San José State University Social Sciences/Anthropology ANTH 12, Introduction to Human Evolution, Section 3, Fall, 2011

Instructor: Dr. Elizabeth Weiss

Office Location: Clark 404R

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Email: Drop Box in the Introduction to Human Evolution e-text; All

emails should be sent this way as opposed to my university

email account!

Office Hours: TuTh 1030 – 1130; 1330 – 1530

Class Days/Time: TuTh 1200 - 1315

Classroom: WSQ207

GE/SJSU Studies Category: B2/Life Science

Course Description

The human organism from an evolutionary perspective. The foundations of life and evolutionary theory. Introduction to primate behavior and the fossil record. Human biocultural evolution over the last sixty million years.

<u>Detailed Course Description:</u> Introduction to Human Evolution is a course designed to allow students to appreciate the evolutionary history of our species and the biological bases that are at the foundation of this process. The course is an introductory one; thus, no specific prior knowledge is assumed. There are no prerequisites to take this course.

During the semester, students will acquire basic biological knowledge relating to molecular biology, cell reproduction, fundamental principles of micro- and macro-evolutionary theory (especially the role of natural selection), and the intellectual background leading to the development of evolutionary theory.

This foundation will then be used to explore the specific evolutionary history of major groups of organisms with a specific focus on human evolutionary history. Comparative perspectives will be incorporated so to provide a basis for understanding how humans are related to other primates (and what this implies structurally, physiologically, and behaviorally). Furthermore, data provided directly by the fossil and molecular records will be comprehensively reviewed in tracing the major features of human evolution. In

summary, this course attempts to place our species in a clear evolutionary context and to ask basic questions relating to human origins, such as what kind of creature are we, how did we get to be this way, and where did we come from.

Major topics will include:
The history of evolutionary theory
Biological basis of life: cells, DNA, and genes
Evolution and heredity
Overview of primates
Hominid/human origins
Modern human origins
Human variation and adaptation

Course Goals and Student Learning Objectives

At a general level, this course is primarily about the nature of the evolutionary process, how it works, and how scientists have come to understand the process (specifically to understand ourselves). The evidence relating to human evolution is used to illustrate evolutionary and biological processes (such as natural selection, reproduction, heredity, etc). In addressing the fundamental questions relating to human origins, you will be challenged to think critically, apply sound scientific methodologies, understand and assess quantitative data, and communicate your knowledge.

At SJSU, students are encouraged to recognize that education is participatory experience. Thus, each student is expected to contribute to further refining the course objectives (so better to articulate your individual expectations and needs), to give feedback to the instructor regarding the adequacy of your learning and how well the course assessment measures that learning (and how these assessment tools can be improved). Finally, each student is challenged to be engaged in the exploration of the fascinating material covered this semester, to participate in class discussions, and to relate in assignments and exercises how you can apply these concepts to your everyday life.

The most important contribution this course can make to your education is to provide you with greater ability to think critically. As a result, this skill will contribute permanently to your further education, that it, for the remainder of your lifetime.

GE/SJSU Studies Learning Outcomes (LO), if applicable

Upon successful completion of this course, students will be able to:

LO1 use methods of science and knowledge derived from current scientific inquiry in life or physical science to question existing explanations;

LO2 demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues; and

LO3 recognize methods of science, in which quantitative, analytical reasoning techniques are used.

Course Content Learning Outcomes

Upon successful completion of this course, students should have increased:

- 1. Understanding of culture as the distinguishing phenomenon of human life, and the relationships of human biology and cultural processes in human behavior and evolution.
- 2. Awareness of human diversity and the ways in which humans categorize diversity.
- 3. Knowledge of the significant findings of archaeology, cultural anthropology, and physical anthropology, and familiarity of the important issues in each subdiscipline.
- 4. Knowledge of the history of anthropological thought and its place in modern intellectual history.
- 5. Comprehension of migration, colonialism, and economic integration as significant phenomena shaping global society.
- 6. Ability to access various forms of anthropological data and literature.
- 7. Awareness of the importance and value of anthropological knowledge in contemporary society, and the ability to apply it to social issues.
- 8. Knowledge of the research methods of the sub-disciplines of anthropology, and ability to apply appropriate research methods in at least one sub-discipline.
- 9. Ability to present and communicate anthropological knowledge and the results of anthropological research to different audiences.
- 10. Knowledge of political and ethical implications of social research.

Required Texts/Readings

Textbooks

1) INTRODUCTION TO HUMAN EVOLUTION

AUTHOR: Elizabeth Weiss

PURCHASE ONLINE ACCESS CODE: http://webcom7.grtxle.com/evolution

ISBN: 978-1-61549-094-3

2) PHYSICAL ANTHROPOLOGY: SELECTIONS FROM POP SCIENCE TO

PRIMARY RESEARCH
EDITED BY: Elizabeth Weiss

PURCHASE FOR A DISCOUNTED PRICE AT:

https://students.universityreaders.com/store/

ISBN: 978-1-935551-66-0

Classroom Protocol

Please respect your neighbors and refrain from newspaper reading; using electronics; utilizing computers for anything other than taking notes.

