



MADERAS RAINFOREST CONSERVANCY

Course Syllabus

Primate Behavior and Ecology

La Suerte Biological Field Station,
Costa Rica

Instructor: LeAndra Luecke Bridgeman
Washington University in St. Louis

Second Summer Session

Duration: 4 weeks, June 22 – July 17, 2012

Credits: 3.0 (through your university)

Cost: \$2,095 USD

Teaching Assistant: Natalie Romine, University of Arizona

Teaching Assistant: TBA

Course description: *Primate Behavior and Ecology* is a field course on how to conduct research on primates in their natural habitat. My main objective in teaching this class is to foster an appreciation for the forest, the animals in it, and its conservation. There are so many things we can learn from forest ecosystem, including how to interact with it in a gentle and observant manner. We will concentrate on the two primate species found at La Suerte – the mantled howler monkey (*Alouatta palliata*) and the white-faced capuchin monkey (*Cebus capucinus*). My goals for the course are to guide students on

- 1) how to formulate a research question and design your own field study
- 2) choose appropriate field methods for conducting behavioral /ecological studies,
- 3) how to collect data in the wild and analyze it,
- 4) how to present and discuss research on animal behavior, and
- 5) how to write a technical research report.

This course emphasizes a learning environment and focuses on providing you with the information and tools you will need to conduct your own original research. Lectures on topics such as taxonomy, diet and feeding behavior, social behavior, grouping patterns, and ranging patterns will enhance your understanding of primates and what is known about them. Prior to traveling to Costa Rica, students are required to develop potential research topics and to collect reference material related to those topics. These will be turned in the week before the course begins (June 16th).

Lectures include the following topics:

- Orientation – safety and procedures to follow at La Suerte, course goals and requirements, discussion of preliminary research topics.
- Introduction to primate behavior and ecology, primate traits, and theories of primate origins.
- Primate taxonomy, New World primate history, primate social systems.
- Feeding ecology, locomotion and positional behavior.
- Tropical ecology and conservation.
- Field methods.

Hands-on instruction in the field will include behavioral data collection, mapping, and vegetation description and sampling.

Requirements and Grading:

Requirements for this course include a research proposal, collection of data for an individual research project, compilation of data and analysis of research results, and a written final report. Each student is required to give two 10-minute oral presentations; one on a published article related to your specific research question and one on your own project at the end of the course. All writing assignments during the course will be hand-written. Your final paper, due after the course is over, will be in electronic format. Attendance at lectures and participation in group assignments is required. A final exam over course material presented in lectures will be given on June 29th.

Group Participation and Lecture Attendance 10%
Background Research and Writing Assignments 20%
Field Notebook 10%
Cumulative Exam 15%
Oral Presentations 20%
Final Paper 25%

Required Texts (shop around for used copies – you don't need brand new ones):

- ***Primate Behavioral Ecology, Fourth Edition.*** Karen B. Strier. Prentice Hall (2010). ISBN: 0205790178
- ***Measuring Behavior: An Introductory Guide, Third Edition.*** By Paul Martin and Patrick Bateson. Cambridge University Press (2007). ISBN 0521535638

Required Reading (sent as .pdf files via email):

- ***New Perspectives in the Study of Mesoamerican Primates: Distribution, Ecology, Behavior, and Conservation.*** Alejandro Estrada, Paul Garber, Mary S. Pavelka, and LeAndra Luecke, Eds. Springer (2006). Chapter 1.
- ***Primate Ecology and Social Structure, Vol. 2 New World Monkeys.*** Robert W. Sussman. Pearson Custom Publishing (2003). Chapters 3 and 4.

Tentative Schedule and Assignments:

Before the course begins, you need to read Sussman (2003), Chapters 3 and 4, which I will send to you as .pdf files. Also read Martin and Bateson (2007), Chapters 1, 2, and 3. We will use Strier's book extensively for background on topics in primate behavioral ecology – I suggest browsing through it and reading up on topics that interest you as possible research projects.

You will send me (via email) some ideas for research projects in which you are interested before we leave for Costa Rica. We can discuss your ideas and I can help you get background articles on the topics you may use.

- June 1. Turn in potential research questions (via email: see above).
- June 21. Arrive in San Jose and spend the night in hotel.
- June 22. Travel to field station. Forest walk and orientation.
- June 23. Work on research questions and discuss projects. Organization of research paper. Begin background research. Lecture 4-6pm.
- June 24. Field method rotations. Lecture 4-6pm. Finalize research questions and write proposal.

