

Introduction to Biological Anthropology
ANT 301 Fall 2018
Unique 31400 - 30465

Course Meets Tu, Th 12:30 – 1:30 in FAC 21. In addition, each student is enrolled in a laboratory section that meets for two hours each week in SAC 5.172. Meeting times vary by section

Instructor Dr. Denné Reed

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Course Description This course introduces students to the study of the human condition from a biological perspective, starting with a review of modern principles of evolution, especially as they apply to humans, and moving on to behavioral and ecological comparisons of humans with our closest living relatives among the primates. The course concludes with a survey of the human fossil and archaeological record over the past eight million years, including modern human variation. This course engages a scientific approach to human origins and students are challenged to consider their place in nature and society as well as their shared humanity.

Main Learning Objectives

- The fundamental of principles of biological evolution and how they have shaped human adaptation and behavior.
- Primate (including human) diversity, behavior and ecology.
- The material evidence underlying human evolution and prehistory.
- Scientific principles of knowledge production and critical thinking.
- The social and ethical implications of human evolution.

Expected Learning Outcomes

1. Articulate the principles, processes and patterns associated with biological evolution.
2. Understand and illustrate where primates and especially humans fit in the larger tree of life.
3. Articulate the main ecological, behavioral and life history patterns in primates and how they inform our understanding of human evolution, variation and adaptation.
4. Adumbrate the human fossil and archaeological record across space and geological time.
5. Articulate the ethical and social issues that have surrounded human evolution and the study of human variation.
6. Understand the fundamentals of scientific reasoning, testing and knowledge production.

Course Structure This course is organized into lecture and laboratory sections. Lectures meet twice a week for one hour and labs meet once a week for two hours. Lectures sessions will include spoken lectures, presentations, interactive exercises, and full class discussions. Lab sessions are limited to ca 20 students and include presentations, discussions, hands-on activities, problem solving tasks and skill development exercises.

Course Prerequisites This is an introductory course with no prerequisites.

Required Materials and Texts Boyd, R and Silk J. (2006) *How Humans Evolved*. **Eighth** Ed. New York: Norton. The field of human origins and evolution is advancing at a rapid rate and therefore it is imperative students have the most recent addition of the textbook. Earlier editions are inadequate.

Classroom Protocol. Civil and courteous behavior is expected during lectures and labs (It's a good idea outside of class too). Cell phone ringers must be turned off prior to the beginning of class.

Attendance Students are expected to attend all lecture and lab sessions. Attendance is not recorded for lecture sessions but is recorded for lab sections. Because of space limitations, students must attend the lab section in which they are enrolled. Excused absences from lab require appropriate WRITTEN documentation (e.g. doctor's note) and arrangements should be made with the TA to attend another section. Contact your TA during the week of the missed lab in order to attend an alternate Lab, otherwise credit for the lab will be lost. Students are expected to bring printed copies of the lab materials with them to class. Lab assignments are available in pdf format from the course blackboard website under the assignments section).

Assignments This course is organized into three sections: 1) Principles of Evolution 2) Comparative Primate Studies 3) Paleoanthropology (the fossil and archaeological record) and human variation. Each section features a set of lab assignments and an exam. Lab assignments include a short quiz at the start of each lab based on the assigned lab readings and a lab exercise conducted during lab. Exams are delivered at the end of each section. In total the course has 3 exams, 10 lab quizzes and 10 graded lab exercises.

Section 1 Principles of Evolution

Lab 1 Scientific Method and Skeletal Anatomy

Lab 2 Genetics

Lab 3 Systematics

Exam 1 – Assesses students' progress in learning the principles of evolution including the main mechanisms of evolution, the core elements of natural selection, the genetic foundations of inheritance, the mathematical foundations for population ecology, the forces that promote variation in populations, the processes that constrain evolution and the manner in which evolutionary processes are expressed over long time periods to produce the tree of life.

Section 2 Comparative Primate Studies

Lab 4 Primate Behavior

Lab 5 Primate Functional Morphology

Lab 6 Primate Dietary Ecology

Exam 2 – Assesses students' knowledge of primate biodiversity, including familiarity with the major taxonomic groups of primates. This exam further assesses knowledge of basic primate ecology and behavior including how it compares and informs our understanding of human ecology and behavior.

Section 3 Paleoanthropology and human variation

Lab 7 Primate Evolution

Lab 8 The Fossil Record of Australopiths

Lab 9 Fossil Record of Homo

Lab 10 Paleolithic Archaeology

Exam 3 – Assesses student knowledge and familiarity with the human fossil and archaeological record,

including the ability to recall the major taxonomic groups in the lineage leading to humans, the sequence, timing and evidence for the origin of major adaptation in our lineage and the general history of human material culture and technological advancement during the stone age.

