

## ANTHC122 : Biological Anthropology Laboratory

### General Information

Author:	<ul style="list-style-type: none"><li>Sarah King</li><li>Griffin, Alec</li><li>Cornett, Julie</li></ul>
Course Code (CB01) :	ANTHC122
Course Title (CB02) :	Biological Anthropology Laboratory
Department:	Social Science
Proposal Start:	Fall 2018
TOP Code (CB03) :	(2202.00) Anthropology
SAM Code (CB09) :	Non-occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000557705
Curriculum Committee Approval Date:	02/09/2018
Board of Trustees Approval Date:	05/03/2018
External Review Approval Date:	Pending
Course Description:	This laboratory course is offered as a supplement to Biological Anthropology and must be taken concurrently with ANTH C121. Laboratory exercises are designed to introduce students to the scientific method, and explore genetics, human variation, human and non-human primate anatomy and behavior, the primate/hominin fossil record, and other resources to investigate processes that affect human evolution.
Submission Type:	Mandatory Revision  We are bringing this course through to change the title to be in keeping with discipline standards. We have also reduced the number of SLO's so they are more manageable and less repetitive.
Author:	No value

### Faculty Minimum Qualifications

Master Discipline Preferred:	<ul style="list-style-type: none"><li>Anthropology</li></ul>
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

### Course Development Options

Basic Skills Status (CB08) Course is not a basic skills course.	Course Special Class Status (CB13) Course is not a special class.	Grade Options <ul style="list-style-type: none"><li>Letter Grade Methods</li><li>Pass/No Pass</li></ul>
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Allow Students to Gain Credit by Exam/Challenge

Allowed Number of Retakes  
0

Course Prior To College Level (CB21)  
One level below transfer.

Rationale For Credit By Exam/Challenge  
No value

Retake Policy Description  
Type:|Non-Repeatable Credit

Allow Students To Audit Course

Course Support Course Status (CB26)  
No value

## Associated Programs

Course is part of a program (CB24)

Associated Program

Award Type

Active

No value

No value

## Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability

Transferable to both UC and CSU

Transferability Status

Approved

### CSU General Education Certification

Area B.3

Categories

Scientific Inquiry &  
Quantitative  
Reasoning  
Laboratory

Status

Approved

Approval Date

No value

Comparable Course

No Comparable Course defined.

### Intersegmental General Education Transfer Curriculum

Area 5.C

Categories

Physical &  
Biological Sciences  
Laboratory/Activity

Status

Approved

Approval Date

No value

Comparable Course

No Comparable Course defined.

### Cerro Coso General Education Requirements

Area 1.1

Categories

Natural Science  
Life Sciences

Status

Approved

Approval Date

No value

Comparable Course

No Comparable Course defined.

## Units and Hours

### Summary

<b>Minimum Credit Units (CB07)</b>	1
<b>Maximum Credit Units (CB06)</b>	1
<b>Total Course In-Class (Contact) Hours</b>	54
<b>Total Course Out-of-Class Hours</b>	0
<b>Total Student Learning Hours</b>	54
<b>Faculty Load</b>	0

### Credit / Non-Credit Options

**Course Credit Status (CB04)**

Credit - Degree Applicable

**Course Non Credit Category (CB22)**

Credit Course.

**Non-Credit Characteristic**

No Value

**Course Classification Status (CB11)**

Credit Course.

Variable Credit Course

**Funding Agency Category (CB23)**

Not Applicable.

Cooperative Work Experience Education Status (CB10)

### Weekly Student Hours

	<b>In Class</b>	<b>Out of Class</b>
Lecture Hours	0	0
Laboratory Hours	3	0
Activity Hours	0	0

### Course Student Hours

<b>Course Duration (Weeks)</b>	18
<b>Hours per unit divisor</b>	54
<b>Course In-Class (Contact) Hours</b>	
Lecture	0
Laboratory	54
Activity	0
<b>Total</b>	54
<b>Course Out-of-Class Hours</b>	
Lecture	0
Laboratory	0
Activity	0
<b>Total</b>	0

### Time Commitment Notes for Students

No value

### Faculty Load

**Extra Duties:** 0

**Faculty Load:** 0

## Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

## Pre-requisites, Co-requisites, Anti-requisites and Advisories

### Co-Requisite

#### ANTHC121 - Physical Anthropology

This is a laboratory class only. Since there is no lecture portion, students must take the Anth 121 lecture course in order to understand the theories and methods that will be applied in this laboratory section. Without the background information on concepts, such as mendelian genetics, mechanisms of evolution, natural selection, adaptation, and primate anatomy, they will not be successful in this course.

### AND

### Co-Requisite

#### ANTHC121H - Physical Anthropology Honors

This is a laboratory class only. Since there is no lecture portion, students must take the Anth 121H lecture course in order to understand the theories and methods that will be applied in this laboratory section. Without the background information on concepts, such as mendelian genetics, mechanisms of evolution, natural selection, adaptation, and primate anatomy, they will not be successful in this course.

