## Catalog 2017-2018 Information

# ANTHR-001 Introduction to Biological Anthropology

54 total hours lecture

3 Units

ADVISORY: Eligibility for ENGL-100

Anthropology is a holistic discipline and attempts to view humans, their biology, cultural history, and activities in as broad a view as possible. Biological anthropology is a subfield of the larger discipline that studies humankind. The primary goal of this subfield is to understand the biological nature and history of humans and their closest living and extinct relatives. Biological anthropology is firmly rooted in evolutionary theory; thus, the evolutionary biology of humans is the central focus of this course. My intent is to promote insight into the evolution of human biology and behavior from an objective or scientific perspective. My approach will introduce the concepts, methods of inquiry, and scientific explanations for biological evolution, and their applications to studying the human species. . Topics addressed will include:1) The various subfields of biological anthropology such as forensic anthropology and the anthropological perspective 2) biological anthropology and paleoanthropology as "multidisciplinary" natural sciences 3) evolutionary processes/change over time and the origin of species 4) DNA, genetics, heredity, variation, and evolution, 5) race, ethnicity, and the biological diversity of modern humans 6) The Order Primates: primate biology and ecology 7) primate social behavior, behavioral ecology, morphology, and classification 8) Earth-life history, continental drift, and the Geologic Time Scale (9) primate origins

LMC: ADR: Social and Behavioral Sciences; DA

TRANSFER: UC; CSU Gen. Ed. Area B2; IGETC Area 5B

#### BIOSC-021 Principles of Biology: Organismal

54 total hours lecture, 108 total hours lab 5 Units PREREOUISITE: MATH-029, 030 or equivalent

ADVISORY: BIOSC-010, High school biology, chemistry

This is an integrated study of the vast array of organisms on this planet. It focuses on biological processes and principles that lead to increasing higher levels of organization. The course is centered on three major areas of study: evolutionary principles, unity and diversity of life and ecology. Major topics will include: origin of life, evolutionary mechanisms, evidence of evolution, speciation, diversity of life; plant form and function; population and community ecology; ecosystems and environmental concerns. Skills in critical thinking, problem solving and effective learning will be presented throughout the course. Laboratory methods, techniques and field work will be included with all major topics. May not be repeated. LR

LMC: DA

TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C

### **ENGL-220** Critical Analysis and Inquiry

54 total hours lecture

3 Units

PREREQUISITE: ENGL-100

A critical investigation of meaning, its creation and transmission through the study of language processes and the application of the principles and criteria of critical thinking to reading and writing. This course will examine the relationships between thought and language, including synthesis and the relationship to logic and meaning. Critical thinking criteria include: recognizing informal and formal fallacies, determining validity of arguments and points of view, separating fact from opinion and identifying biases. May not be repeated. SC

LMC: DA

TRANSFER: UC; CSU Gen. Ed. Area A3; IGETC Area 1B

#### MATH-070 Calculus and Analytic Geometry III

72 total hours lecture, 36 total hours lab

4 Units

PREREQUISITE: MATH-060 or equivalent

Math 70 is an extension of differential and integral calculus and coordinate geometry to functions of more than one variable. Topics include: Vectors in two and three dimensions; analytic geometry of three dimensions; partial differentiation; multiple integrals; line and surface integrals; Green's Theorem, Stokes' Theorem, and applications to various fields. This course is intended for students in mathematics, science and engineering majors. Use of a mathematical software package or graphing calculator is required. May not be repeated. SC

LMC: ADR: Language and Rationality: Communication and Analytical

Thinking; DA

TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2