Grading Grades in this course are based on three in class exams (20% each x 3 = 60%), and 10 lab grades. Each lab grade includes a quiz administered at the start of the lab section that assess the students understanding of the assigned reading and a graded lab exercise conducted during the lab. In total each lab assignment is worth 4% points, 2% for the quiz and 2% for the assignment (4% each x 10 = 40%).

How to get an A in Intro Biological Anthropology The secret formula for a good grade in this course is:

*Read assignments **before** class + attend lectures + attend labs + complete lab assignments = A*

This course synthesizes a broad range of material and it is very difficult to memorize and understand it all at the last minute. The best strategy for getting the most from this course is to read material before lecture (1st encounter), attend the lectures (2nd encounter), attend labs (3rd encounter) and review after each class session (4th encounter). In this way material is learned gradually, and only limited effort should be required to prepare for exams.

I also recommend students form study groups with their peers to review materials weekly. Explaining material to another student is one of the best ways to learn it yourself and its more fun! Students are always welcome to visit the professor or any of the teaching assistants during office hours for additional help, and we are always open to scheduling appointments outside established office hours as needed.

Learning Success Your success in this class is important to me. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we'll develop strategies to meet both your needs and the requirements of the course. I also encourage you to reach out to the student resources available through UT. Many are listed on this syllabus, but I am happy to connect you with a person or Center if you would like.

Grading Policy Final course grades are assigned as follows: A = 94-100; A- = 90-93; B+ = 87-89; B = 83-86; B- = 80-82; C+ = 77-79; C = 73-76; C- = 70-72; D+ = 67-69; D = 63-66; D- = 60-62; F < 59. Note that the division of grades in the A category is different from that in the other letter grades.

Course Schedule

Week 1			
Aug.	30	Course Introduction	
NO LAB THIS WEEK			

Week 2			
Sep.	4	Introduction to Evolution	Boyd & Silk: Chap. 1 pp. 1-25 (26 p)
	6	Mendelian Genetics	Boyd & Silk: Chap. 2 pp. 25-37 (13 p)
NO LAB THIS WEEK			

Week 3			
Sep	11	Molecular Genetics	Boyd & Silk: Chap. 2 pp. 37-50 (14 p)
	13	Population Genetics and the Modern Synth.	Boyd & Silk: Chap. 3 pp. 53-65 (13 p)
Lab 1 - Scientific Method and Skeletal Anatomy			

Week 4			
Sep.	18	Behavior and Evolutionary Constraints	Boyd & Silk: Chap. 3 pp. 65-77 (13 p)
	20	Species and Speciation	Boyd & Silk: Chap. 4 pp. 81-91 (11 p)
Lab 2 - Genetics			

Week 5			
Sep.	25	Tree of Life and Phylogenies	Boyd & Silk: Chap. 4 pp. 91-105 (11 p)
	27	Primate Diversity	Boyd & Silk: Chap. 5 pp. 109-125 (16 p)
Lab 3 - Systematics			

Week 6			
Oct.	2	Exam 1	
	4	Primate Ecology	Boyd & Silk: Chap. 5 pp. 126-141(15 p)
Lab 4 - Primate Behavior			

Week 7			
Oct.	9	Female Reproductive Strategies	Boyd & Silk: Chap. 6 pp. 145-155 (11 p)
Oct.	11	Male Reproductive Strategies	Boyd & Silk: Chap. 6 pp. 155-166 (12 p)
Lab 5 - Functional Morphology			

Week 8			
Oct.	16	Cooperation	Boyd & Silk: Chap. 7 169-188 (21 p)
Oct.	18	Primate Life History	Boyd & Silk: Chap. 8 pp. 189-203 (12 p)
Lab 6 - Diet			

Week 9			
Oct.	23	Exam 2	
Oct.	25	Introduction to Paleobiology and Early Primates	Boyd & Silk: Chap. 9 pp. 207-218 (11 p)
Lab 7 - Primate Evolution			

Week 10			
Oct.	30	Primate Evolution	Boyd & Silk: Chap. 9 pp. 219-230 (20 p)
Nov.	1	Early Hominins and First Adaptations	Boyd & Silk: Chap. 10 pp. 233-243 (10 p)
Lab 8 - Fossil Record of Australopithecus			

Week 11			
Nov.	6	Early Australopiths and Paranthropus	Boyd & Silk: Chap. 10 pp. 244-259 (15 p)
	8	Dikika	
Lab 9 - Fossil Record of Homo			

Week 12			
Nov.	13	Early Homo	Boyd & Silk: Chap. 11 pp. 260-275 (16 p)
	15	Complex Foraging	Boyd & Silk: Chap. 11 pp. 275-296 (20 p)
Lab 10 – Paleolithic Archaeology			

Week 13			
Nov.	20	Neanderthals	Boyd & Silk: Chap. 12 pp. 297-321 (25 p)
	22	Thanksgiving	
NO LAB THIS WEEK			

Week 14			
Nov.	27	Modern Humans	Boyd & Silk: Chap. 13 pp. 323-353 (30 p)
	29	Contrebandiers	
NO LAB THIS WEEK			

Week 15			
Dec.	4	Human Variation (Class evaluations)	Boyd & Silk Chap. 14 pp. 355 – 385 (30 p)
	6	Exam 3	
NO LAB THIS WEEK			

Religious Holidays If you will not be able to attend class due to religious services, let me know at least a week ahead of time. We will make every effort to help you keep up with course assignments in such situations.

