

ANTHROPOLOGY 1001 - INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY

Spring 2016

Monday, Wednesday: 12:45-2:00 PM

Lecture meets in Fungler Hall, Room 108 / Lab sections meet in Lisner Hall, Room 130

Course Instructor: Shannon McFarlin, PhD
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Office Hours: Wednesday, 2:30-4:30pm
Office Location: Science & Engineering Hall, room 6810

Teaching Assistants

Sean Lee:	smlee@gwu.edu	Lab: TR 2:00-3:50pm, F 12:00-1:50pm
Jordan Miller:	jam83@gwu.edu	Lab: W 6:10-8:00pm, W 8:10-10:00pm
Enquye Negash:	enquyen@gwu.edu	Lab: F 8:00-9:50am, F 10:00-11:50am
Angie Peña:	angiepena@gwu.edu	Lab: TR 8:00-9:50am, TR 10:00-11:50am
Alexander Prucha:	prucha@gwu.edu	Lab: TR 6:10-8:00pm, TR 8:10-10:00pm
Meagan Vakiener:	mvakiener@gwu.edu	Lab: TR 12:00-1:50pm, F 2:00-3:50pm
Kaitlin Wellens:	kwellens1899@gmail.com	Lab: W 4:10-6:00pm, TR 4:10-6:00pm

COURSE DESCRIPTION. Who are we and where did we come from? What makes us, as humans, different from other animals? In this course we will explore the factors that have shaped our species' anatomy, physiology, and behavior. Because the study of human evolution is rooted in fundamental principles of modern biology, the course will begin with discussion of natural selection, genetics and heredity. We will examine our species' place in nature by reviewing current research on the behavior, ecology, anatomy, and evolution of our close cousins, the other primates. With this background, we will investigate the fossil record for human evolution and discuss what it tells us about the biology of our direct ancestors. We will also explore how adaptations in modern human populations may account for current diversity in our species. Upon completion of this course, students will be prepared for more advanced coursework in biological anthropology.

LEARNING OBJECTIVES (Specific).

By the end of this semester, students will:

- Understand the evolutionary framework, theoretical concepts and principles that are fundamental to biological anthropology; appreciate how these ideas have developed over time, and ways in which evolutionary forces have shaped variation among modern human populations today;
- Understand anatomical and behavioral diversity among nonhuman primates and the fossil evidence for their evolution, as it pertains to humans' place in nature;
- Learn the basic empirical evidence relevant to human evolutionary history and understand the bases for anatomical and behavioral adaptations in the human lineage over time.

LEARNING OBJECTIVES (General).

This course will contribute to the student's development of:

- Scientific reasoning skills, including proposing relationships between observed phenomena; designing experiments to assess the validity of these relationships; and evaluating the results of these experiments. Through hands-on experiences in the laboratory section of this course, students will test hypotheses using data, scientific reasoning, and the application of quantitative methods.
- Global and cross-cultural perspectives, where modern human racial diversity and the spread of people and their technologies in prehistory are analyzed.

COURSE MECHANICS. This course requires attendance at both lecture and lab sections. Lab sections will cover new material, and expand on topics introduced in lecture. The textbook also explains many topics in greater detail than is possible during lecture.

REQUIRED TEXTS.

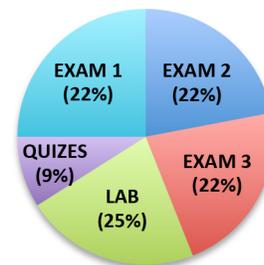
- (1) Stanford C, Allen JS, Anton SC. 2013. Exploring Biological Anthropology: The Essentials. Pearson/Prentice Hall: New Jersey. 3rd Edition.
- (2) Anthropology 1001 Lab Manual – provided during the first lab section meeting

OPTIONAL: An additional online resource is also available as a companion to the Stanford et al. (2013) textbook: MyAnthroKit from Pearson Education, which contains practice quizzes, flashcards, and other interactive online tools to facilitate learning of the

course material. Web access to MyAnthoKit is available in the GW Bookstore, packaged with the Stanford et al. (2013) textbook for an additional fee. Access to MyAnthoKit can also be purchased separately, at <http://www.myanthrokit.com/>

EVALUATION. Grades are based on performance in quizzes, exams, and lab section. Three exams are scheduled for this course, each counting for 22% of the final grade (total = 66%). There will also be six pop quizzes given in class throughout the semester, each counting for 1.5% of the final grade (total = 9%). PLEASE NOTE: in accordance with university policy, the third exam will be given during the final exam period and not during the last week of the semester.

The remaining 25% of the final grade is based on attendance and participation in lab, including completion of laboratory exercises. The laboratory grade is calculated on the basis of the total number of points earned for each lab, as a percentage of the total number of possible points. All labs are worth the same number of points, with two exceptions. The two off-campus labs are each worth twice the number of points as all other individual labs. **Please come to lab on time; points will be deducted if you arrive late.**



MAKE-UP EXAMS. The dates for the exams are posted on the course schedule below. Make travel plans accordingly. Make-up exams may be scheduled in two circumstances, as follows. (1) If you must miss an exam due to an unavoidable conflict, such as observance of a religious holiday or participation in a school-sanctioned sport, you must notify the course director **prior** to the exam date. (2) If you must miss an exam for an unforeseen medical reason or emergency, **notify the course director as soon as possible.** Documentation of your reason for missing the exam (e.g., a note from student health) may be required. **All make-up exams must be taken within one week of the original exam date,** except in rare circumstances. If the course director is not notified of a student's intention to miss an exam until *after* the exam has already been administered in class, the make-up exam may be given in essay format.

