ANTH 467: Paleocology and Human Evolution
Spring Term 2018
University of Oregon

Instructor: Dr. Stephen Frost
Office: Condon 353
Tel: 6-5161
Office Hours: MW 10:00-11:00 a.m.
Email: sfrost@uoregon.edu
Lecture Room: Condon 313
Lecture Time: MW 3:00-4:50 p.m.

Goals:
1. Understand how past environments and the biology of extinct organisms are reconstructed.
2. Review major hypotheses about how past ecosystems shaped human biology and evolution.
3. Evaluate these hypotheses about the past using multidisciplinary evidence from the fossil record, geology, global climate, and other sources.

Description:
This course explores how the ecosystems that our ancestors and other early hominins occupied in the past have made us what we are. The first three weeks will consist of a series of background lectures. Following this, the course becomes a direct discussion-based seminar with weekly group presentations where we will explore some of the major topics in human paleoecology and evolution. For each of these topics, a series of assigned readings will be available on the course Canvas page at least one week in advance. You must read them prior to the relevant seminar. For each of these, I will introduce the topic for that week (typically on a Monday) and we will have a class discussion on that topic based on assigned articles. On the following scheduled meeting (usually a Wednesday) a group of students (2-3) will give a short presentation of 1 or 2 relevant articles of their choosing and will lead subsequent discussion.

While this course focuses on human paleoecology, background in several subjects is expected, including basic human anatomy, the human fossil record, primate diversity, biological classification, evolutionary theory, stratigraphy, taphonomy, and geochronology.

Requirements:
In addition to your participation in class discussion (20%), evaluation will consist of weekly discussion questions (20%), a group presentation and student-led discussion (25%), and a final research paper (35%).

Participation: This course is a discussion based seminar, and therefore attendance is required and you are expected to participate in discussions every week. Your grade in discussions will be based on both the content and quantity of your participation, demonstration of familiarity with the readings, and relevance to the topic. It will also include how respectfully and thoughtfully you engage with other class members. Have a look at the tips for success on the Canvas page for guidance on your participation.

Discussion Questions: The success of this course depends on thoughtful and engaged discussion. To facilitate this, you are required to turn in at least 3 questions for discussion each week, typically on Wednesdays for the student-led discussions, as noted on the schedule below. These must be completed before class, typed and printed (no credit for hand-written questions). These
questions should be open-ended (not yes, no, or short answer) and demonstrate that you have done the reading assignments and synthesized the information. Ideally, they will incorporate outside material or information from previous discussion. Try to incorporate questions that investigate the testability of the different hypotheses, their fit to current data of different types, or underlying assumptions the authors seem to be making.

**Group Presentation and Discussion:** You will be divided into groups of 2-3 students early in the class. Each group will choose one of the topics from weeks 5 – 9. On the date of their selected topic, they will make a 15-20 minute presentation describing 1-2 articles of their choosing that build on the previous discussion, and then lead the class discussion for the remainder of that day. To this end, each group must email me 3 possible articles and a brief justification for each article by class time on Monday the week prior to their presentation and then check in with me during office hours that Wednesday (i.e., one week before their presentation). Your grade will be based on both the quality of your presentation and how well you lead the subsequent discussion. All group members must participate in both the presentation and guiding the discussion. See Article Presentation guide on Canvas.

**Final Research Paper:** You must write an 8 to 10 page research paper on a topic of your choosing, so long as it is appropriate for this class and follows the Research Paper Guidelines on Canvas. You must finalize your final paper topic by May 2, and submit a detailed outline by May 23. The final paper is due on June 14 at 2:45 p.m. The paper outline is worth 10% of your grade and the final paper itself 25%. Topic, outline, and final paper should be printed and handed in, not emailed.

Classroom Etiquette: The success of this course depends on your participation. Help make it an intellectually safe, friendly, and inquisitive environment by respecting others in the class. To this end, please:

- arrive to class on time and read all assigned articles before class begins
- do not interrupt someone else speaking in class
- silence or turn off your cell phone during class
- never text, email, instant message, or surf the web during class – in addition to being distracting and disrespectful to others, it will cost you your participation credit for the day
- never record (audio or video) any part of class unless you have my permission

ADA Statement: Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, no later than the first week of the term. Students may also wish to contact UO Disability Services Office at 541-346-1155. NOTE: As per FERPA regulations Faculty are no longer automatically informed as to the ADA status of students. If you have special requirements, you must bring your information to me as soon as possible.

Equal Opportunity Compliance Statement: It is the policy of the University of Oregon Board of Directors that there will be no discrimination or harassment on the basis of age, disability, gender, marital status, national origin, race, religion, sexual orientation,
or veteran status in any educational programs, activities or employment. Persons having questions about equal opportunity and non-discrimination should contact the Office of Affirmative Action at 541-346-3123.

Schedule: Following, is a tentative schedule of lecture topics. Readings for each lecture topic will be posted on the Canvas page. These readings are intended to provide background for the lectures. Material in the lectures is often different from that given in the assigned reading. This schedule is tentative and changes are possible, but will be announced in advance.

April
2 Introduction
4 Geochronology
9 Paleoenvironment
11 Paleoenvironment (cont’d) – Discussion Questions Due
16 Paleobiology
18 Paleobiology (cont’d) – Discussion Questions Due
23 Savanna Hypothesis
25 Savanna Hypothesis (cont’d) – Discussion Questions Due
30 Monogamy Hypothesis

May
2 Student Group Presentation – Discussion Questions Due
Research Paper Topic Due
7 Turnover Pulse Hypothesis
9 Student Group Presentation – Discussion Questions Due
14 Variability Selection Hypothesis
16 Student Group Presentation – Discussion Questions Due
21 Hunting and Human Evolution
23 Student Group Presentation – Discussion Questions Due
Research Paper Outline Due
28 Memorial Day – No Class
30 The Grandmother Hypothesis

June
4 Student Group Presentation – Discussion Questions Due
6 Course discussion and wrap-up
14 2:45 pm: Final Research Papers Due