HONOURS BSC IN BIOMEDICAL SCIENCE (RESEARCH FOCUS)

Biomedical Science is an interdisciplinary program that focuses on the fundamentals of human structure and function, as well as those of other animals. The first two years provide a background in human anatomy and psychology, in addition to more in-depth knowledge in basic sciences like biology, chemistry, biochemistry, and mathematics. At the end of second year, in addition to courses in biology and biochemistry, students may choose to enter an option within the biomedical sciences program (Neuroscience, Cellular and Molecular Medicine, Bioanalytical Science, Medicinal Chemistry or Biostatistics). The Research Focus is ideal for students thinking of a career in research, as it consists of an immersive research experience in the third and fourth years that will equip students with advanced research, analysis and communication skills applicable to diverse careers. On graduation, they will be ready for more advanced research training or for admission to a professional program in human health.

Admission to this program is competitive and higher averages are required.

This program is offered in English and in French.

Program Requirements

The French immersion stream is available with this program.

Requirements for this program have been modified. Please consult the 2021-2022 calendars (http://catalogue.uottawa.ca/en/archives/) for the previous requirements.

Compulsory Courses at the 1000 level

- ANP 1105 Human Anatomy and Physiology I 3 Units
- ANP 1106 Human Anatomy and Physiology II 3 Units
- BIO 1130 Introduction to Organismal Biology 3 Units
- BIO 1140 Introduction to Cell and Molecular Biology 3 Units
- CHM 1311 Principles of Chemistry 3 Units
- CHM 1321 Organic Chemistry I 3 Units
- MAT 1330 Calculus for the Life Sciences I 3 Units
- MAT 1332 Calculus for the Life Sciences II 3 Units
- PSY 1101 Introduction to Psychology: Foundations 3 Units

Compulsory Courses at the 2000 level

- BCH 2333 Introduction to Biochemistry 3 Units
- BIO 2133 Genetics 3 Units
- CHM 2120 Organic Chemistry II 3 Units
- MAT 2379 Introduction to Biostatistics 3 Units
- PHI 2396 Bioethics 3 Units

Compulsory Courses at the 3000 level

- BCH 3120 General Intermediary Metabolism 3 Units
- BIM 3009 Research Practicum 6 Units
- BIO 3124 General Microbiology 3 Units
- BIO 3170 Molecular Biology 3 Units

Compulsory Courses at the 4000 level

- BIM 4009 Research Project - Biomedical Science 9 Units

Optional Courses

- 3 optional course units in English (ENG) at the 1000 or 2000 level, excluding ENG 1112 and ENG 1131 3 Units
- 3 course units from:
  - PSY 1102 Introduction to Psychology: Applications 3 Units
  - PSY 2114 Lifespan Psychology

3 course units from:

- BPS 2110 Introduction to Biopharmaceutical Science
- PHY 1321 Principles of Physics I
- PHY 1322 Principles of Physics II

3 course units from:

- BCH 3356 Molecular Biology Laboratory
- BIO 3151 Molecular Biology Laboratory

9 optional course units offered by the Faculty of Science 9 Units

18 optional course units at the 3000 or 4000 level offered by the Faculty of Science 18 Units

Elective Courses

12 elective course units 12 Units

Total: 120 Units

Note(s)

1. Students doing an option should choose a course that is not mandatory for their selected option.
2. The course SCI 3101 is considered a science optional course.
3. The following courses are considered as science courses: PHA 4107, PHS 3341, PHS 3342, PHS 3300, PHS 4336.