

ANTH-170  
PRIMATE BEHAVIOR AND HUMAN EVOLUTION  
Fall Semester 2006, Monday and Wednesday, 3:30-5:00 PM

Eduardo Fernandez-Duque, Assistant Professor, Department of Anthropology
Room: 431 University Museum, Phone: 215-898-1072
E-mail: <a href="mailto:eduardof@sas.upenn.edu">eduardof@sas.upenn.edu</a> Website: <a href="http://www.sas.upenn.edu/~eduardof/">http://www.sas.upenn.edu/~eduardof/</a>
Office Hours: Wednesdays, 14:00 to 15:00 or by appointment

### COURSE DESCRIPTION

The course examines the diversity of the living primates, as well as their behavior and evolution. We will look at the ways in which individuals compete with one another to survive, mate and rear their offspring and how their behavior interacts with ecological factors to produce the sorts of societies that we see among primates. We will also consider how our studying of living primates can help us understand the evolution of human behavior.

### COURSE REQUIREMENTS (total of 100 pts):

1. Zoo visit (10 pts)
2. Reading assignment (15 pts)
3. One mid-term Exam (20 pts)
4. Cumulative Final Exam (25 pts)
5. Review Paper (30 pts)

#### Zoo Visit

We will go to the Philadelphia Zoo during the morning (9:00 to 13:00) of Saturday, September 23<sup>rd</sup>. The details of this assignment will be provided later since it will depend on the number of students enrolled in the class.

#### Reading Assignment

There will be four lecture periods used to discuss the assigned readings. At the beginning of each of those four lecture periods you will need to turn in a printout with two questions you have written that are related to the readings. We will use some of those questions for discussion. You will be evaluated on the quality of those questions as they reflect how well you did the readings and how much you thought about them.

#### Midterm and Final

The midterm and final examinations will be based on the lecture material and assigned readings and will consist of a combination of short essay questions, defining and explaining terms, and multiple-choice questions. **Makeup examinations will only be given with a documented medical excuse.**

#### Review Paper

The Review Paper is a major component of this course. You will write on a subject of your choice that will include both a topical focus and a taxonomic topic (e.g. sexual dimorphism in the genus *Papio*). Writing the paper will require from you a very good understanding of the theoretical principles discussed in class so that you can apply them to explaining some data available in the literature. The paper must contain the following sections: *Introduction, Current ideas on the topic, Recommendations for future research, Conclusions, and Literature reviewed*. Length of the paper: 8-10 pages, double-spaced, Times New Roman 12 pts., 1 inch margins or less all around (Points will be discounted if these directions are not followed).

Deadline: Monday December 4, 3:30 PM, before class begins, is the deadline for turning in the final paper (25 pts), 10% deduction of final grade of the paper per day late.

## CLASS ATTENDANCE

Attendance is essential for doing well in this course. All information discussed in class (e.g. questions from students, debate following a lecture) can be included in any of the exams.

## FINAL GRADE

The final grade in this course will be based on the sum of the scores on all assignments.

Grading will be based on the following cut-offs:

100% = A+,	87 – 89% = B+	77 – 79% = C+	67 – 69% = D+
95 - 99% = A,	83 – 86% = B	73 – 76% = C	63 – 66% = D
90 – 94% = A-,	80 – 82% = B-	70 – 72% = C-	60 – 62% = D-      <60% = F

## REQUIRED READINGS

There is one required textbook for the class: Campbell, CJ et al. Primates in Perspective.

Oxford University Press (2007). ISBN: 978-0-19-517133-4.

Since one goal of the course is to be able to read and evaluate scientific literature, I have organized a set of readings for each of the topics discussed in class. These readings (research articles, book chapters, popular notes) are designed to complement as well as supplement the lectures. Supplemental readings will be placed on line as PDF or Word files through Blackboard. You should expect to find some questions from the readings on the midterm and final examinations.

## CLASS TOPICS

### Part I: Primate Diversity, Distribution, and Taxonomy

- Introduction to the Order Primates
- Lemurs, lorises, and galagos
- Tarsiers and New World monkeys
- Old World monkeys
- Apes

### Part II: Principles in the Study of Primate Behavior and Ecology

- Evolution, natural selection, fitness, and the importance of kinship
- Population biology, demography, and life history
- Nutrition, diets, and foraging strategies
- Ranging patterns and territoriality
- Sociality and grouping - avoiding predation and acquiring food
- Sexual selection - intrasexual competition and mate choice

### Part III: Socioecology of Survival, Mating, and Parenting in Primates

- Ecology of mating systems - resource distribution and defensibility
- Reproductive strategies of females
- Reproductive strategies of males
- Parental investment and conflicts between parents and offspring
- Differential investment, paternal care, and nonparent-infant interactions
- The ecology of dispersal patterns
- Social relationships, dominance, and the significance of rank
- Cooperation and alliances - altruism, kinship, and reciprocity

### Part IV: Some Final Issues

- Primate community ecology
- Human threats to primates and primate conservation biology