

ANTH 170: INTRODUCTION TO HUMAN ORIGINS, SPRING 2019
UNIVERSITY OF OREGON

Lecture	282 Lillis Complex (LIL), MW 10:00-11:20 am
Professor	Dr. Scott Blumenthal Email: sblument@uoregon.edu Office: Condon 374 Office Hours: TR 2:00-4:00 pm
Lab	368 Condon Hall (CON)
GEs	Jenneca McCarter (jennecam@uoregon.edu) Office Hours: Condon 365, R 2:00-3:30pm Labs: R 9:00-9:50 am, R 10:00-10:50 am, R 11:00-11:50 am, R 12:00-12:50 pm, R 1:00-1:50 pm, F 9:00-9:50 am, F 10:00-10:50 am, F 11:00-11:50 am Hailay Reda (hailayr@uoregon.edu) Office Hours: Condon 366, T 2:00-4:00pm Labs: F 12:00-12:50 pm, F 1:00-1:50 pm, F 2:00-2:50 pm, F 3:00-3:50 pm

COURSE DESCRIPTION

This course examines the broad and integrative field of human evolution. An understanding of the historical, theoretical, and empirical background of evolutionary biology is fundamental, and constitutes the first portion of this course. It then examines some of the basics of vertebrate, mammalian, and primate biology, so that the ways humans differ from our closest living relatives, the great apes, can be properly appreciated. Understanding geological time, dating of rocks and the fossils they contain, as well as the processes by which organisms become fossilized is necessary to place human evolution in its temporal and environmental context. With this foundation, the course investigates the evidence for human evolution from genetics, biogeography, comparative anatomy, archeology, and especially paleontology, in order to evaluate where, when, how, and (at least in part) why we humans have evolved to be the organisms that we are.

OBJECTIVES

1. Differentiate the forces of evolution and their effects on populations.
2. Compare human biology to that of other primates, mammals and vertebrates.
3. Describe the different types of primates and their biology.
4. Place vertebrate, mammalian, primate and human evolution in geological time.
5. Explain what fossils are and how they form.
6. Identify the bones of the human skeleton and interpret them functionally.
7. Describe where, when, and why humans evolved as we did.

FORMAT

This course includes both lecture and laboratory components. The lecture emphasizes background and theoretical concepts. Material in lectures may be different from assigned reading, and some lecture topics may not be covered in the textbook or are poorly represented. The laboratory focuses on observation, measurement, and interpretation of the data of human evolution.

CANVAS

A Canvas site will be maintained for this class that will contain course information and documents. The midterm will be taken through Canvas. Lecture notes will be available several days prior to their scheduled date. Please contact UO Library Canvas Student Support for help with all technical issues.

TEXTS

Jurmain R, Kilgore L, Trevathan W, Ciochon RL, Bartelink EJ. 2018. Introduction to Physical Anthropology. 15th Ed. Wadsworth.

Frost SR. 2014. Introduction to Human Origins Laboratory Manual. Kendall Hunt.

iCLICKERS

iClickers are required and will be used during lectures, beginning in Week 2. There will be 2 questions during each lecture, based on that day's content. The first question will be asked at the beginning and is entirely based on participation, you don't need to know the correct answer. The second question will be asked near the end of class, and you will receive partial credit for participation and full credit for the correct answer. You can drop all questions from one lecture during the course. Please set frequency code to "AB". Register your iClicker on Canvas by navigating to the "iClicker" link and "remote registration". Please contact UO Library Canvas Student Support if you have trouble registering or using your iClicker.

PACKBACK

Packback questions are a requirement for this course. This is an online community where you will ask and answer questions about topics covered in this class, to explore how these topics relate to the life outside the classroom. You must post 1 question and 2 answers per week, due each Sunday at 11:59pm beginning Sunday April 14. Before you start posting, please read the Community Guidelines found in the tutorial on Packback. If your post does not follow the Packback Community Guidelines, your post could be removed. You will be notified if this happens, and you will be given an opportunity to revise your post, even after the initial deadline. See Canvas for more details.

