

UNIVERSITY OF WATERLOO

Ontario Universities Program in Field Biology

Course Title:	Costa Rica: Rainforest and Reef	
Instructor(s):	Dr. Ralph Smith (rsmith@uwaterloo.ca) and Dr. Marcel Pinheiro	
Dates:	April 27 – May 12, 2017 (16 days)	
Location:	Costa Rica	
Cost:	Estimated \$4,500 (\$350 deposit to home university; \$4,150 balance). Includes: airfares from Toronto, accommodation, surface transportation, meals. Balance: required by March 10, 2017 by cheque payable to University of Waterloo sent to Sue Whyte, Department of Biology, University of Waterloo, 200 University Ave. W, Waterloo, Ontario N2L 3G1	
Prerequisites:	Completion of second year biology program and a credit in an introductory course in ecology. NOTE: Students must be prepared for outdoor physical activities including ocean snorkeling and hiking in the rainforest and mountains.	
Enrolment:	16 students (3 reserved for Waterloo)	
Description:	An introduction to neotropical ecology. The main purpose of the course is to gain some familiarity with major Neotropical terrestrial and marine ecosystems in Costa Rica, evaluate conservation efforts to preserve habitats and biodiversity, and learn techniques of ecological observation. The course commences in the capital city, San Jose, from where we visit volcanic mountains and adjacent coffee producing areas. We then move to the Caribbean coast at the Cahuita Marine Reserve to study the coral reef as well as the coastal rainforest and its abundant animals. Next we boat in to the Parismina turtle research project south of Tortuguero National Park to observe and assist in the conservation work and to study the threatened coastal forests. Driving into the interior highlands we will observe the nature and impacts of large-scale tropical agriculture on the Caribbean slope before arriving at Savegre, high in the Talamanca mountains. At Savegre we will study the montane vegetation and cloud forests, aquatic life in the Savegre river, and the famous avifauna, including the Resplendent Quetzal. We then descend the Pacific slope and boat in to our accommodation on the still-wild Osa Pensinsula, near Corcovado National Park. We will observe the coastal forest, animals, and marine life of the Pacific coast and compare to what we saw on the Caribbean coast. A trip to Caño Island will allow us to snorkel the best Pacific coral reefs in the region. Travel will be by minibus with accommodation in good quality hotels when not in well-run (though basic) field stations. An experienced bilingual naturalist / guide will accompany us throughout the trip. Students will keep a natural history journal describing the ecosystems visited and detailing the diversity in flora and fauna. At Cahuita, we will conduct mini-research projects, mainly on coral reef ecology and biota. The itinerary and details of evaluation may be subject to change.	
Evaluation:	Natural History Journal Participation Quizzes Mini-research project Essay on neotropical ecology or biology (due June 16, 2017)	30% 10% 10% 25% 25%

***\$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.