

Biology 394 — Costa Rica — General Info

Spring 2008

Instructors: Dr. Fredric Janzen
343 Bessey
294-4230
fjanzen@iastate.edu

Dr. Lisa Schwanz
234 Bessey
294-1968
schwanz@iastate.edu

Course Time and Location: 4-5:30 PM in 255 Bessey

Course Content: This undergraduate course is intended to infuse global and research perspectives into your biology experience by exposing you directly to a different culture and biota and to group-based field research. In particular, we will focus on lowland tropical rainforest in Costa Rica because such habitat is a noted cradle of biodiversity, and because it has been at the heart of controversies over the social impact of conservation biology and resource use by humans. From this course, you should gain exposure to, and insight into, the value and generation of biological diversity by applying scientific principles obtained in the classroom to field research conducted in nature and by experiencing cultural diversity in a developing country with its inextricable linkage to nature. We will accomplish these goals with a mixture of lectures and a once-in-a-lifetime trip to Costa Rica.

Course Prerequisite: Instructor consent

Required Text: *To be provided*

Classes: We will lecture but we also expect free discussion. We encourage you to ask questions even if they seem incredibly simple. It won't do you any good if you don't understand what we're discussing. Thus, we expect you to attend class and to participate. There will also be an occasional homework assignment to hone your skills. The lecture portion of the course is worth 1 credit (BIOL 394A) and the trip portion of the course is worth 1 credit (BIOL 394B). Grading will be S/F in both cases.

Course Requirements:

- | | | |
|----|--------------------|----------------------|
| 1) | Attendance | All classes and trip |
| 2) | Participation | All classes and trip |
| 3) | Scientific journal | 2 April |

1) and 2) Attendance, participation, and an occasional homework assignment are the components of your grade for 394A. More than one unexcused absence or missing homework assignment will be considered grounds for failure, as they would clearly indicate lack of adequate participation. We're sure this won't be a problem.

3) The idea behind the scientific journal is to get you to look at and think deeply about your surroundings on the trip. Record facts and impressions; try to interpret and synthesize them. You will receive a handout with more information on keeping a journal. Journals are due in class (2 April) a couple weeks after we return. This will give you time to use the library and other sources to try to interpret questions and synthesize observations that you recorded in your journal during the course of our trip. Late journals will not be accepted. All journals will be returned to you by the end of the semester.

Biology 394 — Costa Rica — Syllabus

Spring 2008

<u>DATE</u>	<u>TOPIC</u>
1/16	Introductions/Gear list
1/23	History/Culture/Politics
1/30	Geology/Meteorology/Biogeography
2/6	Plants and invertebrates
2/13	Vertebrates
2/20	Scientific/Observational/Experimental methods How to keep a scientific journal
2/27	The focal field research projects
3/5	Travel protocols/Basic Spanish language skills
3/12	Finish packing gear
3/13	Meet in early morning at ISU Fly from Des Moines to San Jose, Costa Rica Stay in La Amistad Inn Hotel
3/14	Excursion with a guide (Mario Gomez) to the INBio Center (8:30-11 AM) Depart from INBio for La Selva Biological Station, arriving at lunchtime Prepare ethogram for <i>Ameiva festiva</i> along SAZ (3-5 PM) Evening orientation hike with Mario after dinner (1.5 hours)
3/15	Early morning orientation hike with Mario (7-8:30 AM) Initiate field research projects (experimental application and data collection)
3/16	Continue data collection for field research projects, with possible guest lecture
3/17	Continue data collection for field research projects, with possible guest lecture
3/18	Complete field research projects in the morning and depart La Selva after lunch Tour of rainforest and cacao plantation at Tirimbina Rainforest Center (2-6 PM) Depart for San Jose Stay at La Amistad again, eating dinner at a local restaurant

- 3/19 Excursion to Volcan Poas just north of San Jose
Visit downtown San Jose for open-air market, Gold Museum, etc.
Stay at La Amistad again, eating dinner at a local restaurant
- 3/20 Fly early morning from San Jose to Des Moines and then drive to Ames
- 3/26 No class
- 4/2 Meet to discuss trip experiences, to share photos, to obtain feedback, etc.
SCIENTIFIC JOURNAL DUE IN CLASS!
- 4/9 Meeting of the interested to discuss paper authorship and initial data analyses
- 4/16 Meeting of the interested to continue analyzing data and interpreting results
- 4/23 Meeting of the interested to continue interpreting results and begin framing papers
- 4/30 Meeting of the interested to continue writing papers