

LAURENTIAN UNIVERSITY
Ontario Universities Program in Field Biology

Course Title:	Restoration Ecology: From Microbes to Fish	
Instructor(s):	Dr. John Gunn (jgunn@laurentian.ca) Dr. Nadia Mykytczuk, Dr. Peter Beckett, Dr. Graeme Spiers, Vale Living with Lakes Centre, Laurentian University	
Dates:	August 21 – September 2, 2017	
Location:	2 Field Camps: Hannah Lake, Sudbury and Research Centre, Killarney Park	
Cost:	\$1150 (\$350 deposit to home university; \$800 balance) Includes: accommodation, board, and all in-course travel Excluded: fish and chips in Killarney, travel to and from Sudbury and return from Killarney Balance: required by Aug.1, 2017	
Prerequisites:	One of ecology, plant biology, limnology or soil science are recommended. Introductory statistics will also be an important asset. NOTE: All registrants in the course must be able to swim and be physically fit for extensive hiking and overnight camping.	
Enrolment:	12 students	
Description:	<p>The field course is an experimental and research based study of natural recovery in the Sudbury Basin at one of the most famous environmental success sites in the world. Magnificent Killarney Provincial Park will serve as a comparative reference study for the mining study sites in Sudbury. Lab facilities within the “Living with Lakes Centre” will also be available to students (www.livingwithlakes.ca).</p> <p>Participants will be certified in the international ICP Waters fish dissection technique and learn other recognized assessment techniques for benthic invertebrates and early successional forests, as well as in situ and lab methodology for zooplankton toxicity and biomolecular techniques for assessing microbial communities. Our approach is to create research teams and immerse students in challenging research projects while introducing them to methods and analytical techniques that are designed to trigger their interests to pursue further studies in environmental sciences. Water based recreational activities in Sudbury (Dragon boating) and canoeing and hiking in remote reference sites in Killarney Wilderness Park will instruct, delight and provide some fun.</p> <p>On the first day of the course, each student will be required to present a 20-minute seminar and provide a brief written summary on an assigned topic (topics selected in May 2017). These seminars must be prepared in advance. Each student must submit a scientific paper in journal format on the data collected by their research team, one month after the fieldwork is completed (Note: In past courses several groups actually succeeded in getting their reports published as journal papers).</p>	
Evaluation:	Seminar (20 min) Field notes and quizzes Participation Research paper (due one month after the course ends)	20% 10% 20% 50%

***\$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.