

ANTH C185: PHYSICAL ANTHROPOLOGY

Item	Value
Top Code	220200 - Anthropology
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)
Local General Education (GE)	• CL Option 1 Natural Sciences (CB2) • CL Option 1 Social Sciences (CD1)
California General Education Transfer Curriculum (Cal-GETC)	• Cal-GETC 5B Biological Sciences (5B)
Intersegmental General Education Transfer Curriculum (IGETC)	• IGETC 5B Biological Sciences (5B)
California State University General Education Breadth (CSU GE-Breadth)	• CSU B2 Life Science (B2)

Course Description

Formerly: ANTH C110. The course provides students with an understanding of human evolution and diversity from a biological perspective. Students will explore the central patterns of anatomical, behavioral, and genetic similarities and differences among living primates and humans, in addition to reconstructing the evidence for human evolution found in the fossil record. Transfer Credit: CSU; UC. C-ID: ANTH 110.C-ID: ANTH 110.

Course Level Student Learning Outcome(s)

1. Describe and analyze the development of evolutionary theory and explain the basic principles of biological evolution, natural selection, and heredity through the nature of scientific inquiry and the use of the scientific method.
2. Compare and contrast the morphology and behavior of humans and nonhuman primates to recognize the similarities and differences within the order of Primates.
3. Analyze and interpret the major theories relating to hominid evolution and the origin and dispersal of modern humans and demonstrate a knowledge of the dating techniques used in the research.
4. Synthesize the biological and socio-cultural anthropological perspectives in the description and explanation of human variation and apply this to the concept of race.

Course Objectives

1. Describe how the nature of scientific inquiry and how the application of the scientific methodology process leads to an understanding of the natural world.
2. Define the scope of anthropology and discuss the anthropological perspective as well as physical anthropologists role within the discipline.
3. Distinguish the methods, theories, and perspectives used by physical anthropologists to compare, contrast and interpret the fossil record, including dating techniques.
4. Identify the importance of biocultural evolution including the biological and cultural factors responsible for human variation and the concept that race is not valid from a biological perspective.
5. Demonstrate an understanding of evolutionary theory and identify the main contributors to the development of evolutionary theory
6. Explain the basic principles of Mendelian, molecular, and population genetics.
7. Analyze and evaluate the evolution and dispersal of the major groups of hominin fossils and describe alternative phylogenies for human evolution.
8. Demonstrate an understanding of the classification, morphology and behavior of living and past humans and nonhuman primates and recognize the similarities and differences within The Order of Primates.

Lecture Content

Brief History of Evolutionary Thought Discovery of Natural Selection Key (19th Century) Ideas of Natural Selection and Evolution Natural Selection in Action Nature of Scientific Theory and the Scientific Method Modern Evolutionary Theory Constraints of Evolutionary Theory The Cell DNA Chromosomes Cell Division New Frontiers in Genetics Genetic Principles Discovered by Mendel Non-Mendelian Patterns of Inheritance Principles of Classification Macroevolution and the Process of Speciation Species in the Fossil Record Vertebrate Evolutionary History Processes of Macroevolution Primatology The Primate Order Primate Characteristics Survey of Living Primates Endangered Primate Behavior Primate Field Studies Evolution of Behavior Sympatric Species Why Be Social. Primate Social Behavior Reproductive Strategies Introduction to the Study of Hominids Strategy of Paleoanthropology Example of Paleoanthropology: Olduvai Gorge Experimental Archaeology Reconstruction of Early Hominid Environments and Behavior Dating Techniques Early Primate Evolution Miocene Fossil Hominoids The Bipedal Adaptation Early Hominids from Africa (Pre-Australopithecus Finds) Australopithecus from East Africa Early Homo South African Sites Adaptive Patterns of Early African Hominids A New Kind of Hominid The Morphology of Homo Erectus Who Were the Earliest African Emigrants. Historical Overview of Homo Erectus Discoveries Technological and Population Trends in Homo Erectus Interpretations of Homo Erectus: Continuing Uncertainties Man, the Hunter, Woman the Gatherer. Premodern Humans A Review of Middle Pleistocene Evolution Middle Pleistocene Culture Neanderthals: Premodern Humans of the Upper Paleolithic Culture of Neanderthals Genetic Evidence Trends in Human Evolution: Understanding Premodern Humans Are They Human. Modern Human Origins The Earliest Discoveries of Modern Humans Technology and Art in the Upper Paleolithic Summary of Upper Paleolithic Culture The Evolution of Language Historical Views of Human Evolution The Concept of Race Racism Intelligence Contemporary Interpretations of Human Variation Population Genetics Evolution in Action: Modern Humans

Human Biocultural Evolution Molecular Applications in Modern Human Biology The Adaptive Significance of Human Variation Infectious Disease Evolution of Human Behavior and the Life Course Biocultural Evolution and the Life Cycle Reproductive Functioning Human Impact on the Planet and on Other Life Form The Role of Applied Anthropology Anthropological Perspective Reactions to Repressive Change

Other Resources

1. Coastline Library

Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)
- Video one-way (ITV, video) (63)

Instructional Techniques

A variety of instructional techniques will be employed to encompass different student learning styles. These may include, but are not limited to, lecture, discussion, and small-group activities. Instruction will be supplemented, where appropriate, by PowerPoint presentations, electronic resources and technologies, guest speakers and field trips.

Reading Assignments

Students will complete reading assignments from the textbook as well as any supplemental reading based upon course readers, handouts, internet resources, and assignments from the Coastline Library.

Writing Assignments

Students write at least one paper designed to assess students ability to construct a coherent argument utilizing anthropological theory and concepts.

Out-of-class Assignments

Outside of the classroom students will do the required reading, study for quizzes and exams, and conduct research, where applicable, to prepare papers and essays.

Demonstration of Critical Thinking

Students will demonstrate critical thinking through written work such as essays, papers, and case studies as well as active participation in class discussions.

Required Writing, Problem Solving, Skills Demonstration

A research paper designed to assess students ability to construct a coherent argument utilizing anthropological theory and concepts.

Eligible Disciplines

Anthropology: Masters degree in anthropology or archaeology OR bachelors degree in either of the above AND masters degree in sociology, biological sciences, forensic sciences, genetics or paleontology OR the equivalent. Masters degree required.

Textbooks Resources

1. Required Jurmain, Robert; Kilgore, Lynn; Trevathan, Wenda; Ciochon, Russell L. Essentials of Physical Anthropology, 10th ed. Cengage, 2017 Rationale: - 2. Required Stanford, Craig; Allen John S. Anton, Susan C. REVEL Biological Anthropology, 4th ed. Pearson, 2017 Rationale: - 3. Required Larsen, Clark Spencer. Essentials of Physical Anthropology, 4th ed. Norton, 2019 4. Required Jurmain, Robert; Kilgore, Lynn; Trevathan, Wenda; Ciochon, Russell L.; Bartelink, Eric. Introduction to Physical Anthropology, 15th ed. Cengage, 2018