HONOURS BSC IN BIOLOGY
(RESEARCH FOCUS) - CELLULAR/MOLECULAR OPTION

Recent discoveries and new technologies are revolutionizing the biological sciences, placing increasing emphasis on integrating knowledge across all levels of organization, from molecules to ecosystems. Our programs give students both the intellectual tools and the hands-on experience they need to pursue careers in fields as diverse as conservation and endangered species; land-use management; ecotoxicology; academic, industry or government research; or health care. Learning takes place through traditional classroom instruction, innovative laboratory projects with state-of-the-art technologies, field-based courses around the world, and a strong research program in which undergraduate students of all years are intensively mentored in a research lab.

The honours program in biology allows for in-depth study in one or more biological disciplines. Students can concentrate on a particular area by choosing one of three options: Cellular and Molecular Biology, Physiology, or Ecology, Evolution and Behaviour. This route includes a compulsory independent research project to equip students with advanced research, analysis and communication skills applicable to diverse careers. Students thinking of a career in research should consider the Research Focus, an immersive research experience in the third and fourth years.

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 2019-2020 calendars for the previous requirements.

3 course units from:
- BIO 3109 Molecular Biology Laboratory
- BIO 3152 Cell Biology Laboratory

6 course units from:
- BCH 3120 General Intermediary Metabolism
- BIO 3102 Molecular Evolution
- BIO 3119 Population Genetics
- BIO 3124 General Microbiology
- BIO 3126 General Microbiology Laboratory
- BIO 3142 Plant Developmental Biology
- BIO 3147 Developmental Biology
- BIO 3360 Computational Tools for Biological Sciences
- BCH 4172 Topics in Biotechnology
- BIO 4115 Topics in Molecular Genetics
- BIO 4142 Plant Immunity and Symbioses
- BIO 4144 Plant Biochemistry and Molecular Biology
- BIO 4145 Eukaryotic Microbiology
- BIO 4175 Membrane Physiology
- BIO 4537 Génétique évolutive humaine
- BPS 3101 Genomics
- BPS 4104 Bioinformatics Laboratory

9 elective course units offered by the Faculty of Arts, the Faculty of Education, the Faculty of Law, the Faculty of Social Sciences or the Telfer School of Management

This is a copy of the 2020-2021 catalog.