

PELLISSIPPI STATE COMMUNITY COLLEGE  
MASTER SYLLABUS

**PHYSICAL ANTHROPOLOGY  
ANT 1100**

**Class Hours: 3.0**

**Credit Hours: 3.0**

**Laboratory Hours: 0.0**

**Revised: Fall 2012**

**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 Course Materials:**

Larsen, Clark Spencer. *Our Origins: Discovering Physical Anthropology*, 2<sup>nd</sup> edition. W. W. Norton, 2011

Whitehead PF, Sacco WK, and SB Hochgraf. *A Photographic Atlas for Physical Anthropology, Brief Edition*. Morton Publishing Company, 2005.

**I. Week/Unit/Topic Basis:**

<b>Week</b>	<b>Topic</b>
1	Introduction to 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	<i>Homo erectus</i> and contemporaries
10	Archaic <i>Homo sapiens</i>
11	Modern human origins

- 12            Microevolution in modern populations
- 13            Human variation & adaptation
- 14            Human growth and development; osteology and forensics
- 15            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. IV.1, V.4, V.5
- 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.6, V.4, V.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 primates, their geographic distribution, locomotor patterns, and distinguishing features of prosimians, monkeys, apes, and humans. I.6, V.4
- 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. V.4, V.5
- E.            Discuss the general characteristics, geographical distribution, history of discoveries, and material culture of *Homo erectus*. I.6, I.7, V.4, V.5
- F.            Discuss the general characteristics, geographical distribution, history of discoveries, and material culture of archaic *Homo sapiens*. Define the group classified as Neandertals. I.6, I.7, V.4, V.5
- G.            Discuss the competing hypotheses of the origin of modern humans. Understand the material culture changes seen with early human populations. I.6, I.7, V.4, V.5
- H.            Exhibit an understanding of the importance of genetic variation in populations and how natural selection and other factors act upon variation to alter the genetic structure of populations. I.6, III.4, V.4, V.5
- I.            Understand the interaction between humans and their environment: phenotype and genotype reactions. II.3, V.4
- J.            Exhibit a basic understanding of human growth and development. II.3
- K.            Understand humans as part of a biological continuum. II.3, III.1, III.4, V.4

\*Roman numerals after course objectives reference TBR's general education goals.

**III. Instructional Processes\*:**

Students will:

1. Develop an understanding of the human fossil record and learn how paleoanthropologists and other scientists draw conclusions about the fossils therein. *Natural Sciences Outcome*
2. Read assigned readings and participate in discussions of class and reading material. *Communication Outcome, Humanities/Fine Arts Outcome, Active Learning Strategies*
3. Research scientific journal articles using library online databases and write a paper on a relevant topic in physical anthropology using word processing software. *Communication Outcome, Humanities/Fine Arts Outcome, Social/Behavioral Sciences Outcome, Technological Literacy Outcome*
4. Present the findings of their research paper to the class in a poster format, similar to that seen at professional scientific meetings. *Active Learning Strategies, Transitional Strategies, Communication Outcome*
5. Participate in hands-on learning with classmates by examining fossil casts and completing several exercises related to their examination, developing teamwork and data analysis skills. *Active Learning Strategies, Communication Outcome*
6. Complete several short response/reaction papers to assigned readings. *Communication Outcome*
7. Work with classmates to analyze a mock forensic case and present it to the class. *Communication Outcome, Active Learning Strategies, Transitional Strategies*
8. Practice professionalism by attending class on a regular basis, being dependable, cooperative, and respectful of course topics while contributing to class discussion and projects. *Transitional Strategy, Active Learning Strategy*
9. Demonstrate comprehension of course material on 3 in-class exams, which 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 TBR'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: 300 points

In-class exams (3): 100 points

B. Laboratory Expectations:

N/A

C. Field Work: 150 points

Research paper and oral presentation: 100 points

“Lab” exercises: 50 points

D. Other Evaluation Methods:

Students may earn up to 10 extra credit points by visiting the Frank H. McClung

Museum, located on the University of Tennessee Knoxville campus, and writing a 3 page reaction/response paper to the *Human* Origins exhibit.

E. Grading Scale:

90-100%	(450-405)	A
85-89%	(404-383)	B+
80-84%	(382-360)	B
75-79%	(359-338)	C+
70-74%	(337-315)	C
60-69%	(314-270)	D
59% and below	(below 269)	F

#### **VI. Policies:**

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning 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 Affairs, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Academic Affairs.

#### B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to the following practices:

- Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments.
- Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source.
- Purchasing or otherwise obtaining prewritten essays, research papers, or materials prepared by another person or agency that sells term papers or other academic materials to be presented as one's own work.
- Taking an exam for another student.
- Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor.
- Any of the above occurring within the Web or distance learning environment.

Please see the Pellissippi State Policies and Procedures Manual, Policy 04:02:00 Academic/Classroom Conduct and Disciplinary Sanctions for the complete policy.

#### C. Accommodations for Disabilities:

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127, 132, 134, 135, 131 or by phone: 539-7153 or TTY 694-6429. More information is available at <http://www.pstcc.edu/sswd/>.