ANATOMY AND CELL BIOLOGY LIBERAL PROGRAM - CORE SCIENCE COMPONENT (B.SC.) (47-48 CREDITS)

Offered by: Anatomy and Cell Biology (Faculty of Science)
Degree: Bachelor of Science
Program credit weight: 47-48

Program Description

The B.Sc.; Liberal Program – Core Science Component in Anatomy and Cell Biology is a flexible program that focuses on the fundamentals of cell and molecular biology and human anatomy. The program includes a range of biomedical science disciplines such as biology, experimental medicine, pharmacology and neurobiology. Students may complete this program with a minimum of 47 credits or a maximum of 48 credits depending on their choice of complementary courses.

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.

Required Courses (32 credits)

Expand allContract all

Course	Title	Credits
ANAT 212	Molecular Mechanisms of Cell Function.	3
ANAT 214	Systemic Human Anatomy.	3
ANAT 261	Introduction to Dynamic Histology.	4
ANAT 262	Introductory Molecular and Cell Biology.	3
BIOL 200	Molecular Biology.	3
BIOL 202	Basic Genetics.	3
CHEM 212	Introductory Organic Chemistry 1.[1]	4
PHGY 209	Mammalian Physiology 1.	3
PHGY 210	Mammalian Physiology 2.	3

[1] Students who have taken the equivalent of CHEM 212 Introductory Organic Chemistry 1. and/or MATH 203 Principles of Statistics 1. in CEGEP and receive a course exemption upon admission are exempt from the program requirement(s) and must replace these credits with elective course credits to satisfy the total credit requirement for their degree.

3 credits from the following statistics courses:

Expand allContract all

Course	Title	Credits
MATH 203	Principles of Statistics 1.	3
PSYC 204	Introduction to Psychological Statistics.	3

Complementary Courses (15-16 credits)

Students complete a minimum of 15 or a maximum of 16 complementary course credits selected as follows:

9 credits of advanced anatomy courses (AAC) selected from:

Expand allContract all

Course	Title	Credits
ANAT 314	Human Musculoskeletal Anatomy .	3
ANAT 321	Circuitry of the Human Brain.	3
ANAT 322	Neuroendocrinology.	3
ANAT 365	Cellular Trafficking.	3
ANAT 381	Experimental Embryology.	3
ANAT 514	Advanced Human Anatomy Laboratory.	3
ANAT 565	Diseases-Membrane Trafficking.	3
NEUR 310	Cellular Neurobiology.	3

6-7 credits of biologically oriented courses (BOC) selected from:

Expand allContract all

Course	Title	Credits
ANAT 314	Human Musculoskeletal Anatomy .	3
ANAT 321	Circuitry of the Human Brain.	3
ANAT 322	Neuroendocrinology.	3
ANAT 365	Cellular Trafficking.	3
ANAT 381	Experimental Embryology.	3
ANAT 565	Diseases-Membrane Trafficking.	3
BIOL 300	Molecular Biology of the Gene.	3
BIOL 301	Cell and Molecular Laboratory.	4
BIOL 303	Developmental Biology.	3
BIOL 306	Neural Basis of Behaviour.	3
BIOL 313	Eukaryotic Cell Biology.	3
BIOL 314	Molecular Biology of Cancer.	3
BIOL 320	Evolution of Brain and Behaviour.	3

COMP 204	Computer Programming for Life Sciences.	3
EXMD 504	Biology of Cancer.	3
NEUR 310	Cellular Neurobiology.	3
NEUR 502	Basic and Clinical Aspects of Neuroimmunology.	3
PATH 300	Human Disease.	3
PHAR 300	Drug Action.	3
PHAR 301	Drugs and Disease.	3