# San José State University COSS/ANTH ANTH012, Introduction to Human Evolution, Section 1, Fall 2022

### **Course and Contact Information**

Instructor(s):	Professor Elizabeth Weiss
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Office Hours:	M, W 1045-1145
Class Days/Time:	M, W 1200-1315
Classroom:	WSQ004
GE/SJSU Studies Cat	egory: 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. There are no prerequisites to take this course.

# **GE Learning Outcomes (GELO)**

To fulfill the GE writing requirement students will write three 2-page (500 words) essays. Each writing assignment is a take-home assignment and will be handed in as a printed version in class.

Both the writing assignments and exam questions will be utilized to assess GE learning outcomes. Upon successful completion of this course, students will be able to:

- 1. Demonstrate knowledge of scientific theories, concepts, and data used in the physical and life sciences;
- 2. Apply scientific principles and communicate in ways appropriate to the discipline about the process and results of scientific discovery;
- 3. Access, critically evaluate, and represent scientific information in various forms and draw appropriate conclusions; and
- 4. Use methods derived from current scientific inquiry to form evidence-based opinions about science-related matters of personal, public, and ethical concern.

#### **Course Learning Outcomes (CLO)**

The most important contribution this course can make to your education is to provide you with greater ability to think critically. This skill will contribute permanently to your further education and for the rest of your life.

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

CLO1 explain the evolutionary process, how it works, and how scientists have come to understand the process (specifically to understand ourselves).

CLO2 describe the evolutionary history of our species and the biological bases that are at the foundation of this process.

CLO3 comprehend 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.

CLO4 explain from a comparative perspective how humans are related to other primates (and what this implies structurally, physiologically, and behaviorally).

# **Required Texts/Readings**

*The Human Organism: Explorations in Biological Anthropology (Second Edition); Cognella Publishers* Print Price: \$106.45 Ebook Price: \$84.95

You have multiple options:

Purchase at https://store.cognella.com/81311-2A-NI-009, the University bookstore, online booksellers (like Amazon.com)

Borrow through the library: <u>https://ebookcentral.proquest.com/lib/sjsu/detail.action?docID=6123756&pq-origsite=primo</u> This is a no cost ebook; you must be logged in using your SJSU ID.

Note: This ebook has a limited number of concurrent users; if you see a message that the limit for the ebook has been reached, you will need to wait until one of the users finishes with the ebook before you can access it. There is a waiting list function that will send a notification when the book becomes available.

Borrow through the library's Course Reserve system, there will be two hard copies made available.

# **Course Requirements and Assignments**

"Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus."

<u>Preparation and participation requirements</u>. Read the text prior to coming to class, complete the activity sheets at the end of each chapter, and come with questions.

<u>Quiz requirements</u>. There will be pop quizzes based on the readings; 6 Quizzes will be given, but the lowest grade will be dropped.

<u>Exam requirements</u>. There will be three exams and a comprehensive final exam. Exam questions are designed to assess course and GE learning objectives.

<u>Writing requirements</u>. There will be three 500-word papers. Writing assignments must be turned in as a printed version at the beginning of class. Topics and requirements 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."

# There will be extra credit opportunities, which are based on preparedness for the review sessions.

#### **Final Examination or Evaluation**

There will be a comprehensive final exam given at the scheduled final exam time.

# **Grading Information**

Writing Assignments	3 X 10%	=	30%
Quizzes	5 X 2%	=	10%
Exams	3 X 10%	=	30%
Final Exam	1 X 30%	=	30%
Total			100%

Grading is as followed:

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

D minus is a passing grade.

I do not use Canvas for a multitude of reasons. Yet, I always provide students with prompt feedback, you will receive your graded assignments the next class period. Using simple arithmetic, you can keep track of your progress to ensure that you are not at risk of failing. If you have trouble calculating your grade, I will be happy to help you.

<u>Make-up Work</u>: If you know in advance that you are unable to attend a class, contact me to set up a time to take the quiz or exam prior to its scheduled date. Requests for extensions will be dealt on a case-by-case basis, but in most circumstances only students who were ill or have another valid documented excuse will be able to take a quiz or exam (including the final) or submit an assignment late. The final will be given on the scheduled time.

