PALEONTOLOGY (HBSc)

Department of Biology

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.

UTM Biology is a dynamic community. With nearly 40 active research scientists, more than 100 graduate students and many post-doctoral fellows doing state-of-the-art research using the latest techniques our students will have the opportunity to learn from the best. Our undergraduate research projects and summer student placements in research labs will give students valuable, first-hand experience working in a laboratory environment.

MAKE THE MOST OF YOUR TIME AT UTM!

Programs of Study (POST)

• Major Program ERMAJ1004 Paleontology (Science)

Check out...

Why not interpret ancient geological environments on the north shore of Lake Huron? Apply to ERS325H5 (Field Camp I). Get excited about Earth Science courses about minerals in ERS201H5 and ERS203H5 where you will explore the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time.

What can I do with my degree?

The career you choose will depend on your experience and interests. Visit the Career Centre to explore your career options.

Careers for Graduates: Curator; Survey technician; Taxidermist; Paleontologist; Research consultant; Field technician/director; Epidemiologist; Museum technician; Primatologist; University professor; Laboratory technician; Archivist; Preservationist/restorer.

Workplaces: Government; Scientific R&D; Non-profit agencies; Conservation authorities; Zoos, aquariums, national/provincial parks; Academic medical centres/laboratories; Universities and colleges; Museums.
# HOW TO USE THIS PROGRAM PLAN

Read through each year. Investigate what appeals to you here and in any other Program Plans that apply to you.

Visit [www.utm.utoronto.ca/program-plans](http://www.utm.utoronto.ca/program-plans) to create your own plan using My Program Plan. Update your plan yearly.

![University of Toronto Mississauga logo](https://www.utm.utoronto.ca/)

## PALEONTOLOGY MAJOR Program Plan

*Consult the Academic Calendar for greater detail on course requirements, program notes and degree requirements.*

### 1ST YEAR
- Enrol in courses BIO150H5, BIO153H5, CHM110H5, CHM210H5; MAT132H5, MAT134H5 and ENV100Y5.
- Enrol in courses BIO208H5, BIO209H5, ERS201H5, ERS202H5, ERS203H5, ESS261H1 and BIO259H5.
- Consult the Academic Calendar for greater detail on course requirements, program notes and degree requirements.

### 2ND YEAR
- Enrol in courses BIO208H5, BIO209H5, ERS201H5, ERS202H5, ERS203H5, ESS261H1 and BIO259H5.
- Choose a program of study (Subject POS) once you complete 4.0 credits. Use the Degree Explorer and the Academic Calendar to plan your degree.
- Use the Co-Curricular Record (CCR). Search for opportunities beyond the class room, and keep track of your accomplishments.
- Networking simply means talking to people and developing relationships with them. Start by joining the Erindale Biology Society (EBS). Follow them @UtmEBS. Go to the EBS Meet the Prof Night, or the Biology department’s Walk with a Biologist or the Biology Seminar Series.
- Please refer to the Academic Calendar for greater detail on course requirements, program notes and degree requirements.

### 3RD YEAR
- Enrol in courses ERS325H5, BIO335H5, BIO336H5, and ESS331H1.
- Consider applying for the Research Opportunity Program (ROP) courses BIO299Y and BIO399Y. Visit the EEU website for ROP Course Prerequisites. Attend the RGASC’s PART to enhance your research skills.
- Use the Career & Co-Curricular Learning Network (CLNs) to find postings for on- and off-campus work and volunteer opportunities as well as Work-Study.
- Attend the CC workshop to have your resume critiqued.

### 4TH OR FINAL YEAR
- Enrol in courses ERS325H5, BIO335H5, BIO336H5, and ESS331H1.
- Throughout your undergraduate degree:
  - use the Degree Explorer to ensure you complete your degree and program requirements.
  - see the Office of the Registrar about degree requirements and the Biology Undergraduate Advisor about program requirements.
- Explore your interests. Do you want to make UTM eco-friendly? Become a Sustainability Ambassador with the UTM Sustainability Office.
- Skills are transferrable to any job regardless of where you develop them. Need to strengthen your presentation skills? Consider a role as an RGASC Facilitated Study Group Leader.

