ANTHROPOLOGY 7

“HUMAN EVOLUTION”

Prof. Joseph Manson  
Office: 387 Haines Hall  
Office hours: Tue-Thur 2-3 or by appointment  
jmanson@anthro.ucla.edu

UCLA  
Summer Session C 2006  
Fowler A103B  
Tue-Thur 10:45-12:50

TEXTBOOK: R. Boyd & J.B. Silk. HOW HUMANS EVOLVED, 4th EDITION

GRADES will be based on a midterm exam (35%), a final exam (55%) and a discussion section grade (10%) based on attendance, participation, and short written assignments.

WHAT YOU WILL LEARN IN THIS COURSE

Humankind is one product of the process first identified by Charles Darwin: evolution by natural selection. This insight has profound implications for every scholarly field that concerns itself with the human condition. In this course, you will learn how evolution works -- in particular, how Darwin and his intellectual successors solved the problem of how complex organic design could emerge in the absence of a conscious designer. You will be introduced to the ecology and behavior of humanity's closest living relatives, the nonhuman primates. You will survey the extensive and growing fossil record of human evolution through six million years of change from ape-like -- but upright walking -- creatures to modern Homo sapiens. Finally, you will learn how evolutionary theory and evolutionary history can inform the study of modern human biology, the human mind, and human social behavior.

COURSE OUTLINE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPICS</th>
<th>READINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Aug. 8  ● Why study human evolution? A new way to think about some old, “big” questions  ● How science works and how scientific ideas change: what is a “theory”?</td>
<td>Prologue</td>
</tr>
<tr>
<td>2.</td>
<td>Aug. 10 ● Natural selection: how randomly generated variation and non-random survival and reproduction produce adaptations</td>
<td>Ch. 1-2</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| Aug. 10    | (continued)  
Mendelian genetics: why offspring resemble their parents (but not perfectly) |
| Aug. 15    | 3. Genes in populations: processes by which gene frequencies change (or don’t)  
Molecular genetics: DNA, the chemical basis of heredity  
Species and speciation: What is a species and how do new ones form? |
| Aug. 17    | 4. Introduction to the primates: a survey of the apes, monkeys and prosimians  
Evolutionary theory and social behavior: how natural selection has shaped selfishness and altruism; the central roles of kinship, mate competition and mate choice in evolution |
| Aug. 22    | 5. Primate behavior: how the above principles play out in the lives of apes, monkeys and prosimians  
Primate evolution: how small shrew-like insectivores were transformed into forest apes |
| Aug. 24    | 6. Early hominins: how forest apes were transformed into bipedal savanna dwelling apes  
**MIDTERM EXAM. Will cover readings and associated lecture material up to and including Aug. 17.** |
| Aug. 29    | 7. Hominin paleoecology: How early hominins made a living  
Evolution of the genus *Homo*: brains reach modern sizes, behavior becomes more complex |
| Aug. 31    | 8. Origins of modern *Homo sapiens*: the evolution of modern human morphology and behavior |

Ch. 3-4  
Ch. 5-6  
Ch. 7-9 (including re-reading the material listed with the Aug. 17 lecture)  
Ch. 10-11  
Ch. 12-13  
Ch. 14

10. Sep. 7  ● Evolutionary perspectives on human mating and parenting  ● The evolution of culture: how humans (only?) have a second (non-genetic) inheritance system, and what this implies  Pages 445-488

11. Sep. 12  ● The puzzle of human cooperation: Why do people make sacrifices for large groups of non-relatives?  ● Darwinism, science and ethics: how evolutionary theory can help explain morality but can’t substitute for morality  None

FINAL EXAM: SEP. 14 DURING REGULAR CLASS TIME

SOME COURSE POLICIES AND SUGGESTIONS

Do the readings before their associated lecture. Sometimes my lectures will parallel the readings closely, but at other times I will assume that you’ve already done the readings.

Weekly attendance at discussion section is mandatory. For each section meeting, I will assign, during the preceding week, a few study questions from the textbook. You are required to prepare written answers to each study question. Your T.A. will use the study questions to focus the discussion.

Because of the compressed summer schedule, the Thursday discussion sections will cover the same material as the sections meeting on the following Tuesday and Wednesday.

The midterm and final exams will consist entirely of questions to be answered in about 2-5 sentences. The exams will draw on material to be presented in lecture, in readings and in discussion sections. Bring a blue or black pen to the exams. You will not need a blue book.