

CARLETON UNIVERSITY
Ontario Universities Program in Field Biology

Course Title:	Fish Ecology and Fisheries: The Science Behind Conservation and Management	
Instructor(s):	Dr. Chris Elvidge (Carleton University & University of Eastern Finland); chris.k.elvidge@gmail.com	
Dates:	April 29 – May 12, 2018	
Location:	Queen's University Biology Station (north of Kingston, ON: https://qubs.ca)	
Cost:	<p>\$1150 (\$350 non-refundable deposit to your home university; \$800 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. Balance: required by March 15, 2017, payable to Carleton University. Students with confirmed registrations will receive emailed instructions on how to pay the balance online at a Carleton University website well in advance of the deadline.</p>	
Prerequisites:	<p>Second or third-year course work in ecology, conservation biology, environmental science, geography, or behavioural science/psychology. NOTE: Students must be comfortable around water and boats and able to work outdoors under variable conditions. All participants MUST, at some point, handle live fish.</p>	
Enrolment*:	12 (3 reserved for Carleton University)	
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 seminars and hands-on activities. 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. At the conclusion of the course, students will be able to collect fish using a variety of gear types (electrofishing, seine nets, hoop nets, rod and reel) and safely handle and enumerate (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 the process of experimental design and a variety of research tools used to study the behaviour, ecology, and physiology of wild fish.</p>	
Evaluation:	<p>Oral presentation (20 min + 10 min discussion)</p> <p>Field notebook</p> <p>Participation</p> <p>Write up of field research project report (due on June 9, 2017)</p> <p>Quiz during field course</p>	<p>25%</p> <p>7.5%</p> <p>7.5%</p> <p>40%</p> <p>20%</p>

***\$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.