

BIOCHEMISTRY LIBERAL PROGRAM - CORE SCIENCE COMPONENT (B.SC.) (47 CREDITS)

Offered by: Biochemistry (Faculty of Science)

Degree: Bachelor of Science

Program credit weight: 47

Degree Requirements — B.Sc.

This program is offered as part of a Bachelor of Science (B.Sc.) degree.

To graduate, students must satisfy both their program requirements and their degree requirements.

- The program requirements (i.e., the specific courses that make up this program) are listed under the Course Tab (above).
- The degree requirements—including the mandatory Foundation program, appropriate degree structure, and any additional components—are outlined on the Degree Requirements page.

Students are responsible for ensuring that this program fits within the overall structure of their degree and that all degree requirements are met. Consult the Degree Planning Guide on the SOUSA website for additional guidance.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Courses

U1 Required Courses (23 credits)

Expand allContract all

Course	Title	Credits
BIOC 212	Molecular Mechanisms of Cell Function.	3
BIOC 220	Laboratory Methods in Biochemistry and Molecular Biology 1.	3
BIOL 200	Molecular Biology.	3
BIOL 202	Basic Genetics.	3
CHEM 204	Physical Chemistry/Biological Sciences 1.	3
CHEM 212	Introductory Organic Chemistry 1.	4
CHEM 222	Introductory Organic Chemistry 2.	4

¹ Students with CEGEP-level credit for CHEM 212 Introductory Organic Chemistry 1. and/or CHEM 222 Introductory Organic Chemistry 2. should replace these courses with elective courses.

U1 Complementary Courses (6 credits)

Complementary courses listed for U1 and U2 may be taken in later years if necessary to accommodate courses that must be taken in U1 and U2 as part of the breadth component of the program.

6 credits selected from:

Expand allContract all

Course	Title	Credits
BIOL 205	Functional Biology of Plants and Animals.	3
MIMM 211	Introductory Microbiology.	3
MIMM 214	Introductory Immunology: Elements of Immunity.	3
PHGY 209	Mammalian Physiology 1.	3
PHGY 210	Mammalian Physiology 2.	3

U2 Required Courses (12 credits)

Expand allContract all

Course	Title	Credits
BIOC 311	Metabolic Biochemistry.	3
BIOC 312	Biochemistry of Macromolecules.	3
BIOC 320	Laboratory Methods in Biochemistry and Molecular Biology 2.	3
CHEM 302	Introductory Organic Chemistry 3.	3

U2 Complementary Courses (3 credits)

Complementary courses listed for U1 and U2 may be taken in later years if necessary to accommodate courses that must be taken in U1 and U2 as part of the breadth component of the program.

3 credits selected from:

Expand allContract all

Course	Title	Credits
BIOL 373	Biometry.	3
CHEM 267	Introductory Chemical Analysis.	3
CHEM 297	Introductory Analytical Chemistry Laboratory.	1
COMP 202	Foundations of Programming.	3
COMP 204	Computer Programming for Life Sciences.	3
MATH 203	Principles of Statistics 1.	3
MATH 222	Calculus 3.	3
PSYC 204	Introduction to Psychological Statistics.	3

U3 Complementary Courses (3 credits)

3 credits selected from:

Expand allContract all

Course	Title	Credits
BIOC 450	Protein Structure and Function.	3
BIOC 454	Nucleic Acids.	3