Course Outline

COURSE: ANTH 1L  DIVISION: 10  ALSO LISTED AS:

TERM EFFECTIVE: Spring 2014  CURRICULUM APPROVAL DATE: 11/25/2013

SHORT TITLE: PHYS ANTH LAB

LONG TITLE: Physical Anthropology Lab

<table>
<thead>
<tr>
<th>Units</th>
<th>Number of Weeks</th>
<th>Type</th>
<th>Contact Hours/Week</th>
<th>Total Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>Lecture:</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lab:</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other:</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total:</td>
<td>3</td>
<td>54</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTION:

This laboratory course is offered as a supplement to Introduction to Physical Anthropology either taken concurrently or in a subsequent term. Laboratory exercises are designed to introduce students to the scientific method and hands-on exploration of topics in physical anthropology: genetics; human osteology; comparative and functional skeletal anatomy; primate behavior; human fossil record; modern human variation; and other resources to investigate processes related to human evolution. PREREQUISITE: ANTH 1, Introduction to Physical Anthropology, may be taken concurrently. ADVISORY: English 250.

PREREQUISITES:
Completion of ANTH 1, as UG, with a grade of C or better., Concurrent OK

COREQUISITES:

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES
L - Standard Letter Grade

REPEatability: N - Course may not be repeated

SCHEDULE TYPES:
04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:
1. Apply the scientific method and lab techniques to the comparison of living human, fossil human, and nonhuman primate specimens.
2. Demonstrate knowledge of and ability to apply the scientific method and analysis of primate skeletal material.
Measure: lab projects, lab reports, quizzes, skill demonstrations
PLO: 2
ILO: 3,2,7
GE-LO: B1, B4, B8, B9, D1, F2
Anticipated Year of Assessment: 2015

3. Describe and demonstrate the principles of inheritance and population genetics as they relate to human evolution.
Measure: lab projects, lab reports, quizzes, skill demonstrations
PLO: 2
ILO: 3,2,7
GE-LO: B1, B4, B8, B9, D1, F2
Anticipated Year of Assessment: 2015

4. Identify primate bone names, anatomical elements, and locomotor behavior.
Measure: lab projects, lab reports, quizzes, skill demonstrations
PLO: 2
ILO: 3,2,7
GE-LO: B1, B4, B8, B9, D1, F2
Anticipated Year of Assessment: 2015

5. Evaluate and debate social, cultural, environmental, or other influences on hominid adaptation and survival over time.
Measure: Group projects, oral presentations, lab projects, lab reports, quizzes, skill demonstrations
PLO: 1,2
ILO: 3,2,7,4,1
GE-LO: B1, B4, B8, B9, D1, F1, F2
Anticipated Year of Assessment: 2015

6. Explain a variety of primate and/or hominid evolutionary patterns over time.
Measure: lab projects, lab reports, quizzes, skill demonstrations
PLO: 2
ILO: 3,2,7
GE-LO: B1, B4, B8, B9, D1, F2
Anticipated Year of Assessment: 2015

7. Assemble or organize specimens and/or models used in physical anthropology (skeletal, dental, genetic, geological).
Measure: Group projects, oral presentations, lab projects, lab reports, quizzes, skill demonstrations
PLO: 1,2
ILO: 3,2,7,4,1
GE-LO: B1, B4, B8, B9, D1, F1, F2
Anticipated Year of Assessment: 2015

8. Apply basic forensic field methods for analyzing and interpreting human remains.
   Measure: Group projects, oral presentations, lab projects, lab reports, quizzes, skill demonstrations
   PLO: 3,2,7
   ILO: 3,2,7
   GE-LO: B1, B4, B8, B9, D1, F2
   Anticipated Year of Assessment: 2015

9. Research an anthropological topic and prepare the results for public and/or classroom presentation.
   Measure: Group projects, oral presentations, lab projects, lab reports, quizzes, skill demonstrations
   PLO: 1,2
   ILO: 3,2,7,4,1
   GE-LO: B1, B4, B8, B9, D1, F1, F2
   Anticipated Year of Assessment: 2015

10. Distinguish scientific methodology from other methods of evaluation or thinking.
    Measure: Group projects, oral presentations, lab projects, lab reports, quizzes, skill demonstrations
    PLO: 1,2
    ILO: 3,2,7,4,1
    GE-LO: B1, B4, B8, B9, D1, F1, F2
    Anticipated Year of Assessment: 2015

Program Learning Outcomes:
1. Demonstrate and evaluate relationships between local and national issues, movements, and ideas as they relate to the global community.
2. Demonstrate a range of skills including: research, documentation, analysis, evaluation, communication, contextualization, teamwork, observation, and cultural competency by relating social science concepts and theories to issues of global importance.

