

Anthropology 3200  
**HUMAN ORIGINS AND EVOLUTION**  
Spring 2006

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**Course Objectives**

This course examines the fossil record for human evolution from 6 million years ago to the origin of modern *Homo sapiens*. It covers current theories, evidence, and controversies in the field of paleoanthropology. It considers the historical and sociological contexts of human evolutionary studies, popular myths and misconceptions about human evolution, current challenges to evolutionary theory in American “culture wars”, and alternative scenarios for the future evolution of the human species. The course provides a much deeper examination of the fossil record of human evolution than is available in ANTH 2150, Human Nature. Students are invited to work with the primary scientific literature on the subject, and with our world-class collection of human fossil cast material.

**Course Requirements**

You will be graded on:

- (1) class attendance, preparedness, and participation (20%);
- (2) two take-home exams (40%);
- (3) research paper (30%);
- (4) an in-class presentation of research results (10%).

You are required to have all reading completed for the days assigned. You should come to class thoroughly prepared to discuss this material.

**Required Reading**

The **required text** is:

Lewin, Roger and Robert Foley 2004 *Principles of Human Evolution* (2<sup>nd</sup> edition). Blackwell.

**The Research Paper**

The centerpiece of required work for the term is the research paper. The topic is wide open, so select one that truly interests you. The main expectation is that you will get into the primary scientific literature on your topic. I'd like you to cite a minimum of six relevant and up-to-date sources from traditional books and scholarly journals. Relevant journals would include *Nature*, *Science*, *Current Anthropology*, *American Anthropologist*, *Evolutionary Anthropology*, *Annual Review of Anthropology*, and the *Journal of Human Evolution*. Check with me if you are unsure whether a particular source qualifies.

A list of possible topics is provided below, categorized by those that would involve comparative study of our fossil cast collection, and those that wouldn't. You may also select a topic that is not listed. Clear your topic through me, as I'd like to ensure that everyone is working on a different topic.

**Research Topics Involving Study of DU Cast Collection:**

Earliest hominins: How many species?

Early *Homo*: How many species?

Later *Homo*: How many species?

Neandertal morphology and phylogeny: Direct ancestor, or not?  
*Homo floresiensis*: Real species or microcephalic *H. sapiens*?

### **Other Topics:**

The Last Common Ancestor: Biology and Behavior.  
Contemporary primate models for early hominin behavior: What works the best?  
Explaining bipedalism: What does the evidence say?  
Robust Australopithecine (*Paranthropus*) behavior and social organization.  
Scavenging *versus* hunting in human evolution.  
*Homo erectus/ergaster* expansion out of Africa: Timing and models.  
Neandertal behavior and social organization: The archaeological evidence.  
Neandertal-*H. sapiens* ecological relationships.

### **Research Report**

The research report is an oral presentation to the class that outlines your research problem and methods of inquiry, and summarizes your key findings. It is an opportunity to collect constructive feedback on your project from the instructor and the class. You should expect to incorporate feedback from this presentation into the final draft of your research paper.

## **COURSE SCHEDULE**

<b><u>Week</u></b>	<b><u>Date</u></b>	<b><u>Topic/Reading</u></b>
1	Mar 27	Course Introduction and Overview.
	Mar 29	The Paleoanthropological Record; Narratives of Human Evolution. <u>Reading</u> : Chapter 1.
2	Apr 3	Evolutionary Theory Today: Models and Controversies. <u>Reading</u> : Chapters 2, 3, 4.
	Apr 5	Humans as Primates; The Primate Context of Evolution. <u>Reading</u> : Chapters 5, 6.
3	Apr 10	Reconstructing Behavior and Phylogeny: Models and Evidence. <u>Reading</u> : Chapter 7. <b>Distribute First Exam.</b>
	Apr 12	NO CLASS.
4	Apr 17	Fossils, Molecules, and “Missing Links”; Earliest Hominins: <i>Orrorin</i> , <i>Sahelanthropus</i> , <i>Ardipithecus</i> . <u>Reading</u> : Chapters 8, 9.
	Apr 19	<i>Australopithecus</i> ; Models of Human Origins. <u>Reading</u> : Chapter 10.

**First Exam is Due.**

- 5 Apr 24 Adaptive Radiation of Hominins; The Origins of *Homo*  
Reading: Chapter 11.
- Apr 26 Sorting Through Plio-Pleistocene Hominin Diversity and Ecological Relationships.  
Reading: Chapter 12.
- 6 May 1 *Erectus* Rising: Colonization of the Old World.  
Reading: Chapter 13.
- May 3 Origins Of Anatomically-Modern *Homo sapiens*; The Neandertal Enigma.  
Reading: Chapter 14.  
**Distribute Second Exam.**
- 7 May 8 Recent Research On *sapiens* and Neandertal Evolution.  
Reading: Chapter 15.
- May 10 Archaeology Of Behaviorally-Modern *Homo sapiens*.  
Reading: Chapters 16, 17, 18.
- 8 May 15 Implications of the Human Evolutionary Story; Evolution and Society.  
Reading Chapter 19.  
**Second Exam is Due.**
- May 17 The Challenge of Intelligent Design; The Future Of Human Evolution.  
Reading: TBA.
- 9 May 22 Research Reports.
- May 24 Research Reports; Parting Shots.
- 10 May 29 Memorial Day—NO CLASS
- May 31 NO CLASS.
- 11 June 7 **RESEARCH PAPER IS DUE.**