Las Positas College
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Course Outline for ANTR 1

BIOLOGICAL ANTHROPOLOGY

Effective: Fall 2019

I. CATALOG DESCRIPTION:
ANTR 1 — BIOLOGICAL ANTHROPOLOGY — 3.00 units

This course introduces the concepts, methods of inquiry, and scientific explanations for biological evolution and their application to the human species. Issues and topics will include, but are not limited to, genetics, evolutionary theory, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. The scientific method serves as the foundation of the course.

3.00 Units Lecture

Strongly Recommended
- Eligibility for ENG 1A -

Grading Methods:
Letter or P/NP

Discipline:
- Anthropology

	MIN
Lecture Hours:	54.00
Expected Outside of Class Hours:	108.00
Total Hours:	162.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

Before entering this course, it is strongly recommended that the student should be able to:

A. -Eligibility for ENG 1A
1. Write effective summaries of texts that avoid wording and sentence structure of the original
2. Organize coherent essays around a central idea or a position
3. Provide appropriate and accurate evidence to support positions and conclusions
4. Produce written work that reflects academic integrity and responsibility, particularly when integrating the exact language and ideas of an outside text into one's own writing
5. Utilize effective grammar recall to check sentences for correct grammar and mechanics

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

A. Describe the scientific process as a methodology for understanding the natural world.
B. Define the scope of anthropology and discuss the role of biological anthropology within the discipline.
C. Identify the main contributors to the development of evolutionary theory.
D. Explain the basic principles of Mendelian, molecular and population genetics.
E. Evaluate how the forces of evolution produce genetic and phenotypic change over time.
F. Demonstrate an understanding of classification, morphology and behavior of living primates.
G. Summarize methods used in interpreting the fossil record, including dating techniques.
H. Recognize the major groups of hominin fossils and describe alternate phylogenies for human evolution.
I. Identify the biological and cultural factors responsible for human variation.
J. Deconstruct the biological concept of race.

V. CONTENT:
A. Nature of scientific inquiry and the scientific method
B. Anthropological perspective
C. History and development of biological evolutionary thought
D. Molecular, Mendelian and population genetics
E. Mechanisms of evolution
F. Comparative primate taxonomy, anatomy and behavior

G. The nature of the fossil record including dating techniques
H. Fossil and genetic evidence of human evolution
I. Biocultural adaptations and modern human variation
J. Deconstructing the biological concept of "race"

VI. METHODS OF INSTRUCTION:
A. **Lecture** -
B. Textbook reading assignments; additional Internet and/or print assignments
C. **Research** - Research project
D. **Audio-visual Activity** - Presentation of audio-visual materials
E. **Discussion** -

VII. TYPICAL ASSIGNMENTS:
A. Read the textbook chapter on Mendelian genetics; using a Punnett Square diagram, map out the results of a union between two carriers for a recessive trait.
    1. What percentage of offspring would we expect not to show the recessive trait?
B. Read "Two Questions about Race" by Alan Goodman (2006) and summarize his argument against using "race" as a biological category.
C. Explain Charles Darwin's theory of natural selection using relevant concepts including fitness and selective pressure.

VIII. EVALUATION:
Methods/Frequency

A. Exams/Tests
    One midterm and final exams
B. Quizzes
    Periodic
C. Papers
    Midterm and/or final paper
D. Home Work
    Weekly homework

IX. TYPICAL TEXTS:
1. Stanford, Craig, John Allen, and Susan Anton. *Biological Anthropology: The Natural History of Humankind.* 4 ed., Pearson, 2016.
2. Jurmain, Robert, Lynn Kilgore, Wenda Trevathan, and Eric Bartelink. *Essentials of Physical Anthropology.* 10 ed., Cengage, 2016.
3. Larsen, Clark. *Our Origins: Discovering Physical Anthropology.* 4 ed., Norton, 2017.
4. Stanford, Craig, John Allen, and Susan Anton. *Exploring Biological Anthropology: The Essentials.* 4 ed., Pearson, 2016.

X. OTHER MATERIALS REQUIRED OF STUDENTS: