Addenda and Errata

FALL 2025

KEY

This document is a record of the changes made to the Spring Calendar 2025 after it was originally published.

The following are the types of changes noted in this document:

- Items marked as addenda (*) were approved after the Calendar was published.
- Items marked as errata (**) are corrections to errors or omissions that were approved prior to the original publication of the Calendar.
- Items that are <u>underlined</u> are additions or edits to previously published curricula.
- Items that are struck through are deletions from previously published curricula.

Credentials

To qualify for a credential from Langara College, all requirements specific to each program outlined in this calendar must be completed. In addition, students are required to complete a minimum of 50% of the credential's course credit at Langara.

Of the 40% of credit required for completion of baccalaureate degrees, associate degrees, diplomas, and certificates at the College, the final course credits must be completed as stipulated:

- · Baccalaureate Degree: 39 of the last 48 credits must be completed at Langara.
- · Associate Degree or Diploma: 18 of the last 24 credits must be completed at Langara.
- · Certificate: Nine of the last 12 credits must be completed at Langara.

For post-degree diplomas, post-degree certificates, citations, and microcredentials, all credits must be completed at Langara.

MULTIPLE CREDENTIALS

A minimum of 50% of credits for a second or subsequent credential of the same level must be new courses that have not been used to satisfy requirements for a previous credential.

BACHELOR OF SCIENCE DEGREE IN BIOINFORMATICS

Bioinformatics is a powerful multidisciplinary science that applies computational and statistical tools to curate and analyze expansive amounts of biological data. The utility of bioinformatics is being realized in an ever-increasing number of fields including molecular biology, personalized and preventative medicine, biotechnology, food technology, agriculture, and environmental science, and many others.

Recent advances in high throughput sequencing technology has enabled the inexpensive generation of vast amounts of biological data, some of which has been made openly available in online data repositories. Using this data, along with existing and novel computational tools, students in the Bachelor of Science in Bioinformatics will learn to formulate questions and cultivate ideas, mine databases, and create visualizations that lead to innovation. This program is designed to emphasize real-world relevance and applied learning through the incorporation or computer lab-based courses and experiential learning opportunities, such as a mandatory eight-month co-op term.

The Bachelor of Science in Bioinformatics will produce a highly desirable and skilled graduate trained to contribute to the knowledge economy and succeed in this rapidly growing and dynamic field.

ADMISSION REQUIREMENTS

Langara College general admission requirements:

- Domestic applicants, please refer to the Domestic Admissions section in this calendar
- International applicants, please refer to the International Admissions section in this calendar

Academic Requirements

- 1. One of the following (prerequisites are valid for only three years):
- A minimum "B" grade in Precalculus
- Permission of the department based on the MDT process (MDT 085); or
- A minimum "C+" grade in Precalculus 12 and a minimum "C-" grade in Calculus 12.
- 2. A minimum "B" grade in Chemistry 12 or a minimum "C-" grade in CHEM 1118 (prerequisites are valid for only three years).
- 3. A minimum "C+" grade in Anatomy and Physiology 12 or a minimum "C" grade in BIOL 1111, 1118, 1175, or 1218.

English Language Requirement

Category 1

Notes:

1. Applicants who completed Biology 12 prior to September 2019 may use this course to satisfy this requirement.

Program Preferences

Preference may be given to applicants who exceed the minimum academic requirements.

Documents Required for Application Evaluation

Applications will not be considered until all documents have been received.

- Completed application for admission form
- · Official transcript(s)
- · LET or LPI scores (if applicable)

Admission to a program does not guarantee registration in required courses. Students interested in the program are strongly encouraged to check individual course prerequisites and submit relevant documents to Registrar & Enrolment Services well in advance of the registration period.

CURRICULUM

TOTAL CREDITS: 130** LOWER LEVEL COURSES

Course No.	Credits
Allof	
BINF 1100	0
BINF 2100	0
BIOL 1115	4
BIOL 1215	4
BIOL 2315	3
BIOL 2330	3
BIOL 2415	3
CHEM 1120	4
CHEM 1220	4
CHEM 2216	4
COOP 2301	3
COOP 2501	3
CPSC 1160	3
CPSC 1181	3
CPSC 2150	3
CPSC 2221	3
EXPE 2300	3
STAT 1181	3
STAT 2281	3
One of	
CPSC 1150	3
CPSC 1155	3
One of	
MATH 1171	3
MATH 1173 and	3
MATH 1183	1
MATH 1175	3

One of	
MATH 1271	3
MATH 1273 and	3
MATH 1283	1
MATH 1275	3
One of	
MATH 1252	3
MATH 2362 and	3
MATH 2382	1
Six credits of	
university-transferable	6
ENGL courses	
Three-six credits of	3-6
non-science electives ¹	

Term Notes:

 Students who take MATH 1171, 1271, and 1252 will need to take six credits of non-sciences electives to meet full credit requirements.

UPPER LEVEL COURSES

Course No.	Credits
Allof	
BINF 3100	0
BINF 4100	0
BINF 4215	3
BINF 4225	3
BINF 4290	4
BIOL 3315	4
BIOL 3430	4
BIOL 4315	4
BIOL 4415	4
CHEM 3216	4
CPSC 3260	4
CPSC 3280	4
CPSC 4160	4
CPSC 4260	4
STAT 3225	3