

**ANTHRO 1 Course Outline as of Fall 2023****CATALOG INFORMATION**

Dept and Nbr: ANTHRO 1 Title: BIOLOGICAL ANTHROPOLOGY

Full Title: Biological Anthropology

Last Reviewed: 4/25/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

In this introductory, broad survey course, students will study human evolution and humans as organisms, with an emphasis on a bio-cultural approach. The course will cover the history and modern synthesis of evolutionary theory; study primate behavior and comparative anatomy; examine dating techniques and the fossil record; and critically assess past and future human/environmental relationships including issues concerning future adaptation.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 1A

**Limits on Enrollment:****Schedule of Classes Information:**

Description: In this introductory, broad survey course, students will study human evolution and humans as organisms, with an emphasis on a bio-cultural approach. The course will cover the history and modern synthesis of evolutionary theory; study primate behavior and comparative anatomy; examine dating techniques and the fossil record; and critically assess past and future

human/environmental relationships including issues concerning future adaptation. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 1A

Limits on Enrollment:

Transfer Credit: CSU;UC.

Repeatability: Two Repeats if Grade was D, F, NC, or NP

### **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>		<b>Effective:</b>	<b>Inactive:</b>
	C	Natural Sciences	Fall 1981	
	H	Global Perspective and Environmental Literacy		

<b>CSU GE:</b>	<b>Transfer Area</b>		<b>Effective:</b>	<b>Inactive:</b>
	B2	Life Science	Fall 1981	

<b>IGETC:</b>	<b>Transfer Area</b>		<b>Effective:</b>	<b>Inactive:</b>
	5B	Biological Sciences	Fall 1981	

<b>CSU Transfer:</b>	Transferable	<b>Effective:</b>	Fall 1981	<b>Inactive:</b>
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<b>UC Transfer:</b>	Transferable	<b>Effective:</b>	Fall 1981	<b>Inactive:</b>
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#### **CID:**

CID Descriptor: ANTH 110 Introduction to Biological Anthropology

SRJC Equivalent Course(s): ANTH1

#### **Certificate/Major Applicable:**

Major Applicable Course

### **COURSE CONTENT**

#### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Discuss the fundamental concepts of evolutionary theory, including the various mechanisms of evolution, including natural selection, genetic mutation, gene flow, genetic drift and emerging studies of epi-genetic influences.
2. Apply anthropological vocabulary and concepts to evaluate alternate phylogenies of ancient primates within a framework of evolutionary theory.
3. Analyze contemporary issues of primate evolution and survival; human health and medicine; human impacts on environments and future primate adaptation.

#### **Objectives:**

At the conclusion of this course, the student should be able to:

1. Demonstrate knowledge of the terms, concepts and research methodologies used in the study of human evolution and diversity.
2. Discuss the developmental history of evolutionary theory, including the ability to convey basic knowledge of the principles of human genetics at the cellular and molecular level of DNA structure and replication.
3. Identify the major forces of evolution.
4. Compare different classification systems, and describe humankind within the contemporary

primate order (e.g., classic taxonomy, cladistics, phylogeny).

5. Describe the adaptive relationships of primates with their environmental world (e.g., anatomy, social behavior, subsistence, culture), including the ability to discuss the issues surrounding the survival of non-human primates today.

6. Demonstrate a basic knowledge of fossil specimens relied upon to construct the various phylogenies offered for primate ancestry, with particular emphasis on the debates of hominin ancestry.

7. Recognize and discuss the environmental relationships (climate, geography, and other environmental determinants) of biological and adaptive mechanisms in ancestral populations that gave rise to archaic and modern human diversity.

8. Discuss contemporary human issues including whether race is a valid, biologically meaningful concept; how growth and development relate to human variation; and how life patterns may impact our evolutionary future.

9. Assess the ways in which cultural aspects of the human species intersect with biological evolutionary processes that may impact our potential evolutionary trajectories.

10. Evaluate the ways in which humans have impacted the natural environment and how that impact now challenges the future survival of humankind.

## **Topics and Scope:**

I. Introduction to Anthropology as a Scientific Discipline and to the Methods of Scientific Inquiry

II. The Development of Modern Evolutionary Theory

III. Natural Selection and Other Forces of Evolution such as Mutation, Genetic Drift, Gene Flow as Mechanisms That May Give Rise to Speciation

IV. The Structure of DNA as Heritable Material, Including Principles of Replication and Reproduction at the Cellular and Molecular Levels

V. Modern Populations and Human Diversity, Including Concepts of Race, Growth and Development, and Impact of Life History Patterns

VI. Bioethics and Genetic Innovation

VII. Primate Taxonomy and Skeletal Anatomy

VIII. The Social Behavior of Non-human Primates and the Environmental Challenges they Face Today

IX. Geologic Time Scales and Chronometric Dating Techniques to Assess Deep Time

X. Early Primate Evolution: The First Primates

XI. Early Hominid Forms in Africa and the Origins of Culture(s) as an Environmental Adaptive Mechanism

XII. Names, Dates, Cranial Capacities, and Morphological and Genetic Changes in the Human Fossil Records Over Time

XIII. Evolution and Expansion of Homo Erectus from Africa into Asia and Europe

A. The continuing evolution of Lower Paleolithic culture as an adaptation to expanding environments

B. Impact of hominids on early megafauna

XIV. Evolution and Expansion of Homo Sapiens in Africa, Asia, and Europe

A. The Neanderthals and Other Archaic Forms

B. Middle Paleolithic Cultures Maximizing Global Environmental Niches

XV. Origin and Expansion of Anatomically Modern Homo Sapiens through Africa, Europe, Asia, Australia, and the Americas

A. Upper Paleolithic cultures maximizing global environmental niches

B. Impact of hominids on contemporary environments

XVI. The Relationship Among Human Biology, Culture, and the Spread of Disease

XVII. Summary of Global Environmental Impact of the Human Species and Challenges for the

# Survival of Human Beings in the Twenty-first Century

## Assignment:

1. For homework, students will read and study assignments in textbooks for each class meeting, approximately 10-30 pages per week.
2. Students will write one or more reaction papers which may include research topics, summary and response papers, or critical-thought essays (for a total of 1250-1500 words).
3. Students will complete 2-4 exams during the semester, which can include multiple choice questions, true/false, completion, map identification, and short answer and essay questions.
4. Optional assignments may include map quizzes, other types of homework, attendance, in-class participation, and book responses.
5. Quizzes

## Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, book responses, and reaction papers

Writing  
30 - 40%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving  
0 - 0%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Exams, Quizzes

Exams  
55 - 70%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Map quizzes, other types of homework, attendance, and in-class participation

Other Category  
0 - 10%

## Representative Textbooks and Materials:

- Biological Anthropology: Concepts and Connections. 3rd Edition. Fuentes, Agustin. McGraw Hill. 2019
- Core Concepts in Biological Anthropology. Fuentes, Agustin. McGraw Hill. 2007 (classic)
- Essentials of Biological Anthropology. 5th Edition. Larsen, Clark. W.W. North & Company. 2021

Our Origins: Discovering Physical Anthropology. 5th Edition. Larsen, Clark. W.W. Norton & Company. 2020

Transformations: Readings in Evolution, Hominins, and the Environment. 6th Edition. Smith, Dianne and Slovak, Nicole (Ed). Hayden-McNeil Publishing Inc. 2008 (classic)