HONOURS BSC BIOMEDICAL SCIENCE

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 from an array of optional courses and obtain a minor in one of many programs offered, OR they can choose an option within the biomedical sciences (Neuroscience, Cellular and Molecular Medicine, Bioanalytical Science, Medicinal Chemistry or Biostatistics). On graduation, they will be ready for more advanced research training or for admission to a professional program in human health.

Students in the Biomedical Sciences program are also eligible to participate in the Co-Operative Education Programs.

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

This program is offered in English and in French.

Program Requirements

Co-operative education is available with this program.

The French immersion stream is available with this program.

Requirements for this program have been modified. Please consult the 2022-2023 calendars (http://catalogue.uottawa.ca/en/archives/) for the previous requirements.

Basic Skills		
3 optional course units in English (ENG) at the 1000 or 2000 level, excluding ENG 1112 and ENG 1131		3 Units
Compulsory courses at the 1000 level		
ANP 1111	Essentials of Human Anatomy and Physiology I	3 Units
ANP 1115	Essentials of 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
BIO 3124	General Microbiology	3 Units
BIO 3170	Molecular Biology	3 Units
Optional courses		
3 course units from:		3 Units
PSY 1102	Introduction to Psychology: Applications	
PSY 2114	Lifespan Psychology	
3 optional course units from: [1]		3 Units
BPS 2110	Introduction to Biopharmaceutical Science	
PHY 1321	Principles of Physics I	
PHY 1322	Principles of Physics II	
3 course units from:		3 Units
BCH 3356	Molecular Biology Laboratory	
BIO 3151	Molecular Biology Laboratory	
9 optional course units offered by the Faculty of Science [2]		9 Units
18 optional course units at the 3000 or 4000 level offered by the Faculty of Science [2,3]		18 Units
Electives		
30 elective course units		30 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: CMM 3350, CMM 4360, MIC 4100, MIC 4124, MIC 4125, MIC 4126, PHA 4107, PHS 3300, PHS 3341, PHS 3342, PHS 4336.