Introduction to Graduate Biological Anthropology Part I: Primate Morphology and Evolution

ANT 392L Unique # 31910 Fall 2018

Course website on Canvas: http://canvas.utexas.edu/

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This course is Part 1 of a two semester core curriculum in biological anthropology. All biological anthropology graduate students are required to take parts 1 and 2. Part 2 will be offered in Spring 2019. Part 1 will consist of a combination of lectures, discussions and student presentations, and will cover major topics in biological anthropology. Lab material will also be incorporated into the course. Topics covered will include the history of the field of biological anthropology, evolutionary theory, primate systematics, methods of phylogenetic reconstruction, primate diversity and anatomical adaptations, and the human and nonhuman primate fossil record. (Part 2 will emphasize primate social behavior and ecology, genetics, and human biological variation). The goal of the course is to give you an overview of the field, while allowing you to identify areas of research you might want to pursue at the master's and doctoral levels.

Course requirements and deadlines:

<u>Due</u>	Grade %
Sept 20	10%
Oct 11	5%
Oct 25	15%
Nov 8	15%
Dec 6	15%
Dec 13	15%
	15%
	10%
	Sept 20 Oct 11 Oct 25 Nov 8 Dec 6

Readings:

Textbooks:

Whitehead P, Sacco W, and Hochgraf S (2005) A Photographic Atlas for Physical Anthropology. Morton Publishing Company.

Introduction to Physical Anthropology (2018) Jurmain, Kilgore, Trevathan, Ciochon, and Bartelink. Cengage. 15th Edition.

Other required readings: Numerous articles are available online via the Canvas course website http://canvas.utexas.edu/

Daily routine: Most weeks I will lecture on the assigned topic for the first half of the time period. The remaining time will be used for class discussion on the assigned readings. Please read all assigned readings before class meets each week, and be prepared to discuss them.

Leading class discussion: Each student will be required to lead one class discussion. This will require you to be responsible for summarizing the essence of that day's reading assignments, as well as preparing leading questions to ask the class that will generate discussion. All students are expected to participate in discussion, every day.

Short papers and lab assignments: Please see instructions below.

Term project presentation: Each student will be required to conduct a small research project during the course of the semester and then present the results the last day of class in a 10-15 minute professional-style presentation. The goal of this assignment is to get your "feet wet" by doing original research and learning how to present your data as you would at a national conference (e.g. American Association of Physical Anthropologists). I will meet with each student individually to help you figure out your research topic, and to help you identify the resources you need to carry out your project. If you are unable to collect original data, as an alternative you may compile data from the literature to analyze in a new way.

By Oct. 11 at the *latest*, each student must submit a brief description or outline of his or her intended paper/project topic for approval.

Term project paper: You are also required to write a paper on your research project in journal article style. This paper should be approximately 15 pages long, but no more than 20 (double spaced, 12 pt font, one inch margins, excluding references and figures).

Introduction to Graduate Physical Anthropology

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Shapiro

Schedule

Aug 30	Organizational meeting
Sept 6	Past, present and future of biological anthropology
Sept 13	Evolutionary theory, adaptation, and natural selection
Sept 20	Macroevolution, classification, and phylogenetic reconstruction (Paper 1 due today)
Sept 27	Primate Taxonomy, systematics and diversity (Including in-class lab on primate anatomy)
Oct 4	Primate anatomy and adaptations I: Body size, locomotion, and postcranial anatomy
Oct 11	The primate fossil record I: Primate origins and early primates (term project topic description due today)
Oct 18	Primate anatomy and adaptations II (Guest lecture: Carrie Veilleux)
Oct 25	The primate fossil record II: Anthropoid evolution (Lab assignment on limb bone scaling due today)
Nov 1	Early hominins and the evolution of bipedalism
Nov 8	The evolution of <i>Homo</i> I (Paper 2 due today)
Nov 15	The evolution of <i>Homo</i> II
Nov 22	Thanksgiving
Nov 29	Origin and dispersal of anatomically modern Homo sapiens
Dec 6	Student project presentations (Written paper due Dec 13 AT NOON)

Paper 1 Assignment: Historical and current perspectives on biological anthropology PAPER DUE SEPT 20

Read the papers assigned for Sept 6 and write a 5-10 page paper (double-spaced, 12 point font, 1 inch margins) addressing the following questions:

(You are welcome to read other relevant papers you may come across, but it is not required).

How has American biological anthropology changed in the last hundred years or so? Should it be called physical or biological anthropology? Is biological anthropology a biological science or a social science? Why is biological anthropology at UT housed in the College of Liberal Arts? Should biological anthropology remain part of the "four-field approach to anthropology or should it be a more separate, specialized discipline?