#### **Classroom Protocol**

I consider my students adults. Attendance is optional. When one attends lecture, one should behave appropriately and pay attention. If one feels that they cannot pay attention for the entire period (for whatever reason), then one should not attend class.

# **University Policies**

Per <u>University Policy S16-9</u>, relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on <u>Syllabus Information</u> web page (https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.

#### Week **Topics, Readings, Assignments, Deadlines** Date 2 8/22 Introduction to the class **Topic:** History of Evolutionary Theory 8/24 Reading: Chapter 1, pp. 1-9 **Topic**: Natural Selection and Evidence of Evolution 3 8/29 **Reading:** Chapter 1: pp. 9-15; Reading 1: pp. 18-30 **Topic:** Understanding Taxonomy and Creating a Cladogram 8/31 No Reading: Opportunity to Catch Up Assignment Discussed: Writing Assignment 1 Labor Day - No Class 9/5 4 9/7 **Topic:** Mendelian Genetics & Modern Synthesis **Reading:** Chapter 2: pp. 33-45; Reading 2: pp. 48-55 Topic: Cells, DNA, and Protein Synthesis 5 9/12Reading: Chapter 3: pp. 57-64 **Topic:** Molecular Anthropology and Evolutionary Medicine 9/14 Reading: Chapter 3: pp. 64-68; Reading 3: pp. 70-77 9/19 Exam 1 Review 6 Assignment Due: Writing Assignment 1 Exam 1 9/21 **Topic:** General Primate Characteristics 7 9/26 Assignment Discussed: Writing Assignment 2 Reading: Chapter 4: pp. 79-82 **Topic:** Prosimians and Tarsiers 9/28 **Reading:** Chapter 4: pp. 82-86 **Topic:** New World Monkeys 8 10/3**Reading:** Chapter 4: pp. 86-91 10/5**Topic:** Old World Monkeys and Apes Reading: Chapter 4: pp. 91-97 **Topic:** Primates as Models for Human Evolution 9 10/10Reading: Chapter 4: pp. 97-99; Reading 4: pp. 102-107 10/12Exam 2 Review **Assignment Due:** Writing Assignment 2 10 10/17 Exam 2 10/19 Topic: Fossils and Contenders for the earliest hominid Assignment Discussed: Writing Assignment 3 Reading: Chapter 5: pp. 111-122 Topic: Australopithecines: Graciles and Robusts 11 10/24 Reading: Chapter 5: pp. 122-129 **Topic:** Early *Homo* and Oldowan tools 10/26 **Reading:** Chapter 5: pp. 129-134; Reading 5: pp. 138-142 12 10/31 **Topic:** *Homo erectus* and sibling species **Reading:** Chapter 6: pp.145-156; Reading 6: 160-163

# ANTH012-01/Introduction to Human Evolution, Fall 2022, Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines		
	11/2	Topic: Homo heidelbergensis		
		Reading: Chapter 7: pp. 165-170		
13	11/7	Topic: Neanderthals		
		Reading: Chapter 7: pp. 170-175		
	11/9	Topic: Origins of Anatomically Modern Humans		
		<b>Reading:</b> Chapter 7: pp. 175-180; Reading 7: pp. 184-190		
14	11/14	Exam 3 Review		
		Assignment Due: Writing Assignment 3		
	11/16	Exam 3		
15	11/21	Topic: Human Variation		
		<b>Reading:</b> Chapter 8: pp. 195-198; Reading 8: pp. 214-219		
	11/23	Thanksgiving Holiday – No Class		
16	11/28	Topic: Human Adaption		
		Reading: Chapter 8: pp. 198-204		
	11/30	Topic: Human Life Cycle		
		Reading: Chapter 8: pp. 204-210		
17	12/5	Review Day - Last Day of Class		
Final Exam	12/14	Wednesday, December 14th, in WSQ004, 0945-1200		