

**ANT 351E (Unique # 31395)**

**PRIMATE EVOLUTION**

**SPRING 2011**

**TTH 9:30-11:00 SAC 5.172**

**PRIMATE EVOLUTION WEBSITE:** <http://www.laits.utexas.edu/shapiro/>

username: shapiro

password: pr1mate (yes that's a 1, not an i)

**Remaining course materials on blackboard:** <http://courses.utexas.edu>

Instructor:

Liza Shapiro

Office Hours: Tues and Thurs. 11-12 or by appointment

SAC 5.128

Phone: 471-7533

Email: [liza.shapiro@mail.utexas.edu](mailto:liza.shapiro@mail.utexas.edu)

If you can't come to my office during office hours, please feel free to call at any time and make an appointment! You are also welcome to communicate with me by email.

Prerequisites: ANT 301 (You will be best prepared for this course if you have had ANT 301, ANT 432L, or ANT 348-Human Evolution).

**Course description:**

This course is an examination of the fossil record for nonhuman primate evolution. After a basic grounding in the anatomy, ecology, and systematics of living primates, we will explore each of the major radiations of fossil primates with respect to adaptive diversity, functional morphology, and systematics.

**Course objectives:** After taking the course, you should understand:

- 1) the systematics of living primates including the basic anatomical differences that distinguish them functionally and phylogenetically.
- 2) current methodologies for reconstructing phylogenetic relationships among primates
- 3) how the study of functional morphology in living primates can be applied to the reconstruction of behavior in fossil primates.
- 4) the adaptations and phylogenetic relationships among fossil primates, and the relationship of fossil primates to living primates.

### Textbooks/Readings/Websites:

**Required Textbook:** Fleagle, J. (1999) Primate Adaptation and Evolution Academic Press. Available at the University Co-op.

**This book is on reserve in the Life Sciences Library if you don't want to purchase it.**

**Optional textbook:** (a useful reference for comparative primate skeletal anatomy; will facilitate your lab observations and assignments). Available at the University Co-op.

**Whitehead P, Sacco W, and Hochgraf S (2005) A Photographic Atlas for Physical Anthropology. Morton Publishing Company. This book is on reserve in the Life Sciences Library if you don't want to purchase it.**

### Other Required Readings:

#### **On Blackboard:**

In addition to the textbook readings, there will be supplementary readings available in pdf format on BLACKBOARD. See Reading list in "Syllabi" on Blackboard. The pdfs will be found under "Assignments" on BLACKBOARD (<http://courses.utexas.edu>).

**PRIMATE EVOLUTION WEBSITE :** <http://www.laits.utexas.edu/shapiro/>. To log on, use username: shapiro, Password: pr1mate. This website has been developed by me, UT Anthro graduate students, and the College of Liberal Arts. You can use this website as a backup to other assigned course readings. You will also be given specific assigned readings from it, and you will be assigned 5 digital laboratories you can link to from the website (see "Lab assignments" below).

NOTE: The Primate Evolution Website is a work in progress. I would appreciate feedback on any bugs you find. Reasonably significant feedback can earn you extra credit in the class.

### Course requirements:

**Lab assignments: You will complete 4 in-class labs using fossil cast material, plus 5 digital labs.**

**In-class labs:** There are four lab assignment sheets available for download from Blackboard. See "Assignments" on Blackboard (<http://courses.utexas.edu>). Labs will be held during regular class hours (see syllabus). You are required to bring your lab assignment with you to class on lab days (along with your class notes). You will hand in your lab answer sheet before you leave class.

**Digital labs** –From the main page of the Primate Evolution Website, <http://www.laits.utexas.edu/shapiro/>, click on **Electronic Laboratories**. This will lead you to the assignments and downloadable answer sheets. You must hand in the answer sheets **at the beginning of class** on the following dates (see syllabus):

**Digital Lab 1:** Early Primates:

Due March 8

<b>Digital Lab 2:</b> Early Anthropoids:	Due March 29
<b>Digital Lab 3:</b> Subfossil Lemurs:	Due April 12
<b>Digital Lab 4:</b> Fossil Platyrrhines	Due April 19
<b>Digital Lab 5:</b> Fossil Hominoids	Due April 28

**Exams:** There will be 3 exams; the third exam is given on the last class day and is not cumulative. Each exam will consist of a variety of types of questions, such as multiple choice, short answers, and essays.

**Paper:** Each student will be required to write a 5-10 page paper, double spaced, 12 pt. font. The focus of the paper will be to compare primary (journal articles) and secondary (science reports from the popular press) sources on the same topic within primate evolution. Further information on the term paper can be found on a separate handout.

### **Grading**

Exam 1	20%
Exam 2	20%
Exam 3	20%
Paper	20%
Lab assignments:	20%

### **Course policies:**

The following policies are not intended to be harsh, but are included to provide clear guidelines on issues that students often face throughout the semester.

### **Make-ups**

There will be no make-up exams or in-class labs. Exceptions will be made only 1) with *proof* of dire emergency or illness, 2) due to observance of a religious holy day, or 3) due to military service.

