#### **ANTHRO 1L Course Outline as of Fall 2016**

### **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	i I	Nbr of Weeks	<b>Course Hours Total</b>	
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:**

An introductory laboratory course that uses scientific methodology to explore and experiment with topics from Introduction to Biological Anthropology (ANTHRO 1) lectures. Major topics to be covered include cell biology, genetics, human osteology, primate anatomy and social behavior and the human fossil record. Additional topics may include human variability, medical anthropology, forensic anthropology, environmental challenges to hominids, and human impact on the environment.

# **Prerequisites/Corequisites:**

Course Completion or Current Enrollment in ANTHRO 1

# **Recommended Preparation:**

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: An introductory laboratory course that uses scientific methodology to explore and experiment with topics from Introduction to Biological Anthropology (ANTHRO 1) lectures. Major topics to be covered include cell biology, genetics, human osteology, primate anatomy

and social behavior, and the human fossil record. Additional topics may include human variability, medical anthropology, forensic anthropology, environmental challenges to hominids, and human impact on the environment. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion or Current Enrollment in 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:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

B3 Laboratory Activity Fall 2001

**IGETC:** Transfer Area Effective: Inactive:

5C Fulfills Lab Requirement Fall 2012

5B Biological Sciences Fall 2001 Fall 2012

5C Fulfills Lab Requirement

**CSU Transfer:** Transferable Effective: Fall 2001 Inactive:

**UC Transfer:** 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. Distinguish a variety of primate and/or hominid evolutionary patterns over time.
- 3. Assemble or organize specimens and/or models used in physical anthropology (skeletal, dental, genetic).
- 4. Evaluate and debate social, cultural, environmental, and other influences on hominid adaptation and survival over time.

# **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 hominids 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 Australopithecines
- B. The emergence of the genus Homo
- C. Cultural, behavioral, and biological changes in human evolution
- V. Additional topics may include:
  - A. Human Variability
  - 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. One to four in-class quizzes or exams, which can include multiple choice and true-false questions, short answers, and the 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.

Multiple choice, True/false, Matching items, Completion, Identification of specimens, Short answer

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, 2nd Edition. Walker, Suzanne. Morton Publishing Co.: 2010 (Classic)

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

Lab Manual and Workbook for Physical Anthropology, 6th Edition. France, Diane. Cengage Learning: 2006 (Classic)

Laboratory Manual and Workbook for Biological Anthropology: Engaging with Human Evolution. Soluri, K. Elizabeth and Agarwal, Sabrina C., W.W. Norton & Co.: 2016 Method and Practice in Biological Anthropology: A Workbook and Laboratory Manual for Introductory Courses. Hens, Samantha. Pearson/Prentice Hall: 2007 (Classic)