## Entrance Skills

Entrance Skills	Description
No value	No value

## Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

## Specifications

### Methods of Instruction

Methods of Instruction	Presentations (by students)
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<b>Rationale</b>	No value
<b>Methods of Instruction</b>	Group Work
<b>Rationale</b>	No value
<b>Methods of Instruction</b>	Instruction through examination or quizzing
<b>Rationale</b>	No value
<b>Methods of Instruction</b>	Laboratory
<b>Rationale</b>	No value
<b>Methods of Instruction</b>	Outside reading
<b>Rationale</b>	No value
<b>Methods of Instruction</b>	Audiovisual
<b>Rationale</b>	No value
<b>Methods of Instruction</b>	Case Study
<b>Rationale</b>	No value
<b>Assignments</b>	
<p>Out-of-class assignments include reading chapters from the lab manual prior to class, preparing for quizzes and exams, and completing write up on labs performed in class. For example, students may be asked to compare the measurements of several australopithecine skulls and then explain what the observed differences indicate about environmental adaptation.</p>	
<b>Methods of Evaluation</b>	<b>Rationale</b>
Participation	Presentation - students will be expected to present in class on an independent project related to their coursework. Presentations will be graded based on a rubric.
Tests	Quizzes and Exams - these will be given throughout the semester and may consist of multiple choice, true/false, and short answer questions.
Other	Lab reports - Students will be expected to write lab reports each week. Lab reports will be graded based on a rubric.
<b>Equipment</b>	
No Value	

**Textbooks**

Author	Title	Publisher	Date	ISBN
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	France, D.. (2011) Lab Manual and Workbook for Physical Anthropology, 7th, Cengage (This text is the most up-to-date version and is recommended by C-ID)			
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**Other Instructional Materials**

No Value

**Materials Fee**

No

**Learning Outcomes and Objectives****Course Objectives**

Apply the scientific method.

Identify the outcomes of evolutionary processes.

Describe structure and function of DNA and RNA.

Demonstrate how human traits are inherited.

Identify anatomical and behavioral features of non-human primates.

Compare the morphology of primates and early hominins.

Describe the biological and behavioral adaptations of the genus Homo.

Identify defining features of anatomically modern humans.

## CSLOs

- Demonstrate the key theories and concepts related to the forces of evolution, including mutation, natural selection, genetic drift, and gene flow.** Expected SLO Performance: 70.0
- Identify modern non-human primate species and describe their skeletal morphology and social behavior.** Expected SLO Performance: 70.0
- Identify the main hominin species by their skeletal morphology and describe the key adaptations in human evolution.** Expected SLO Performance: 70.0
- Analyze the influence of the environment on humans including the resulting biological and cultural differences.** Expected SLO Performance: 70.0

## Outline

### Course Outline

No value

### Lab Outline

This course will consist of hands-on laboratory activities that cover the following concepts:

- I. Nature of scientific inquiry and the scientific method
  - a. Application of scientific methods
- II. Molecular, Mendelian, and population genetics
  - a. Investigation of cell biology
  - b. Examination of genetic traits
- III. Mechanisms of evolution
  - a. Mutation
  - b. Natural selection
  - c. Gene flow
  - d. Genetic drift
- IV. Comparative primate taxonomy; anatomy and behavior
  - a. Mammals and primates
  - b. Lemurs; Lorises; and Tarsiers
  - c. New World Monkeys
  - d. Old World Monkeys
  - e. Apes
- V. Investigation of human osteology; forensic and anthropometric methods
  - a. Cranial bones and landmarks
  - b. Post-cranial bones and landmarks
- VI. Biocultural adaptations and modern human variation
  - a. Age and sex assessment
  - b. Race
  - c. Pathology
  - d. Environmental adaptations
- VII. The nature of the fossil record including dating techniques
- VIII. Fossil and genetic evidence of human evolution
  - a. Australopithecine anatomy
  - b. Early Homo anatomy
  - c. Archaic Homo sapiens
  - d. Anatomically modern humans

## Delivery Methods and Distance Education

**Delivery Method:** Please list all that apply -Face to face -Online (purely online no face-to-face contact) -Online with some required face-to-face meetings ("Hybrid") -Online course with on ground testing -iTV – Interactive video = Face to face course with significant required activities in a distance modality -Other

Face 2 Face

**Rigor Statement:** Assignments and evaluations should be of the same rigor as those used in the on-ground course. If they are not the same as those noted in the COR on the Methods of Evaluation and out-of-class assignments pages, indicate what the differences are and why they are being used. For instance, if labs, field trips, or site visits are required in the face to face section of this course, how will these requirements be met with the same rigor in the Distance Education section?

No Value

**Effective Student-Instructor Contact:** Good practice requires both asynchronous and synchronous contact for effective contact. List the methods expected of all instructors teaching the course. -Learning Management System -Discussion Forums -Moodle Message -Other Contact -Chat/Instant Messaging -E-mail -Face-to-face meeting(s) -Newsgroup/Discussion Board -Proctored Exam -Telephone -iTV -Interactive Video -Other (specify)

No Value

**Software and Equipment:** What additional software or hardware, if any, is required for this course purely because of its delivery mode? How is technical support to be provided?

No Value

**Accessibility:** Section 508 of the Rehabilitation Act requires access to the Federal government's electronic and information technology. The law covers all types of electronic and information technology in the Federal sector and is not limited to assistive technologies used by people with disabilities. It applies to all Federal agencies when they develop, procure, maintain, or use such technology. Federal agencies must ensure that this technology is accessible to employees and the public to the extent it does not pose an "undue burden". I am using -iTV—Interactive Video only -Learning management system -Publisher course with learning management system interface.

itv  
LMS  
publisher

**Class Size:** Good practice is that section size should be no greater in distance ed modes than in regular face-to-face versions of the course. Will the recommended section size be lower than in on-ground sections? If so, explain why.

No Value