Paper 2 Assignment: Debates in Biological Anthropology PAPER DUE Nov 8

Find relevant references, and then write a 5-10 page paper (double-spaced, 12 pt font, 1 inch margins) addressing the following question. Possible topics are suggested below, but feel free to choose any topic that has been the subject of debate in the physical anthropology literature.

What role do stubborn debates have in advancing our understanding of a topic?

Do they help or hinder progress? Do participants in these debates remain objective or do they become too closely tied to their point of view?

(Be sure to summarize and contextualize the debate before addressing the question).

Suggested topics (There are many more – feel free to work on a topic of your choice! The debates can be from any time period in the physical anthropology/evolutionary literature).

How much emphasis should we place on natural selection to explain variation in phenotypic traits?

How does speciation occur?

What was the most critical selective factor in the origin of anatomical features that set primates apart from other mammals?

Who/where were the earliest anthropoids, and what were their adaptations?

What was the locomotor behavior of Australopithecus afarensis?

What was the locomotor behavior of the common ancestor to chimpanzees and humans?

Where and when was the origin of anatomically modern *Homo sapiens*?

Term project: presentation and paper (Presentation due Dec 6, Paper due Dec 13)

Term project presentation: Each student will be required to conduct a small research project during the course of the semester and then present the results the last day of class in a 10-15 minute professional-style presentation (using Powerpoint). The goal of this assignment is to get your "feet wet" by doing original research and learning how to present your data as you would at a national conference (e.g. American Association of Physical Anthropologists). I will meet with each student individually to help you figure out your research topic, and to help you identify the resources you need to carry out your project. If you are unable to collect original data, as an alternative you may compile data from the literature to analyze in a new way.

Term project paper: You are also required to write a paper on your research project in journal article style. This paper should be approximately 15 pages long (double spaced, 12 point font), but no more than 20. It should have the following sections: Introduction (background), Materials and Methods, Results, Discussion, Conclusions.

Here is a guideline for how you will be graded on each component:

Presentation grade:

- Ability to keep presentation within 15 min. time limit (excluding technical difficulties)
- Organization of presentation
- Quality of visuals
- Clarity of expression
- Handle on material/ability to answer questions
- Content/effort put into research project

Written paper grade:

- Paper organization
- Writing clarity
- Originality of research
- Thoroughness of background (ability to put your work into the context of related research and discuss its significance)
- Explanation of methods
- Quality of analysis
- Use of appropriate references
- Working within the page limits

Note on UT policies:

<u>Religious holy days</u>. By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work 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.

<u>Students with disabilities:</u> Any student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities (http://diversity.utexas.edu/disability/), at ssd@austin.utexas.edu, 512-471-6259 (voice) or 512-410-6644 (Video Phone) as soon as possible to request an official letter outlining authorized accommodations.

Please inform me as soon as possible if you need accommodations.

<u>Honor Code</u>: Each student in this course is expected to abide by the University of Texas Honor Code.:

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

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 a tutorial and information on plagiarism, see http://www.lib.utexas.edu/services/instruction/learningmodules/plagiarism/

Also, see http://deanofstudents.utexas.edu/sjs/scholdis.php

Guns.

As of August 1, 2016, due to the passage of S.B. 11 (https://campuscarry.utexas.edu), licensed, concealed handguns are now allowed in most campus buildings, including classrooms. If you hold a license to carry a concealed weapon, it is your responsibility to know and follow the Texas and University policies listed here: https://campuscarry.utexas.edu/students. Visible weapons or threatening behavior will be reported to the UT Police Department immediately.

The following statement serves as a reminder - I am required to notify you of this *verbally*, and I will do so in class:

Based on my legal right to ban guns from my UT office, *no guns are allowed in my office* (SAC 5.128). Leaving a gun unattended (as it would be, if left outside my office) is against the law. Please plan accordingly. *YOU* are always welcome in my office, just not your gun. Thank you.

Emergency evacuation: (Office of Campus Safety and Security, 512-471-5767, http://www.utexas.edu/safety/)

- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors.
- Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.

Other useful information:

Resources for Learning & Life at UT Austin The University of Texas has numerous resources for students to provide assistance and support for your learning.

- o Sanger Learning and Career Center: https://ugs.utexas.edu/slc
- University Writing Center: http://uwc.utexas.edu/
- o Counseling & Mental Health Center: http://cmhc.utexas.edu/
- o Career Counseling: http://ugs.utexas.edu/vick/career
- Student Emergency Services: http://deanofstudents.utexas.edu/emergency/

Behavior Concerns Advice Line (BCAL)

• If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual's behavior. This service is provided through a partnership among the Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit http://www.utexas.edu/safety/bcal