

Course Title:	Turtles: Ecology, Behaviour, and Conservation Website: https://turtlecourse.weebly.com/
Instructor(s):	Grégory Bulté, Department of Biology, Carleton University, gregory.bulte@carleton.ca
Dates:	May 7th to May 20 th , 2023 Arrival at QUBS between 16h00 and 17h30 on the 7th. Departure from QUBS before noon on the 20th.
Location:	Queen’s University Biological Station 280 Queen's University Road, RR #1, Elgin, Ontario K0G 1E0 613-359-5629
Cost:	\$1100 (\$350 non-refundable deposit to your home University. Balance paid upon registration). Includes: room, board, and lab space at the Queen’s University Biological, and research equipment Excluded: travel costs to and from QUBS. The balance (\$750) is payable to Carleton University and is required by March 21st, 2023. Students with confirmed reservations will receive emailed instructions on how to pay the course balance
Prerequisites:	Second year coursework in ecology, conservation biology, or animal behaviour. Comfortable with working near, on, and in the water.
Enrolment:	12 (6 from Carleton)
Course Description (brief):	In this course, students apply concepts and techniques commonly used in wildlife ecology, animal behaviour, and conservation biology to the study of freshwater turtles in the field. You will learn to gather data on the abundance, demography, and behaviour of selected species of turtles. You will use these data as the basis for your final report. For more information, visit the course website: https://turtlecourse.weebly.com/
Evaluation:	Data assignments: 15% Final exam: 25% Final report: 50% Participation: 10%

An Average Day – What to Expect

(a) Daily timeline	<p>The schedule will vary based on weather conditions and the availability of shared equipment and space such as boats and classrooms, but a typical workday will follow this schedule:</p> <p>7h30 to 8h30: Breakfast</p> <p>9h00 to 10h00: Lecture, workshop, or demonstration</p> <p>10h00 - 12h00: Fieldwork, turtle processing, or data entry</p> <p>12h00 to 13h00: Lunch</p> <p>13h00 to 17h30: Fieldwork</p> <p>19h00 to 21h00: Briefing and planning / Independent work</p> <p>Be prepared to work from 9h00 to 21h00 most days.</p>
(b) Work habitat & Physical exertion	<p>Turtles in Ontario live in lakes and wetlands. Most of the fieldwork will be conducted in chest waders and in canoes or small boats. Short hikes with field gear and canoe trips may be necessary to reach certain sites. Wading and canoeing are wonderful ways to get close and personal with the aquatic realm, but wading in ponds with soft mucky bottoms is strenuous so is paddling in windy conditions. You will have to demonstrate common sense with regards to sun protection, hydration, and physical exertion.</p>
(c) Common activities	<p>Common activities will include:</p> <ul style="list-style-type: none"> • Canoeing to sampling sites • Actively searching for turtles • Setting and checking nets from a boat or in waders • Installing and retrieving data collection devices • Measuring turtles and recording data • Entering and summarizing data • Performing behavioural observations in the field or from videos recorded during the course • Briefings and discussions • Cleaning and organizing field gear • Short lectures • Independent work • Taking selfies with cute turtles
(d) Weather, dehydration, & biting insects	<p>The weather in early spring at QUBS varies greatly, but the highs are generally around 12 to 20°C and the lows between 3 and 10°C. Be prepared to work in cold and rainy conditions (at least there are no bugs when it is cold and rainy!). The lake temperature is usually around 10 to 15°C. Pack clothing for rain, warm, and cold weather as well as sunscreen, and a water bottle.</p> <p>Wetlands are breeding grounds for several biting insects and blood donations to the six-legged kind is inevitable. If you strongly react to insects' bites, use insect repellent, but care should be exercised with these strong chemicals when handling wildlife.</p>
(e) Toxic/poisonous, wildlife/ plants	<p>While doing fieldwork you may be exposed to poison ivy, wild parsnip, or diseases carrying ticks. Toxic plants are easy to avoid once you know to recognize them. To limit exposure to disease carrying ticks, always wear long pants in the field, tuck your pants inside your socks and your shirt inside your pants, and perform daily tick checks.</p>
(f) Sleeping, washroom & laundry facilities	<p>Your accommodations at QUBS will be one the following:</p> <ul style="list-style-type: none"> • a single or double unheated cabin without a washroom (shared washroom with individual showers stalls are available in the main building); • a shared bedroom in a cottage or dorm house with a washroom. <p>You will only find out about your accommodations upon arrival at QUBS so pack as if you will sleep in an unheated cabin (i.e., a warm sleeping bag). Pack earplugs if you are a light sleeper.</p> <p>QUBS does not provide bedding. Bring your own sleeping bag and pillow.</p> <p>Showers have hot water.</p> <p>Coin operated laundry is available on site.</p>
(g) Meal plans & food allergies	<p>QUBS provides 3 meals per day plus snacks (e.g., fruits, bread, cereals) around the clock. The default meal plan includes meat and dairy, but vegetarian and vegan meal plans are available. The cooking staff can accommodate special dietary requirements such as allergies and intolerances. Information regarding meal plans and dietary accommodations will be provided shortly before the beginning of the course.</p>
(h) Non-academic responsibilities	<p>QUBS does not have full time cleaning staff, so students and researchers are expected to clean after themselves in both the living and working spaces.</p>

(i) Degree of isolation	QUBS is a 45 minutes drive from Kingston. WIFI is available and bandwidth is sufficient to check emails and browse, but cannot sustain high streaming and downloading demands, so we ask students to refrain from using streaming and downloading platforms. Cell phone reception is generally good around the main building, but can be patchy on the land base.
(j) Alcohol & drugs	<p>The drugs and alcohol policy for QUBS is the following:</p> <p>"Queen's University does not permit alcoholic beverages in its work buildings (Operations Centre, workshop, aquarium or labs). However, alcoholic beverages are permitted in individual residences. Keep bottles and cans out of plain sight. Even a few empties in plain view give the wrong impression to visitors to QUBS. There is zero tolerance for illegal drugs at QUBS or on QUBS properties. It is expected that QUBS users will behave in a sensible and decorous manner at all times."</p> <p>Cannabis Policy. Consumption of cannabis is subject to a number of restrictions. Smoking or vaping of cannabis is prohibited on the Queen's University campus (which includes QUBS), unless approved for medical or research use. The university's Interim Smoking of Cannabis Policy works in tandem with existing Queen's policies about Smoking on Campus. Use of recreational cannabis in the workplace is illegal.</p>
(k) Vaccinations/ Insurances	All students participating in the field course must be fully vaccinated against COVID-19 and may be required to show proof of vaccination to study at the Queen's University Biological Station. International students must have valid travel health insurance.
(l) Social Situations	For safety reasons, fieldwork will always be performed at least in pairs. Moreover, you will have to share accommodations with other participants in the course or from other field course. You must therefore be comfortable with teamwork and communal living arrangements. This course is a great opportunity to meet new people and to expand your networks of friends and professional contacts. If you think you will find the social environment of the course challenging, please contact the instructor before signing up.
(m) Final comments	<p>Collecting data on wildlife is important but catching and handling wild animals causes stress. We will thus expect students to act professionally when working with turtles.</p> <p>Academic accommodations. The field station has limited workspace and the course has a single instructor so we may not be able to provide academic accommodations such as more time for evaluations or separate examination space.</p> <p>QUBS is in one of Canada's biodiversity hotspots and it is an amazing place to meet students and researchers from other institutions.</p>