

**HBIO 300**  
**EVOLUTION, ECOLOGY, AND CULTURE**  
**4 Units**

This course will study how human biological evolution and cultural development affect the way we interact with the environment and with each other. This course provides a comprehensive overview of how biological and cultural influences interact in making us human. It considers the extent to which we can use Darwinian theory to achieve a better understanding of human behavior. We begin with a fundamental premise: that human social behavior is the outcome of a complex interplay between our biology, molded by millennia of natural selection, mediated by the environment to which we were adapted during our evolution, and filtered through a complex web of cultural factors. We cannot truly separate the intricate braid of human biology and human culture. We can, however, ask what the causes and consequences of this interplay may be. This can be done not only for people living in traditional hunter-gatherer societies, but also for ourselves in western culture. We will consider the biological and cultural underpinnings of such topics as the human diet, the human mind, and the human tendency to worship supernatural powers.

Another major goal of the course is to teach students how to create and present professional Powerpoint presentations, as well as academic papers. These are skills that are useful to any career, particularly in academics. The time requirements for this course will be substantial because students will be reading and presenting on the class readings, and also will engage in producing a major research paper and a oral presentation. A very heavy emphasis will be placed on daily class attendance, participation in discussions, and the student's efforts to make written and oral works interesting and clear.

The class meets on Mondays from 4-6:50 in Hancock (AHF) B10 seminar room. The course format is a mixture of lecture and both instructor and student-led discussions based on the readings.

## **Required books:**

Topic: Human evolution, anatomy and health

Book: **The Story of the Human Body** (by Lieberman)

Topic: Hunter gatherers as a model for early human culture

Book: **The Hadza, Hunter Gatherers of Tanzania** (By Marlowe)

Topic: Biological sex, cultural gender, sexual differences, sexual relations

Book: **Why Sex Matters** (by B.S. Low)

Topic: Environment, resources, and human cultural development

Book: **Guns, Germs and Steel** (by J. Diamond)

Topic: Resource use and conflict, ancient civilizations

Book: **Fall of the Ancient Maya** (by D. Webster)

Topic: Religion in Human Culture

Book: **Evolving God** (by Barbara King)

The first class will be a general introduction to human evolution, ecology, and culture. During the second class, we will start discussing the individual books, and assign groups.

Each group will work on a book discussion (preferably with PP slides prepared), AND each individual student should write a term paper based on the same subject, or related topic subject to approval. The paper should be about 5 pages long, and should primarily be based on original research papers on a subject that is related to topics discussed in class. The paper can give reference to the book that was presented, but should also contain references to at least three peer reviewed papers. The term paper does not have to come to the same conclusions as the books used. The paper will be presented by the individual student towards the end of the class.

## **Grading:**

20% - Class participation/Preparedness

20% - Moderation of Book Discussion

20% - Quizzes/ Short tests

20% - Presentations

20% - Paper

## LECTURES

### Week 1

Jan 11: Introduction: Concepts in human evolution, Darwinian views of human biology

### Week 2

Jan 18: Martin Luther King Jr. Day - No class

### Week 3

Jan 25: Human evolution cont. **QUIZ**

### Week 4

Feb 1: Concepts in human evolution cont.  
New topic: Hunter gatherers

### Week 5

Feb 8: Students present book: The Hadza. **QUIZ**  
New topic: Human sex and sexuality

### Week 6

Feb 15: President Day - No class

### Week 7

Feb 22: Students present book: Why Sex Matters  
New topic: New topic: environment, resources

### Week 8

Feb 29: Students present book: Guns, Germs, and Steel  
New Topic: Resources, conflict, ancient civilizations

### Week 9

Mar 7: Students present book: Fall of the Ancient Maya  
New Topic: Religion in Human Culture

### Week 10

Mar 14: Spring Recess- No class

### Week 11

Mar 21: Students present book: Evolving God  
New Topic: Human diet, agricultural revolution

## READINGS

Book introduction

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**Lieberman**

**Lieberman**  
**Marlowe**

**Marlowe** finish  
**Low**

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**Low** finish  
**Diamond**

**Diamond** finish  
**Webster**

**Webster** finish  
**King**

-

**King** finish  
**Lieberman**

### Week 12

Mar 28: Finish topic: diet, agricultural revolution  
Topic: Writing academic papers, **approval of topics**

**Lieberman**

### Week 13

Apr 4: Darwinian medicine,  
Health in modern and ancient humans **QUIZ**

**Lieberman**

### Week 14

Apr 11: Human biology and ecology

Original research  
papers (assigned)

### Week 15

Apr 11: Human biology and ecology **QUIZ**

Original research  
papers (assigned)

### Week 16

Apr 25: Student Presentations of papers  
**Final Project Paper Due**

### **Academic Accommodations:**

•Any student requesting academic accommodations based on a disability are required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (the instructor) as early in the semester as possible. DSP is located in Student Union (STU) 301 and is open 8:30-5:00pm Monday – Friday. The phone number for DSP is 213) 740-0776.

### **Academic Integrity:**

•Students who violate University standards of academic integrity are subject to disciplinary sanctions, including failure in the course and suspension from the University. Since dishonesty in any form harms the individual, other students and the University, academic integrity policies will be strictly enforced. I expect you will familiarize yourself with the Academic Integrity guidelines found in the current SCampus.

### **Academic Integrity Violations:**

- Academic dishonesty/misconduct (plagiarism, cheating, unauthorized collaboration, etc.) will not be tolerated. All academic integrity violations will result in a grade sanction and will be reported to the Office for Student Judicial Affairs. It is your responsibility to “reasonably” protect your own work from the plagiarism of others.
- If plagiarism is detected on a group project, all members of the group will be held responsible.
- You are expected to be familiar with the Academic Integrity guidelines found in the current SCampus (student guidebook). An electronic version is available at <http://usc.edu/scampus>.