LABORATORY SECTIONS

Lab exercises should be read before attending your section each week. Lab time is valuable and your only chance to prepare for the practical exams. Complete the exercises, and make sure you understand all material before you leave. Your lab instructor will collect your lab books on a regular basis, and grade them for completion only.

EXAMS

Laboratory PRACTICAL EXAMS will consist of a series of stations with specimens that must be studied in a limited period of time. The MIDTERM exam will be taken remotely through Canvas on your own time outside of class. It will be available beginning the afternoon of Wednesday May 1st at 5:00pm and must be completed by Sunday May 5 by 11:59pm. Once you begin you will be limited to 80 minutes to complete the exam, which will be multiple choice and open book. The FINAL EXAM will be in class, multiple choice format, and will be comprehensive and closed book.

GRADING

Your evaluation will be based on answering iClicker questions (10%), Packback participation (10%), completion of lab exercises (10%), Lab Practical Exam I (15%), Lab Practical Exam II (15%), Midterm Exam (15%), and Final Exam (25%).

All assignments must be completed at their scheduled times. UNDER NO CIRCUMSTANCES WILL MAKE-UPS BE GIVEN without a documented excuse (such as illness or conflicting University-related travel). If you cannot take an exam, you must notify your GE in advance by email.

Grades will be assigned as follows: A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F < 60%, with '+' and '-' representing the top and bottom 3% of each letter.

ACCOMMODATIONS

Appropriate accommodations will be provided for students with documented disabilities. Please make arrangements to meet with Dr. Blumenthal or your GE to discuss these accommodations.

CLASS SCHEDULE

Week	Dates	Class	Reading
	4/1	Lecture 1: History of Evolutionary Theory	Chapter 2
Week 1	4/3	Lecture 2: Inheritance, Cell Structure & Division LAB I: Mendelian Genetics	Chapter 4: pp. 81-97; Chapter 3: pp. 50-51; 64-78
	4/8	Lecture 3: DNA and Protein Synthesis – iClicker Required	Chapter 3: pp. 52-64
Week 2	4/10	Lecture 4: Population Genetics LAB II: DNA structure and Protein Synthesis	Chapter 4: pp. 98-110
	4/14	First Packback Posts Due 11:59 p.m.	
	4/15	Lecture 5: Forces of Evolution	Same as previous
Week 3	4/17	Lecture 6: Macroevolution and Classification LAB III: Population Genetics	Chapter 5: pp. 113-128; 136-139
	4/22	Lecture 7: Primate Biology	Chapter 5: pp. 128-136; Chapter 6: pp. 143-154
Week 4	4/24	Lecture 8: Survey of Living Primates LAB IV: Human Osteology	Chapter 6: pp. 155-182
	4/29	Lecture 9: The fossil record: Geochronology and Taphonomy	Chapter 5: pp. 128-130; Chapter 9: pp. 272-276
Week 5	5/1	Lecture 10: Primate Evolution LAB V: Primate Classification	Chapter 8: pp. 225-245
	5/5	Midterm Due 11:59 p.m.	
	5/6	Lecture 11: Hominoid Evolution	Chapter 8: pp. 245-261
Week 6	5/8	Lecture 12: Bipedalism and Earliest Hominins LAB VI: Practical examination I	Chapter 9, Chapter 10: pp. 287- 297
	5/13	Lecture 13: Ardipithecus ramidus	Same as previous
Week 7	5/15	Lecture 14: Australopithecus LAB VII: Bipedalism	Chapter 10: pp. 297-309
	5/20	Lecture 15: Paranthropus	Same as previous
Week 8	5/22	Lecture 16: Earliest Homo LAB VIII: Plio-Pleistocene Hominins	Chapter 10: pp. 310-316
	5/27	Lecture 17: Memorial Day – No Class	
Week 9	5/29	Lecture 18: Homo erectus LAB IX: Later Genus Homo	Chapter 11
	6/3	Lecture 19: Later Homo	Chapter 12
Week 10	6/5	Lecture 20: Modern Human Origins LAB X: Practical examination II	Chapter 13
Finals	6/12	Final Examination 10:15 a.m.	