

Bio181ww Tropical Ecology and Conservation

(Cross-listed as ENV 181ww)



Course Description:

This fall semester seminar and field trip is designed to provide 12 students with an in depth understanding of terrestrial tropical ecology and first-hand experience in tropical Central America. Topics to be covered include 1) community ecology, 2) ecosystem ecology, 3) physiological ecology, 4) plant-animal interactions, 5) conservation biology, and 6) sustainable agriculture. In addition to weekly readings, discussions, and writing assignments, students will write a grant proposal and present it to the class. Over winter break we will travel to Costa Rica for an intensive two-week field experience. We will gain hands-on research experience in contrasting habitats and learn about conservation efforts in Costa Rica. A typical 2-day schedule will be a morning hike followed by meetings to design group experiments, data collection in the afternoon, an evening lecture or discussion, further data collection the next morning, data analysis in the afternoon, and oral presentations that evening. Although the conditions will often be uncomfortable (very hot and humid), this is an excellent opportunity to witness the stunning beauty and diversity of Costa Rica. Offered Fall 2009 and alternate years.

Here are what the students say are the highlights of the course:

1. Learning how to present and propose research.
2. Learning how to write a proposal and executing that project.
3. The hands-on experience.
4. Designing an experiment and seeing it come to fruition in the Costa Rican rainforest.

Enrollment: Students cannot register for this *HIGH DEMAND* course via SIS online. If interested, an [application](#) must be submitted to Prof. Colin Orians by April 15th. The selected students will be notified on May 1st. Prerequisite: Biology 14 and permission.

The course is for advanced undergraduate and graduate students from different disciplines, i.e., Agriculture, Food and Environment (Friedman School of Nutrition), Biology, Environmental Studies, Fletcher School of Law and Diplomacy, and Urban and Environmental Policy and Planning. The writing workshop (ww) designation means that the course emphasizes writing as a way of learning. In science, writing involves both text and graphical presentation, and this course focuses on both aspects

Course expenses: Estimated cost of this trip is \$1,600 (financial aid is available). Dr. Orians.

Schedule: Fall Semester – Block J+ (T,Th 3:00-4:15) Barnum 113 ([Syllabus](#))
Costa Rica Trip – (December 29th to January 11th; see [draft Schedule](#))



From left to right: Andres Vega (co-leader), Jocelyn Muller, Nicole Cyr, Nadaa Taiyab, Tim Manning, Karen Kesler, Lisanne Petracca on a night walk in Corcovado National Park



From left to right: Ayron Strauch and Karen Kesler at the La Selva Biological Station