

#### CAREER PATHFINDERS

# BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN

# **BIOLOGY**

#### Overview

The study of Biology encompasses any manifestation of life, from the DNA molecule to the interactions of organisms within the various ecosystems of the earth. This broad discipline includes the subject areas of Botany, Zoology, Microbiology, Ecology, Genetics and Molecular Biology. Education in Biology can lead to employment in conservation or other government departments, work as a technologist in a research or industrial laboratory, as well as a career in education. It also provides the preparation necessary for those entering several professional programs including Dentistry, Medicine, Veterinary Medicine, Pharmacy and Optometry.

"I credit a lot of my success to the personal attention and research opportunities available at The University of Winnipeg. Because this is a university with an undergraduate focus, professors are very accessible to undergraduate students."

- David Selchen, (B.Sc. Biology and Psychology), Rhodes Scholar

### Job Titles

- Aquatic Biologist (NOC 21110)
- Bioengineer (NOC 21399)
- Biochemist (NOC 21110)
- Botanist (NOC 21110)
- Chemical Oceanographer (NOC 2113)
- Coroner (NOC 41310)
- Dentist (NOC 31110)
- Dietician and Nutritionist (NOC 31121)
- Ecologist (NOC 21110)
- Horticulturalist (NOC 2225)
- Marine Geologist/Geophysicist (NOC 21102)
- Marine Biologist (NOC 21110)

- Medical Librarian (51100)
- Zoologist (NOC 21110)
- Post-Secondary Teaching and Research Assistant (NOC 41200)
- Biologist and Related Scientists (NOC 21110)
- Registered Nurse (NOC31301)
- Psychiatric Nurse (NOC 30301)
- Medical Laboratory Technologist (NOC 32120)
- Secondary School Teacher (NOC 41220)
- Chemical Technologist and Technician (NOC 22100)
- 1 The numbers following each job title refer to <u>Canada's National Occupational Classification (NOC) code</u>. Jobs may require additional education or training.
- 2 Government of Canada. "Biology/Biological Sciences, General (26.0101), Bachelor's degree." Job Bank, 9 March 2020, <a href="https://www.jobbank.gc.ca/studentdashboard/26.0101/LOS05">https://www.jobbank.gc.ca/studentdashboard/26.0101/LOS05</a>

### Work Settings

## Skills and Characteristics

- Biotechnical Companies
- Chemical Companies
- Consulting Firms
- Educational Institutions
- Environmental Organizations
- Government Agencies/Departments
- Health Agencies
- Health Care Facilities
- Libraries
- Non-Government Agencies
- Pharmaceutical Industry
- Private Practice
- Research Institutes
- Sports Organizations
- Trade/Professional Associations

- Scientific writing
- Oral communication
- Analytical skills
- Lab skills
- Field skills
- Problem solving

#### Professional Associations and Other Links

- Canadian Botanical Association https://www.cba-abc.ca/
- Association of Professional Biology <a href="https://www.professionalbiology.com/">https://www.professionalbiology.com/</a>
- Associated Environmental Assessors of Canada Inc. <a href="http://aesac.ca/">http://aesac.ca/</a>
- VIU Biology Department https://www2.viu.ca/biology/advising/jobsearch.asp
- Biotalent.ca http://www.biotalent.ca/
- Canadian Society of Zoologists <a href="https://www.csz-scz.ca/">https://www.csz-scz.ca/</a>
- Canadian Society of Environmental Biologists <a href="https://cseb-scbe.org/">https://cseb-scbe.org/</a>
- The Canadian Society of Plant Biologists http://www.cspp-scpv.ca/
- Canadian Forests http://www.canadian-forests.com/
- Canadian Society for Molecular Biosciences http://www.csmb-scbm.ca/index.aspx
- Environmental Careers Organization <a href="http://www.eco.ca/">http://www.eco.ca/</a>
- Environmental Chemistry.com <a href="http://environmentalchemistry.com/">http://environmentalchemistry.com/</a>
- Environmental Expert https://www.environmental-expert.com/
- Nature Jobs http://www.nature.com/naturejobs/science/
- Canadian Society of Environmental Biologists <a href="https://cseb-scbe.org/">https://cseb-scbe.org/</a>

This document is intended to provide a starting point for your career research. For more information about UWinnipeg's Biology program, visit the Department of Biology website and the Biology Fact Sheet.

Students are encouraged to <u>schedule an appointment with an Academic and Career Advisor</u> for assistance with career planning.