

Career & Employment Services (CES)

www.uleth.ca/ross/ces

What can I do with a Major in **Biological Sciences**?



For more information on the Biological Sciences Major at the U of L:

http://www.uleth.ca/artsci/biological-sciences

Faculty of Arts & Science

D866 University Hall Phone: 403-329-2245 Email: See <u>Contact Website</u> Academic Advising:

http://www.uleth.ca/ross/academic-advising

The Biological Sciences Program at the University of Lethbridge

Biological Sciences delve into the world of living organisms – from microbes, to human beings, to entire ecosystems. It is the science of life on, under and above earth. Exploring the nature of life leads biologists out into the world where they study how organisms interact with their environment, how they function and how they evolved over time.

The Bachelor of Science, majoring in Biological Sciences, provides students with hands-on learning, moving beyond textbooks and lectures to engaging research projects. Biology is a research-intensive science that can lead to a wide range of study areas, like environmental work, microbiology or agriculture. Students will be required to complete courses in Chemistry, Physics and Mathematics, ensuring a strong foundation in the core sciences.

Skills Developed

- Ability to Formulate Scientific Problems
- Aptitude for Math
- Communicate Ideas Clearly
- Computer Knowledge
- Creativity
- Critical Thinking
- Curiosity
- Enjoy Synthesizing Data

- Fascination with Nature & Natural Phenomenon
- Fieldwork Techniques
- Formulating & Modeling
- In-Depth Knowledge of Biological Theory
- Laboratory
- Logical Thinker
- Meet Deadlines
- Oral & Written Communication

- Organizational
- Precision & Accuracy in Data Collection/ Observation
- Problem Solving
- Proficiency in Laboratory Procedures & Processes
- Research
- Teamwork
- Technical
- Work Independently

Work Environments

An education in Biological Sciences provides an excellent foundation for professional programs such as environmental law, medicine, dentistry, optometry, pharmacy, veterinary medicine and education. Graduates of the Biological Sciences program find employment in a wide range of industries and sectors, such as biotech research companies, pharmaceutical companies, petroleum producers, mining and forestry companies, national and provincial parks, environmental consulting firms, municipal utility companies, agricultural companies or government agencies. Graduates may also work with dairy and vegetable producers, brewers and distillers, federal and provincial regulators, hospitals and medical centres, conservation authorities or zoos and aquariums.

Key Areas of Specialization:

Behavioural & Evolutionary Ecology, Comparative Physiology, Biotechnology, Bioinformatics, Plant Biology, Systemic Biology, Cellular & Molecular Biology, Genetics, Ecology & Evolution

Entry Level Job Titles

These jobs are normally intended for new graduates and require 0 to 2 years of experience. It is important to note that many entry level positions require *some* related experience or demonstrated ability to perform job-related tasks. Even those positions that do not *require* experience will still prefer an experienced candidate, if one is available.

- Assistant Scientist
- Biological Science Technician (Human & Animal Biological Samples)
- Conservation Associate Biologist
- Conservation Project Coordinator
- Contract Environmental Field Technician
- Data Management Specialist
- Entry Level Biologist
- Entry Level Marketing Associate
- Entry Level Scientist

- Entry Level Study Technician (Animal Ops)
- Entry Level Water Treatment Chemical Sales Associate
- Environmental Health Specialist
- Environmental Program Specialist
- Environmental Protection Specialist
- Fisheries Officer
- Greenspace Program Coordinator
- Healthcare Coordinator
- Interpretive Naturalist
- Junior Biologist
- Junior Fisheries Biologist

- Laboratory Scientist
- Molecular Lab Technician
- Pipeline Environmental Inspector
- Quality Assurance Auditor
- Research Assistant
- Research Technician/ Technologist
- Resource Management Officer II
- Technologist Trainee Allergy
- Technologist Trainee Reference Microbiology
- Technologist Trainee Esoteric Immuoassay
- Technologist Trainee Infectious Disease

Note: The U of L offers various resources and programs to facilitate students in gaining work and volunteer experience. Find an entry level position on the <u>CES job board</u> or join the <u>Management</u> or <u>Arts & Science</u> Cooperative Education Programs. Summer jobs, part-time work, internship positions and volunteer experience help students to enhance their skillset and accumulate work experience for their future career.

Related Job Titles

These jobs generally require extensive, relevant work experience and/or further education.

- Agricultural Products Inspector
- Agricultural Researcher
- Agronomist
- Animal Behaviourist
- Animal Care Attendant
- Aquaculture Technician
- Athletic Director
- Bacteriologist
- Biochemist
- Bioengineer
- Bioinformatics Programmer

- Bioinformatics Specialist
- Biological Researcher/ Technician
- Biologist
- Biostatistician
- Botanist
- Biotechnologist
- Chiropractor
- Community Health Worker
- Conservation Biologist
- Conservationist/ Conservation Officer

- Cytotechnologist
- Cytogenetics Technologist
- Dentist
- Diagnostic Medical Sonographer
- Dietician
- DNA Analyst
- Drug Testing Technician
- Ecologist
- Ecosystems Biologist
- Embryologist
- Entomologist
- Environmental Auditor

- Environmental Consulting
- Environmental Health Officer
- Environmental Lawyer
- Environmental Protection Specialist
- Epidemiologist
- Ergonomist
- Ethnobotanist
- Food Industry Quality Control Specialist
- · Food Technologist
- Forensics Technician
- Genetic Counsellor
- Genetic Technologist
- Geneticist
- Gerontological Specialist
- Habitat Management Biologist
- · Health Care Administrator
- Health Educator
- Health Policy Analyst