Canvas In this class we use Canvas—a Web-based course management system with password-protected access at <http://canvas.utexas.edu>—to distribute course materials, to communicate and collaborate online, to post grades, to submit assignments, and to give you online quizzes and surveys. You can find support in using Canvas at the ITS Help Desk at 475-9400, Monday through Friday, 8 a.m. to 6 p.m., so plan accordingly.

Use of E-Mail for Official Correspondence to Students. E-mail is recognized as an official mode of university correspondence; therefore, you are responsible for reading your e-mail for university and

ANT 301 Fall 2018 6 REED

course-related information and announcements. You are responsible to keep the university informed about changes to your e-mail address. You should check your e-mail regularly and frequently—we recommend daily, but at minimum twice a week—to stay current with university-related communications, some of which may be time-critical. You can find UT Austin's policies and instructions for updating your e-mail address at <http://www.utexas.edu/its/help/utmail/1564>

Academic Integrity Please pursue rigorous honesty in everything you do, including your work for this class. It will serve you well in life, and in this class as well since we report all cases of suspected academic dishonesty to the dean of students. Each student in the course is expected to abide by the University of Texas Honor Code: "As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity." **Plagiarism is taken very seriously at UT.** Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT's Academic Honesty and the University Honor Code which can be found at the following web address: http://deanofstudents.utexas.edu/sjs/acint_student.php. Dishonesty will result at least in a failed grade for the assignment and perhaps also for the course. For more info, see <http://www.lib.utexas.edu/services/instruction/learningmodules/plagiarism>. You are encouraged to work together in study groups and often in lab exercises, however the work you submit (unless otherwise indicated) must be your work.

Q drop Policy. Texas law limits the number of course drops for academic reasons to six. Senate Bill 1231 says: "Beginning with the fall 2007 academic term, an institution of higher education may not permit an undergraduate student a total of more than six dropped courses, including any course a transfer student has dropped at another institution of higher education, unless the student shows good cause for dropping more than that number."

Important Dates (2018)

- 4 Sep. - Fourth class day; Last day of the official add/drop period; after this date, changes in registration may require the approval of the department chair and usually the student's dean.
- 14 Sep. - Twelfth class day; Last day an undergraduate student may add a class except for rare and extenuating circumstances. Last day to drop a class for a possible refund.
- 25-26, 29-31 Oct. - Academic advising for continuing and readmitted students for the spring semester.
- 1 Nov. - Last day an undergraduate student may, with the dean's approval, withdraw from the University or drop a class except for urgent and substantiated, nonacademic reasons. Last day an undergraduate student may change registration in a class to or from the pass/fail basis.
- 19 Dec. – Default final exam date.

Disability Services Students with documented disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259. Please let me know about any arrangements we can make that will assist you in your learning.

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>

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

- Sanger Learning and Career Center: <http://lifelearning.utexas.edu/>
- Undergraduate Writing Center: <http://uwc.utexas.edu/>
- Counseling & Mental Health Center: <http://cmhc.utexas.edu/>
- Career Exploration Center: <http://www.utexas.edu/student/careercenter/>
- Student Emergency Services: <http://deanofstudents.utexas.edu/emergency/>

Title IX Reporting

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's [relevant policies](#).

Faculty members and certain staff members are considered “Responsible Employees” or “Mandatory Reporters,” which means that they are required to report violations of Title IX to the Title IX Coordinator. I am a Responsible Employee and must report any Title IX related incidents that are disclosed in writing, discussion, or one-on-one. Before talking with me, or with any faculty or staff member about a Title IX related incident, be sure to ask whether they are a responsible employee. If you want to speak with someone for support or remedies without making an official report to the university, email advocate@austin.utexas.edu For more information about reporting options and resources, visit titleix.utexas.edu or contact the Title IX Office at titleix@austin.utexas.edu

Emergency Evacuation Policy. Occupants of buildings on the UT Austin campus are required to evacuate and assemble outside when a fire alarm is activated or an announcement is made. Please be aware of the following policies regarding evacuation: Familiarize yourself with all exit doors of the classroom and the building. Remember that the nearest exit door may not be the one you used when you entered the building. If you require assistance to evacuate, inform me in writing during the first week of class. In the event of an evacuation, follow my instructions or those of class instructors. Do not re-enter a building unless you're given instructions by the Austin Fire Department, the UT Austin Police Department, or the Fire Prevention Services office.