



Anthropology 1L (1 unit) Laboratory in Physical Anthropology



Instructor: Autumn Cahoon
Office Hour: MW12-12:30
Office: V231

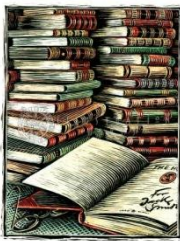
Email: ACahoon@sierracollege.edu
Class Time: 2:00-5:05 Wednesday
Location: V222

CATALOG DESCRIPTION

Introductory laboratory course designed to investigate the science of biological anthropology. Areas of study include: the production and distribution of genetic variation, human osteology, human variation, comparative primate taxonomy, behavior and osteology, and fossil evidence for human evolution. Field trip required.

COURSE DESCRIPTION

This course is designed to assist students in experiencing physical anthropology as a three-dimensional science. Osteology, forensic anthropology, genetics, non-human primatology, anthropometry and human evolution are among the anthropological disciplines introduced. The osteological material in the lab is intended to assist the student in becoming familiar with the characteristics of skeletal remains and with the variability that may exist in various populations. Meets General Education area B3.



REQUIRED TEXT

Method and Practice in Biological Anthropology: A workbook and laboratory manual for introductory courses Samantha M. Hens ISBN 0132250063

GRADING

1) Tests: The course is based on four (4) tests that are worth 100 points each (for a total of 400 points). Tests are not cumulative in content, but you are expected to gain conceptual tools as the semester progresses. Each test will cover a unit of material covered in class: 1) human osteology and forensics, 2) human genetics, 3) primatology, and 4) human evolution.

These exams will be “lab practicals” involving the visual and metric identification of specimens and their characteristics. Many students are unfamiliar with this format. Thus, regular attendance will allow you to experience the format and types of questions presented.

It is absolutely essential for you to be ON TIME on test days. If you are late, you will not be allowed to take the test until an appropriate starting time can be arranged to fit you in. Due to the nature of lab practicals, lab exams cannot be taken at any other time than the time scheduled.

2) Zoo Report: You will be required to attend the Sacramento Zoo, at least one time during the semester to complete a Zoo Report on the primate species available there. Detailed instructions will be presented later in the semester. The Zoo Report is worth 100 points and is **DUE November 7th** at the beginning of class!

3) Lab Assignments: Each lab day there will be assignments that we will work on in class, and occasional homework/take-home assignments. Most of these will be in the lab manual – you must bring the text to class EVERY DAY. The lab work assignments will be discussed at the end of the day that they are completed in class. You will earn lab assignment points for participating in the lab activities and completing lab assignments. If you are not in class, with your book, you will not be able to earn points for any day that you miss. Any take home assignments will be due the following class period and will be collected for lab assignment points. On days that we watch a video in class, attendance will count as the lab assignment for the day and will be worth points. Each day, including exam days (with the exception of the 4th exam), will be worth 10 points for a total of 150 points.

4) Pop Quizzes and Pre-lab assignments: At the end of each chapter is a page of multiple choice/true-false pre-lab questions. You are required to have these questions completed prior to the beginning of class on the date the chapter is required for class. On 5 of the 15 class days I will either collect the pre-lab questions or give a short 5 question quiz within the first 5 minutes of class. **IF you arrive AFTER the quiz has been given or the pre-labs collected, you will lose these points!** Each pre-lab and quiz is worth 10 points for a total of 50 points.

ABSOLUTELY NO LATE ASSIGNMENTS ACCEPTED!

There are a total of 700 points in the class. To find out your grade, add all points together and divide by 7. Grades are calculated on a straight scale with no curve.

A = 90.0 - 100% B = 80.0 – 89.9% C = 70.0 -79.9%
D = 60.0 – 69.9% F = < 59%



Academic Honesty: If a student is found cheating on any of the assignments or exams in this class, the student will receive ZERO points for that assignment/exam.

Extra Credit

There will be **two** opportunities to earn extra credit. You will be able to do a little extra work on the zoo assignment for up to 20 points which is due with the zoo report, and/or you can design a video or powerpoint presentation of a hominid group for up to 30 points. Details for the poster/video are located on blackboard. During the course of the semester, other extra credit opportunities **may** become available, however extra credit points may not exceed 10% of the total points in the class.

Make - up Exam Policy

Due to the nature of the course and the content of the tests, taking exams at any time other than that scheduled is not possible. However as situations do arise that require students to miss class, a cumulative exam will be offered for students who miss a section exam. The make-up exam will be given during the last week of the semester and is given by appointment with me or in the testing center. The cumulative exam may NOT be taken to improve a low test score!

