

PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

PHYSICAL ANTHROPOLOGY
ANT 1100

Class Hours: 3.0

Credit Hours: 3.0

Laboratory Hours: 0.0

**Date Revised: Spring
01**

Catalog Course Description:

Focuses on the range of human genetic variation and adaptation that is demonstrated in living populations today, comparisons of biology and behavior between human and non-human primates and examination of our human prehistory as outlined in the fossil record.

Entry Level Standards:

Students must be able to read and write at a college level.

Prerequisites:

None

Textbook(s) and Other Reference Materials Basic to the Course:

Essentials of Physical Anthropology, Robert Jurmain, Harry Nelson, Lynn Kilgore, and Wenda Treadan, 4th edition.

Relevant course readings will be placed in the library for review material not covered in the text. Students will be responsible for reviewing the appropriate materials for each lecture.

I. Week/Unit/Topic Basis:

Week	Topic
1	Introduction, physical anthropology
2	Development of evolutionary theory
3	Biological basis of life
4	Heredity and evolution
5	Overview of living primates
6	Primate behavior
7	Mammalian/Primate evolution
8	Hominid origins
9	Homo erectus and contemporaries

10	Archaic Homo sapiens
11	Modern human origins
12	Microevolution in modern populations
13	Human variation & adaptation
14	Growth and development/forensics
15	Lessons for the future
16	Final Exam Period

II. Course Objectives*:

- A. Comprehend how theories of biological evolution developed in light of advances in the natural sciences resulting in part from the age of discovery and exploration. I.5, IV.3
- B. Discuss the basic principles of Mendelian inheritance, including the concept of dominance, recessiveness, codominance and the Laws of Segregation and Independent Assortment. Be able to differentiate between Mendelian and polygenic inheritance. I.5
- C. Discuss the suite of characters that are shared by most primate species and distinguish the primates from other mammal groups. Exhibit basic familiarity with nonhuman primate, their geographic distribution, locomotor patterns, and distinguishing features of prosimians, monkeys, apes, and humans. I.5, IV.1
- D. Discuss the importance of primate socioecology and how various environmental factors influence social behavior. In addition, know the important types of social interactions of nonhuman primates. IV
- E. Discuss the general characteristics, geographical distribution, history of discoveries, and material culture of Homo erectus. I.5, IV
- F. Discuss the general characteristics, geographical distribution, history of discoveries, and material culture of archaic Homo sapiens. Define the group classified as Neandertals. I.5, IV
- G. Discuss the competing hypotheses of the origin of modern humans. Assess material culture changes reflect with early modern human populations. I.5, IV
- H. Exhibit an understanding of the importance of genetic variation in populations and how natural selection and other factors act upon variation to alter genetic structure of populations. I.5, VII.4
- I. Understand the interaction between the humans and their environment: phenotype and genotype reactions. I.5
- J. Exhibit a basic understanding of human growth and development. I.5, VII.4
- K. Understand humans as part of a biological continuum. IV

*Roman numerals after course objectives reference goals of the university parallel program.

III. Instructional Processes*:

Students will:

1. Research and write a report on some relevant topic within the study of physical anthropology using traditional sources and the Internet. *Communication Outcome, Technological Literacy Outcome, Information Literacy Outcome, Active Learning Strategy*
2. Develop an understanding of the "race" concept as a socio-cultural reality rather than a biological one; assess the social and political consequences of this misunderstanding in contemporary society and throughout history. *Cultural Diversity and Social Adaptation Outcome, Transitional Strategy*
3. Read and critique scientific explanations of human origins. *Communication Outcome, Problem Solving and Decision Making Outcome*
4. Analyze a mock "forensic case" in order to see how a physical anthropologist works with police departments. *Personal Development Outcome, Problem Solving and Decision Making Outcome, Transitional Strategy*
5. Illustrate comprehension of class material on 3 in-class exams and 1 take home exam. These will include an essay component that requires students to present a logical argument supporting a particular viewpoint or explaining a scientific concept. *Communication Outcome*

*Strategies and outcomes listed after instructional processes reference Pellissippi State' s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

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

1. Understand and define the different subdisciplines of anthropology. A
2. Obtain a basic understanding of the development of evolutionary theory. A,E,F,G
3. Understand basics of human biology at the cellular level. B,H
4. Learn the importance of Mendel' s experiments and the eventual founding of the science of genetics. B,K,H
5. Learn the variety and characteristics of living primates. C,D
6. Understand primate behavior through the concept of socioecology. C,D
7. Obtain a basic knowledge of mammalian and primate ancestry based upon the fossil record. B,C,D,E,F
8. Describe the introduction to the field of paleoanthropology and the various stem hominids of the Plio-Pleistocene. G,I,J,K
9. Understand and describe the circumstances concerning the emergence of the genus Homo. E
10. Continue to investigate the path that led to modern humans and Neandertals. F
11. Discuss modern human origins emphasizing critical thinking. J,K
12. Describe and discuss human variation throughout the world. H,I,J,K

13. Describe and discuss how humans adapt to various environments. G,H,I
14. Learn the basics of growth and development and relate this to forensics. J,K

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures: 400 points

Exams (4): 100 points each

B. Laboratory Expectations: 200 points

Homework assignments: 100 points: collect 10 of 14

Article review: 50 points: 2-3 pages maximum

Internet exercise: 50 points: 1 page review of 5 appropriate web sites

C. Field Work: 140 points

Research paper: 100 points: 5-7 pages maximum

Take home exercise: 40 points: Forensic case study

D. Other Evaluation Methods:

N/A

E. Grading Scale:

90-100 %	(662-740)	A
80-89 %	(588-661)	B
70-79 %	(514-587)	C
60-69 %	(440-513)	D
59 % - below	(512 - below)	F

VI. Policies:

A. Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of Academic and Student Affairs, may have requirements that are more stringent.

B. Other Policies:

1. All PSTCC policies regarding tardiness, absenteeism, and academic dishonesty will be strictly followed and applied.
2. An atmosphere of professionalism will be maintained during all discussion of human similarities and differences; inflammatory or inappropriate language will not be tolerated.