



INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY (ANTH1001)

Fall 2018

M, W: 12:45- 2:00 PM

Lecture meets in Funger Hall, Room 108

Lab sections meet in Lisner Hall, Room 130

Course Instructor: Dr. Laurence Dumouchel

Office Hours: Tuesday, 1:00-3:00 PM or by appointment

Contact: ldumouchel@gwu.edu

Office Location: Science & Engineering Hall, 6th floor, #6675

Lab sections

Section	Time	TA	Email	Office Hours
42	W 4:10-6:00 PM	Kristen Tuosto	ktuosto@gwu.edu	F 9:00-11:00 AM
30	W 6:10-8:00PM	Ryan McRae	rmcrae@gwu.edu	R 10:30 AM-12:30 PM
31	W 8:10-10:00 PM	Ryan McRae	rmcrae@gwu.edu	R 10:30 AM-12:30 PM
32	R 8:00-9:50 AM	Kristen Tuosto	ktuosto@gwu.edu	F 9:00-11:00 AM
33	R 10:00-11:50 AM	Sylvain Nyandwi	snyandwi@gwu.edu	T 10:30 AM-12:30 PM
34	R 12:00-1:50 PM	Sylvain Nyandwi	snyandwi@gwu.edu	T 10:30 AM-12:30 PM
35	R 2:00-3:50 PM	Louis Gorgone	louisgorgone@gwu.edu	T 2:00-4:00 PM
36	R 4:10-6:00 PM	Louis Gorgone	louisgorgone@gwu.edu	T 2:00-4:00 PM
37	R 6:10-8:00PM	Katie Ornelas	kornelas13@gwu.edu	M 2:15-4:15 PM
38	R 8:10-10:00 PM	Katie Ornelas	kornelas13@gwu.edu	M 2:15-4:15 PM
39	F 8:00-9:50 AM	Elaine Miller	millere@gwu.edu	M 2:00-4:00 PM
40	F 10:00-11:50 AM	Elaine Miller	millere@gwu.edu	M 2:00-4:00 PM
41	F 12:00-1:50 PM	Axelle Shimwa	akamanzi@gwu.edu	TBD
43	F 2:00-3:50 PM	Axelle Shimwa	akamanzi@gwu.edu	TBD

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 joint 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 MATERIALS

(1) "How Humans Evolved" by Robert Boyd and Joan B. Silk, 2017 (8th edition) W. W. Norton & Company

(2) Anthropology 1001 Lab Manual – provided during the first lab section meeting.

(3) Turning Point clicker:

- Purchase a Response Card RF-LCD Clicker (recommended; no wifi/data needed), or download the free ResponseWare app on your cell phone (wifi/data needed). Note: lack of data signal or wifi malfunction does not constitute a valid excuse for not participating in polls.
- Purchase a license to enable you to respond to polls during class.

Clickers and licenses can be purchased from the GWU bookstore, or directly from Turning Point. You must create an account with Turning Point, and link this account through Blackboard. Instructions for doing this are available using this link: <https://itl.gwu.edu/files/downloads/TPRegistrationStudents.pdf>
Note: academic misconduct such as using another student's clicker will be treated as cheating and reported to the GW Office of Academic Integrity. You will be allowed to miss 15% of the questions without penalty. Because of the generosity of this policy, no individual arrangements for excused or

unexcused absences will be made. Contact the Dean of Academic Affairs for options if you need to miss more than 15% of the classes.

EVALUATION

Grades are based on performance in exams and in lab section. Two exams are scheduled for this course, each counting for 25% of the final grade (total = 50%). Class participation and attendance (polls) will count for 8% of your final grade. The remaining 42% (14 labs, 3% each) of the final grade is based on attendance and participation in the labs, 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.

GRADING SCHEME

Letter grades are assigned at the end of the semester using the +/- system according to the following chart. **Final grades are not rounded, and there is no extra credit offered.**

A	93%-100%	C	73%-76.99%
A-	90%-92.99%	C-	70%-72.99%
B+	87%-89.99%	D+	67%-69.99%
B	83%-86.99%	D	63%-66.99%
B-	80%-82.99%	D-	60%-62.99%
C+	77%-79.99%	F	0%-59.99%

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 your teaching assistant **at least one month prior** to the exam date. (2) If you must miss an exam for an unforeseen medical reason or emergency, **notify the course instructor 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.

