ANTH R101L: BIOLOGICAL ANTHROPOLOGY LAB

Originator
amelidonis

College
Oxnard College

Discipline (CB01A)
ANTH - Anthropology

Course Number (CB01B)
R101L

Course Title (CB02)
Biological Anthropology Lab

Banner/Short Title
Biological Anthropology Lab

Credit Type
Credit

Start Term
Fall 2021

Catalog Course Description
This laboratory course is offered as a supplement to Introduction to Biological Anthropology, either taken concurrently or in a subsequent term. Laboratory exercises are designed to introduce students to the scientific method and explore genetics, human variation, human and non-human behavior, the primate/hominin fossil record and other resources to investigate processes that affect human evolution.

Taxonomy of Programs (TOP) Code (CB03)
2202.00 - Anthropology

Course Credit Status (CB04)
D (Credit - Degree Applicable)

Course Transfer Status (CB05) (select one only)
A (Transferable to both UC and CSU)

Course Basic Skills Status (CB08)
N - The Course is Not a Basic Skills Course

SAM Priority Code (CB09)
E - Non-Occupational

Course Cooperative Work Experience Education Status (CB10)
N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)
Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)
N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)
Y - Not Applicable

Course Noncredit Category (CB22)
Y - Credit Course

Funding Agency Category (CB23)
Y - Not Applicable (Funding Not Used)

Course Program Status (CB24)
1 - Program Applicable

General Education Status (CB25)
Y - Not Applicable

Support Course Status (CB26)
N - Course is not a support course

Field trips
May be required

Grading method
Letter Graded

Does this course require an instructional materials fee?
No

Repeatable for Credit
No

Is this course part of a family?
No

Units and Hours

Carnegie Unit Override
No

In-Class

Lecture
Minimum Contact/In-Class Lecture Hours
0
Maximum Contact/In-Class Lecture Hours
0

Activity

Laboratory
Minimum Contact/In-Class Laboratory Hours
52.5
Maximum Contact/In-Class Laboratory Hours
52.5

Total in-Class

Total in-Class
Total Minimum Contact/In-Class Hours
52.5
Total Maximum Contact/In-Class Hours
52.5

Outside-of-Class

Internship/Cooperative Work Experience

Paid
Minimum Paid Internship/Cooperative Work Experience Hours
0
Maximum Paid Internship/Cooperative Work Experience Hours
0

Unpaid
Minimum Unpaid Internship/Cooperative Work Experience Hours
0
Maximum Unpaid Internship/Cooperative Work Experience Hours
0

Total Outside-of-Class

Total Outside-of-Class
Minimum Outside-of-Class Hours
0
Maximum Outside-of-Class Hours
0

Total Student Learning

Total Student Learning
Total Minimum Student Learning Hours
52.5
Total Maximum Student Learning Hours
52.5

Minimum Units (CB07)
1
Maximum Units (CB06)
1

Prerequisites
ANTH R101 or concurrent enrollment

Entrance Skills

Entrance Skills
Students are required to take ANTH R101 Biological Anthropology as a corequisite or perquisite for ANTH R101L to acquire the necessary background knowledge in evolutionary theory, genetics, heredity, primatology, osteology, and paleoanthropology required to complete the lab assignments.

Prerequisite Course Objectives
ANTH R101-Describe the scientific process as a methodology for understanding the natural world.
ANTH R101-Define the scope of anthropology and discuss the role of biological anthropology within the discipline.
ANTH R101-Identify the main contributors to the development of evolutionary theory.
ANTH R101-Give examples of genetic illnesses and the mechanisms by which they are transmitted.
ANTH R101-Explain the basic principles of Mendelian, molecular and population genetics.
ANTH R101-Evaluate how the forces of evolution produce genetic and phenotypic change over time.
ANTH R101-Summarize the major events in human evolution and prehistory.
ANTH R101-Demonstrate an understanding of classification, morphology and behavior of living primates.
ANTH R101-Summarize methods used in interpreting the fossil record, including dating techniques.
ANTH R101-Recognize the major groups of hominin fossils and describe alternate phylogenies for human evolution.
ANTH R101-Identify the biological and cultural factors responsible for human variation.

