

UNIVERSITY OF WATERLOO
Ontario Universities Program in Field Biology

Course Title:	Costa Rica: Rainforest and Reef
Instructor(s):	Dr. Marcel Pinheiro (marcel.pinheiro@uwaterloo.ca), Dr. Ralph Smith
Dates:	April 29-May 13, 2018 (15 days)
Location:	Costa Rica
Cost:	Estimated \$4,325 (\$350 deposit to home university; \$3,975 balance). Includes: airfares from Toronto, accommodation, surface transportation, meals. Balance: required by March 12, 2018 ; payment can be made electronically through shop.uwaterloo.ca under Field Trips & Course Fees.
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 snorkelling and hiking in rainforest and mountains.
Enrolment*:	16 (4 reserved for University of Waterloo); minimum 12
Description:	Students will gain 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, in the central highlands. 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 to the Parismina turtle research project south of Tortuguero National Park, where we observe and assist in the conservation work, and study the threatened coastal forests. Driving into the interior highlands we travel to the Arenal volcanic region, and visit the volcano, surrounding montane rainforest, and investigate primary succession on recent lava flows. We then travel to Monteverde, via Lake Arenal, and examine additional montane forest types, and local fauna such as coati mundi, capuchin and howler monkeys, agouti, and a diverse collection of birds. We then proceed to Palo Verde National Park to visit one of Central America's most important wetlands. After observing and learning about a wide array of birds, we continue to the region's seasonal dry forest, which is threatened. Travel will be by minibus. Accommodation is 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 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 (30%) Participation (10%) Quizzes (10%) Mini-research project (25%) Essay on neotropical ecology or biology (due June 18, 2018; 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.