

UNIVERSITY OF WINDSOR
Ontario Universities Program in Field Biology

Course Title:	Ecohydrology of a Tropical Pre-Montane Forest
Instructor(s):	Dr. Chris Houser (chouser@uwindsor.ca)
Dates:	April 20-May 4, 2018
Location:	Soltis Center for Research and Education, Costa Rica
Cost:	\$2500 (\$350 deposit to home university at time of registration), \$2150 balance paid to the University of Windsor by April 1, 2018. Includes: Room and board in Costa Rica; in-country travel; field and laboratory costs. Does not include: Airfare to Costa Rica. Students can arrange their own transportation to San Jose International Airport in Costa Rica.
Prerequisites:	Students should have second or third-year courses in ecology, environmental science, and/or geography. Students will need to be comfortable in the jungle. Students must be in good physical condition and be willing to hike for many hours each day, often over challenging terrain in hot tropical weather. Students must be prepared to deal with the presence of bugs, snakes, and the many other organisms that make the tropics unique.
Enrolment*:	15 (10 reserved for University of Windsor)
Description:	In Costa Rica, pre-montane forests are found at the elevation-controlled transition between lowland rainforest and lower montane cloud forests. As transition zones, tropical pre-montane forests are biologically diverse, and depend to varying degrees on orographic precipitation and the capture of this moisture by vegetation through frequent immersion by clouds and mist. A portion of the moisture captured by the canopy is released as stemflow and drip, which combined with the high humidity, low solar radiation and relatively low evapotranspiration of the wet forest, leads to greater and more continuous streamflow than is possible from precipitation alone. The objective of this course is to close the water budget for a small watershed through direct measurement of Precipitation and Fog interception, Streamflow, groundwater discharge, and Evapotranspiration. A typical field day will consist of hiking and collecting field observations in the tropical pre-montane forests of Costa Rica, collecting field data and field observations, and learning about ecohydrology through both hands-on exploration as well as lectures. Students will also participate in a service learning exercise to teach local school children about the hydrology of pre-montane forests and how they are reliable suppliers of high quality surface flow and are crucial in maintaining freshwater resources downstream, particularly in the dry season when rain is limited.
Evaluation:	Participation (field work, laboratory analysis) (15%) Field and Laboratory Assignments (5 @10% each) (50%) Field Note Book/Data Generation/Documentation (20%) Public Presentation and Demonstration (15%)

***\$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.