

Anthropology 1H

Honors Introduction to Biological Anthropology

3 units; 3 hours lecture

*Recommended Preparation: English 1 or eligibility for English 1A or qualification by appropriate assessment.
Degree applicable Transfer CSU, UC*

This honors course, intended for students in the Honors Transfer Program, explores and emphasizes the evolution and biological diversity of the human species and our closest living relatives, the non-human primates. Topics include genetics, mechanisms of evolutionary change, primate behavior and ecology, human biological variation and human evolutionary history through examination of the fossil record. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either Anthropology 1H or Anthropology 1. Duplicate credit will not be awarded.

Course Objectives:

1. Demonstrate an understanding of the concepts of the scientific method and its significance to science.
Objective Exams
2. Describe and evaluate the major ideas that preceded and led to the development of evolutionary theory and analyze modern theories of Darwinian evolution through natural selection.
Essay Exam
3. Identify and describe the processes by which genetic information is transmitted from one generation to the next.
Objective Exams
4. Identify and discuss the various components of the DNA molecule and the process of protein synthesis.
Objective Exams
5. Explain and assess the mechanisms of evolutionary change and explain how each one contributes to the evolutionary process.
Essay Exam
6. Contrast point and chromosomal mutations and discuss the significance of point mutations to evolution.
Objective Exams
7. List the major anatomical characteristics of primates associated with movement and the senses, and explain how they evolved as adaptations to an arboreal environment.
Objective Exams
8. Contrast the major forms of primate social structure and describe their relationship to the primate species' ecology.
Essay Exam
9. Evaluate the benefits of bipedalism in reference to the particular environment in which most hominin evolution occurred.
Essay Exam
10. Compare and contrast the skull characteristics of *Australopithecus africanus*, *Australopithecus* (or *Paranthropus*) *boisei*, and *Homo habilis* in relation to the particular diet of each.
Essay Exam
11. Contrast the anatomical characteristics of *Homo habilis* and *Homo erectus*, and analyze those contrasts in reference to their respective environment and subsistence strategies.
Objective Exams
12. Analyze the characteristics of *Homo neanderthalensis* in reference to the environment in which this hominin lived.
Objective Exams

13. Evaluate the models that account for the origin of Homo sapiens, outlining the major criteria and evidence supporting each.
Objective Exams
14. Outline the cultural stages in the evolution of the genus Homo, making reference to the particular Homo species, tool industry, and environmental context associated with each stage.
Essay Exam
15. Explain the difference between physiological adjustments and adaptations and explain skin color and body form as adaptations to particular environments.
Essay Exam
16. Conduct scholarly research independently to enrich multiple reading and writing tasks.
Other: Essay Exam, Written Homework, Term or Other Papers

Student Learning Outcomes (SLO):

1. Natural Selection

In a written assignment, students will explain how natural selection is related to environmental factors by using an example that identifies key processes of natural selection and illustrates how selective pressures can change.

2. Primate Arboreal Adaptation

In an in-class assignment or objective exam question, students will demonstrate an understanding of primate adaptation by describing the major anatomical characteristics of primates associated with movement and the senses, and identifying how they evolved as adaptations to arboreal environments.

3. Human Evolution

In a written assignment or objective exam question(s), students will demonstrate an understanding of human evolution by comparing and contrasting the anatomical and behavioral features of modern Homo sapiens with various extinct species of the Genus Homo (e.g. Neanderthals, H. erectus, H. habilis).

ADA Statement:

El Camino College is committed to providing educational accommodations for students with disabilities upon the timely request by the student to the instructor. A student with a disability, who would like to request an academic accommodation, is responsible for identifying herself/himself to the instructor and to the Special Resource Center. To make arrangements for academic accommodations, contact the Special Resource Center.

Student Code of Conduct

<https://www.elcamino.edu/administration/board/2019-policies/AP%205500%20Student%20Conduct%20.pdf>

Student Rights and Grievances Procedure 5530

<https://www.elcamino.edu/administration/board/boarddocs/AP%205530%20STUDENT%20%20RIGHTS%20AND%20GRIEVANCES.pdf>