ANTH 170: INTRODUCTION TO HUMAN ORIGINS, SPRING 2021
UNIVERSITY OF OREGON

Lecture
Professor
WEB
Dr. Scott Blumenthal
Email: sblument@uoregon.edu
Office Hours: R 4-5pm on Zoom or by appointment.

Lab
REMOTE via Zoom
GEs
Aileen Fernandez (aileenf@uoregon.edu)
Office Hours: F 10:00am-12:00pm
Labs: W 9:30-10:30am, 11:00am-12:00pm, 12:30-1:30pm, 2:00-3:00pm; R 9:30-10:30am, 11:00am-12:00pm, 12:30-1:30pm, 2:00-3:00pm

Nicholas Altensee (naltense@uoregon.edu)
Office Hours: T 9:00-10:00am or by appointment.
Labs: F 9:30-10:30am, 11:00am-12:00pm, 12:30-1:30pm, 2:00-3:00pm

COURSE DESCRIPTION
This course provides an introduction to the scientific study of human origins, and will cover aspects of evolutionary biology, geology, paleontology, primatology, paleoanthropology, and archaeology. The course begins with a survey of the historical, theoretical, and empirical background of evolutionary biology, followed an examination of the basics of vertebrate, mammalian, and primate biology and evolution. We will also focus on understanding geological time, dating of rocks and the fossils they contain, as well as the processes by which organisms become fossilized, necessary to place the human fossil record in its temporal and environmental context. With this foundation, the course investigates the evidence for human evolution from comparative anatomy, paleontology, genetics, and archeology, in order to evaluate where, when, how, and why we humans have evolved to be the organisms that we are.

OBJECTIVES
1. Use the scientific method to understand and interpret the natural world.
2. Differentiate the forces of evolution and their effects on populations.
3. Compare human biology to that of other primates, mammals and vertebrates.
4. Describe the different types of primates and their biology.
5. Explain what fossils are and how they form.
6. Identify the bones of the human skeleton and interpret them functionally.
7. Investigate evidence for where, when, and why humans evolved.

COURSE FORMAT
This is a hybrid class, with a WEB lecture component and a REMOTE laboratory component. Lectures have no set meeting time, and you may watch them at a time that is convenient for you. Lectures emphasizes background and theoretical concepts, and may cover some topics differently from assigned reading, while other topics may not be covered in the textbook or are poorly represented. The textbook readings are required, providing additional context and explanation that will help you master the content of this course. Laboratory sections are synchronous and remote, delivered via Zoom, and you must attend your scheduled sections. Lab assignments focus on applying knowledge covered in lectures and readings to the observation and interpretation of evidence for human evolution.

TEXT

Labs will be made available on Canvas.
CANVAS
This course is delivered using Canvas, where you can find learning materials and other course information, submit assignments, and take quizzes and exams. Any course announcements will be made through Canvas, so please make sure that you regularly check your Canvas-linked e-mail account.

When you register for the class, you will automatically be enrolled to the site. Please contact UO Library Canvas Student Support for help with all technical issues.

CANVAS MODULES
The course is organized into weekly modules on Canvas. Start each module by going to the Overview Page, where you can find the information you need to keep up with class during that week, including weekly objectives, readings, lectures, and assignments. If you prefer, you can also find links to course material listed in each module, outside of the overview page.

ASSIGNMENTS
Weekly Labs
LAB ASSIGNMENTS will be posted on Canvas. To preserve formatting, please download and complete the lab using the computer version of Word. Using the online version of Word in your browser is not recommended. Labs must be submitted via Canvas by Friday at 11:59pm of the following week.

Weekly Quiz
The WEEKLY QUIZ will be completed on Canvas. Each quiz will be short (4 questions), multiple choice and open book. Each quiz will be available from Wednesday at 5pm and must be completed by Fridays 11:59pm.

Discussion Boards
There will be 3 DISCUSSION ASSIGNMENTS due throughout the term, which will be completed in a Canvas discussion board. Each assignment will include the following 3 components: First, you will first watch a documentary video. Second, you will compose your discussion post (2-3 paragraphs in length) that includes a response and reaction to the video, as well as readings and lectures, that addresses a set of provided questions/topics, and provides at least two questions of your own to engage your classmates. Third, in the week following the initial post you will compose a response to a post written by one of your classmates. See the Discussion Board assignments on Canvas for additional information. Your discussion groups will consist of the other students in your laboratory section. Each discussion post is due by Sunday at 11:59pm.

Exams
All exams will be taken on Canvas. The MIDTERM will be multiple choice and open book, and will be available from Wednesday April 28th at 5pm and must be completed by Sunday May 2 11:59pm. Once you begin you will be limited to 80 minutes to complete the exam. The FINAL EXAM will also be multiple choice format, comprehensive and open book, and will be available from Wednesday June 9th 12:01am and must be completed by 11:59pm.

HOW TO PLAN YOUR WEEK
As you move through the module each week, I suggest the following schedule:

Monday through Wednesday: Students should complete assigned readings and watch the narrated lectures using the links provided on Canvas.

Wednesday through Friday: Attend your scheduled lab section on Zoom.

Thursday and Friday: Take the online quiz, due by 11:59pm on Fridays. Students should begin work on lab assignments for the current week, and submit labs from the previous work by 11:59pm on Fridays. Work on discussion board posts, which are due Sundays by 11:59pm.
GRADING
Your evaluation will be based on Discussion board participation (20%), Quizzes (10%), Lab exercises (10%), Lab Exam I (10%), Lab Exam II (10%), Midterm Exam (15%), and Final Exam (20%). 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 3% (e.g. ≥ 97%) and bottom 3% (e.g. ≥ 90 and < 93%) of each letter.