ANTH R101-Summarize the major migrations out of the African homeland, into Asia, Europe, Australia, North and South America, and into the Pacific Islands.

Requisite Justification

Requisite Type
Prerequisite

Requisite
ANTH R101 Biological Anthropology

Requisite Description
Course in a sequence

Level of Scrutiny/Justification
Closely related lecture/laboratory course

Requisite Type
Concurrent

Requisite
ANTH R101 Biological Anthropology

Requisite Description
Course in a sequence

Level of Scrutiny/Justification
Closely related lecture/laboratory course

Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	Describe and apply the scientific method.
2	Explain evolutionary mechanisms and processes including those related to genetics, hereditary, natural and sexual selection.
3	Distinguish the morphological differences between non-human primates, hominins and contemporary humans.
4	Describe the behavioral and biological differences between non-human primates, hominin ancestors and contemporary humans.

Course Objectives

	Upon satisfactory completion of the course, students will be able to:
1	Apply the scientific method.
2	Identify the outcomes of evolutionary processes.
3	Describe structure and function of DNA and RNA.
4	Demonstrate how human traits are inherited.
5	Identify anatomical and behavioral features of non-human primates.
6	Compare the morphology of primates and early hominins.
7	Describe the biological and behavioral adaptations of the genus Homo.
8	Identify defining features of anatomically modern humans.

Course Content

Lecture/Course Content

1. Nature of scientific inquiry and the scientific method
2. Molecular, Mendelian and population genetics
3. Mechanisms of evolution
4. Comparative primate taxonomy, anatomy and behavior
5. The nature of the fossil record including dating techniques
6. Fossil and genetic evidence of human evolution
7. Biocultural adaptations and modern human variation

Laboratory or Activity Content

1. Application of scientific methods
2. Investigation of cell biology
3. Examination of genetic traits
4. Exploration of evolutionary mechanisms
5. Investigation of human osteology, forensic and anthropometric methods
6. Comparative behavioral and anatomical studies of non-human primates
7. Comparative anatomy of fossil species
8. Investigation of trends in hominin evolution
9. Investigation into modern human variation and bio-cultural adaptations

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Problem solving exercises
Skills demonstrations
Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Clinical demonstration
Essay exams
Group projects
Individual projects
Laboratory activities
Laboratory reports
Objective exams
Projects
Problem-Solving Assignments
Problem-solving exams
Quizzes
Skills demonstrations
Skill tests

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Audio-visual presentations
Computer-aided presentations
Collaborative group work
Clinical demonstrations
Class activities
Class discussions
Case studies
Distance Education
Demonstrations
Field trips
Instructor-guided interpretation and analysis
Instructor-guided use of technology
Internet research
Lecture
Small group activities

Describe specific examples of the methods the instructor will use:

1. The instructor will lead discussions on topics that may include the scientific method, DNA, osteology, genetics, primates, paleoanthropology, adaptation, variation, evolution and the fossil record.
2. The instructor will utilize lectures, films, internet materials, skeletal remains, models and computer software to explore and critically analyze topics relevant to the understanding and application of biological anthropology.
3. Students will be asked to critically analyze a variety of evidence and utilize it to develop theories regarding human origins, genetics, evolution, and heredity.

Representative Course Assignments

Writing Assignments

Some labs require students to answer short essay questions.

Critical Thinking Assignments

1. Participate in class, online and small group discussions regarding the importance of genetic evidence in understanding taxonomic classifications related to primates.
2. Students will complete short writing assignments evaluating fossil and osteological evidence determining key characteristics including genus and species, age, sex, key traits such as bipedalism, brain size, stature.

Reading Assignments

Students will be required to read background and theoretical materials relating to the course labs.

