

Course Title:	Aquatic Insect Behaviour
Instructor(s):	Dr. Fiona F. Hunter, fhunter@brocku.ca and TBA
Dates:	May 1-14 2022
Location:	Wildlife Research Station on Lake Sasajewun, Algonquin Park, Ontario http://www.algonquinwrs.ca
Cost:	Total cost: \$1850. \$350 payable to your home University with your application. \$1500 balance (payable to Brock University) due by April 25th, 2022. This course fee covers all equipment and consumables required for student projects and food and accommodation for 13 days. Students are responsible for their own transportation to and from the field station. In the past, students have been able to arrange car pools with students from other Universities.
Prerequisites:	Second-year general ecology course or animal behaviour course. Experience in experimental design is recommended.
Enrolment:	20 (4 reserved for Brock University)
Course Description (brief):	Course topics will include aquatic insect collection techniques, identification of aquatic insects in the laboratory, the habitat associations of different groups of insects, and ecological interactions of common species encountered. Students will work in groups of two and carry out an independent research project on the behavioural ecology of an aquatic insect of their choice and write up a report to be handed in after completing the course. Students will also keep notes on their field observations in a field book, which will also be submitted after the field course for grading. It is expected that students will gain an appreciation of the diversity of aquatic insects in Ontario and understand the ecological roles of each of the major insect groups that have aquatic life stages.
Evaluation:	Participation in fieldwork: 10% Participation in class discussions: 10% Insect Identification quiz after Week 1: 10% Individual presentation of assigned readings: 15% Field book – notes and observations: 25% Experimental report: 30%

An Average Day – What to Expect

Daily timeline	Some students perceive field course modules as opportunities for an easy grade, a credit-based vacation. Describe an average work day that suggests otherwise (e.g., 7:00 breakfast, 8:00 field work rain or shine, 12:00 lunch break, 1:00 continuing field work, 6:00 dinner, 8:00-11pm class lectures, log books updates, student presentations). Be descriptive, identify where mental endurance tends to breakdown, but also supportive.
Work habitat & Physical exertion	Describe the work habitat and levels/duration of physical exertion required (e.g., steep rocky alpine mountain trails, daily hiking 10km with backpack; 8 hrs/day in muddy/wet wetlands buried hip-deep in waders; long day-light hours in open savanna with only bushes as toilets; twice daily underwater in full scuba gear lumbering scuba tanks and weight belts to and from dive boat). Provide sweat and tear adjectives as required. Be descriptive, highlight areas where students have had trouble in the past. But be supportive as well (e.g., water breaks, rest periods – common sense mitigation measures)
Common activities	Describe: <ul style="list-style-type: none"> • common activities (e.g., boat travel over open ocean, canoe paddling across lakes, driving over high mountain passes, night driving on secluded trails/roads, hiking through wet/muddy rainforest, long days sitting in the open rain or cold) and • associated risks (e.g., sea sickness, altitude sickness, capsizes, collisions, getting lost, twisted ankles, fatigue, blisters from poor footwear, heat exhaustion, hypothermia). Be descriptive, but supportive (i.e., common sense mitigation measures)
Weather, dehydration, & biting insects	Describe: <ul style="list-style-type: none"> • weather conditions likely to be encountered (e.g., min./max. temp, strong sun, high UV, high humidity, heavy rain/snow, high winds etc.). Consider dehydration, sun burns, heat shock, hypothermia. • what are the insects like (e.g., 24/7 mosquitoes, blackflies, no-see-ums, sand flies, deerflies, horseflies)? How should participants dress to ensure comfort and safety through typical and extreme days?
Toxic/poisonous, wildlife/ plants	Describe the natural hazards to the work/living environment (e.g., ticks & Lyme disease, mosquitoes & malaria, stinging bees/wasps/fire ants, poisonous snakes, centipedes, poison ivy, manchineel apple, large mammals, fire coral & jellyfish). How common are these risks? How are they mitigated?
Sleeping, washroom & laundry facilities	Describe: <ul style="list-style-type: none"> • sleeping accommodations (e.g., personal tents, student dorms X-many to a room, gender specific vs. co-ed, cockroaches/mice, heating/AC). Do students need to bring any of their own sleeping gear (e.g., tents, sleeping bags, pillows, no-see-um screens)? • washroom facilities (e.g., flush vs pit/squat toilets, access to toilet paper, comm. vs private showers, hot vs cold) • washing/laundry facilities (e.g., facilities readily available vs. cleaning self and clothes in local streams)
Meal plans & food allergies	Describe the typical meal plan and whether students are responsible for their own food or whether cooks are provided. How easy/hard is it to accommodate student-specific meal plans and allergies?
Non-academic responsibilities	Describe daily non-academic student responsibilities (e.g., camp chores, cooking/cleaning/sweeping duties, washroom cleaning)
Degree of isolation	How isolated are you? How easy/difficult is it for students to: <ul style="list-style-type: none"> • recharge cameras, laptops? • communicate with the “plugged-in world” • satisfy food cravings, to access stores for personal hygiene needs, missing/forgotten equipment • access medical supplies/support?
Alcohol & drugs	Is the course dry, or is alcohol permitted during off hours/ off-site? What is your marijuana policy?
Vaccinations/ Insurances	What vaccinations must/should students have? What travel insurance must/should students have?
Social Situations	Describe the social requirements (if not already addressed above) highlighting situations or conditions that can cause problems for some students (e.g., group living in close quarters, group projects, local customs/cultures that students are not familiar with, being the object of curiosity themselves). Emphasize local culture and student expectations (e.g., appropriate/respectful clothing)
Final comments	Other course specific concerns? Or, offer the carrot → notwithstanding all the above why is this course a great course (e.g., personal growth, new friends with like-mind, unique experiential opportunities etc.)?