What is Integrative Biology?

Biology is a Life Science focused on understanding life and living organisms at every level of organization from molecules to communities. It is divided into many specialized fields such as morphology, physiology, anatomy, behavior, origin, and distribution. (Source: Oxford Dictionary)

At UTSC, Integrative biology provides students with solid foundational knowledge in areas like:
- Impact of Environment and Climate Change on the Biology of Ecosystems
- Conservation and Biodiversity of Organisms
- Animal Physiology or Ecophysiology
- Infection and Disease
- Plant and Microbial Biology
- Behavioural Biology or Behavioural Genetics
- The Evolution of Development

Entry-Level Jobs for Bachelor Grads

Common employment destinations include:
- Sales in Pharmaceuticals and Medical Supplies
- Conservation Officer in Government Services
- Volunteer Coordinator in Non-profits
- Research or Teaching Assistant in Universities
- Lab Technician in Industry or Government
- Assistant Biologist, Food Inspection Agencies
- Water Technologist in Conservation Authorities
- Educator or Program Developer in Education
- Intern, Ministry of Natural Resources
- Policy Analyst in Government
The Career Directory: www.canadastop100.com/tcd

Graduate & Professional Studies

Popular further education opportunities include:
- Biology – Master, PhD
- Public Health: Epidemiology – Master, PhD
- Environmental Science – Master, PhD
- Sustainability – Master, PhD
- Genetic Counselling - Master
- Medical or Dentistry School – MD, DDS
- Physical or Occupational Therapy - Master
- Education – Bachelor, Master
- Clinical Research - Post-Graduate Certificate
- Medical Laboratory Technology - Diploma
- Environmental Technology - Diploma or Graduate Certificate

Skills of Biology Grads

- Research and analyze biological questions
- Design and conduct experiments
- Collect and analyze data using statistical methods
- Field and laboratory skills
- Writing skills (literature reviews, scientific reports)
- Oral presentation skills
- Knowledge of how organisms interact with the environment
- Application of ecological theory and critical analysis of environmental and conservation problems
- Understanding the theory and practice of conservation biology

What makes Biology at UTSC unique?

Many of the world’s most important issues require a firm understanding of biological principles and practices. UTSC’s programs provide students with a solid understanding while allowing students to tailor their program to meet their interests.

Use LinkedIn!

UTSC Biology graduates are working in Research, Education, Healthcare and Business.

Attend our LinkedIn workshop to learn about the Find Alumni tool for networking!

Integrative Biology Grads from UTSC have gone on to:
- Canada Food Inspection Agency (Inspector)
- Kadmon Pharmaceuticals (Research Associate)
- Sunnybrook Health (Physiotherapist)
Examples of Fields that ‘Fit’ the Skills of Biology Grads

- Healthcare
- Federal, provincial, municipal governments
- Education
- Pharmaceutical
- Research (hospitals, nonprofit organizations)
- Biotechnology
- Colleges and universities
- Quality Control (food, pharmaceutical, medial)

Your 4-Year Career Exploration Action Plan

1. **Do Your Research**

The databases below provide you with details about job prospects, nature of work, educational requirements, working conditions, pay and related career paths:

**Career Cruising**: Log into cln.utoronto.ca, click on Resources, and click on Career Cruising to be logged in automatically

**O*Net**: online.onetcenter.org (U.S. site)

Attend our workshop **Discover Your Skills and Career Options**, meet with a Career Counsellor, and use our resources to get to know your skills, values, personality and interests:

[www.utsc.utoronto.ca/aacc/get-know-yourself](http://www.utsc.utoronto.ca/aacc/get-know-yourself)

Use the advice on our tip sheets for gathering info:

- Information Interviews
- Working On-Campus
- Internships
- Volunteering

2. **Explore Career Options & Get Experience**

Gain exposure to your options in the world of work and make connections while you’re a student via campus events and programs listed on cln.utoronto.ca and ccr.utoronto.ca:

- Extern Job Shadowing
- In the Field
- Explore It! (course-based)
- Partners in Leadership (4th year students)
- iLead, uLead, weLead (Dep’t of Student Life)
- Employer Information Sessions
- Career & Volunteer Fairs
- Departmental Student Association Events

Apply for Work Study jobs in CLN in Fall and Spring! You might also find work via www.scsu.ca/jobs.

Find networking opportunities, internship programs and entry-level jobs via websites like www.talentegg.ca and www.charityvillage.ca.

As an upper year student (14+ credits), attend UTSC’s **Get Hired Conference** and participate in **Jobs for Grads**.

As a graduate, explore internships and other trainee programs like www.careeredge.ca

3. **Build Your Network**

Explore Professional Associations and get involved: volunteer for their events and conferences, and get to know people in your industry of interest. These are your future mentors, supervisors and colleagues!

**Biology Student Association at UTSC**: [www.thebiosa.org](http://www.thebiosa.org)

**About Bioscience**: [www.aboutbioscience.org](http://www.aboutbioscience.org)

**BioTalent Canada**: [biotalent.ca](http://biotalent.ca)

**Biotechnology Industry Association**: [www.bio.org](http://www.bio.org)

**Canadian Food Inspection Agency**: [www.inspection.gc.ca](http://www.inspection.gc.ca)

**Canadian Society of Biochemistry, Molecular and Cellular Biology**: [www.csbmc.ca](http://www.csbmc.ca)

**The Society for Biomolecular Sciences**: [www.slas.org](http://www.slas.org)

**Environmental Careers Organization Canada (ECO Canada)**: [www.eco.ca](http://www.eco.ca)


**Hamilton Health Sciences**: [www.hamiltonhealthsciences.ca/careers/CareerTreeEnglish.pdf](http://www.hamiltonhealthsciences.ca/careers/CareerTreeEnglish.pdf)

**Please note**: This document is a starting point for your further research into career options in this field of study. For more information on this program and course requirements, please visit the departmental website at the top of the first page.