Any behavior deemed disruptive to the instructor or other students may result in being asked to leave the classroom or being referred to the Judicial Affairs Officer of the University.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc.

Assignments and Grading Policy

Preparation and Participation requirements

Read the chapters prior to coming to class; make sure to take the survey, do the reinforcement activities, take the pre- and post-tests to help you understand the topics and do well on the midterm and final.

Exam requirements

Midterm & Comprehensive Final (Both of which will use Scantron T&E 0200)

<u>Writing requirements</u> include three (3) take home assignments each of which will consist of 500 words minimum per assignment. All writing assignments must be turned in via Turnitin.com before class begins on the scheduled due date.

Topics will be discussed in detail in class and are designed to address the GE learning objectives. Writing assignments will be graded in accordance to GE guidelines, which states that "writing shall be assessed for grammar, clarity, conciseness and coherence." Writing assignments cannot be re-written after they have been graded.

Failure to turn in any of the writing will result in an F in the class, regardless of achievement on other portions of the course (this is a university policy on GE courses).

Grading Policy and Procedures: To pass this course, you must receive a final grade of D- or higher.

The final semester grade will be based on the following (each is graded on a scale of 100):

Writing Assignment 1	1 X 5%	Ш	5%
Writing Assignment 2	1 X 10%	II	10%
Writing Assignment 3	1 X 15%	II	15%
Midterm	1 X 30%	=	30%
Comprehensive Final	1 X 40%	=	40%
Total			100%

Grading is as followed:

A	В	С	D	F
97% - 100% = A+	87-89% = B+	77-79% = C+	67-69% = D+	Below 60% = F
91-96% = A	81-86% = B	71-76% = C	61-66% = D	
90% = A-	80% = B-	70% = C-	60% = D-	

<u>Make-up Work:</u> If you know in advance that you should be unable to attend an exam, contact me to set up a time to take the exam prior to its scheduled date. Only students with a valid documented excuse will be able to take a make-up the midterm, final exam, or submit a late writing assignment.

University Policies

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The <u>University's Academic Integrity policy</u>, located at http://www.sjsu.edu/senate/S07-2.htm, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The <u>Student Conduct and Ethical</u> Development website is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Disability Resource Center (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.

ANTH012/Introduction to Human Evolution, Fall 2011, Course Schedule

List the agenda for the semester including when and where the final exam will be held. Indicate the schedule is subject to change with fair notice and how the notice will be made available.

Table 1 Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	8/25	Introduction to Course and E-text
2	8/30 9/1	History of Evolutionary Theory, Chapter 1; Understanding Natural Selection, Chapter 1;
3	9/6	Article 1 Evidence of Evolution, Chapter 1; Article 2
	9/8	Mendelian Genetics and Nonmendelian patterns of inheritance, Chapter 2.
4	9/13	Modern Synthesis, Chapter 2; Article 3
	9/15	Cells and DNA and Cell Division, Chapter 3. Writing Assignment 1 Due
5	9/20	Protein Synthesis and Molecular Anthropology, Chapter 3; Articles 4 and 5
	9/22	Primate Classification and General Primate Characteristics, Chapter 4; Article 6
6	9/27 9/29	Prosimians and Tarsiers, Chapter 4; Anthropoids, Chapter 4;
7	10/4	Using Primates for Models of Human Evolution, Chapter 4; Articles 7, 8, and 9
	10/6	Fossils, Types of Fossils in the Hominid Record, Dating Fossils, and Evolutionary Time, Chapter 5. Writing Assignment 2 Due
8	10/11	Primate Evolution, Chapter 5; Article 10 MIDTERM
9	10/13	What makes hominids different from other apes? And Contenders for the earliest hominid; Chapter 6.
	10/20	Australopithecines, Chapter 6; Article 11
10	10/25	Australopithecines, Chapter 6; Articles 12 and 13
	10/27	Early Homo species and Oldowan Tools, Chapter 6;
11	11/1	Humans disperse: Introduction, Skull Anatomy, Homo erectus and Homo ergaster, Chapter 7;

Week	Date	Topics, Readings, Assignments, Deadlines		
	11/3	Earliest Fossils Out of Africa, Homo antecessor, Homo Floresiensis, Chapter 7		
12	11/8	Homo Heidelbergensis, African Archaic Homo sapiens, Asian Archaic		
		Homo sapiens, European Archaic Homo sapiens, Chapter 8.		
	11/10	Neanderthals, Chapter 8		
		Writing Assignment 3 Due		
13	11/15	Origins of Anatomically Modern Humans, Chapter 8		
		Articles 14 and 15		
	11/17	Paleo-Indians, Chapter 9;		
		Articles 16, 17, 18		
14	11/22	Origins of Agriculture and Affects of Agriculture on Health, Chapter		
		10;		
		Articles 19 and 20		
	11/24	No Class		
15	11/29	Modern Human Variation: Human Variation, Chapter 11		
		Articles 21, 22, and 23		
	12/1	Modern Human Variation: Adaptation and Acclimatization, Chapter 11;		
		Articles 24 and 25		
16	12/6	Modern Human Variation: Human Life Cycle, Chapter 11		
	12/8	Review		
Final Exam	12/15	0945 – 1200		