

QUEEN'S UNIVERSITY
Ontario Universities Program in Field Biology

Course Title:	Aquatic biodiversity & ecosystem assessment in Canada and China	
Instructor(s):	Prof. Yuxiang Wang (yuxiang.wang@queensu.ca; 613-533-6134) Prof. Steve Lougheed (steve.lougheed@queensu.ca; 613-533-6128) Course webpage: http://www.queensu.ca/wanglab/teaching/biol-307317-canada-china-exchange-field-course	
Dates:	July 23 – Aug 5, 2017 (14 days; 3 credits)	
Location:	Queen's University Biological Station and environs including the St. Lawrence River.	
Cost:	Estimated \$1,100 (\$350 deposit to home university, \$750 balance). Includes: fees, 13 nights accommodations and board at QUBS, in-class travel. Balance: due upon arrival	
Prerequisites:	Completion of second year biology or environmental program, or permission of the instructors.	
Enrolment:	14 students (2 reserved for Queen's) [in addition to OUPFB students, 16 students from four partner Chinese universities (Fudan, Tongji, China Southwest and Beijing Normal Universities)]	
Description:	<p>Based at the Queen's University Biological Station, this course provides Canadian & visiting Chinese students with experience of the impacts of human development on the environment, with focus on selected aquatic ecosystems in both Asia and North America. We introduce key conservation and environmental challenges pertaining to freshwater environments in both regions. Students learn methods for surveying biodiversity, classifying wetlands, and quantifying variation in habitat structure, hydrology and water chemistry. We provide overviews of Canadian & Chinese diversity of fish, amphibians, reptiles, birds and plants. Students will also develop practical skills in experimental design, developing hypotheses based on observations of diversity and ecosystem variation and then testing these as independent group research projects. The course is organized around five themes: i) Biodiversity assessment, ii) Habitat assessment or natural and reconstructed wetlands, iii) Aquatic environmental degradation, iv) Water control & usage, and v) Relationships between socioeconomic development and aquatic environments. The course also provides excellent opportunities for exchange of ideas on culture, academic, and socioeconomics in China and Canada. This course has a "sister" course, which can be taken in alternate years (next time in 2018) with two weeks spent in China with some of the Chinese classmates.</p> <p>Each student group (3 members) will present a research seminar on a topic assigned by the faculty. Students maintain a field journal to record all data and field observations. Each student will write a final report based on data from their independent project that will be submitted 6 weeks after the completion of the course.</p>	
Evaluation:	Course participation Field journal & blog Seminars Final report	20% 20% 20% 40%

***\$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.