### BUILD A NETWORK
- Attend the Get Hired Fair through the Career Centre (CC) to learn about on- and off-campus opportunities.
- Attend the Career Counselling session to have your resume critiqued.
- Networking simply means talking to people and developing relationships with them. Start by joining the Erindale Biology Society (EBS). Follow them @UtmEBS. Go to the EBS Meet the Prof Night, or the Biology department’s Walk with a Biologist or the Biology Seminar Series.
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### BUILD A GLOBAL MINDSET
- Engage with the many programs offered by the International Education Centre (IEC). Whether you are an international or domestic student.
- Consider joining the Canada EDF day trips or English Language Conversation Circles to deepen your global mindset.
- First-year international students can also take advantage of THRIVE, a one-day conference dedicated to helping you start your UTM journey successfully.
- Go to the Canadian Paleontology Conference.

### PLAN FOR YOUR FUTURE
- Attend the Program Selection & Career Options workshop offered by the Office of the Registrar and the CC.
- Consider applying for the Research Opportunity Program (ROP) courses BIO299Y and BIO399Y. Visit the EEU website for ROP Course Prerequisites. Attend the RGASC’s PART to enhance your research skills.
- Review your plan yearly. Update your plan yearly. Visit [www.utm.utoronto.ca/program-plans](http://www.utm.utoronto.ca/program-plans) for the online version and links.

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*Updated on: 10/05/2023*
Skills developed in Paleontology

To be competitive in the job market, it is essential that you can explain your skills to an employer. Visit the Career Centre to learn how to articulate and market the following skills:

Communication & interpersonal: write scientific reports; present research findings; interact professionally with a multidisciplinary team of researchers, technicians, students and professors; and literacy writing.

Research: define a problem; establish hypotheses; gather scientific data; analysis of materials; and review scientific literature.

Technical: use specialized computer programs; perform laboratory procedures; maintain laboratory equipment and instrumentation; and comply with quality control procedures.

Quantitative: analyze data for trends and apply statistical tests to data.

Critical thinking & problem-solving: logically interpret trends and results.

Get involved

Check out the 100+ student organizations on campus. Here are a few:

- Erindale Biology Society (EBS)
- UTM Student Union (UTMSU)
- UTM Athletics Council (UTMAC)

For a full listing of clubs on campus visit the Student Groups and Societies Directory

Effective biological training involves careful study of real organisms, both living and dead. Consequently, almost all Biology courses with laboratories involve students in one or more of the following activities with animals, plants, and/or microorganisms: collecting and preserving organisms from the field; dissecting or handling preserved or euthanized specimens (or properly anaesthetized living specimens); observing and making measurements on organisms maintained under laboratory conditions approved by the Canadian Council of Animal Care.

Department of Biology

William G. Davis Building, Rm 3056
University of Toronto Mississauga
3359 Mississauga Rd
Mississauga ON Canada L5L 1C6

Undergraduate Advisor: 905-828-3999
d.matias@utoronto.ca
www.utm.utoronto.ca/biology

Student Recruitment & Admissions

Innovation Complex, Room 1270
University of Toronto Mississauga
3359 Mississauga Rd
Mississauga ON Canada L5L 1C6

905-828-5400
www.utm.utoronto.ca/future-students

Admission to UTM

All program areas require an Ontario Secondary School Diploma, or equivalent, with six Grade 12 U/M courses, or equivalent, including English. The admission average is calculated with English plus the next best five courses. The Grade 12 prerequisites for this program are Advanced Functions, Biology and Chemistry. The approximate average required for admission is low- to mid-80s. More information is available at utm.utoronto.ca/viewbook.

NOTE: During the application process, applicants will select the Life Sciences admissions category, but will not officially be admitted to a formal program of study (Specialist, Major, and/or Minor) until after first year.

Sneak Peek

Peel back the layers of the earth in ERS202H5 – a course that takes a close look at the dynamic evolution of the surface and of the interior of the Earth.