DOES NOT MEET GRADUATION REQUIREMENT ELECTIVES—HIGH SCHOOL

| Physical Anthropology | Semester Course—Grades 11-12 Prerequisite: Biology AB is recommended | | |
|---|--|-------------|--------------------|
| Course Code Number and Abbreviation | 36-12-01 Phys Anthro | withitne | Repres |
| Course Description | The major purpose of this course is to study the biological nature and evolution of humankind. A laboratory approach is stressed, including detailed observations and measurements of casts of fossil hominids, other primates, and stone artifacts. This course in designed to provide a foundation for college courses in the biological sciences, anthropology, and other social sciences. Physical Anthropology does not meet the District science graduation requirement. It may be used as an elective. It meets one semester of the University of California 'd' admission requirement for laboratory science. | | |
| Instructional Units and Pacing Plans | Instructional Units *Suggested Weeks | | |
| | The Study of Humankind | 2 | 2 |
| | Organic Evolution and the Origin of Life | 2 | 3 |
| | Comparisons of Primates | 2 | 3 |
| | Evolution of Primates | 2 | 2 |
| | | 1 | 1 |
| | Hominid Adaptations | | 2 |
| | Hominid Adaptations Australopithecines and Homoerectus | 2 | 3 |
| | | 2 | 2 |
| | Australopithecines and Homoerectus Hominids in Transition Early Homo sapiens, and Neanderthals | | 3 2 2 |
| | Australopithecines and Homoerectus Hominids in Transition | 2 | 2 2 1 |
| | Australopithecines and Homoerectus Hominids in Transition Early Homo sapiens, and Neanderthals Humans like Ourselves | 2 2 1 | 2 2 1 *19 |
| | Australopithecines and Homoerectus Hominids in Transition Early Homo sapiens, and Neanderthals | 2 2 1 | 1 *19 |

The following standard from English-Language Arts Content Standards California Language for California Public Schools will be measured on State assessments: Arts Content Standard • Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources. In accordance with their individual capacity, students will grow in the Representative ability to: Performance · Demonstrate process skills of scientific thinking: observing, Objectives communicating, comparing, ordering, categorizing, relating, inferring, and applying. · Demonstrate skills in the area of speaking, listening, writing, reading, graphing, mapping and mathematics.

- Evaluate the contributions of science and technology and their relevance to improving our daily lives in preparation for the future.
- · Establish the relevance of science and its applications to careers and real-life situations.
- Select and use appropriate tools and technology (such as computer-linked probes, spreadsheets, and graphing calculators) to perform tests, collect data, analyze relationships, and display data.*
- Identify and communicate sources of unavoidable experimental error.*
- Identify possible reasons for inconsistent results, such as sources of error or uncontrolled conditions.*
- Formulate explanations by using logic and evidence.*
- Solve scientific problems by using quadratic equations and simple trigonometric, exponential, and logarithmic functions .*
- Distinguish between hypothesis and theory as scientific terms.*
- Recognize the usefulness and limitations of models and theories as scientific representations of reality.*
- Recognize the issues of statistical variability and the need for controlled tests.*

- Recognize the cumulative nature of scientific evidence.*
- Analyze situations and solve problems that require combining and applying concepts from more than one area of science.*
- Investigate a science-based societal issue by researching the literature, analyzing data, and communicating the findings. Examples of issues include irradiation of food, cloning of animals by somatic cell nuclear transfer, choice of energy sources, and land and water use decisions in California.*
- Know that when an observation does not agree with an accepted scientific theory, the observation is sometimes mistaken or fraudulent (e.g., the Piltdown Man fossil or unidentified flying objects) and that the theory is sometimes wrong (e.g., the Ptolemaic model of the movement of the Sun, Moon, and planets).*
- Investigate a societal issue by researching literature, analyzing data and communicating findings and discuss possible future outcomes.
- Demonstrate interconnections between the many disciplines of science.
- Demonstrate the interdisciplinary connections between science and other curricular fields.

Note: Asterisked items are Science Investigation and Experimentation Standards for the State of California.

Representative Content Objectives

In accordance with their individual capacity, students will grow in the ability to:

- Describe the fields of science needed to study the biological history of human beings.
- Compare and contrast the various theories on the origin of life.
- Describe the major divisions of the geologic time scale.
- Explain methods used in dating fossils, and identify various types of fossils.
- Describe how to use a site map to reconstruct the possible daily lives of past hominids.
- Explain the key physical changes in the evolutionary history of

vertebrate animals.

- Compare the morphology of modern apes and humans.
- Describe behavior patterns and the social organization of living primates.
- Explain the major changes that took place in *Australopithecus*, *Homo erectus*, and *Homo sapiens*
- Compare changes over time in tool technology, using casts of stone artifacts.
- Describe a possible human "family tree" (cladogram) based on evidence of evolutionary relationships.