across spans of time and space.
3. Recognize economic and political relationships and policies that reproduce or support local oppressive and unequal spatial relationships.
4. Communicate complex ideas surrounding the workings of capitalist systems and the spatial flows they generate, to a lay audience.
5. Consolidate their knowledge about space, place, scale and power as abstract concepts and apply them to an analysis of concrete instances of inequality in the global economy.

SELECTED COURSE TOPICS
Globalization; Global Value Chains; The New International Division of Labour, the Feminization of Work; Care Chains, Debt Crises, Austerity, Outsourcing, Free Trade, Brexit, Globalization, alt right

SAMPLE OF TYPICAL COURSE READINGS (May change from Year to Year)
COURSE OVERVIEW

This course examines regional development theories and policies from different spatial scales and from different perspectives (e.g., public and private decision making). The course examines different approaches to, and conceptions of, “the region” in development and planning. The primary focus is on the process by which regions as spatial economic entities develop and change, both quantitatively and qualitatively, over time. It examines three central questions: 1) how and why do regions grow (or decline); 2) what role does (or can) public policy play in shaping the course of regional development?; 3) how do public and private actors make decisions within the context of “the region”? 4) how can the study of regions help to inform our understanding of the three pillars of sustainability (social/cultural, economic and environmental). To address these questions, a broad body of literature on regional economic development theory and regional planning will be surveyed. While international in scope, emphasis is placed on trends and issues in North America and Europe.

LEARNING OUTCOMES

• To provide a critical understanding of key concepts related to regional development and regional planning particularly as they relate to the situation in Canada and developed world
• To develop and implement a survey method to used to acquire data relevant to shaping regional development policies
• To develop analytical techniques to study and investigate public and private decision within a regional geographic framework

COURSE TOPICS

Regional development theories and policies; economic development; regional planning and development; economic decision making, public sector decision making and policy making regarding regional development; research methods and data analysis at the regional scale.

SELECTED COURSE TEXTS & READINGS

Reading will consist of a series of peer reviewed journal articles, government reports and institutional reviews/analyses, and government issued data.
COURSE OVERVIEW
The purpose of this course is to examine the relationship between geography and urban politics, including different dynamics of power and inequality in cities. Students will discover how politics, planning, and the ways that different actors interact with governing arrangements influence processes and actions that shape cities. Geography is integral to this understanding because urban politics makes reference to different issues studied at neighbourhood, city, and regional scales. This course is intended to address the needs and interests of geography students to gain scholarly and practical experience to apply skills in theory development, research, policy analysis and writing to contemporary issues in urban political geography. Students will learn how to express their ideas, arguments and opinions with different audiences that influence urban policy and planning. This course will benefit undergraduate students interested in the fields of urban and regional planning, government, and public policy.

LEARNING OUTCOMES
At the successful completion of this course, students will be able to:
1. apply key concepts of power and governance to the context of urban political geography.
2. describe and explain how cities are shaped and developed by spatial and political processes.
3. distinguish between different individuals, groups, and institutions that connect urban politics with social and spatial geographies.
4. formulate their own opinions and justify connections between issues in geography and urban politics.
5. evaluate issues and processes in urban political geography by combining skills in research and critical thought to effectively communicate to academic peers and policy/planning practitioners.

COURSE TOPICS
This course will examine topics including: approaches to the study of urban political geography; the relationship between urban development and power; urban actors and stakeholders; public engagement in planning; government and governance. In 2017, students will also have the opportunity to explore topics that include building Indigenous-municipal relationships, sanctuary cities, politics of reconciliation, and environmental justice. Lectures and assignments will focus primarily on North American urban areas and case studies; however, international examples will also be explored, especially in the readings and discussions.

COURSE READINGS
This course will draw from a variety of readings that will be posted on onQ. In addition, there is one required book which will be used throughout the course: Manuel, Arthur and Derrickson, Grand Chief Ronald M. (2015). Unsettling Canada: A national wake-up call. Toronto: Between the Lines. (288 pages) ~ approximate price: $25
GPHY 370/3.0 Special Topics in Human Geography

Course offered by visiting faculty on Geography topics related to their research interests. Consult the departmental homepage for further details of specific course offerings each academic year.
LEARNING HOURS 120 (36L;84P)
PREREQUISITE Level 3 in a GPHY Plan, or permission of the Department
Urban Planning Studies – Certificate
URPS-C-UPS

Subject: Administered by the Department of Geography and Planning.

Plan: Consists of 12.0 units as described below.

Program: The Plan will lead to a Certificate in Urban Planning Studies.

