

DRAFT SYLLABUS

Primate Behavior, Ecology, Ecosystem Sustainability and Conservation

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COURSE GOALS AND DESCRIPTION

Course is directed to students interested in biological anthropology, primatology, tropical ecology, rainforest conservation, sustainability, and field biology. Each day the professor works intensively with students, present lectures, and provide background information to help students develop a conceptual framework for understanding the diversity and complexity of tropical forest ecosystems. Lectures, training in field techniques, examples of animal-plant interactions, and observations of primate behavior are designed to help students develop individual research projects. Each student is required to write a research proposal to conduct a field project, collect field data to test a set of hypotheses on primate behavior and ecology, and write a final report during the course.

In addition students will learn about the culture, food, and history of Costa Rica, and have the opportunity to meet and interact with local people who live in the communities adjacent to the field site.

On Campus Requirements:

Each student is required to attend a series of on-campus orientation meetings and proposal writing workshops. These will be held from 5-6pm beginning Thursday October 20, 2011. Class meetings will be held on Wednesday's and Thursday's in an attempt to accommodate all students.

Research Proposal

Each student is required to select one of 8 research topics (see attached form on how to write a research proposal) that best suites their background and interests. Associated with each topic I have outlined the main theoretical issues that need to be addressed in their research proposal, and a set of required readings. Each student is required to write a 5-8

page research proposal based on the handout provided. The first draft of the research proposal is due November 1st and must be sent to me as a .doc or.docx file via email. I will provide students with written feedback on their proposal including text that should be deleted, added, and revised, and articles they should read. During proposal writing workshops I will provide guidelines on how to write a quality research proposal and we will discuss the individual strengths and weaknesses of student proposals.

The second draft of the proposal is due December 1st (sent via email). Again, I will provide students with written feedback on their proposal including text that should be deleted, added, and revised, and additional articles they should read. During proposal writing workshops we will discuss the individual strengths and weaknesses of student proposals.

Students will be required to write a 3rd draft of their proposal and bring 5 double-spaced paper copies with them to Costa Rica. I will provide them with additional feedback in Costa Rica. No student can begin their research project until their proposal is approved.

GRADING

Field Techniques in Biological Anthropology. This part of the course involves supervised participation in data collecting techniques and field methods. This includes both lectures and field activities directed to learning (1) methods of collecting information on temporal changes in resource availability in the rainforest, (2) mapping a field site, and (3) methods of collecting data on the behavior on free-ranging nonhuman primates.

Research Design and Data Analysis which includes (1) developing a field project and writing a 5-8 page research proposal, (2) collection and evaluation, of your field data, (3) analysis and preparation of a written research report (20+ pages) based on your individual research project, and (4) oral and powerpoint presentation of your research results.

A minimum of 3 drafts of your research proposal are required. The first draft is due on November 7th, the second draft on December 5th^l, and students are required to bring 5 hard copies of their 3rd draft with them to Costa Rica. I will give students comments on each draft, but only grade their final draft which is due during the first week of the field course.

COURSE REQUIREMENTS IN COSTA RICA

Assignments and Class Schedule

December 27-January 12: Daily class lectures from 4:30-6:00pm

December 28- January 1st: Students will be divided into groups and assigned each day to participate in one of four field exercises. We will focus on four field techniques/exercises.

- A. Collecting behavioral data on monkeys
- B. Collecting ecological data on forest structure and habitat
- C. Using a handheld GPS unit to map a field site
- D. Analyzing behavioral data

Groups will report on what they have learned each evening. Meet with faculty each evening to discuss the schedule, activities, and equipment you need for the following day (December 28-January 2nd)

Map Quiz – to ensure that each student has a mental map of the trail system, we will have a map quiz on January 2nd. This will take 15 minutes.

Complete Final draft of research proposal January 3rd by 6:00pm. What is required is a 5-8 page written proposal indicating the OBJECTIVES AND SIGNIFICANCE, BACKGROUND, RESEARCH QUESTIONS (HYPOTHESES), METHODS, SUMMARY of your project. RESEARCH PROJECTS MUST BE APPROVED BEFORE YOU CAN BEGIN YOUR PROJECT. Detailed descriptions and definitions of behavioral/ecological variables studied should be included in an appendix. All proposals must also include a sample data sheet.

January 4th - 6:00-9:00 pm. 3-hour essay exam. The essay exam is based on in-class lectures

January 5th - students whose research proposals have been approved can begin data collection for their research.

January 11 – last day of data collection. Students must begin analyzing their data and writing their final report

January 13 - Each student must hand in a final written paper by 6:00 PM detailing the results of their research. The paper must be written as a scientific article and include a TITLE PAGE, ABSTRACT, Introduction (brief theoretical statement indicating the research questions), METHODS (be extremely specific and detailed), RESULTS (present the data), DISCUSSION (describe how your results compare to similar research on other species or theoretical issues in the field), CONCLUSIONS (list 4 conclusions of your research), REFERENCES, TABLES, FIGURES.

January 14 - Primate Behavior and Ecology Symposium on at La Suerte. Each student will give an oral presentation sharing the results of their research project. Presentations cannot be read. You can use note cards note figures/tables/overheads to assist in the presentation. As in scientific meetings you will have a maximum of 15 minutes for the presentation and 5-10 minutes for discussion.

