



Things to Know About the Biological Sciences and BCN programs at UWindsor

The Department of Integrative Biology offers two undergraduate BSc Honours programs: **Biological Sciences and Behaviour, Cognition and Neuroscience (BCN)**

Each of these programs provides preparation for many future goals/pathways, and career aspirations.

What are the Biological Sciences and BCN programs?

Biological Sciences	BCN Behaviour, Cognition & Neuroscience
Highly flexible, but rigorous program Can be done with or without thesis Many options for specializing in different areas of biology, and/or adding a minor	Combines Biology and Psychology Includes a research project in 4 th year working in an area relating to behaviour, cognition & neuroscience.

Keep in mind that you can complete a **Combined Honours program** that includes Biological Sciences, for students who have interests in two areas of study. See www.uwindsor.ca/science/310/undergraduate-programs for more information.

What are the admissions requirements?

Successful completion of the OSS Diploma and a minimum 70% average of six Grade 12 U or M courses, including ENG4U. This average may be higher, depending on the number of applicants.

Course requirements: ENG4U, MHF4U, SCH4U, SBI4U. SPH4U is recommended. MCV4U is strongly recommended. A minimum 70% average of all attempted science and math courses is also required.

What can I do with a Biological Sciences or BCN degree?

There are many options to pursue with a Biological Sciences or BCN degree. Many students complete a Biological Sciences degree prior to applying to **professional programs** such as Medicine, Dentistry, Optometry, Pharmacy, or Veterinary Medicine. Some students go on to carry out **research in Biology or related subjects**. Other graduates go on to programs in **Law, Education, or Business**, building on and using their science background in these fields. Some areas where graduates work include **biotechnology, environmental management and conservation, politics/policy, forensic science, bioinformatics, and scientific writing/communication**.

Professional schools, graduate school

Most Canadian professional schools like medicine and dentistry have very few course prerequisites for admission, and students do **not** have to be in any particular program to be eligible. Marks (GPA) tend to be the most important factor, though admissions/aptitude tests and other requirements may be involved. Some schools, like optometry, veterinary and some pharmacy programs, do have more specific admissions requirements. Students should check with the schools they are interested in applying to, as requirements vary. A student could pick up pre-professional courses in any program, though it is probably easiest to do so in programs that already include some of these admissions prerequisites, like

first year Biology. Some Biology graduates go on to other types of professional programs, like education, law, or business. A Biology degree can be relevant to a career in several different fields.

Many of our students go on to pursue graduate study (i.e., MSc, PhD). This may be of interest for people who want to become researchers in academic, government, or corporate settings, but can also lead to other career opportunities (e.g., in consulting, NGO work, teaching in higher education).

Why choose UWindsor for your Biological Sciences or BCN degree?

Academic:

- Our department has strong researchers, and several faculty members focused on teaching and learning. We have a remarkably diverse group of faculty members and provide many opportunities for students to carry out actual research during their program.
- There are LOTS of possible minors and combined honours programs for students who are interested in Biology and another subject.
- It is possible to do an international exchange as part of a Biology/BCN program.
- We have more laboratory experience in our courses than many other Biology programs. We also have many opportunities for research experience as volunteers, Outstanding Scholars, through NSERC fellowships, work-study positions, and in the Honours Thesis course.

Student life/community:

- The University of Windsor (and the Faculty of Science) has a lot of peer/social support for academic help, and for students interested in applying to professional schools (or pursuing other career goals).
- We have awesome, friendly, supportive students, and student organizations (e.g., Science Society)!

What You'll Take First Year

Biological Sciences:

<p>Fall:</p> <p style="text-align: center;">Cell Biology (BIOL-1101) General Chemistry I (CHEM-1100) Calculus (MATH-1720 or 1760) Arts & Social Science elective</p> <p>One of:</p> <p style="text-align: center;">Physics (PHYS-1300 or PHYS-1400) or Computer Science (COMP-1047 or -2067 or -1400) or Environmental Systems (ESCI-1100) or Atmosphere and Climate (ESCI-1130)</p>	<p>Winter:</p> <p style="text-align: center;">Biological Diversity (BIOL-1111) General Chemistry II (CHEM-1110) Statistics (STAT-2910) Arts & Social Science elective</p> <p>One of: (align to pair with Fall course)</p> <p style="text-align: center;">Physics (PHYS-1310 or PHYS-1410) or Computer Science (COMP-2057 or COMP-1410) or Intro to Earth Science (ESCI-1111) or Geomorphology (ESCI-2400)</p>
---	--

Behaviour Cognition and Neuroscience:

<p>Fall:</p> <p style="text-align: center;">Cell Biology (BIOL-1101) Psychology as a Behavioural Science (PSYC-1150) General Chemistry I (CHEM-1100) Calculus (MATH-1720 or -1760 - <i>recommended</i>) or elective</p> <p>One of:</p> <p style="text-align: center;">Physics (PHYS-1300 or PHYS-1400) or Computer Science (COMP-1047 or -2067 or -1400) or Environmental Systems (ESCI-1100) or Atmosphere and Climate (ESCI-1130)</p>	<p>Winter:</p> <p style="text-align: center;">Biological Diversity (BIOL-1111) Psychology as a Social Science (PSYC-1160) General Chemistry II (CHEM-1110) Statistics (STAT-2910)</p> <p>One of: (align to pair with Fall course)</p> <p style="text-align: center;">Physics (PHYS-1310 or PHYS-1410) or Computer Science (COMP-2057 or COMP-1410) or Intro to Earth Science (ESCI-1111) or Geomorphology (ESCI-2400)</p>
--	--

What Scholarships are available?

Many scholarships are available, including:

- **Renewable Entrance Scholarships:** it is renewable up to 4 years, based on a minimum average. See: <http://www.uwindsor.ca/studentawards/entering-students>.
- **Outstanding Scholars Program:** \$750 awarded in both Fall and Winter terms. Mentoring in first year, and opportunity to work with a faculty member starting in second year. See: <http://www.uwindsor.ca/outstandingscholars>
- Many other scholarships/awards for different accomplishments/groups. See all at: <http://www.uwindsor.ca/studentawards/entering-students>

Have Questions?

Academic Advising:

The Department of Integrative Biology has several faculty members who act as academic advisors for students in our programs. They advise students on course selection, academic strategies, careers, etc. We encourage students to meet with an advisor in their first semester after arriving at UWindsor. Book an appointment at:

<https://outlook.office365.com/owa/calendar/BiologyBookings@uwindsor.ca/bookings/>

(or email biosci@uwindsor.ca)

Want to check us out online?

Visit our website: www.uwindsor.ca/science/integrative-biology/

Contact Information: Dept. of Integrative Biology

Phone: 519-253-3000, Ext. 2696

E-mail: biosci@uwindsor.ca

Other departments that offer programs with Biology-related content*:

Interdisciplinary Arts and Science (Biology major or minor) – for students also interested in Arts, Social Science or Language.

Chemistry & Biochemistry – NB: Biochemistry degree requires a full year of Calculus (i.e., an additional term of calculus compared to Biological Sciences), and calculus-based Physics are required.

Biomedical Science – NB: Biochemistry & Biomedical Sciences Health stream requires a full year of Calculus (i.e., an additional term of calculus compared to Biological Sciences), and calculus-based Physics

Physics - Medical Physics

School of the Environment

General Science – 3-year program run through the Faculty of Science

*See www.uwindsor.ca/science/310/undergraduate-programs for more information

NOTE: this is just a guide and not a binding document