<table>
<thead>
<tr>
<th>1. Core</th>
<th>(6.0 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>6.0 units</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Option</th>
<th>(6.0 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>6.0 units</td>
</tr>
</tbody>
</table>

| 3. Supporting   | (0.0 units) |

| 4. Additional Requirements |

| 5. Substitutions |

<table>
<thead>
<tr>
<th>6. Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
</tr>
<tr>
<td>B.</td>
</tr>
<tr>
<td>C.</td>
</tr>
<tr>
<td>Year</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>2018-19</td>
</tr>
<tr>
<td>2019-20</td>
</tr>
<tr>
<td>2020-21</td>
</tr>
<tr>
<td>2021-22</td>
</tr>
<tr>
<td>2022-23</td>
</tr>
</tbody>
</table>

**Program Intake**
- FAS students
- Distance students

**Notes**: Enrolment of 10 students in Year 1 growing to 39 in total in Year 3 at steady state, with 2 years to complete program.

12-unit certificate with 6 incremental units for FAS students.

**FAS**
- % of Program taken in Year 1: 0.50
- % of Program taken in Year 2: 0.50

**FFTE**
- 0.50

**Enrolment**
- Returning Students Year 2 - FAS
- Returning Students Year 2 - Distance

**Total Enrolment**
- 11
- 25
- 34
- 39
- 39

**Enrolment Domestics vs International**
- Domestic
- International

**Total Reduction**
- $6,760
- $7,033
- $7,174
- $7,317

**Enrolment Reductions if any Required to Accommodate Growth in New Program**
- Domestic
- International

**Total Reduction**
- $6,760
- $7,033
- $7,174
- $7,317

**Grant Revenue Assumption**
- Use grant rate provided for type of student in program on the rates schedule

**Recovery to the University Fund**
- Use Shared Services Attribution cost on Elasticities Summary provided on Rates Schedule Tab

**New Faculty Positions Required**
- 0

**Expenditures**
- Direct program costs
  - Program Development
  - Academic salaries and professional fees
  - Adjunct Salaries
  - TA - Salaries (includes benefits)
  - Benefits
  - Marketing
  - Maintenance fees
  - Books and materials
  - Other

**Attribution of Central Shared Services**
- 0
- 0
- 0
- 0
- 0
- 0
- 0
- 0
- 0
- 0

**Net Revenue**
- 0
- 0
- 0
- 0
- 0
- 0
- 0
- 0
- 0
- 0
This module is to be completed by the Academic Units in consultation with the Faculty Office(s) and/or School of Graduate Studies as appropriate as well as the **Office of Planning and Budgeting**.

### Summarize the additional resources needed to implement the program under the following headings (where applicable)

| Faculty (e.g. number of 0.5-credit courses) | No new faculty resources are required to mount this program |
| Staff (include number or fraction of FTEs) | The program has been designed to best utilize existing staff |
| Teaching Assistants (include number of TA hours) | Based on the projected enrollment numbers, we do not expect there to be a requirement for TAs. |

### Other Non-Academic University Services

*Indicate which of the following Services will be needed. Provide details as needed.*

| Financial Services | Minimal additional resources are anticipated as the participants in this Certificate are existing Queen’s students. |
| Human Resources | N/A |
| Advancement | No support required |
| Student Services | Incremental based on new enrolment. Same level of service as for students enrolled in other undergraduate certificate programs. These students may increase participation in Career Services and Counseling, however we expect this to be a minimal impact. |
| Residences | No additional resources are anticipated as the participants in this Certificate are existing Queen’s students. |
| Administrative services | Incremental based on new enrolment, development of certificate application system, creation of new program codes etc., student tracking and completions |
| Other | |

---

**Page 193 of 199**
Budget Module and Narrative

Complete the budget template found on the QUQAP website in consultation with the Faculty Financial Officer and the Registrar detailing one-time expenses (monies that will only be required once for start-up), base funds (year after year expenses), all other expenses and revenues from all sources for each year until steady state is reached. Consultations with the Office of Planning and Budgeting are also recommended.

Include a narrative to accompany the budget template [maximum 2 pages; use of subheadings suggested].

The program has been designed to best utilize existing staff and faculty resources. To support the marketing of the program, about $3,000 will be required annually.

If other sources are needed, list the sources and indicate if the funds have been applied for and if they have been secured.

Net Impact of the Proposed Program

Summarize any other resource or funding implications of the proposed program.

Revenue for this proposed program will come from the new tuition fees. It is anticipated that the proposed program will steadily grow over the next few years and will reach an annual intake of 20 students with 5% attrition expected. It is anticipated that it will take students two years to complete the certificate requirements (12 units). As a result, it is anticipated that all initial start-up and administration costs will be recovered in Year 1 and net revenue to the University of approximately $6,700 in Year 1 and annual net revenue of $33,000 in Years 4 and beyond.

The University may also apply for BIU funding to support this initiative.
The Department of Geography and Planning would like to develop two new programs for undergraduate students with strong general interests in urban planning or in urban studies. These new programs are:

- A certificate in Urban Planning Studies (worth 12 credit units) in specific Geography courses at the 200 and 300 levels. This certificate could be completed within two years using the credits that are being counted towards your degree along with two more. The certificate indicates that you have added to your expertise by completing a set of courses dedicated to the study of urban planning.