- Herbarium Technician
- Informationist
- Marine Biologist
- Medical Doctor
- Medical Illustrator
- Medical Informatician
- Medical Lab Technologist
- Medical Librarian
- Microbiologist
- Molecular Biologist
- Mortician
- Naturalist
- Oceanographer
- Ophthalmic Medical Technologist
- Organic Pollution Toxicologist
- Ornithologist
- Paramedic
- Parasitologist
- Park Interpreter
- Pathologist's Assistant

- Pedigree Analyst
- Pest Control Consultant
- Plant Physiologist
- Radiation Therapist
- Radiologist
- Restoration Biologist
- Science Magazine Editor/Writer
- Soil Scientist
- Teacher
- Technical Writer
- Toxicologist
- University Professor
- Veterinarian
- Veterinary Technician
- Water Quality Inspector
- Water & Wastewater Operator
- Wetlands Biologist
- Wildlife & Fisheries Biologist
- Zoologist

Thinking Outside the Box: Other Possible Job Titles

On average, people change their careers three to five times in their lifetime. So, no matter what major you choose, you may still be interested in opportunities totally unrelated to your program of study. We encourage you to be open to all possibilities! Your undergraduate degree can be a springboard for other educational pursuits, and your transferable skills and experience can prepare you to work in a multitude of settings.

- Actuary
- Acupuncturist
- Aerospace Engineer & Operations Technician
- · Animal Breeder
- Audiologist
- Business Development Research Analyst
- Business Systems Analyst
- City Recycling Manager
- Compensation, Benefits & Job Analysis Specialist
- Compliance Promotion Specialist
- Computer Scientist
- · Cost Estimator
- Crime Scene Technician
- Facilities Manager/ Supervisor
- Fitness Consultant
- Forensic Laboratory Analyst
- Hazardous Waste
 Management Technologist

- Hydrometric Technician/ Technologist
- Instructional CoordinatorIntellectual Property
- Lawyer
- Kinesiologist
- Logistics Specialist
- Management Analysts
- Massage Therapist
- Mathematician
- Occupational Health & Safety Advisor
- Occupational Hygienist
- Occupational Therapist
- Operations Research Analyst
- Optometrist
- Pathologist
- Patient Services
 - Coordinator
- Pharmaceutical Financial Analyst
- Pharmacologist
- Psychiatrist

- Physiologist
- Physiotherapist
- Pollution Control
 Technologist
- Product Marketing Manager
- Public Relations Specialist
- Quality Assurance Auditor
- Recreation Director
- Regulatory/Government Affairs Specialist
- Speech-Language Pathologist
- Strength & Conditioning Specialist
- Technical Sales
 Representative
- Validation Specialist
- Web Developer

Useful Resources

Recommended websites to assist in exploring the field of Biological Sciences and its career opportunities.

Alberta Learning Information Service Occupational Profiles

<u>Biological Technician</u>, <u>Biologist</u>, <u>Biotechnologist</u>, Ecologist

Alberta Society of Professional Biologists

http://www.aspb.ab.ca/

Alberta Institute of Agrologists

http://www.aia.ab.ca/

My Plan - Education and Career Information

Biology & Biomedical Sciences

Eco Canada – Environmental Careers

Organization

http://www.eco.ca/

Canadian Science

http://www.science.ca/

BioTalent Canada

http://www.biotalent.ca/

BIOTECanada

http://www.biotech.ca/

Canadian Society of Plant Biologists

http://www.cspp-scpv.ca/

The Canadian Ecology Centre http://www.canadianecology.ca/

Canadian Society for Ecology and Evolution

http://csee-scee.ca/

Canadian Institute of Food Science & Technology

http://www.cifst.ca/

Canadian Society for Medical Laboratory Science

http://csmls.org/

Canadian Botanical Association

http://www.cba-abc.ca/cbahome.htm

Canadian Society of Zoologists

http://www.csz-scz.ca/

Canadian Council of Technicians & Technologists

http://www.cctt.ca/

Canadian Biochemical Society

http://www.csmb-scbm.ca/

Canadian Society of Environmental Biologists

http://www.cseb-scbe.org/

Campus Resources

Career & Employment Services (CES) http://www.uleth.ca/ross/ces/

Career Counselling (Counselling Services) http://www.uleth.ca/counselling/

Academic Advising

http://www.uleth.ca/ross/academic-advising

Native Student Advising

http://www.uleth.ca/ross/native-student-advising

Student Success Centre – Study Skills, Learning

Strategies & Tutoring

http://www.uleth.ca/student-success-centre/

Accommodated Learning Centre

http://www.uleth.ca/ross/accommodated-

<u>learning-centre/</u>

International Centre for Students http://www.uleth.ca/international/

Registrar Office & Student Services

http://www.uleth.ca/ross/

Scholarship & Students Finance http://www.uleth.ca/ross/student-finance/ U of L Students' Union & Student Clubs http://www.ulsu.ca/

Campus Job Resources

Career & Employment Services Job Board CES Job board

Arts & Science Applied Studies http://www.uleth.ca/artsci/applied-studies/students

Arts & Science Co-op Education & Internship

http://www.uleth.ca/artsci/coop

Management Co-op Education

http://www.uleth.ca/management/co-op

Study Abroad & Exchanges

http://www.uleth.ca/international/content/study

abroad-exchanges

Management Study Abroad & Exchanges

http://www.uleth.ca/management/study-abroad

Career & Employment Services (CES)

CES assists U of L students and graduates with their career exploration and work search needs.

AH154 Anderson Hall, Phone: 403-329-2000 Mon- Fri: 9:00 a.m. to 12:00 p.m. 1:00 p.m. to 4:00 p.m.