

**UNIVERSITY OF WESTERN ONTARIO**  
**Ontario Universities Program in Field Biology**

<b>Course Title:</b>	<b>Urban Ecology</b>	
<b>Instructor(s):</b>	Tim Hain University of Western Ontario, Department of Biology (thain@uwo.ca)	Contact: Brenda Beretta (bberetta@uwo.ca) Biology, Univ. of Western Ontario, London , ON N6A 5B7; 519-661-2111 x 82555, fax 519-661-3935
<b>Dates:</b>	Saturday 2 August – Saturday 16 August, 2024 (12 days minimum in the field)	
<b>Location:</b>	The University of Western Ontario, London, Ontario	
<b>Cost:</b>	<p>The cost for students who have their own accommodations is <b>\$575</b>. Costs for students who wish to stay in Western’s residence is <b>\$1235</b> (\$575 for course fees and \$660 for accommodations). Rooms have been set aside for students at Western’s London Hall at a preferred rate, and students will make the reservations themselves by mid-April using a registration link. Breakfasts are available at an additional cost. Students are encouraged to bring their own cookware and eating utensils. Grocery trips will be made on the two Saturdays, and students are otherwise encouraged to bring their own food.</p> <p>\$350 deposit at registration; balance to UWO by mid-July. Cost of meals and transportation to UWO are not included.</p>	
<b>Prerequisites:</b>	Completion of two years in a Biology program, an introductory Ecology course (equivalent to UWO BIOL 2483), and introductory statistics (ANOVA, correlation, and regression)	
<b>Enrolment:</b>	Maximum 16 (8 reserved for UWO students), minimum 7	
<b>Course Description (brief):</b>	<p>The growth of urban centres has destroyed many habitats, but created opportunities for many species. Populations have adapted and individuals have acclimated to the environmental changes associated with urbanization. In this course, we will look at how species use novel environments that had not existed before cities, and consider how populations found in urban areas differ from populations in more natural environments, with a focus on terrestrial ecosystems. In the first week, we will spend a few hours a day with classroom and lab-based learning, with the remainder of the time making field trips to sites around London and other neighbouring communities to build their knowledge of habitats found in urban areas and to develop their skills in the field. Students will make their own observations for use in assignments. The second week is devoted to research projects of the students’ design, based in the field.</p>	
<b>Evaluation:</b>	<p>(i) <b>pre-course</b> on-line quiz based on assigned readings (5%)  (ii) 3-4 short assignments, completed <b>on-site</b>, based on field observations and data collection (30%),  (iii) <b>on-site</b> presentation of proposed research project (15%) and peer-review comments of two other research proposals (10%),  (iv) performance and report (in the style of a journal article) based on the second week’s project (40%; due approx. 5 weeks after August 16; the end of field course). When evaluating your performance we will follow UWO criteria, which can be found here: <a href="https://www.uwo.ca/academic_calendar/">Academic Calendar - Western University (uwo.ca)</a></p>	

