

Central American Field Ecology (BI 341) - January 2020

Trip Leader: Dr. Grant Casady

Course: Central American Field Ecology - BI 341 – 4 credits

- Fulfills **Global Perspectives** and **Upper Division Biology**

Prerequisites: 1) BI 345 Ecology *or* BI 396 Global Change Ecology

2) BI 339 – Intro to Field Studies (1 credit prep course Fall 2017)

Course Objectives: This course is intended to provide Biology students with:

1. A deeper understanding of Central American ecosystems
2. A better appreciation for the ways in which societal and ecological systems interface, especially in Costa Rica
3. Skills in designing, implementing, and reporting on a field-based ecological research project, including presentation of results at a scientific conference
4. Improved ability to measure forest and marine ecosystems and make observations

Requirements: As a part of the 1 credit prep course in the Fall (BI 339) students will work in teams to write a research proposal. During January the research will be directed by a team of students, all students will participate in gathering data for each project. Students will present their research at the Spokane Intercollegiate Research Conference, held in April 2018, and will have an incomplete until the poster has been graded. It should be noted that conditions in Costa Rica will often be wet, sometimes cold, and sometimes hot. Extensive walking and hiking will be a part of most parts of the trip. You will live in close quarters with other students and faculty. You will eat a lot of rice and beans.

Study Sites:

Quetzal Ecological Research Center (1/5 – 1/9). Our first stop will be in the high elevation cloud forests in the Talamanca Mountains, along the Savegre River. We will spend time hiking in never-harvested primary cloud forests. Past student research has evaluated nesting habitat of the endangered Resplendent Quetzal.



Sampling clams on the Pacific coast.

Tárcoles Fishing Cooperative (1/12 – 1/16).

Stop two will be at the Coope Tárcoles along the Pacific Coast. At this site we will stay with Costa Rican families in home stays. Our research will be in cooperation with the local fishing cooperative, which is making progress toward restoring their local fishery by instituting fishing restrictions on the nearby waters. Past student research has involved monitoring mollusk species in the intertidal zone for changes in population size, possibly in relation to conservation efforts.



Arenal Volcano Lodge between research sites.



Hiking along the Savegre River at QERC.

Bijagual Ecological Research (1/20 – 1/24). Our final field site will be in the low elevation rain forest along the Atlantic slope. This site has been set aside for the preservation of rain forest ecosystems in an area that has been deforested in the past. Student research at this site has focused on the feeding preferences of leaf cutter ants, and tent making bats, both important species in rainforest restoration efforts.



Resting from a swim near a waterfall at Bijagual Ecological Reserve.

Between research sites we will spend time in the capital San Jose, where we will visit museums, zoos, and cultural centers, and experience city life in Costa Rica. We will also visit the Monte Verde cloud forest and Arenal volcano.

Anticipated program fee:

- \$3,500 will cover airfare to Costa Rica, housing, all meals, and transportation
- Not covered: laundry, snacks, personal items and souvenirs, free-time activities
 - \$500 non refundable deposit due upon acceptance
 - \$500 June 1
 - \$500 July 1
 - \$500 August 1
 - \$500 September 1
 - \$500 October 1
 - \$500 November 1

Early Bird Special: Students who are timely with payments and completion of paperwork will receive a \$100 credit. In order to qualify for the EBS, a student must make ALL payments on time according to the payment plan and turn in all required paperwork in accordance with the Off-Campus Programs office's deadlines.

Off-Campus Programs Travel Grant: Program participants will be eligible to receive a \$500.00 need-based travel grant. Information regarding the application timeline will be communicated upon acceptance to the program.

Off-Campus Programs Contact Info:

- Ann Penfield apenfield@whitworth.edu; 777-4581 or
- Nick Vasiloff nvasiloff@whitworth.edu; 777-4596