ANTH 170: Introduction to Human Origins  
Spring Term 2017  
University of Oregon

Instructor: Dr. Stephen Frost  
Office: Condon 353  
Tel: 6-5161  
Office Hours: TR 9:00-10:00 a.m.  
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Lecture Room: 282 Lillis  
Lecture Time: TR 12:00-1:20 p.m.

Lab Instructor: Ms. Diana Christie  
Office: Condon 365  
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Office Hours: TR 9:30 – 10:30 a.m.  
Email: dchristi@uoregon.edu

Lab Room: 368 Condon  
Lab Times: F 8:00-8:50 a.m.  
F 9:00-9:50 a.m.  
F 10:00-10:50 a.m.  
F 11:00-11:50 a.m.

Lab Instructor: Ms. Chelle Haynes  
Office: Condon 365 Blue  
Tel: 6-5109  
Office Hours: R 1:30 – 2:30 p.m.  
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Lab Room: 330 Condon  
Lab Times: F 8:00-8:50 a.m.  
F 9:00-9:50 a.m.  
F 10:00-10:50 a.m.  
F 11:00-11:50 a.m.

Lab Instructor: Mr. Damion Sailors  
Office: Condon 365A  
Tel: 6-5109  
Office Hours: TR 1:30 – 2:30 p.m.  
Email: dsailors@uoregon.edu

Lab Room: 330 Condon  
Lab Room: 368 Condon  
Lab Times: F 11:00-11:50 a.m.  
F 12:00-12:50 p.m.  
F 1:00-1:50 p.m.

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F 12:00-12:50 p.m.  
F 1:00-1:50 p.m.  
F 2:00-2:50 p.m.


Overview: 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 will constitute 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.
Goals:
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 possibly why humans evolved as we did.

Course Mechanics: This course includes both lecture and laboratory components. The lecture emphasizes background and theoretical concepts. The laboratory focuses on observation, measurement, and interpretation of the data of human evolution.

A Canvas site will be maintained for this class. When you register you will automatically be enrolled to the site. All problems concerning the use of Canvas will be handled at the ITC center in the Knight Library. The Canvas site will contain essential information for the course including the syllabus and lecture notes. You will also have access to Cengage’s Mindtap resources there. In addition, weekly quizzes on the lecture material will be taken through Canvas. Therefore, you must be able to use it. I will endeavor to post lecture notes several days prior to their scheduled date.

Requirements: Evaluation will consist of weekly quizzes, cumulative final exam, packback participation, weekly laboratory exercises, and two laboratory practical exams. All examinations must be taken at the scheduled time: **UNDER NO CIRCUMSTANCES WILL MAKE-UP EXAMS BE GIVEN** without a documented excuse (i.e. a signed note from your doctor or student health services, or a conflicting University obligation verified by student services). If you will not be able to take an exam, you must notify your GE in advance. Notification should be done via email.

**Quizzes** will be taken remotely through Canvas on your own time outside of class, they are due every Tuesday before class begins. They will be available beginning Friday each week. You will be limited to thirty minutes to complete it. Quizzes are open book.

**Final exam** will be in class, multiple choice format, taken on scantron. It will be comprehensive, closed book, and draw heavily from the quiz questions.

**Packback questions** are a requirement for this course. This is an online community where you will ask and answer questions about the different topics covered in this class and how they relate to the real world. In order to receive credit you must post 1 question and 2 answers per week, due each Sunday at 11:59 p.m. beginning Sunday April 16. Before you start posting, be sure to read the Community Guidelines found in the tutorial on Packback. If your post doesn’t follow the Packback Community Guidelines, there is a chance it will be removed and you won’t receive points for that post. See canvas for more details.

**Laboratory exercises** are to be read before attending your lab section for the week. Lab time is valuable and your only chance to prepare for the practical exams. You need to arrive prepared to know what you need to do. Don’t just complete the exercises, but be sure you know all the material before you leave. Your lab instructor will collect them on a regular basis, and grade them for completion only.
**Laboratory practical exams** will consist of a series of stations with specimens that must be studied in a prescribed period of time. Students who miss scheduled labs and practical exams will not be able to make them up as laboratory content requires considerable setup and curatorial effort.

The weight of each form of evaluation to the total course grade is as follows:

- Lab Exercises: 10%
- Lab Practical I: 15%
- Lab Practical II: 15%
- Packback Participation: 10%
- Lecture Quizes: 20%
- Lecture Final Exam: 30%

Grades will be assigned as follows: A = 90-100%, B = 80-89%, C = 70-69%, D = 60-69%, F < 60%, with +’s representing the top 3% and –’s the bottom 4% of each letter.

Students with disabilities: If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with the instructor soon. Also please request that the Counselor for Students with Disabilities send a letter outlining your approved accommodations. [Disability Services: disabsrv@darkwing.uoregon.edu, 346-1155; http://ds.uoregon.edu/].

Schedule: Following is a schedule of lecture and lab topics. The reading assignment for each lecture topic is given in parentheses. All readings are from the text, and are intended to provide background for the lectures. Material in the lectures is often different from that given in the assigned reading, and many lecture topics are not found in the textbook or are poorly represented. Thus, the book is to serve as a background and reference, but does not duplicate the lectures.

**April**
- 4 Lecture 1: History of Evolutionary Theory (Chapter 2)
- 6 Lecture 2: Inheritance, Cell Structure and Division (Chapter 4: pp. 81-97; Chapter 3: pp. 50-51; 64-78)
- 7 LAB I: Mendelian Genetics
- 11 Lecture 3: DNA and Protein Synthesis (Chapter 3: pp. 51-64)
- 13 Lecture 4: Population Genetics (Chapter 4: pp. 98-110)
- 14 LAB II: DNA structure and Protein Synthesis
- **16 First Packback Posts Due 11:59 p.m.**
- 18 Lecture 5: Forces of Evolution (Same as previous)
- 20 Lecture 6: No Class
- 21 LAB III: Population Genetics
- 25 Lecture 7: Macroevolution and Classification (Chapter 5: pp. 113-128; 136-139)
- 27 Lecture 8: Primate Biology (Chapter 5: pp. 128-136; Chapter 6: pp. 143-154)
- 28 LAB IV: Human Osteology

**May**
- 2 Lecture 9: Survey of Living Primates (Chapter 6: pp. 155-182)
- 4 Lecture 10: The fossil record: Geochronology and Taphonomy (Chapter 5: pp. 128-130; Chapter 9: pp. 272-276)
- 5 LAB V: Primate Classification
Lecture 11: Primate Evolution (Chapter 8: pp. 225-245)
Lecture 12: Hominoid Evolution (Chapter 8: pp. 245-261)
LAB VI: Practical examination I
Lecture 13: Bipedalism and Earliest Hominids (Chapter 9, Chapter 10: pp. 287-297)
Lecture 14: Ardipithecus ramidus (Same as previous)
LAB VII: Bipedalism
Lecture 15: Australopithecus (Chapter 10: pp. 297-309)
Lecture 16: Paranthropus (Same as previous)
LAB VIII: Plio-Pleistocene Hominids
Lecture 17: Earliest Homo (Chapter 10: pp. 310-316)

June
Lecture 18: Homo erectus (Chapter 11)
LAB IX: Later Genus Homo
Lecture 19: Later Homo (Chapter 12)
Lecture 20: Modern Human Origins (Chapter 13)
LAB X: Practical examination II
Final Examination 8:00 a.m.