

Department of Biology

Paleontology Major Program



What is Paleontology?

Paleontology is a basic science concerned with the evolutionary history of life. Students are required to have a broad knowledge base of biological and geological knowledge. Areas of detailed knowledge will include vertebrate and invertebrate paleobiology, evolutionary biology, systematics, functional morphology, sedimentology, stratigraphy, and plate tectonics.

Why Study Paleontology at UTM?

- Learn from the best – dedicated teaching staff including over two dozen faculty and sixty graduate students and post-doctoral fellows
- Learn about the latest discoveries & research – our faculty do state-of-the-art research, which translates directly into our course curriculum
- Valuable first-hand experience in lab, field and experiential learning courses

First-Year Paleontology at UTM

All Paleontology Major students complete the following courses in their first year:

- **BIO152H5** – Intro to Evolution & Evolutionary Genetics
- **BIO153H5** – Diversity of Organisms
- **CHM110H5** – Chemical Principles I
- **CHM120H5** – Chemical Principles II
- **MAT134Y5** – Calculus for Life Sciences
- **One of: ENV100Y5: The Environment or ERS120H5: Planet Earth**

Career Paths

- Research (Grad School)
- Education
- Government (Ministry of Environment)
- Museums
- Industry
- Consulting

How Do You Study Paleontology at UTM?

Paleontology Major (8-8.5 credits)

Courses to Look Forward To!

The department of Biology offers more than 50 undergraduate courses. Students in the Paleontology program complete the following courses at the UTM and St. George Campus.

Required Courses

- **ERS201H5:** Earth Materials
 - **ERS202H5:** Dynamic Earth
 - **ERS203H5:** Rock Forming Processes
 - **ESS261H1:** Earth System Evolution
 - **ERS325H5:** Field Camp I - This course, held on the north shore of Lake Huron in the summer, covers geological mapping skills, stratigraphic section measurements, and the recognition of rock types, fossils and geological structures in the field in order to interpret ancient geological environments (approx. 12 days of field instruction). Students must pay a course fee, which includes transportation and accommodation at the camp. The costs of food and tuition fees are extra.
 - **BIO354H5:** Vertebrate Form & Function
 - **BIO356H5:** Major Features of Vertebrate Evolution
 - **BIO360H5:** Biometrics I
 - **ESS331H1:** Sedimentation and Stratigraphy
- Please note that the pre-requisite for **BIO360H5** is **STA215H5**. The pre/co-requisite for **BIO354H5** and **BIO356H5** is **BIO210Y5**.

Experiential Learning in Biology

We offer a wide-range of unique learning opportunities across all of our disciplines:

- **Research Opportunity Program (ROP):** participate in original research with a professor, learn research methods, and share in the excitement and discovery of acquiring new knowledge
- **BIO481 - Senior Research Project:** conduct an independent research project under the supervision of a faculty member; learn how to design, carry out, and analyze and evaluate results/data
- **BIO400 – Internship:** learn to apply biology knowledge and skills through a 200-hour work placement in the private or public sector
- **BioPath Professional Development Program:** two-year program open to all biology students. The program aims to facilitate the development of transferrable skills that will help students be successful beyond university.

Departmental Events

The Biology Department offers exciting opportunities for students to expand their interest in biology through a weekly departmental seminar featuring exciting guest speakers from across North America as well as our popular “Walk with your Professor” series where participants are led on a nature walk through the beautiful Mississauga campus.

For more information on career options, please visit the Career Centre site
<http://www.utm.utoronto.ca/careers/>.

For more information on these programs, please explore our Academic Calendar -
<https://student.utm.utoronto.ca/calendar/calendar.pl>.