MISSED LAB SECTIONS. The mechanics and pace of this course unfortunately do not allow for individually scheduled make-up labs. If you have an unavoidable conflict, you must communicate with your instructor **well ahead of time** (at least one week in advance) in order to arrange attendance in an alternate lab section. You will **not** be allowed to attend a different lab section without advanced permission.

If you must miss lab due to an unforeseen excused absence, such as illness (including flu-like symptoms) or emergency, **notify your laboratory instructor as soon as possible, within 3 days of the missed lab.** Documentation of your reason for missing the lab (e.g., a note from student health) may be required. **For excused absences and if you have notified your lab instructor as required,** you will be given an opportunity to make up the missed laboratory content. Otherwise, unexcused absences from lab will result in a zero for that week. We also recommend that you ask a classmate to review their lab notes with them, since the lab material will be included on the exams.

RELIGIOUS HOLIDAYS. It is completely acceptable for you to miss lecture or lab due to observance of religious holidays. However, it is your responsibility to look ahead on the calendar and notify the instructor of any conflicts (for the entire semester) with lab or lecture no later than the **second week of class.**

BLACKBOARD. Once you are registered for this course, you will automatically have access to the Blackboard site associated with it. Go to <https://blackboard.gwu.edu/> and sign in using your email ID and password. We will use Blackboard to communicate announcements, store important documents and external links to web sites of interest that deal with material covered in the course, and provide a way for you to check your grades as the course progresses.

ACADEMIC INTEGRITY. All graded work must be completed in accordance with The George Washington University Code of Student Conduct, available online: <https://studentconduct.gwu.edu/code-student-conduct>

SUPPORT FOR STUDENTS OUTSIDE OF THE CLASSROOM.

Disability Support Services (DSS). Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information, please refer to <http://gwired.gwu.edu/dss/>

University Counseling Center (UCC). The Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations; and confidential assessment, counseling services (individual and small group), and referrals. You can reach the UCC at 202-994-5300. For additional information, please refer to <http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices>

SECURITY. In the case of emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After the evacuation, seek shelter at a predetermined rendezvous location.

DATE	SCHEDULE OF TOPICS* (Subject to change)	READING
Jan. 11	Introduction: What is Biological Anthropology?	Chapter 1
Jan. 13	Origins of Evolutionary Thought	Chapter 2
	COMPLETE ON YOUR OWN - Lab 1: Evolution: Darwin's Dangerous Idea	
Jan. 18	NO CLASS – MLK DAY	
Jan. 20	The Darwinian Revolution	Chapter 2
	Lab 2: Natural Selection, Evolution, Creationism. DUE IN LAB: Lab 1.	
Jan. 25	Mendelian Inheritance & Genetics I: Cells and Molecules	Chapter 3
Jan. 27	Genetics II: From Genotype to Phenotype	Chapters 4
	Lab 3: Cladistics and Introduction to Genetics	
Feb. 1	The Forces of Evolution	Chapter 5
Feb. 3	Formation of Species	Chapter 5
	Lab 4: Inheritance and Population Genetics	
Feb. 8	Human Variation: Evolution, Adaptation, and Adaptability	Chapter 6
Feb. 10	The Primates	Chapter 7
	Lab 5: Race and Ancestry	
Feb. 15	NO CLASS – PRESIDENT'S DAY	
Feb. 17	EXAM 1	
	Lab 6: Osteometry of the Skull and Postcrania	
Feb. 22	The Primates: Adaptive Trends	Chapter 7
Feb. 24	The Primates: Diversity	Chapter 7
	Lab 7: The Primates (Introduce Lab 8 – Living Primates, due Mar. 9-11)	
Feb. 29	Primate Behavior: Group Living	Chapter 8
Mar. 2	Primate Behavior: Reproductive Strategies	Chapter 8
	NO LAB MEETING – COMPLETE LAB 8 INDEPENDENTLY	
Mar. 7	Geology: Introduction to Fossils	Chapter 9
Mar. 9	Primate Origins	Chapter 9
	Lab 9: Primate Behavioral Ecology. DUE IN LAB: Lab 8.	
Mar. 14-18	NO CLASS – SPRING BREAK	
Mar. 21	Becoming Human: The Origins of the Hominin Clade	Chapter 10
Mar. 23	Early Hominins and <i>Australopithecus</i>	Chapter 10
	Lab 10: Bipedalism and Hominin Origins	
Mar. 28	EXAM 2	
Mar. 30	The 'Robust Australopiths' and Reconstructing the Past	Chapter 10
	Lab 11: <i>Paranthropus</i> and Early <i>Homo</i>	
Apr. 4	Rise of the Genus <i>Homo</i>	Chapter 11
Apr. 6	Rise of the Genus <i>Homo: H. erectus</i>	Chapter 11
	Lab 12: Neanderthals & Later <i>Homo</i> (Introduce Lab 13 - Hall of Human Origins, due Apr. 20-22)	
Apr. 11	Archaic <i>Homo sapiens</i> and Neandertals	Chapter 12
Apr. 13	Emergence & Dispersal of <i>Homo sapiens</i>	Chapter 13
	NO LAB MEETING – COMPLETE LAB 13 INDEPENDENTLY	
Apr. 18	Evolution of the Brain and Behavior	Chapter 14
Apr. 20	Evolution of the Human Life Cycle	Chapter 14
	Lab 14: The Brain, Culture, and Language. DUE IN LAB: Lab 13	
Apr. 25	Human Evolution - Wrap Up	
Apr. 27	Biomedical and Forensic Anthropology	Chapter 15
TBA	FINAL EXAM*	

*Schedule is subject to change. The final exam date to be determined as per GW's Final Exam Schedule.