**Note:** The 3<sup>rd</sup> exam is scheduled for the last week of classes. If you have other exams scheduled that week, plan to budget your study time well. This happens often, so I cannot give special consideration to students in this situation. I will also not provide alternative exam times for students who have personal travel plans or commitments, so please don't ask.

**Illness or emergency:** If you miss an exam or lab due to illness or emergency, contact me *as soon as possible* either before the exam or within 2 days after the exam or lab. You will not be given a make-up unless you can provide documentation regarding the reason for your absence.

**Religious holy days.** A student who misses classes or other required activities, including examinations, for the observance of a religious holy day should inform me as far in advance of the absence as possible, so that arrangements can be made to complete an assignment within a reasonable time after the absence.

**Absence for military service.** In accordance with section 51.9111 of the Texas Education Code, a student is excused from attending classes or engaging in other required activities, including

exams, if he or she is called to active military service of a reasonably brief duration. [The maximum time for which the student may be excused has been defined by the Texas Higher Education Coordinating Board as "no more than 25 percent of the total number of class meetings or the contact hour equivalent (not including the final examination period) for the specific course or courses in which the student is currently enrolled at the beginning of the period of active military service."] The student will be allowed a reasonable time after the absence to complete assignments and take exams.

**Students with disabilities:** At the beginning of the semester, students with disabilities who need special accommodations should notify the instructor by presenting a letter prepared by the Services for Students with Disabilities (SSD) office. To ensure the most appropriate accommodations can be provided, students should contact the SSD at 471-6259. See <http://deanofstudents.utexas.edu/ssd/>

### **Late assignments**

Late term papers or labs will cost you 10 points (out of 100) per day. This could change your grade dramatically. Don't be late!

### **Attendance**

I do not take formal attendance, but I am aware of who consistently comes to class and who doesn't. Consistent attendance can help boost your grade if you end up with a borderline final grade. Whether you come to class or not, you are responsible for keeping up with what happens in class. This applies to the content of the class, handouts, and announcements about class policies, events, deadlines, etc. Lectures and announcements can be found on Blackboard, but it is easy to miss other pertinent information if you are absent from class.

### **Grades**

The grade you are given, either on an individual exam or assignment or as your final grade, is not the starting point of a negotiation. It is your grade unless an error has been made. If you think an error has been made, let me know within one week of receiving the assignment or exam grade.

**\*\* Important!** I do not offer "extra credit" opportunities. If you are struggling in the course, please come for help *during* the semester when there is still time for me to help you. Take advantage of my office hours or make an appointment with me.

Do not wait until the course is over and ask me to change your grade because you are trying to graduate, or you have had a tough time with your personal life this semester. By then, it is too late for me to help you.

### **Scholastic Dishonesty**

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from The University. Scholastic dishonesty" includes, but is not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the

prior permission of the instructor), or the attempt to commit such an act. For more information, see [http://deanofstudents.utexas.edu/sjs/acint\\_student.php](http://deanofstudents.utexas.edu/sjs/acint_student.php) and Chapter 11 in <http://deanofstudents.utexas.edu/sjs/downloads/InstitutionalRules1011.pdf>

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 SPRING 2011  
 DR. LIZA SHAPIRO**

**SCHEDULE: Lectures, labs, exams**

JAN	18	INTRODUCTION
	20	What is a primate?
	25	Reconstructing phylogenetic relationships
	27	Movie
Feb	1	Extant primates I: Strepsirrhines
	3	Extant primates II: Haplorhines - Platyrrhines
	8	Extant primates III: Haplorhines - Catarrhines
	10	<b>In-class Lab 1- Extant primates</b>
	15	Primate origins: Hypotheses
	17	<b>EXAM 1</b>
	22	The Paleocene fossil record + Adapoids I: Morphology and adaptations
	24	Adapoids II: Phylogenetic relationships
Mar	1	Omomyoids I: Morphology and adaptations
	3	Omomyoids II: Phylogenetic relationships
	8	<b>In-class Lab 2: Early primates (hand in Digital Lab 1: Early primates)</b>
	10	Early anthropoids I: Morphology, adaptations of Eocene anthropoids
	15	SPRING BREAK
	17	SPRING BREAK
	22	Early anthropoids II: Morphology, adaptations of Oligocene anthropoids
	24	Early anthropoids III: Phylogenetic relationships
	29	<b>In-class Lab 3: Anthropoid origins (hand in Digital Lab 2: Early anthropoids)</b>
	31	Review for Exam 2
Apr	5	<b>EXAM 2</b>
	7	Strepsirrhine evolution
	12	Platyrrhine evolution ( <b>hand in Digital Lab 3: Subfossil lemurs</b> )
	14	No class: work on Digital Lab 4.
	19	Cercopithecoid evolution ( <b>hand in Digital Lab 4: Fossil Platyrrhines</b> )
	21	Hominoid evolution I: Early Miocene/Adaptations and phylogeny
	26	Hominoid evolution II: Mid-Late Miocene /Adaptations and phylogeny
	28	<b>In-class Lab 4 Miocene primates (hand in Digital Lab 5: Fossil Hominoids)</b>
	3	Review for Exam 3 ( <b>Paper due today!</b> )
May	5	<b>EXAM 3</b>

**\*\* Paper due May 3**