

University of Toronto

Ontario Universities Program in Field Biology

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| Course Title: | Temperate Field Biology |
| Instructor(s): | Megan Bontrager (m.bontrager@utoronto.ca , 530-407-7507) Micah Freedman (micah.freedman@utoronto.ca , 864-506-1906) Department of Ecology and Evolutionary Biology 25 Willcocks St. Toronto ON M5S 3B2. |
| Dates: | August 6 – 19, 2026 |
| Location: | Koffler Scientific Reserve 17000 Dufferin Street King City, Ontario, Canada L7B 1K5 |
| Cost: | \$1,025 (\$350 deposit to home university; \$675 balance by June 15 to host university). This fee covers lodging, food, and transportation from the University of Toronto St. George Campus to the field station and back. |
| Prerequisites: | Required: second year course in biology. Recommended: second or third year course in ecology and/or evolution; an introductory statistics course or some previous experience with R. |
| Enrolment: | 16 (13) |
| Course Description (brief): | The objective of this course is to give students a broad overview of the natural history of south-central Ontario and to introduce them to some of the most commonly used methods in the study of field ecology and evolution. We will observe many types of organisms (e.g., plants, insects, birds) in a wide array of environments with a focus on the organisms studied by the course instructors. Students will experience hands-on learning through natural history walks, preparation of plant and insect specimens, group projects, and an independent research project. We will also have some lectures and group discussions of the scientific literature during the evenings. In the second half of the course, each student will design and conduct their own research project, which they will present to classmates in a symposium and write up in the format of a scientific paper. Further details on the course and specifics of what to bring will be provided in the spring to those who enroll. |
| Evaluation: | Marks are based on class participation, leading a group discussion, performance on group projects, and the oral and written presentation of an individual project. Students are also expected to hand in their field notes and data. <ul style="list-style-type: none"> • Leading group discussion of a pre-assigned scientific paper: 5% • Field notebook and specimen collections: 15% • Class performance and participation (this includes group projects, paper discussions, and general participation in the course): 20% • Oral presentation on individual project: 20% • Written report on individual project (submitted two weeks after the end of the course): 40% |

An Average Day – What to Expect

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| (a) Daily timeline | For the first week, the course is structured around group activities. Days begin with breakfast at 7:30 a.m. and end with an after-dinner discussion that typically runs until 9:00 p.m. Daytime activities will include guided walks and group field projects. The second half of the course is devoted to independent research projects. Students will plan their days and evenings to complete experimental design and set up, data collection, and data analysis. The course ends with all students presenting their projects at a research symposium. |
| (b) Work habitat & Physical exertion | The Koffler Scientific Reserve has diverse habitats and rolling terrain. Guided walks, group projects, and independent projects will involve spending most of the day moving around the property, outdoors, regardless of weather conditions. |
| (c) Common activities | <ul style="list-style-type: none"> • Common activities: Hiking; identifying, measuring, and counting plants, insects, and birds; collecting data in the field; analysing data in R. • Associated risks: Risks include common risks of hiking, such as twisted ankles, fatigue, blisters, heat exhaustion, dehydration, and hypothermia. |
| (d) Weather, dehydration, & biting insects | <ul style="list-style-type: none"> • Weather conditions in August are variable. Students should bring layered clothing and rain gear, sunscreen, and insect repellent. • Water is available at all facilities. Students should bring their own large water bottle. • Horse flies, deer flies, and mosquitoes can be expected. Deer ticks (vectors of Lyme's disease) are common at KSR. |
| (e) Toxic/poisonous, wildlife/ plants | Ticks are common at KSR. Students will receive guidance on tick bite prevention. Each residence is equipped with a tick-removal kit. Poison ivy is found in several areas at the field station. There is also potential for contact with bees and wasps. |
| (f) Sleeping, washroom & laundry facilities | <ul style="list-style-type: none"> • There are several residences at the field station. Two to five students will share a bedroom/bathroom. Roommate assignments will be made taking students' comfort and preferences into account (e.g., sharing a room with students of the same gender identity or with the identity(ies) that they are most comfortable sharing with). • Shared bathrooms have full running water and showers. • Laundry facilities are available. |
| (g) Meal plans & food allergies | Meals are provided. Vegetarian, vegan, kosher, halal, and allergy-friendly diets are readily accommodated if requested in advance. Students will have access to kitchens and refrigerators and are welcome to supplement meals with their own snacks |
| (h) Non-academic responsibilities | Students will be assigned to kitchen clean-up duties on a rotating schedule. All students are responsible for the cleanliness of their bedrooms, bathrooms, and common spaces. |
| (i) Degree of isolation | <ul style="list-style-type: none"> • Most residences and the reserve laboratory have wi-fi. • Cell phone coverage is strong at the residences and laboratory, but spotty across other parts of the property. • There will be one or two 'town runs' to nearby Newmarket if students need to purchase additional supplies. • South Lake Hospital, Newmarket, is a 10 min. drive. |
| (j) Alcohol & drugs | Please note that illegal drug use is strictly forbidden and that alcohol should be limited to a moderate amount, in residence areas only, and only after 5 pm. Hard alcohol and spirits (whisky, vodka, gin, tequila, rum, etc) are forbidden. Inebriation during your stay at KSR is not acceptable. |
| (k) Vaccinations/ Insurances | Standard vaccinations and health insurance are sufficient. |
| (l) Social Situations | The Koffler Scientific Reserve is a closed campus, meaning that you will encounter only your classmates and the resident research staff and students. Expect the types of social interaction found regularly on a university campus. |
| (m) Final comments | In this course, you will experience doing hands-on field research and being a scientist. This will require creativity, hard work, and persistence. The instructional team is excited to support you through this process! |