This course promotes understanding of:
- Cultures and subcultures
- Mutual respect among diverse peoples
- Familiarity with cultural developments and their complexities

Student Learning Outcome: 1,3,5,8,10

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS
Curriculum Approval Date: 11/25/2013
3 Hours

Content: The Scientific Method
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of the scientific method through lab exercises, observations of laboratory data, analysis of data, formulation of hypotheses to account for the data, testing hypotheses against independently acquired data; Distinguish scientific methodology from other methods of evaluation or thinking
Out-of-Class Assignments:
3 Hours
Content: Darwin’s Natural Selection and the Origin of Species
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of examples from nature; Investigating and demonstrating knowledge of cellular transformation through lab exercises and lab reports
Out-of-Class Assignments:

4 Hours
Content: Human and Population Genetics
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of the double helix, inheritance, and phenotypic traits through lab exercises and lab reports

Out-of-Class Assignments:

3 Hours
Content: Biological Classification
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of taxonomy through lab exercises and lab reports; Applying knowledge to classification of living primates

Out-of-Class Assignments:

3 Hours
Content: Primate Osteology
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of nonhuman primate osteology through lab training with primate skeletons.

Out-of-Class Assignments:

3 Hours
Content: Human Osteology
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of human osteology through lab training with human skeletons.

Out-of-Class Assignments:

3 Hours
Content: Primate Behavior
Student Performance Objectives (SPO): Observing and demonstrating knowledge of the behavior of living primates through video and/or fieldtrip to a local zoo or primate lab.

Out-of-Class Assignments:

3 Hours
Content: Early Primates and Hominids
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of early primates from the Paleocene through the Miocene; Lab exercises and reports based on fossil collection study; Evaluate and debate social, cultural, environmental, or other influences on hominid adaptation and survival over time

Out-of-Class Assignments:

6 Hours
Content: Human Behavior in Comparative Perspective
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of comparisons between human and nonhuman primate behavior; Lab exercises and reports based on fossil collection study and observation of living primates during local zoo field trip

Out-of-Class Assignments:

3 Hours
Content: Early members of Genus Homo
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of fossil hominids; Lab training in Anthropometric studies; Lab exercises and reports based on fossil collection study.

Out-of-Class Assignments:

3 Hours
Content: Evolution of Homo sapiens
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of the evolution of Homo sapiens through lab exercises and lab reports

Out-of-Class Assignments:

3 Hours
Content: Biology of Homo sapiens
Student Performance Objectives (SPO): Investigating and demonstrating knowledge of the biology of Homo sapiens through lab exercises and lab reports

Out-of-Class Assignments:
6 Hours
Content: Analysis of Modern Human Variation

Student Performance Objectives (SPO): Investigating and demonstrating knowledge of modern human variation; Lab training in Craniometric and Osteometric studies; Identification of postcranial skeletal bones; Lab exercises and reports based on fossil collection study

Out-of-Class Assignments:
6 Hours
Content: Human Skeletal Variation and Forensic Anthropology

Student Performance Objectives (SPO): Investigating and demonstrating knowledge of human skeletal variation and forensic anthropological techniques: fingerprints, blood analysis, gunshot wounds, trephination, antemortem, perimortem, and postmortem analysis; Lab exercises and lab reports

2 Hours Final

METHODS OF INSTRUCTION:
In-class: Over the course of the semester, students perform weekly exercises to demonstrate their understanding of each of the topics enumerated in the content section of this course outline. Exercises typically revolve around the application of the scientific method: observation, data collection, data analysis, formulating hypotheses, and testing of hypotheses. Since this is a lab, all exercises are hands-on. Students read and discuss key concepts and ideas that frame their lab exercises. They also write lab reports.

Out-of-class: Logistics permitted, students take a field trip to a local zoo or primate lab to observe and document nonhuman primates.

METHODS OF EVALUATION:
Category 1 - The types of writing assignments required:
Percent range of total grade: 45 % to 55 %
Lab Reports

Percent range of total grade: 15 % to 20 %
Field Work
Lab Reports
Quizzes

Category 3 - The types of skill demonstrations required:
Percent range of total grade: 10 % to 20 %
Class Performance/s
Field Work

Category 4 - The types of objective examinations used in the course:
Percent range of total grade: 5 % to 15 %
Multiple Choice

Category 5 - Any other methods of evaluation:
Field observation report Percent range of total grade: 5 % to 10 %
REPRESENTATIVE TEXTBOOKS:
Required:
ISBN: 9780895828118
Reading level of text, Grade: 14 Verified by: Debbie Klein
Other textbooks or materials to be purchased by the student:

ARTICULATION and CERTIFICATE INFORMATION
Associate Degree:
CSU GE:
IGETC:
CSU TRANSFER:
  Transferable CSU, effective 201430
UC TRANSFER:
  Not Transferable

SUPPLEMENTAL DATA:
Basic Skills: N
Classification: Y
Noncredit Category: Y
Cooperative Education:
Program Status: 1 Program Applicable
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department: ANTH
CSU Crosswalk Course Number: 1L
Prior to College Level: Y
Non Credit Enhanced Funding: N
Funding Agency Code: Y
In-Service: N
Occupational Course: E
Maximum Hours:
Minimum Hours:
Course Control Number:
Sports/Physical Education Course: N
Taxonomy of Program: 220200