# WHAT CAN I DO WITH A BACHELOR OF SCIENCE DEGREE IN BIOLOGY?

A Guide Compiled by Concordia Career Services



### **General Skill Sets:**

The Department of Biological and Environmental Sciences offers three and four-year Bachelor of Science degrees, giving students the option to either prepare for a professional career or move forward to professional programs or graduate school.

Graduates will have acquired knowledge and skills that will allow entry into laboratory, field jobs or further study in areas such as Education and Public Health. When employers are hiring, they are interested in the skills attained through university study.

## **Examples of skills:**

- conduct field and laboratory tests
- operate, maintain and calibrate equipment for field tests and surveys
- isolate, identify and prepare specimens for study
- grow cultures under controlled conditions
- collect field data
- maintain quality control and assurance
- analyze data and report results
- manage approvals and permits related to research ethics and handling of hazardous materials

- conduct biological, microbiological, chemical and biochemical tests
- conduct plant and animal inventory surveys to gather information on plant and animal distribution and abundance
- prepare progress reports on surveys for research biologists
- set up and maintain specific or general laboratory areas
- prepare reagents, perform analyses and maintain equipment in laboratories
- collect information for industry (for example, regarding land use or reclamation)

Source: [http://occinfo.alis.alberta.ca/occinfopreview/info/browse-occupations/occupation-profile.html?id=71001558]

Statistics tell us that university graduates are more likely to be promoted or attain leadership positions than those who do not have a degree. Generally, they move into positions with increased responsibilities and increased pay, or they leave their current employer to take or a better-paying role elsewhere, as at this time the degree is combined with work experience

# Skills Acquired from an Undergraduate Degree in Biology:

- Think analytically and critically
- Follow laboratory procedures and processes with proficiency
- Apply biological facts, concepts and principles
- Research Skills
- Apply computer skills and statistical techniques
- Write clear and accurate technical reports
- Observe health and safety practices

- Scientific theory and practical knowledge
- Assess and solve problems
- Ability to meet deadlines
- Collect and observe data with precision and accuracy
- Ability to work independently or in a team
- Demonstrate ethical conduct in all scientific and relate activities
- Show self-direction and motivation
- Operate scientific equipment

Innovative talents

# **Careers for Graduates of an Undergraduate Degree in Biology:**

There are many different career options for Biology graduates. Below is a sample of positions available to graduates:

- Analytical Laboratory Technologist
- Assistant Microbiologist
- Biological Technician or Research Assistant
- College Lab Assistant
- Environmental Technician
- Habitat Biologist
- Industrial Hygiene Technician
- Informatics Associate

- Lab Technician
- Laboratory Analyst
- Medical Laboratory Technologist
- Oil Sample Laboratory Technician
- Pharmaceutical Sales Representative
- Ouality Control Technician
- Research Assistant
- Forensics Technical Expert

As learning is life-long, some careers which are related to Biology Degree require additional training. This may involve weekend, evening or part-time courses; further education (some employers provide support by allowing time or offering finances to assist you in your learning); distance studies; or full time college or university, including graduate studies. In any case, the Bachelor's degree is a starting point.

# Other Careers Related to Biology:

#### **Health**

Audiologist
Bacteriologist
Chiropractor
Clinical Research Coordinator Assistant
Community Health Worker
Cytotechnologist
Diagnostic Medical Sonographer
Doctor
Dentist
Nurse

#### **Education**

Teacher/Professor Environmental Educator Recreation Director

# **Ecology:**

Agronomist

Health Records Professional Massage Therapist Medical Geneticist Ophthalmic Medical Technologist Optometrist Paramedic Pharmacologist Pathology Assistant Veterinarian

Conservation Biologist Conservation Officer Environmental Health Officer Restoration Biologist

#### All sectors:

Biomedical Engineer Curator Entrepreneur Horticulturalist Marine Biologist Pollution Control Technologist Research associate Science Magazine Science Magazine Editor/writer Technical Sales Representative Wildlife Biology

# Zoologist

# References

www.alis.gov.ab.ca/occinfo
www.jobsfuture.ca
www.unce.edu/stuaff/career/Major/index.htm

For more information or assistance with career and educational planning, please contact Concordia Career Services at + (780) 378 - 8461 or our website is careerservices.concordia.ab.ca