

UNIVERSITY OF GUELPH
Ontario Universities Program in Field Biology

Course Title:	Field Ecology								
Instructor(s):	Dr. Ryan Norris (rnorris@uoguelph.ca) and Emily Martin (emilym@uoguelph.ca), Department of Integrative Biology, University of Guelph								
Dates:	Sunday, July 13 th – Saturday, July 26 th , 2025 (tentative)								
Location:	Algonquin Wildlife Research Station (AWRS) on Lake Sasajewun, Algonquin Provincial Park								
Cost:	\$1,800, with \$350 deposit due to home university upon application and balance of \$1,450 (accepted students will receive instructions). Includes all meals. Does NOT include transportation to/from AWRS.								
Prerequisites:	0.50 credits in Ecology and Biostatistics								
Enrolment:	20 students total (15 from Guelph)								
Description:	This 12-day field course is held in Algonquin Provincial Park, Ontario, in mid-late July. Emphasis is on natural history of the area (all taxa) and the design and implementation of an ecological field study (experimental or observational). At the beginning of the course, students will be exposed to flora and fauna of the area through a variety of hikes and workshops. Students will then design and conduct a research project on a topic of their choice in either terrestrial or aquatic habitats and write an independent formal scientific paper. In addition, students will produce a field notebook highlighting their own natural history interests as well as accurately documenting their daily observations, data collection, and questions. An organizational meeting will be held in the winter semester prior to the field course, and some workshops and formal lectures will occur throughout the course.								
Evaluation:	<table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Research Project</td> <td style="text-align: right;">50% (40% paper, 10% oral proposals)</td> </tr> <tr> <td>Natural history Notebook</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>Participation</td> <td style="text-align: right;">15%</td> </tr> <tr> <td>Self-Reflection Essay</td> <td style="text-align: right;">10%</td> </tr> </table>	Research Project	50% (40% paper, 10% oral proposals)	Natural history Notebook	25%	Participation	15%	Self-Reflection Essay	10%
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An Average Day – What to Expect

(a) Daily timeline	Field work is intense and demands long days in the field. A typical field day is not 9 – 5 and students should be expecting to work hard and, as a result, derive a great deal of satisfaction from their accomplishments at the end of two weeks. One should embark on a field course because they are passionate about being outdoors in all conditions, exploring and being curious about nature, and conducting scientific studies outside. Some students perceive field course modules as opportunities for an easy grade, a credit-based vacation. However, this is not the case. The days can be long and can be gruelling, but the sense of community and camaraderie that develops among the students is incredibly fun and rewarding. An average workday includes 7:00 am breakfast (though cereal is available if an earlier start is necessary), 8:00 am natural history hikes (1 st week) or fieldwork (2 nd week) rain or shine, noon lunch break, 1:00 pm more hikes and exploring (1 st week) or fieldwork (2 nd week), 6:00 pm dinner, 7:00-10 pm either free time, class lectures, field book updates, student presentations, or night field excursions.
(b) Work habitat & Physical exertion	Depending on the research projects, long back-country hikes, or canoeing (sometimes with portage) may be expected, 5-10 km day hikes through varying elevations and through rocky/muddy/mosquitoey habitat are common. Students may find themselves immersed in bogs, ponds, or lakes in hip-waders, climbing uneven terrain through mixed hardwood/conifer forest, long hours in open field/meadow habitats with only bushes as toilets or a long walk to an outhouse. Staying hydrated and resting when necessary will be key ingredients in maintaining stamina throughout the days. Being invested in hard work and data collection early will help to avoid the burnout that can occur if students do not balance their data collection and field work accordingly.
(c) Common activities	Hiking, canoeing, swimming, and observing are common activities.
(d) Weather, dehydration, & biting insects	Students need to bring sun protection (sunscreen, wide-brimmed hats), a water bottle to carry water into the field, as well as rain gear (rain boots, rain pants, rain coats). A warm sleeping bag is necessary for cold nights. By mid-July, mosquitoes, blackflies and deer flies have started to wane, but are still prevalent and hungry. Depending on the year, they can be quite thick and wearing long sleeves, pants, and using repellent are excellent ways to ensure comfort.
(e) Toxic/poisonous, wildlife/ plants	Students must complete bear safety training as encounters with black-bears and other large wildlife (e.g. Moose) are possible around the field station and while in the field. Other natural hazards that are common are poison oak and poison ivy, wearing long pants and using common sense are the best defences.
(f) Sleeping, washroom & laundry facilities	<ul style="list-style-type: none"> ● sleeping accommodations: shared cabins, not typically co-ed. Students need to bring bedding (warm sleeping bag, sheets, pillow). ● washroom facilities: at the field station, there are flush toilets and hot showers. In the field, there are out-houses (sometimes) and bushes. ● washing/laundry facilities: washing machine available on a fee per use basis if the well and septic are not overwhelmed, clothesline for hanging to dry
(g) Meal plans & food allergies	Three meals are provided each day (typically cold/cereal breakfast and hot lunch/supper), if students have specific requirements (e.g. vegetarian, vegan) some can be met. Others dietary requirements may require students to supplement their own food.
(h) Non-academic responsibilities	Students are responsible for daily chores at the field station that include dishes, cleaning the common indoor areas, and tidying common outdoor areas, as well as pitching in on projects that may be ongoing while we are there.
(i) Degree of isolation	<p>The WRS is a remote and rustic field station that is equipped with electrical power but rudimentary (if any) cell/internet connections.</p> <ul style="list-style-type: none"> ● Recharging electronic devices is possible, but outlets are limited and so patience is paramount ● Cell reception around the station is improving, but still spotty, and data is typically very slow if it connects at all ● Students can bring their own snacks, keeping them labelled and in a closed mouse-proof container

Module #11

(j) Alcohol & drugs	Use of alcohol/drugs must follow the WRS policy, which is subject to change. Alcohol is permitted after working hours have wrapped up, and not during the day. Students must use substances responsibly, keeping their own safety and the safety of others as a priority. Intoxication will not be tolerated.
(k) Vaccinations/ Insurances	Vaccinations as required by provincial governments.
(l) Social Situations	This course is two weeks of living in close proximity with a relatively small group of people. We share meal-times and spend a lot of time together as a group, but even more so in smaller field groups. It is important that people come with an open mind and are accepting of diverse personalities and perspectives, that people are friendly and supportive of each other. Students should be prepared to work in small field groups of 3-4 people when project goals overlap; students may find that they require assistance in the field to collect their individual data and should be prepared to help others in kind. Be prepared to work hard to ensure that everyone is contributing fairly and collaboratively. Also, unless students drive their own vehicle (car-pooling is recommended as space for vehicles at the WRS is limited), getting to one of the small towns outside of Algonquin Park can be difficult (30 - 45 min drive each way). Students must be prepared to be easy-going, friendly, and flexible with personal space expectations as quarters are tight for sleeping accommodations.
(m) Final comments	Each cohort of students brings a vibrancy and enthusiasm for exploring nature and investigating scientific questions that invigorates our curiosity and passion for field research. We will explore some stunning places in the park, and no doubt embark on some memorable adventures. Often people who participate in this course become long-lasting friends as it is a unique opportunity to connect with a diverse group of people from varying backgrounds but who all share similar passions. We look forward to meeting you!