

CARLETON UNIVERSITY
Ontario Universities Program in Field Biology

Course Title:	Fish and Fisheries: The Science Behind Conservation and Management	
Instructor(s):	Dr. Chris Elvidge (chris.k.elvidge@gmail.com)	
Dates:	April 30 – May 13, 2017	
Location:	Queen's University Biological Station (north of Kingston, ON: https://qubs.ca/)	
Cost:	<p>\$1100 (\$350 non-refundable deposit to your home university; \$750 balance). Includes: all accommodations, meals, wi-fi, use of boats and equipment and transportation during the course. Excluded: Students are responsible for travel to and from QUBS with possible carpooling opportunities. Balance: required by March 17, 2017, payable to Carleton University. Ruth Hill-Lapensee (Dept. Biology, Carleton University) will contact you with instructions for balance payment once your seat is confirmed.</p>	
Prerequisites:	<p>Second or third-year course work in ecology, conservation biology, environmental science and/or geography. NOTE: Students must be comfortable around water and boats; able to work outdoors under variable conditions. All participants must, at some point, handle live fish.</p>	
Enrolment:	12 students (3 reserved for Carleton)	
Description:	<p>Eastern Ontario is home to a diversity of freshwater ecosystems and fish species, providing an ideal backdrop for a field course examining the ecology, conservation and management of fish and fisheries. The objective of the course is to introduce students to the conceptual foundations of fisheries science and aquatic ecology research while providing them with some of the practical skills needed for research, data analysis and fisheries assessment. Through lectures and hands-on activities students will be exposed to diverse practices in contemporary fisheries research, conservation and management. Students will work in groups with the guidance of the instructors to execute their own research projects with the aim of generating data to publish in peer-reviewed journals. This will give participants the opportunity to experience the scientific publication process (after the course concludes). At the conclusion of the course, students will be able to collect fish using a variety of gear types (e.g. electrofishing, seine nets, hoop nets, rod and reel) and safely handle and enumerate (e.g. identify, measure, tag) a variety of fish species. Students will also be able to characterize fish habitat (e.g. snorkeling surveys) to gain insight on fish-environment interactions. In addition, students will be exposed to a variety of research tools used to study the behaviour, ecology and physiology of wild fish including biotelemetry, archival loggers, respirometers, field physiology sampling kits, and underwater video.</p>	
Evaluation:	Presentation (20 min) on pre-selected topic; lead 10 min discussion Field notebook Participation Write up of field research project report (due on June 9, 2017) Quiz during field course	30% 10% 10% 30% 20%

***\$350 Deposit is due at time of registration.

Tuition at your home institution is *in addition* to any field module costs.

Students who drop a field course should not expect a refund of any field course costs.

Students are encouraged to purchase cancellation insurance if airline tickets are required.

Students are responsible for all fees incurred by the home or host university due to any bounced cheque.