LATE POLICY
Labs, Weekly Quizzes, and Discussion Board: Late submissions will be graded with a penalty of 10% with each day late. After 10 days, the grade will be 0%.

Exams: UNDER NO CIRCUMSTANCES WILL MAKE-UPS BE GIVEN without prior approval for a documented excuse. If you cannot take an exam, you must notify your GE well in advance.

ACCOMMODATIONS
Appropriate accommodations will be provided for students with documented disabilities. Please contact me of your GE to discuss these accommodations as soon as possible.

PERSONAL ISSUES
If there is a serious issue related to your ability to participate in our course, please contact me immediately.

ACADEMIC HONESTY
The University of Oregon and I consider academic honesty to be essential for each student’s intellectual development. As an institution fundamentally concerned with the free exchange of ideas, our University depends on the academic integrity of each of its members. In the spirit of this free exchange, students and faculty of our University recognize the necessity, and accept the responsibility, for academic honesty.

RESOURCES FOR REMOTE LEARNING
Canvas support: phone (541-346-1900), email (uoonline@uoregon.edu), or live chat (livehelp.uoregon.edu).

Remote Technology Resources for Students: https://is.uoregon.edu/remote.
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<tr>
<th>Week</th>
<th>Lectures</th>
<th>Deadlines</th>
<th>Lab Sections</th>
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| 1    | - Anthropology & scientific method  
      - History of scientific and evolutionary thinking  
      - Antiquity of humanity  
      - Principles of inheritance  
      - Lab introductions  
      - Weekly quiz due Friday by 11:59pm | - Lab 1 Mendelian Genetics (due next Fri by 11:59pm) |
| 2    | - Cell structure and division  
      - DNA and protein synthesis  
      - Discussion #1 Post due Sunday by 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 2: DNA & Protein Synthesis (due next Fri by 11:59pm) |
| 3    | - Population Genetics  
      - Forces of Evolution  
      - Macroevolution  
      - Biological Classification  
      - Rocks and fossils  
      - Discussion #1 Reply due Sunday by 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 3: Population Genetics (due Fri Week 4 by 11:59pm) |
| 4    | - What is a Primate?  
      - Survey of living primates  
      - Evolution of vertebrates and mammals  
      - Evolution of primates  
      - Discussion #2 Post due Sunday 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 4: Human Osteology (due next Fri by 11:59pm) |
| 5    | - Evolution of primates  
      - Australopithecus  
      - Paranthropus  
      - Bipedalism and earliest fossil hominins  
      - Ardipithecus  
      - Discussion #2 Reply due Sunday by 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 5: Primate Classification (due next Fri by 11:59pm) |
| 6    | - Discussion #3 Post due Sunday 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 6: LAB EXAM during lab sections |
| 7    | - Discussion #3 Reply due Sunday by 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 7: Bipedal Adaptations (due next Fri by 11:59pm) |
| 8    | - Discussion #3 Post due Sunday 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 8: Plio-Pleistocene hominins (due next Fri by 11:59pm) |
| 9    | - Discussion #3 Reply due Sunday 11:59pm  
      - Weekly quiz due Friday by 11:59pm | - Lab 9: Later Genus Homo (due next Fri by 11:59pm) |
<p>| 10   | - Weekly quiz due Friday by 11:59pm | - Lab 10: LAB EXAM during lab sections |
| Finals | FINAL EXAM on Wednesday June 9 available 12:01am and due by 11:59pm | - |</p>
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<thead>
<tr>
<th>Weeks</th>
<th>Readings (Jurmain 15th edition)</th>
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| 1     | • Ch 1: read the entire chapter, paying attention to the overview of the structure of the field of physical (biological) anthropology (pages 12-18), as well as the scientific method (pages 19-21)  
|       | • Ch 2: read pages 25-43 closely, which focus on the development of evolutionary theory, Darwin’s contributions, and natural selection. Also look at pages 43-46 on the history of opposition to evolution.  
|       | • Ch 4: read pages 81-97 on Mendelian genetics |
| 2     | • Ch. 3: read pages 50-51 and 64-78 on cell structure and cell division; read pages 52-64 on DNA and protein synthesis |
| 3     | • Ch. 4: read pages 98-110 on population genetics and forces of evolution |
| 4     | • Ch. 5: read pages 113-123 on biological classification and cladistics; read pages 136-139 on macroevolution; read pages 123-128 on the definition of a species  
|       | • On fossils, read Ch. 5 pages 128-130  
|       | • On rocks, read Ch. 9 pages 272-276 |
| 5     | • Ch. 5: read pages 130-136 on humans as vertebrates and humans as mammals  
|       | • Ch. 6: read pages 143-154 on primate characteristics; read pages 155-173 on the living non-human primates; also look at pages 173-182 for issues in primate conservation |
| 6     | • Ch. 8: read pages 225-245 on early primate evolution; read pages 245-261 on the evolution of monkeys and apes |
| 7     | • Ch. 9: read pages 263-272 on the field of paleoanthropology; read pages 279-283 on the evolution of bipedalism  
|       | • Ch. 10: read pages 287-297 on the mechanics of bipedal locomotion and the fossil evidence for the earliest hominins |
| 8     | • Ch. 10: read pages 297-303 on Australopithecus; read pages 303-309 on Paranthropus  
|       | • Ch. 9: revisit pages 270-271 on earliest stone tools during the time of Australopithecus |
| 9     | • Ch. 10: read pages 310-316 on early Homo.  
|       | • Ch. 9: read pages 268-269 pages 277-279 on Oldowan archaeology and hominin behavior  
|       | • Ch. 11: read the entire chapter on Homo erectus |
| 10    | • Ch. 12: read the entire chapter on Later Homo  
|       | • Ch. 13: read the entire chapter on the evolution of Homo sapiens |