



Valdosta State University, Department of Biology
BIOL 4000: Tropical Biodiversity and Conservation: 3 credit hours

Instructor: Dr. Joshua S. Reece

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This course takes place from January 4th, 2016 through January 12th, 2016

***This syllabus is subject to modification at the instructor's discretion.
You will be notified of any and all changes***

Course Overview

Welcome to Bio 4000. This course will focus on 1) the biodiversity of the Latin American tropics of Costa Rica, and 2) conservation issues surrounding these areas. The course will involve an intensive 9 days of immersion learning that includes nature exploration, consultation with local experts on conservation issues, and exposure to cultural aspects relevant to biodiversity and conservation. The purpose of the program is to expose and educate students to these issues and to give them a more global sense of natural biodiversity and cultural attitudes towards nature. Costa Rica offers a valuable lesson to students interested in the interplay between cultures, economics, nature and conservation.

Course Objectives and Educational Outcomes

The broad objectives of this course are to introduce you to the ecosystems, habitats, flora and fauna of the Latin American Tropics, and to the issues surrounding their conservation. This course addresses Department of Biology educational outcomes 1, 2, and 5 and VSU General Education Outcomes 4, 5, and 7.

Course Prerequisites

The course prerequisite is BIOL 1107, BIOL 1108, BIOL 3200, and BIOL 3250.

Course Credits

BIOL 4000 is a three credit course

Required Texts and Materials

We will utilize peer reviewed literature for this course; there is no textbook. However, every student will purchase a field guide to the biodiversity of Costa Rica. You may purchase a general guide, or a taxon specific guide (e.g., birds, insects, plants, etc.). You should choose a guide that matches your interests. Additionally, each student will be required to bring a device for generating digital documents in MS Word. It should be possible to get a laptop on loan from VSU if you do not own a device.

Basis for Final Grade- This is subject to modification depending on the instructor's prerogative and the progress of the class.

Assignment	Group or Individual	% of final Grade	Points each	Points total
Field Guide	Individual	10%	10	10
Field Notebook / Log	Individual	5%	5	5
Pre-trip paper	Individual	10%	10	10
Field Practicals (2)	Individual	20%	10	20
Small Group Lecture	Group	10%	10	10
Paper: synopsis of research or conservation efforts in Costa Rica	Group topic, individual write-up	20%	20	20
Peer Review	Individual	5%	5	5
Post Trip Final Exam	Individual	20%	20	20
Total		100%		

- Before the course begins, you will create a field guide of 25 common plants and animals that you expect to see at the sites listed on the itinerary. This will include plants and animals common (not rare!) at these sites. List the species, its basic ecology, and unique identifying characteristics, including the time of year it can be seen/heard. This will be due on December 15th.
- Your field notebook will include an entry for every day in the field. For each day of the trip, you will log a record of the species and ecosystems we visited, relevant conservation efforts and issues, and cultural implications.
- Field practicals will be short answer quizzes of organismal ID, ecosystem features and processes, and conservation issues discussed during field trips.
- Students will form small groups of 2-3 individuals for oral presentations on a group project. For the group project, students will present on a species, group of species, or conservation issue relevant to the course. You will be assigned to a group and time to choose your topic prior to our departure. You should collaborate with your group to prepare for this presentation before we leave.
- Prior to our departure date, you will submit a 2 page, single spaced paper researching one major conservation issue in Costa Rica- an issue that is relevant to the areas and habitats that we will visit in Costa Rica. This will also be due by December 15th.
- The paper you write for the course will be a synopsis of research or conservation efforts in Costa Rica. The paper will be 12-15 pages, double spaced and 12 point font. You may choose a topic as a group, but each individual must write their own submission, using their own words and only their words. One round of peer review will be included before your turn in your final draft at the end of the course.
- There will be a multiple choice and short answer final exam that takes place during the last post-trip meeting (see dates on syllabus). This exam will cover natural history, ecosystem processes, conservation issues, and conflicts between indigenous needs and global conservation priorities.

Attendance Policy: Attendance to all field trips is mandatory while in Costa Rica. In addition, we will have one 4 hour informational pre-trip meeting in early December. After you return from the trip, there will be three, mandatory follow-up meetings where we will review your papers and conduct peer reviews. These will take place in January. Your grade will be finalized for the Spring 2016 semester.

Grade Scale: 100-90% A; 80-89% B; 70-79% C; 60-69% D, 0-59% F

Student Conduct

You will be respectful of your classmates and your instructor. Cell phone use is not allowed during class, especially not when I am lecturing in the field.

Course Policies: Technology and Media

Email: Please email me only from a VSU email account. I am unable to respond to emails from non-VSU accounts.

Classroom Devices: You may NOT use your cell phones in class under any circumstances. You may bring cell phones on field trips, but no calls are to be taken when we are working in the field, and no unauthorized use (texting, social media, etc.) of cell phones will be allowed while in the field. Phones may be used for photographing or taking GPS points when permission is given to do so.

Accommodations Statement

Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farber Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (Video Phone), and 229-219-1348 (TTY). For more information, please visit <http://www.valdosta.edu/student/disability> or email access@valdosta.edu.

Academic Integrity

Academic integrity is the responsibility of all VSU faculty and students. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the syllabus. All students are expected to do their own work and to uphold a high standard of academic ethics. Cheating (including plagiarism) will not be tolerated. The instructor reserves the right to dismiss you from the course without credit if you are caught cheating. You will be respectful of your instructor and your fellow students at all times, or you will be dismissed from the class and potentially the course.

Tentative Schedule, BIOL 4000

- Pre-trip meeting: November 3rd 3:30-4:30pm
- Pre-trip meeting with field guide and pre-trip paper due: December 15 from 5pm to 7pm
- Trip (January 4-12, 2016)
 - Day 1: 12-30-2015: Fly to Costa Rica

- Day 2: 12-31-2015: San Jose and Arenal Volcano
 - Visit INBioparque ecosystem exhibits and trails
 - Travel to Arenal
 - Visit Poas Volcano
 - Visit Hot Springs
- Day 3: 1-1-2016: Arenal Region
 - Kayaking on Lake Arenal
 - Visit La Fortuna Waterfall
- Day 4: 1-2-2016: Monteverde
 - Travel to Monteverde Reserve
 - Visit local school
- Day 5: 1-3-2016: Monteverde
 - Hike Santa Elena Cloud Forest
 - Plant trees in EF reserve
 - Canopy adventure
- Day 6: 1-4-2016: Carara
 - Carara Biological Reserve
 - Travel to Central Pacific Coast
- Day 7: 1-5-2016: Central Pacific Coast
 - Visit Manuel Antonio National Park
- Day 8: 1-6-2016: Sarchi
 - Travel via Sarchi to San Jose with six road-side stops for short hikes (focusing on ecotones)
- Day 9: 1-7-2016: Depart for home
- Post-trip Meeting #1: Jan 19 5pm to 7pm: Review material covered during trip, writing workshop for 15 page paper
- Post-trip Meeting #2: Jan 25 5pm to 7pm: Rough drafts of paper due and in-class peer review. Also review for final exam
- Post-trip Meeting #3: Feb 1 5pm to 7pm: Final draft of paper due, final exam given.