

Our graduates go on to succeed in a wide range of careers



Rhett Andruko
BSC, Lead Resource Analyst,
Silvacom

I manage and lead teams in the completion of Forest Management Plans and other forest resource management projects, including the processing and analysis of spatial and aspatial data, timber supply analysis and modelling, generating and presenting reports and management documents to clients and government, supporting consultation, and managing and leading field programs.



Liz Purves
M.Sc, Grants Manager,
Birds Canada

I am responsible for prospect research, tracking funding opportunities, and developing/writing funding proposals to support Birds Canada’s work to conserve wild birds, with a focus on government, foundation, and other institutional grants. My work is always changing as I work with colleagues and partners across the country on a diversity of projects, from local species at risk monitoring, to community engagement, to international conservation of migratory birds.



Sophia Skebo
BSC, MSc candidate in Translational
Medicine, Queen’s University

My research examines the role of BMPR-II in the vascularization of tumours in the lung. The concepts and skills learned during my undergraduate prepared me for a graduate career.



Katie Birchard
BSC, Data Scientist,
Apex Resource Management
Solutions

I develop custom software tools used to create and run ecological model forecasts. These forecasts allow our clients (academic partners, government, industry, and NGOs) to evaluate the predicted outcomes of implementing different environmental management strategies. I’m working on generating a model for predicting the effect of restoring urban and agricultural land to wetlands on ecosystem carbon dynamics.



Liam Dowling
BSch, MD, Anesthesiology
Resident,
University of Saskatchewan

After my biology degree, I completed medical school at Queen’s. I currently care for people with complex medical conditions needing surgery, resuscitation, or pain relief. My time in the Biology Department at Queen’s gave me skills in critical appraisal, comparative physiology, and statistical analysis, skills that I use to this day. Also, the tight-knit community in the Biology Department gave me the support I needed to achieve the high standards required at medical school.



Jenni Velichka
M.Sc, Biologist,
Kilgour and Associates Ltd

In this capacity I develop water quality guidelines for the province of British Columbia and contribute to projects related to Environmental Effects Monitoring.



Biology

At Queen’s, Biology students explore the living world at every level — from the inner workings of cells, to the diversity of organisms, to the dynamics of entire ecosystems. With opportunities for hands-on labs, local and international field courses, and research alongside leading professors, you’ll gain both practical skills and scientific insight. A degree in Biology prepares you to think critically, contribute meaningfully, and pursue a wide range of academic and career paths.



Biology Degree Options



Biology

BIOL-S or BIOL-M

Biology – Specialization (Science)
Bachelor of Science (Honours) or Biology
Major (Science) – Bachelor of Science (Honours)

Let your interests evolve. The four-year Honours BSc is a rigorous degree plan that will ground you in all the major subdisciplines of Biology but still allow a room for specialization in the upper years. Many students discover their strengths and passions in their first years of study, and this degree plan will allow you to build strength in one of several distinct areas of study.



Biology and Mathematics

BIMA-S

Biology and Mathematics – Specialization (Science) –
Bachelor of Science (Honours)

Understanding the evolution of drug-resistant diseases draws upon knowledge of genetics, genomics, epidemiology, and population ecology. These are all areas of study steeped in both Biology and Mathematics, and this example is just one of many that could be used to highlight the growing need for quantitative literacy in academics, medicine, and industry.



Biotechnology

BTEC-S

Biotechnology – Specialization (Science) – Bachelor of Science
(Honours)

This degree plan focuses on a highly active and rapidly changing area of applied research. The plan balances conceptual and practical learning experiences at a broad range of scales of biological organization — from microbes to ecosystems — embracing the diversity of life forms that can be used to improve agriculture, medicine, and the environment.



Biology and Psychology

BIPS-S

Biology and Psychology – Specialization (Science) – Bachelor
of Science (Honours)

Humans and other animals have more in common than you might think. From neurological systems to patterns of behaviour, this degree plan fuses core elements from Biology and Psychology and explores both commonalities and uniquely human features of brain, behaviour, and cognition.

Experiential Learning Opportunities

Honours Thesis Course

The capstone experience of the Biology department. It allows students to work on their own independent research project. Students have the opportunity to gain experience in the full range of research activity in Biology including project design, data analysis and interpretation, literature review, scientific writing, oral presentation and interactive collaboration with colleagues.

Research Mentorships

They offer individual students the opportunity to undertake a laboratory research practicum under the supervision of a Biology faculty member.

Advanced Lab Courses

These courses provide hands on training in practical and theoretical aspects of basic and advanced tools and techniques used in research labs. These courses help to develop critical thinking and problem solving, as well as excellent oral and written scientific communication skills.

Field Courses

Biology students can choose from ~30 different field courses offered by 16 universities that participate in the Ontario Universities Program in Field Biology (OUPFB). Field courses offer small classes with opportunities to travel across the globe (e.g. China, Mexico, and Tanzania). These courses provide amazing opportunities to gain hands-on experience in different field sites and focus on sampling diverse habitats, identifying different kinds of organisms, understanding their ecology and evolution, conducting independent research studies, and developing strong science communication skills.