**An Average Day – What to Expect**

(a) Daily timeline	<p>In the first week, a typical day involves lecture time from 8:30-11:30am, lunch from 11:30am-12:30pm, then a trip to the field from 12:30-5:30pm. There will be a break from 5:30-7:00pm, and either organized social time or independent work time from 7:00-9:00pm.</p> <p>In the second week, students will conduct their own experiment. Students will meet with the instructors at 8:30am and depart for the field site by 9:00am. Field collection days will take 4-6 hours, and after that, students will review their data from the day and prepare their field notes for submission.</p>
(b) Work habitat & Physical exertion	<p>Some of the work environment will seem familiar: London is a mid-sized Canadian city. There is some traffic around London Hall, so students should be careful to obey traffic signals for their own safety.</p> <p>Our field trips will take a few hours each day, and students should prepare themselves each day by packing the food and drink they need. Some field trips in the first week and data collection locations in the second week will not have washrooms: students may need to improvise if nature calls.</p> <p>Our field trips will involve walking up to 5km, and students will have to carry their own equipment into the field.</p>
(c) Common activities	<p>The class will include lecture time in the morning or evening, and independent work period in the evening. During the day, field trips will include some travel. Students should bring a small bag or backpack that they can use to carry their notebooks, pens, pencils, binoculars, water bottle, and lunch. In the field, we will be exploring sites of ecological interest in urban areas, including abandoned schools or factories, sewage lagoons, and city parks. These activities will require comfortable footwear.</p>
(d) Weather, dehydration, & biting insects	<p>August weather in London is likely to be hot and sunny, so students should come with a supply of sunscreen, a protective hat and sunglasses. But check the weather! What you choose to wear will depend on conditions that day: it's a good idea to come with at least one set of clothes to wear in cool weather. Because of the risk of ticks, we recommend that students wear long pants, so students should bring a water bottle to the field every day. Fieldwork will involve a lot of walking, so wear comfortable shoes. Mosquitos will be present, so students may want to apply insect repellent when going on some field excursions.</p>
(e) Toxic/poisonous, wildlife/ plants	<p>Much of our fieldwork will involve walking through tall grass. Students should do frequent checks for ticks. Some sites may have poison ivy. We will provide some training on what to watch for to avoid these risks, and recommend that students wear long pants that can tuck into socks, even in hot weather.</p>
(f) Sleeping, washroom & laundry facilities	<p>Some students will provide their own accommodations. Students who wish to stay in residence at UWO will have their own room in London Hall (<a href="#">London Hall   Residence</a>), which has a washroom with shower, sink and toilet, and a kitchen with stove, microwave, fridge, and sink. Bed linens and towels are provided, but students who plan to do their own cooking will need to provide pots, pans, dishes, and utensils. Laundry facilities are available in the building.</p>
(g) Meal plans & food allergies	<p>Students are responsible for providing their own meals, and should come to class every day with food for their day. Students staying in London Hall will have access to a kitchen in their suite. Time for grocery shopping will be provided on August 2 and August 9.</p>
(h) Non-academic responsibilities	<p>Students will be responsible for cleaning their accommodations upon checkout.</p>
(i) Degree of isolation	<p>The course is based out of the University of Western Ontario in the city of London. While on campus, students will have reliable access to electricity, running water, washrooms, and internet. London Hall is a short walk from a convenience store and a restaurant at the corner of Sarnia Rd. and Western Rd. University Hospital is on Western's campus.</p> <p>The course will involve some day-trips off campus, which will have reduced access to washrooms, and students should ensure that they have their electronic devices charged before these trips.</p>
(j) Alcohol & drugs	<p>Alcohol consumption is only permitted outside of class hours. Anyone judged to be unable to fully function as a result of intoxication will not be allowed to participate in field activities; and this impairment will be reflected in the student's grade for those activities. Smoking of any legal substance is permitted only in designated areas, but the rules regarding intoxication always apply.</p>
(k) Vaccinations/ Insurances	<p>OHIP (or other Canadian equivalent) is the only required insurance. We will request your health card number and information about any supplemental insurance you may have. All such information will be kept strictly confidential.</p>

## Module #14

(l) Social Situations	Field courses can be very fun! We will have a few activities at the beginning of the course where students get to know each other. In a small course with students staying in different locations, it can be easy to accidentally exclude people from impromptu social gatherings after the coursework is done for the day. Please extend invitations to group events to everyone in the class, and be aware that fieldwork is often tiring: there are good reasons for personal health to say yes to rest!
(m) Final comments	Many students live in cities but have never had an opportunity to appreciate the great variety of habitats that exist so close to home. You will learn how species have adapted to changing environments by exploiting new niches. August is a great time for seeing species in migration. There's a good chance that you'll be able to leave this course with knowledge that can impress your friends and family about wildlife that exists in their neighbourhood.