PACK ON EVENING OF January 14 and CLASS PARTY!!!!

January 15 SO LONG, FAREWELL, GOOD-BYE La Suerte!!!! Leave La Suerte and travel to San Jose for sight-seeing and tourist shopping Spend night at hotel in San Jose.

January 16 Return to the United States

REQUIRED TEXTS :

ONLY PURCHASE ONE OF THESE TEXTS. IF YOU ARE STUDYING CAPUCHINS, PURCHASE THE CAPUCHIN TEXT. IF YOU ARE STUDYING HOWLERS, PURCHASE THE HOWLER TEXT.

(Please order on your own from campus book store or the internet).

Milton, K 1980. The Foraging Strategy of Howler Monkeys: A Study in Primate Economics. New York: Columbia University Press.

Fragaszy, DM, Visalberghi, E. and Fedigan, LM (2004). The Complete Capuchin: The Biology of the Genus Cebus. Cambridge: Cambridge University Press.

Recommended:

2011 Primates in Perspective Vol. 2. C. J. Campbell, A. Fuentes, K. C. MacKinnon, S. Bearder, and R. Stumpf. New York. Oxford University Press.

COURSE LECTURE SCHEDULE

There will be lectures scheduled every day. Generally lectures will be from 4:30-6:00pm.

Lecture topics include:

1. Orientation regarding safety, procedures and behavior at La suerte, course goals, and course requirements
2. Costa Rica: its people, economics, industry, government, and conservation,
3. U.S. Geopolitical involvement in Central America 1848-2011 (Panama, Nicaragua, Costa Rica, and the desire to build a canal)
4. Ethical issues in field research (working with the human and nonhuman primate community)
5. Introduction to primate behavior and ecology, primate traits, and theories of primate origins
6. Ancestral and derived traits, parallel and convergent evolution
7. The evolutionary history of New World Primates
8. Problems of primate locomotion and anatomical solutions
9. Body size, feeding ecology and the problems primates face when exploiting fruit, leaf, and insect resources
10. Spatial information, cognition, and perceptual cues in primate foraging behavior.
11. Rainforest ecology and primate conservation.
12. Ecotourism, bananas, pineapples, and globalization
13. Primate cognitive ecology: use of social and ecological information in decision-making
14. Tool use in capuchins and other primates
15. Primate social systems
- 16 Cooperation and competition: The evolution of sociality

Grading (FIELD TECHNIQUES and Lectures)

Map Quiz	5%
Field Techniques	15%
3 hour essay exam	20%
Proposal	15%
Data Collection	15%
Final Presentation	15%
Final Paper	15%

FINAL GRADE =

A+=>94

A= 90-94%

B+ = 85-89

B = 80-84

C+=75-79

C=70-74

D+=65-69

D=60-64

F=<60

Attendance at all lectures, presentations, and discussions is required.

The forest is a very personal experience:

Difficult to describe and impossible to photograph. It is more than 3 dimensional: space, sights, colors, textures, sounds, experiences. On the last full day at La Suerte please take the time to walk around the forest by yourself so that you can leave with a final and quiet memory of your time here.

Your experience here will be very intense. Try to maintain your energy, but if you are having physical or emotional problems, please let us know. We have been through this before and we can help. The entire La Suerte staff is here to help..

POLICIES GOVERNING ACADEMIC INTEGRITY

1. Codes of Conduct and Academic Integrity. I expect all students to adhere to codes of conduct and academic integrity that is outlined in the University of Illinois student handbook. The handbook can be found on line at [and](#) clearly spells out penalties for academic dishonesty, plagiarism, and appropriate and inappropriate conduct. The field course runs 7 days per week for 24 hours a day from July 20-August 14th and I expect all students to behavior accordingly.

Dismissal Policy: This policy is set by the University of Illinois Code of Policies and Regulations Applying to all students

1. Any behavior that endangers another person or property can result in immediate dismissal
2. Conduct with id undesirable and in violation of the University's Code of Policies and Regulations including policies on drugs and alcohol
3. Conduct that is in violation of the laws, rules and regulations, and customs of the host country
4. Behavior, whether academic or social, which constitutes a clear and present danger to the health or safety of persons or property, or threatens the future viability of the program.
5. Physical or sexual assault; harassment, unlawful possession, use or distribution of illegal drugs, alcohol abuse, setting a fire or possession of explosives, possession of a weapon, threat.

Responsible Use of Alcohol:

Responsible use of alcohol includes the following:

1. A student does not miss any scheduled event because of the effects of alcohol consumption.
2. A student does not become ill due to the effects of alcohol consumption
3. A student is respectful of others sharing the same housing
4. A student does not engage in inappropriate behavior toward other individuals that is the result of alcohol consumption
5. A student does not engage in destructive behavior toward property that is the result of alcohol Consumption
6. Use of illegal drugs is not permitted at the field station. The penalties and penal conditions for illegal drug use in Nicaragua are EXTREMELY severe. If the police catch anyone using illegal drugs, that person(s) will be prosecuted. If the staff of Ometepe catch you using illegal drugs, you will be immediately dismissed from the field school and sent home
7. A student abides by the laws of the country in which he or she is living