## WESTERN UNIVERSITY Ontario Universities Program in Field Biology

Course Title:	Adirondack Forest Ecology
Instructor(s):	Dr. Ben Rubin Department of Biology, Western University <u>brubin2@uwo.ca</u> , 519.661.2111 ext. 87475
Dates:	Friday, May 3 – Thursday, May 16, 2024
Location:	Newcomb Campus (State Univ. of NY College of Environmental Science and Forestry) Newcomb, NY, USA
Cost:	<ul> <li>\$2000. Includes transportation (departing from and returning to London, ON or Hamilton, ON), lodging, and meals starting with dinner on May 3 and ending with lunch on May 16. If you wish to arrange your own transportation to the research station, you may, but the course fees will not be reduced. A deposit of \$350 is due at registration, and the balance (\$1650) is due in full on March 22.</li> <li>Valid travel documents for entering the US and returning to Canada are required (definitely includes a passport and may include a Visa depending on your citizenship). It is your responsibility to determine what documents you need and to obtain them. Proof of supplementary medical insurance for travel to the US is required.</li> </ul>
Prerequisites:	Two one-semester courses in biology
Enrolment:	Maximum: 20 (6 reserved for Western students)
Course Description (brief):	At more than 24,000 km <sup>2</sup> , Adirondack State Park is one of the largest protected areas in eastern North America. It is 3.5 times the size of Algonquin Provincial Park, with similar forests and more mountainous topography. We will explore the natural history of the park's environments, including boreal, northern hardwood, upland, lowland and aquatic communities. We will observe the Adirondacks during leaf-out and bird migration in early spring – one of the most dynamic times of year. The course will focus on three themes: <ul> <li>Identification of flora and fauna</li> <li>Field measurement techniques</li> <li>Natural and human history of the Adirondacks</li> </ul> <li>An information video about the course is available here: <a href="https://youtu.be/4cDKCBXdkk4">https://youtu.be/4cDKCBXdkk4</a></li> <li>NOTE: This course requires substantial hiking on and off trails in steep, rough, and mountainous terrain. Weather in the Adirondacks in May can be mild or severe, including the possibility of biting insects, cold temperatures, rain, or even snow. If you wish to avoid these conditions, please do not sign up for this course.</li>
Evaluation:	Participation and professionalism*20%Pre-course assignments10%Journal (in the Adirondacks) and Scientific blog (due Jun 10)30%Individual project (proposal in the Adirondacks) & Final report* (due Jun 10)40%* You must pass this component of the course to pass the course.40%

## An Average Day – What to Expect

(a) Daily timeline	We will live at a research station for two weeks. You will sleep in cabins (6 to 8 people each) on bunk beds. Breakfast (6:45 am) and dinner (6:00 pm) are at a dining hall (a short walk from the cabins) where there is also access to bathrooms, showers, and laundry. At breakfast, we will be able to pack a bag lunch.
	We'll head outside shortly after breakfast each day and be back by dinner. You should expect to be outdoors all day, rain or shine. Evenings will include time to work on field journals, free time (campfires, canoeing, card games), and occasional mandatory or optional class activities.
(b) Work habitat & Physical exertion	We will hike (up to 6 km per day) on and off trails in terrain ranging from flat to quite steep and rugged. Trail conditions are likely to be muddy in many places. Expect to carry a daypack all day through rugged terrain.
	Wearing a good-fitting and sturdy pair of hiking boots and having good rain gear with you will help you stay comfortable and safe.
(c) Common activities	Typical activities include riding in 11-seat vans on rural mountain roads, hiking (as described above), and practicing forest measurement techniques individually and in groups. During free time, there is the opportunity to canoe or swim in a cold lake at the research station. The College of Environmental Science and Forestry staff provides canoe safety training. Swimming is done at students' own risk and must be restricted to daylight hours when others are present.
(d) Weather, dehydration, & biting insects	Weather conditions are highly variable. It is likely that you will be outside in the rain at different points during the course, be uncomfortably cold, uncomfortably warm, physically fatigued, and annoyed by biting black flies.
	You should carry two litres of drinking water each day to remain hydrated. On sunny days, sunscreen is recommended because we will walk through forests before the leaves have completely emerged, so UV exposure can be significant.
(e) Toxic/poisonous, wildlife/ plants	Natural dangers include possible encounters with black bears, poison ivy, ticks carrying Lyme disease, and venomous snakes. All of these are unlikely to be problems. In 11 years of teaching the course, we have encountered a bear twice (without incident), seen poison ivy once or twice (no reactions), and never encountered venomous snakes or Lyme disease. Nevertheless, proper vigilance and regular tick checks are good practices.
(f) Sleeping, washroom & laundry facilities	We live in cabins with four bunk beds each. They may be full or not, depending on the number of male and female participants. Cabins have heat and electricity but no plumbing. Bedding and towel service are not provided. Wi-Fi, showers, flush toilets, and laundry facilities are available in a nearby building.
(g) Meal plans & food allergies	Breakfast and dinner are prepared for us in a dining hall. At breakfast time, we have access to food to make sandwiches, fruit, and other snacks to pack our own bag lunch. The kitchen will accommodate most dietary restrictions so long as they are informed in advance.
(h) Non-academic responsibilities	We are collectively responsible for keeping our cabins clean and for leaving the facilities in as good condition as we find them.
	Some students have attempted to take online courses while taking this field course. Depending on the course in question, this may be technically possible. However, I do not recommend it because free time and internet bandwidth are both very limited.
(i) Degree of isolation	From the research station, it is a fifteen-minute drive to the nearest town (Long Lake, NY), which offers a limited selection of snacks, souvenirs, and supplies you may have forgotten. At the research station, Wi-Fi is available only in the dining hall. Cell service is spotty at best.
	We have first aid supplies on hand, and I will bring some common over-the-counter medicines. There is a defibrillator in the dining hall. If further medical attention is required, there is 911 service and a hospital with emergency medical facilities approximately 1 hour's drive from the research station (Saranac Lake, NY).

(j) Alcohol & drugs	The drinking age in the United States is 21 years, and cannabis is illegal there. Students are not allowed to bring alcohol or recreational drugs with them. However, once we arrive in the Adirondacks, students who are of legal age in the US can occasionally buy moderate quantities of alcohol (a convenience store in town sells beer) to consume during their free time (some evenings), as long as drinking does not interfere with class activities.
(k) Vaccinations/ Insurances	Recent COVID vaccination is recommended.
	Supplementary medical insurance is required.
(I) Social Situations	As described above, this course involves living in close quarters with other students, the instructor, and the TA. We work together, eat together and often recreate together during our free time. It is essential to respect each other's needs for quiet, personal space, privacy, etc.
(m) Final comments	In ten years of offering this course, almost all students loved the experience and the location and learned a lot. A few make friendships that will last a lifetime or are inspired to change career goals. An information video about the course is available here: <u>https://youtu.be/4cDKCBXdkk4</u> .
	A top priority in this course is to create an environment that is inclusive and safe for all. If you are considering enrolling but have questions concerning potential vulnerabilities or personal needs related to personal health conditions, mental health concerns, learning disabilities, trans-gender status, sexual orientation, ethnicity, religious practices, etc., I am happy to talk with you. I can describe the typical course environment and procedures, listen to your needs, and explore possible ways of accommodating them.