Skills Demonstrations

1. Analyze skeletal remains to create a biological profile of a decedent.
2. Demonstrate proficiency in anthropometry.

Other assignments (if applicable)

Students will compile and analyze experimental data utilizing tabular and statistical methods

Outside Assignments

Representative Outside Assignments

1. Participate in class, online and small group discussions regarding the importance of genetic evidence in understanding taxonomic classifications related to primates.
2. Students will complete short writing assignments evaluating fossil and osteological evidence determining key characteristics including genus and species, age, sex, key traits such as bipedalism, brain size, stature.

District General Education

A. Natural Sciences

B. Social and Behavioral Sciences

C. Humanities

D. Language and Rationality

E. Health and Physical Education/Kinesiology

F. Ethnic Studies/Gender Studies

CSU GE-Breadth

Area A: English Language Communication and Critical Thinking

Area B: Scientific Inquiry and Quantitative Reasoning

Area C: Arts and Humanities

Area D: Social Sciences

Area E: Lifelong Learning and Self-Development

CSU Graduation Requirement in U.S. History, Constitution and American Ideals:

IGETC

Area 1: English Communication

Area 2A: Mathematical Concepts & Quantitative Reasoning

Area 3: Arts and Humanities

Area 4: Social and Behavioral Sciences

Area 5: Physical and Biological Sciences

Area 6: Languages Other than English (LOTE)

Textbooks and Lab Manuals

Resource Type
Textbook

Description
Diane L France (2016). *Lab Manual and Workbook for Physical Anthropology* (7th). New York Cengage . 1305259041

Resource Type
Textbook

Description
K. Elizabeth Soluri and Sabrina Agarwal (2016). *Engaging with Human Evolution: A Laboratory Manual for Biological Anthropology* (1st). New York W.W. Norton Company . 9780393912

Distance Education Addendum

Definitions

Distance Education Modalities

Hybrid (51%–99% online)
Hybrid (1%–50% online)
100% online

Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.

Yes

Regular Effective/Substantive Contact

Hybrid (1%–50% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post on discussion board topics such as where they are given a series of photographs of skeletal remains and asked to determine genus and species, bipedalism, cause, manner and mechanism of death, age, stature, etc.
E-mail	Faculty will communicate with students via email regarding course information and concerns.
Other DE (e.g., recorded lectures)	Faculty may record video lectures on the course content including videos on evolution, genetics, heredity, primates, paleoanthropology, variation, adaptation, and human health.
Video Conferencing	Faculty may utilize online live meetings with students to deliver lectures and have discussions on topics related to the course content.

Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post on discussion board topics such as where they are given a series of photographs of skeletal remains and asked to determine genus and species, bipedalism, cause, manner and mechanism of death, age, stature, etc.
E-mail	Faculty will communicate with students via email regarding course information and concerns.
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Video Conferencing	Faculty may utilize online live meetings with students to deliver lectures and have discussions on topics related to the course content.

100% online Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post on discussion board topics such as where they are given a series of photographs of skeletal remains and asked to determine genus and species, bipedalism, cause, manner and mechanism of death, age, stature, etc.
E-mail	Faculty will communicate with students via email regarding course information and concerns.
Other DE (e.g., recorded lectures)	Faculty may record video lectures on the course content including videos on evolution, genetics, heredity, primates, paleoanthropology, variation, adaptation, and human health.
Video Conferencing	Faculty may utilize online live meetings with students to deliver lectures and have discussions on topics related to the course content.

Examinations

Hybrid (1%–50% online) Modality
Online
On campus

Hybrid (51%–99% online) Modality
Online
On campus

Primary Minimum Qualification
ANTHROPOLOGY

Review and Approval Dates

Department Chair
09/04/2020

Dean
09/07/2020

Technical Review
09/23/2020

Curriculum Committee
09/23/2020

DTRW-I
MM/DD/YYYY

Curriculum Committee
11/25/2020

Board
MM/DD/YYYY

CCCCO
MM/DD/YYYY

Control Number
CCC000562066

DOE/accreditation approval date
MM/DD/YYYY