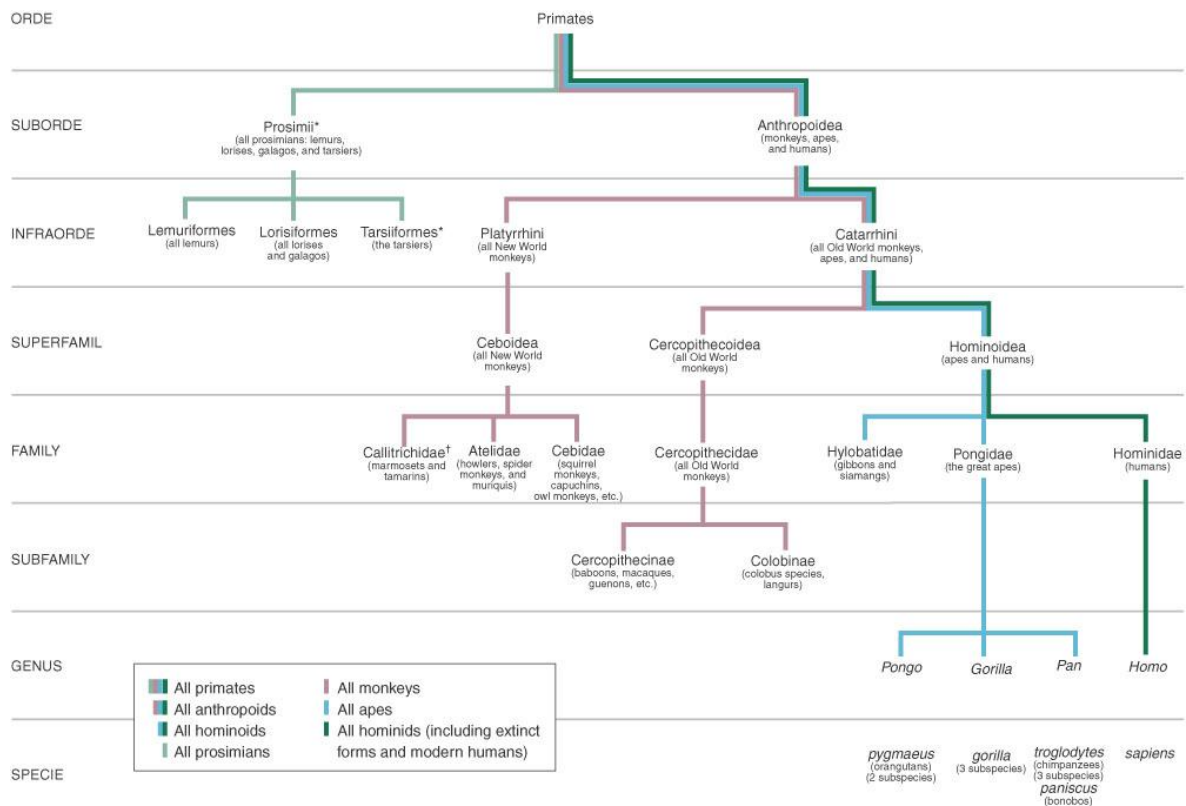
Drop Policy: After the second week, I will not drop anyone from this course for non-attendance, that is the responsibility of the student.

BE ADVISED! Anth 1L is a lab course that is equivalent in workload and level of difficulty to the other Natural Science one unit lab courses (e.g. biology, chemistry, physics). Thus, be prepared to do some work! The good news is ... regular attendance, listening, and filling out worksheets/labs, should get you a good grade in this class. The best way to succeed in this class is to show up for all classes!

Classroom Rules:

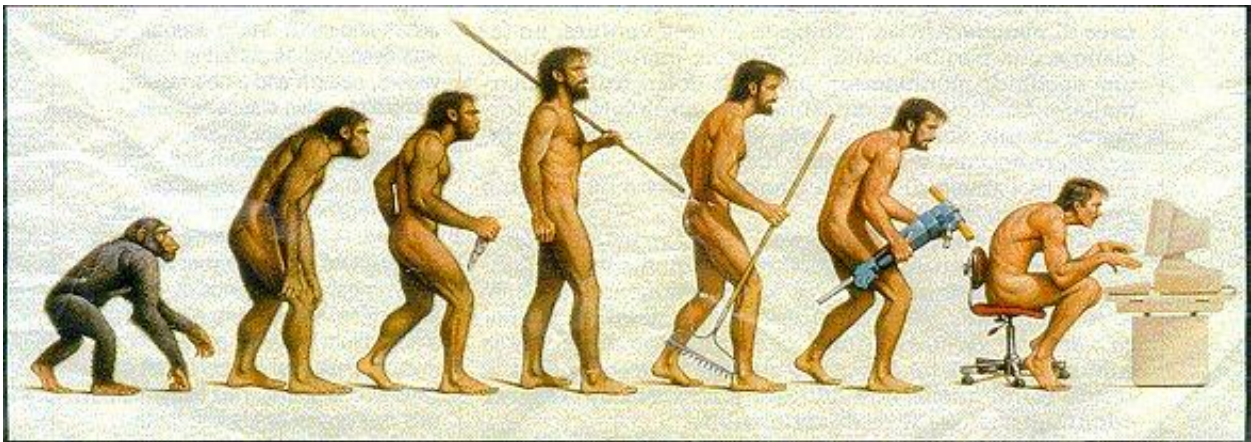
There is to be no food or drink brought into this room while lab materials are out (water bottles with screw on caps are ok). If you bring food or drink into the class room, you will be asked to remove it.

