

**ANTHRO 1L Course Outline as of Fall 2024****CATALOG INFORMATION**

Dept and Nbr: ANTHRO 1L Title: BIOLOGICAL ANTHRO LAB

Full Title: Biological Anthropology Lab

Last Reviewed: 4/11/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	0	17.5	Lecture Scheduled	0
Minimum	1.00	Lab Scheduled	3.00	6	Lab Scheduled	52.50
		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: 0.00

Total Student Learning Hours: 52.50

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:**

This is an introductory laboratory course where students use scientific methodology to explore and experiment with topics from Introduction to Biological Anthropology (ANTHRO 1) lectures. Students will examine the scientific method, evolutionary theory, cell biology, genetics, human osteology, primate anatomy and social behavior, and the human fossil record. Additional topics may include human biological variation, medical anthropology, forensic anthropology, environmental challenges to hominins, and human impact on the environment.

**Prerequisites/Corequisites:**

Course Completion or Current Enrollment in ANTH 1 ( or ANTHRO 1)

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

Description: This is an introductory laboratory course where students use scientific methodology to explore and experiment with topics from Introduction to Biological Anthropology (ANTHRO 1) lectures. Students will examine the scientific method, evolutionary theory, cell biology,

genetics, human osteology, primate anatomy and social behavior, and the human fossil record. Additional topics may include human biological variation, medical anthropology, forensic anthropology, environmental challenges to hominins, and human impact on the environment. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion or Current Enrollment in ANTH 1 ( or ANTHRO 1)

Recommended:

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>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
	B3	Laboratory Activity	Fall 2001
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
	5C	Fulfills Lab Requirement	Fall 2012
	5B	Biological Sciences	Fall 2001
	5C	Fulfills Lab Requirement	Fall 2012
<b>CSU Transfer:</b>	Transferable	Effective:	Fall 2001
		Inactive:	
<b>UC Transfer:</b>	Transferable	Effective:	Fall 2001
		Inactive:	

**CID:**

**Certificate/Major Applicable:**

Major Applicable Course

### **COURSE CONTENT**

**Student Learning Outcomes:**

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

1. Distinguish scientific methodology from other methods of evaluation or thinking.
2. Identify and discuss the forces of evolutionary change that have shaped primate and hominin evolution.
3. Assemble, organize, and identify specimens and/or models used in biological anthropology (skeletal, dental, genetic, fossil).

**Objectives:**

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

1. Discuss the structures of cellular biology and DNA and identify the major principles of genetic inheritance.
2. Identify the major elements of the human skeleton using three-dimensional materials in a lab setting.
3. Compare and contrast human and non-human primate anatomy and social behavior using three-dimensional materials in a laboratory setting.
4. Identify key biological and cultural attributes that characterize the early hominins using three-dimensional materials in a laboratory setting.

## Topics and Scope:

This course will cover the following topics:

### I. Cell Biology and Genetics:

- A. Cellular structure and organelle function
- B. The structure and functions of DNA
- C. Principles of inheritance
- D. Mechanisms of genetic variation and evolutionary change

### II. Human Osteology

- A. The function of human bone
- B. The major sections of the human skeleton
- C. Estimation of age and sex from the human skeleton

### III. Primatology

- A. Primate taxonomy
- B. Comparative primate anatomy
- C. Primate social behavior

### IV. Fossil Record

- A. The earliest Hominins
- B. The Australopithecines
- C. The emergence of the genus Homo
- D. Cultural, behavioral, and biological changes in human evolution

### V. Additional topics may include:

- A. Human biological variation
- B. Medical anthropology
- C. Forensic anthropology
- D. Dating techniques
- E. Environmental challenges to hominins
- F. Human impacts on the environment

## Assignment:

1. Weekly in-class reading assignments in course workbook (2-5 pages).
2. Weekly problem-solving and/or skills demonstrations with lab models or specimens in class.
3. Weekly in-class attendance and participation in group discussions of data, problem-solving assignments including lab reports.
4. In-class quiz(zes) or exam(s) (1-4), which can include:
  - A. Multiple choice
  - B. True-false questions
  - C. Short answers
  - D. Identification of three-dimensional specimens.

## 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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

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

Lab reports

Problem solving  
15 - 25%

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

Assembling three-dimensional models

Skill Demonstrations  
15 - 25%

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

Quiz(zes), exam(s)

Exams  
40 - 50%

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

In-Class Participation and Attendance

Other Category  
5 - 15%

### **Representative Textbooks and Materials:**

Exploring Physical Anthropology: A Lab Manual and Workbook. 3rd Edition. Walker, Suzanne. Morton Publishing Co. 2017 (classic).

The Human Evolution Coloring Book. 2nd Edition. Zihlman, Adrienne L. Harper Collins. 2001 (classic).

Lab Manual and Workbook for Physical Anthropology. 8th Edition. France, Diane. Cengage Learning. 2018.

Laboratory Manual and Workbook for Biological Anthropology: Engaging with Human Evolution. Soluri, K. Elizabeth and Agarwal, Sabrina C. W.W. Norton & Co. 2019.

Method and Practice in Biological Anthropology: A Workbook and Laboratory Manual for Introductory Courses. 2nd Edition. Hens, Samantha. Pearson/Prentice Hall. 2015 (classic).