- A Minor in Urban Studies, which would require 30 credit units selected from a wide variety of urban and/or city-themed courses throughout the Faculty of Arts and Sciences; this minor would provide a strong interdisciplinary focus on city spaces and urban issues. The Minor Degree indicates that you have developed an area of specialization in your degree that can be used as a foundation for advanced study or to demonstrate to a potential employer your willingness to go beyond the general requirements of your degree.

Your input would be greatly appreciated as we would like to determine the demand for the Certificate in Urban Planning Studies and the Minor in Urban Studies. Could you please answer the following four (4) questions to offer your input into the demand for these program options?

Thank you for participating in our survey. Your feedback is important.
STUDENT INTEREST SURVEY

1. Are you currently in a GPHY Degree Plan? By this I mean, are you currently enrolled for a Geography Major, Minor or Medial Degree?

![Survey Results Graph]

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I am in a GPHY Major</td>
<td>48.68%</td>
</tr>
<tr>
<td>Yes, I am in a GPHY Minor</td>
<td>14.58%</td>
</tr>
<tr>
<td>Yes, I am in a GPHY Medial</td>
<td>16.66%</td>
</tr>
<tr>
<td>No, I am not in a GPHY Major, Minor or Medial</td>
<td>25.96%</td>
</tr>
<tr>
<td>Don't Know</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#</th>
<th>Other (please specify)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have graduated from a CPHY major</td>
<td>4/17/2017 10:47 AM</td>
</tr>
<tr>
<td>2</td>
<td>Economics</td>
<td>4/16/2017 11:04 AM</td>
</tr>
<tr>
<td>3</td>
<td>I graduated with a geography major</td>
<td>4/16/2017 10:27 AM</td>
</tr>
<tr>
<td>4</td>
<td>I am a master of urban planning student</td>
<td>4/15/2017 10:44 AM</td>
</tr>
<tr>
<td>5</td>
<td>I am a French Major, Devis minor, with a geography teachable</td>
<td>4/13/2017 11:10 PM</td>
</tr>
</tbody>
</table>
2. What level of study are you at?

- Yr1: 2%
- Yr2: 22%
- Yr3: 30%
- Yr4: 31%
- Yr4+ (Graduated): 3%
- No response: 12%

3. Having read about our planned programs, What is the likelihood that you would enrol in a Minor in Urban Studies Program (30 credit units) if you were given the opportunity and were eligible to do so?
4. Which do you find more appropriate to meeting your own career needs and interests?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Minor Degree in Urban Studies</td>
<td>12.38%</td>
</tr>
<tr>
<td>a Certificate in Urban Planning Studies</td>
<td>41.90%</td>
</tr>
<tr>
<td>Both</td>
<td>34.29%</td>
</tr>
<tr>
<td>Neither</td>
<td>11.43%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Other (please specify)

<table>
<thead>
<tr>
<th>#</th>
<th>Other</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I don't know much about what either of these opportunities would entail</td>
<td>4/19/2017 7:32 PM</td>
</tr>
</tbody>
</table>
5. Thank you so much for taking the time to provide us with feedback. Your views will help us to improve our degree plan. Do feel free to contact me if you have additional questions or comments. Dr. Beverley Mullings, Associate Head of Undergraduate Programs, mullings@queensu.ca, (613) 533 6000 xtn 78829

<table>
<thead>
<tr>
<th>#</th>
<th>Responses</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I think this is a wonderful idea!</td>
<td>4/16/2017 11:11 AM</td>
</tr>
<tr>
<td>2</td>
<td>Hi, I think that having it in a minor format would reduce the quality of the program. While some people would like to skip the physical components, disentangling the way physical environment is tied to how people use it would be harmful to understanding the discipline. Instead, I think it would be better to relook at which physical components are required and allow for a better array of courses, including some more GIS options, especially at the minor level. I also think that the certificate would be good because likely if there are students interested in urban studies they are already taking all the courses so having an accreditation on top of their undergrad would just be a nice bonus.</td>
<td>4/16/2017 10:40 AM</td>
</tr>
<tr>
<td>3</td>
<td>I think it’s certainly a nice thing to do, especially the certificate. For myself, however, urban studies are not really of interest. I’m more into socio-environmental geographies.</td>
<td>4/16/2017 16:25 AM</td>
</tr>
<tr>
<td>4</td>
<td>Wish this was offered to us when we were in second year!</td>
<td>4/15/2017 12:00 PM</td>
</tr>
<tr>
<td>5</td>
<td>The Planning Certificate is SUCH a good idea!</td>
<td>4/13/2017 9:38 PM</td>
</tr>
<tr>
<td>6</td>
<td>This is amazing! I wish I could have done this during my undergrad.</td>
<td>4/13/2017 8:14 PM</td>
</tr>
</tbody>
</table>