If you have an unavoidable conflict, you must communicate with your teaching assistant **well ahead of time** (preferably at least one month in advance) in order to arrange an alternate lab section. If you must miss lab due to an unforeseen excused absence, such as illness (including flu-like symptoms) or emergency, **notify the teaching assistant 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 the teaching assistant 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 HOLIDAY

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 your teaching assistant of any conflicts (for the entire semester) with lab or lecture no later than the **first two weeks 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 GW NetID 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 Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information, please refer to <https://disabilitysupport.gwu.edu/>
- **Mental Health Services.** The Colonial Health Center 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 Colonial Health Center at 202-994- 5300. For additional information, please refer to <https://healthcenter.gwu.edu/mental-health>
- **International Services Office (ISO).** The International Services Office offers free tutoring and language support for international students who are non-native English speakers. For additional information, please refer to <https://libguides.gwu.edu/c.php?g=576191&p=4068674>

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 rendez-vous location.

COURSE SCHEDULE

WEEK	DATE	TOPIC	CHAP#
1	M, Aug 27	What is Biological Anthropology? & Introduction to the course	
	W, Aug 29	The Origins of Evolutionary Thought	
	Lab	No lab meeting <u>Homework:</u> Lab 1: Evolution: Darwin's Dangerous Idea, due week 2	
2	M, Sep 3	Labor Day (no class)	
	W, Sep 5	The Darwinian Revolution	1
	Lab	Lab 2: Natural Selection, Evolution, Creationism <u>Turn in Lab 1</u>	
3	M, Sep 10	Mendelian Inheritance	2
	W, Sep 12	Genetics I: Cells and Molecules	
	Lab	Lab 3: Cladistics and Introduction to Genetics	
4	M, Sep 17	Genetics II: From Genotype to Phenotype	
	W, Sep 19	The Forces of Evolution	3
	Lab	Lab 4: Inheritance and Population Genetics	
5	M, Sep 24	Formation of Species	4
	W, Sep 26	Human Variation: Evolution, Adaptation, and Adaptability	14
	Lab	Lab 5: "Race" and Ancestry	
6	M, Oct 1	Primates Adaptive Trends	5
	W, Oct 3	Primates Diversity	
	Lab	Lab 6: The Primates Assign Lab 7 - Living Primates (due week 8)	
7	M, Oct 8	Fall Break (no class)	
	W, Oct 10	Primate Behavior: Group Living Prep questions, comments and concerns	
	Lab	No lab meeting - use this time to complete lab 7	
8	M, Oct 15	Primate Behavior: Reproductive Strategies	
	W, Oct 17	Review of material & opportunity for questions	
	Lab	Lab 8: Primate Behavioral Ecology <u>Turn in Lab 7</u>	
9	M, Oct 22	EXAM 1	
	W, Oct 24	Geology: Introduction to Fossils	9
	Lab	Lab 9: Osteometry	
10	M, Oct 29	Primate Origins	
	W, Oct 31	Becoming Human: The Origins of the Hominin Clade	10
	Lab	Lab 10: Bipedalism and Hominin Origins	

11	M, Nov 5	Early Hominins and <i>Australopithecus</i>	
	W, Nov 7	The 'Robust Australopiths	
	Lab	Lab 11: <i>Paranthropus</i> and Early <i>Homo</i>	
12	M, Nov 12	Rise of the Genus <i>Homo</i>	11
	W, Nov 14	<i>Homo erectus</i>	
	Lab	Lab 12: Neanderthals & Later <i>Homo</i> Assign Lab 13: Hall of Hum. Origins, due week 14	
13	M, Nov 19	Archaic <i>Homo sapiens</i> and Neandertals	12
	W, Nov 21	Thanksgiving Break (no class)	
	Lab	No lab meeting (Thanksgiving Break)	
14	M, Nov 26	Emergence & Dispersal of <i>Homo sapiens</i>	13
	W, Nov 28	Modern Brain and Behavior	15
	Lab	No lab meeting - use this time to complete lab 13	
15	M, Dec 3	Evolution of the Human Life Cycle Prep questions, comments and concerns	8
	W, Dec 5	Human Evolution - Wrap Up	16
	Lab	Lab 14: The Brain, Culture, and Language. Turn in Lab 13	
	M, Dec 10	Review of material & opportunity for questions	
	Dec 12-20	EXAM 2 (date & time TBD)	