Many of the lab materials are fragile and very expensive; treat them with care and respect. There is to be no use of cell phones, iPods, blackberrys, laptops, etc. during class hours. You may use them before class, but they must be **put away** prior to the beginning of class. If I see any of these being used you will be warned once, and asked to leave class on the second offense.



CLASS SCHEDULE

8/22	Intro to Class, Intro to Osteology, Dentition, and the Skull	Chapters 6 and 8
8/29	Skeletal Biology	Chapters 6,7, and 8
9/5	Forensics	Chapter 9
9/12	Exam 1, Scientific Method	Chapter 1
9/19	DNA, RNA, and Basic Genetics	Chapters 2 and 3
9/26	Blood Typing and Pedigree Analysis	Chapter 4
10/3	Hardy Weinberg Population Genetics	Chapter 5
10/10	Exam 2 and Primate Video	
10/17	Primate Classification and Adaptations	Chapters 10 and 11
10/24	Sexual Dimorphism; Diet and Dentition	Chapter 11
10/31	Primate Behavior and Zoo Report Review	Read Chapter 12
11/7	Review and Exam 3	Zoo Report Due!
11/14	Class Canceled – Instructor at a conference Watch online video - Fill out worksheet for lab credit and submit online!	
11/21	Bipedalism and Australopithecines	Chapter 13
11/28	Genus <i>Homo</i>	Chapters 14 and 15
12/5	Review and Exam 4	



Zoo Report (100 points) – Sacramento Zoo

1) You must complete a classification chart (found on page 2) of **three different primate** species that you observe at the Sacramento Zoo, one Prosimian, one Monkey, and one Ape (15 points each). Most of the info will come from your observation, but some may have to be looked up in the text or on signs at the zoo.

Extra Credit will be given for classification charts of up to two additional species. (10 points of extra credit for each additional species classification chart.) Be sure to mark which are the extra credit classification charts. A digital copy of this chart can be found on blackboard.

2) Select *one* of the primate species from the classification charts for a more detailed observation. You will need to choose a species with multiple animals in the enclosure. If your first choice species is being inactive, look for a species that is displaying some activity. Observe this species for 30 minutes focusing specifically on the interactions between the different animals in the enclosure and any interactions between the animals and the other zoo visitors. Pay close attention to grooming behaviors, dominance/submission, facial expressions, vocal calls, etc. While you are observing the species take detailed notes of all the behaviors of the primates under observation. Then you need to write up a *chronological list* of your observations as a bulleted list.

3) Write a paper discussing the following (each should be a separate paragraph):

- Discuss the basic behaviors and interactions you observed in your focal species
- What unique/different behaviors did you observe that probably would not occur in the wild? How might you explain this?
- Discuss how the confined zoo environment may differ from the natural environment for this one species?
- What did you think of the entire experience, both going to the zoo as well as the assignment as a whole.

Writing Requirements:

The project will be graded for both content (90% of grade) and grammar (10% of grade). Paper should be typed with a black 12 point standard font (preferably Times New Roman). If you get information for the written paper from a source other than personal observation of the primates, you will need to cite these using MLA parenthetical citations and include a works cited page.

Grade:

45 points – 3 Classification charts
20 points – 30 minute observation detailed bulleted list
25 points – Questions paper
10 points – Grammar and spelling

The Zoo Report is Due on November 7th!

You must submit a printed copy of all 3 parts at the beginning of class on November 8th and a digital copy of parts 2 and 3 online in blackboard by November 7th at midnight.

Primate Classification Chart

Fill out the chart completely for the primate species you choose to observe.

Common name:_____

Suborder:_____

Superfamily:_____

Family:_____

Genus:_____

Species (also list subspecies if applicable)_____

Scientific name:_____

Number of primates observed in enclosure:_____

Describe the coloring and any identifying markings of the primate:_____

Identify the primate group (Prosimian, New World Monkey, Old World Monkey, Ape):

Describe the features that you used to identify which primate group this species belongs to:

Is there sexual dimorphism in this species, if so, describe what is dimorphic:_____

In which countries does this primate live in the wild:_____

Describe the natural habitat of this primate:_____

What is this primate's natural diet in the wild:_____

What is this primate's natural locomotion pattern? (this may be different from what you observe)