June 25. Field method rotations. Lecture 4-6pm. Oral presentations of published articles.
 June 26. Field method rotations. Lecture 4-6pm. Finalize methods and turn in proposals.
 June 27. Begin data collection (ALL PROJECTS MUST BE APPROVED PRIOR TO BEGINNING DATA COLLECTION). Lecture 4-6pm.
 June 28. Data collection. Lecture 4-6pm. Study for exam.
 June 29. Data collection. Exam 4-6pm.
 June 30. Data collection. Begin writing background section for paper.
 July 1. Data collection. *Movie night!*
 July 2. Data collection. Conservation exercise.
 July 3. Data collection. Work on background section for paper.
 July 4. Data collection. Turn in background section.
 July 5. Data collection. Project consultations (7-8pm). Night hike (optional).
 July 6. Data collection. Project consultations (7-8pm). Night hike (optional).
 July 7. Data collection. Project consultations (7-8pm). Night hike (optional).
 July 8. Data collection. Confirm airline reservations.
 July 10. Data collection. *Movie night!*
 July 11. Last day of data collection. Begin data compilation.
 July 12. Data compilation and analysis.
 July 13. Data compilation and analysis. Turn in hand-written final paper detailing results of research.
 July 14. Work on presentations.
 July 15. Symposium – presentations of projects and results. Last night class party.
 July 16. Field Trip? Return to San Jose and spend night in hotel.
 July 17. Return home.
 July 25. Final research papers due 6pm CST (via email).

Materials needed (not an extensive list):

- Data book – Rite in the Rain[®] Journal Spiral Notebook. The lowest price I have found on these is at www.riteintherain.com
- Watch with a timer that you can set to sound at specific intervals
- Binoculars (10x40 magnification/distance is suggested)
- Flagging tape (1 roll)
- Compass
- Rubber boots (It is very muddy in the rain forest!)
- Bug spray (at least 2 bottles)
- Rain poncho
- Ruled paper notebook(s)
- Pens/pencils
- Swimsuit
- Mosquito net
- Towels

Academic Integrity Policy

All students are expected to follow policies regarding academic integrity outlined in the Washington University Policies and Procedures pages found on the University's website at (<http://www.wustl.edu/policies/undergraduate-academic-integrity.html>). Policies and penalties regarding academic dishonesty, plagiarism, and inappropriate conduct are outlined therein.

Policies on Behavior

Additional grounds for dismissal based on conduct:

- 1) Breaking regulations outlined in the Washington University Student Handbook, including:
- 2) Violation of laws, customs, rules and regulations of the host country.
- 3) Any behavior that constitutes a clear and present danger to the health or safety of people or property, or threatens the future viability and reputation of the field station.
- 4) Physical or sexual assault or harassment; unlawful possession of illegal substances; alcohol abuse; possession of weapons.
- 5) Illegal substances – use of drugs at the field station is not permitted. The penalties and penal conditions in Costa Rica are EXTREMELY SEVERE. If staff catches anyone doing drugs while under the care of the field station, you will be dismissed from the course and immediately sent home.

Responsible Use of Alcohol

This policy is outlined on the Washington University website at

<http://www.aisweb.wustl.edu/hr/empld.nsf/pages/dapolicy>. Responsible use of alcohol includes the following:

- 1) A student does not miss a scheduled event because of the effects of alcohol consumption.
- 2) A student does not become ill due to effects of alcohol consumption.
- 3) A student does not disrespect other students sharing housing due to the effects of alcohol consumption.
- 4) A student does not engage in disrespectful or inappropriate behavior towards other students, instructors, or employees of the field station due to alcohol consumption.
- 5) A student does not engage in destructive behavior toward property as a result of alcohol consumption.

This field course runs for 25 days, 24 hours a day and the above regulations apply for its entirety. These policies are in place to ensure a safe and happy time in Costa Rica for everyone. The field school experience is one-of-a-kind and is meant to be an educational one, but it is also meant to be fun. You will make new friends, live in a different culture, and see a beautiful part of the world! We can't wait to welcome you to La Suerte...please email me if you have any questions or require more information.

Saludos,

LeAndra

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