

Introduction to Biological Anthropology

ANT 3514C Summer A 2017

Instructor:

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Course Website: <http://lss.at.ufl.edu>

Course Communications: Please use Canvas to communicate with the Instructor and the TAs.

Required Text: Jurmain, R, Kilgore, L, Trevathan, W, Ciochon, RL, and Bartelink, EJ. 2018. *Introduction to Physical Anthropology*, 15th edition. Boston, MA: Cengage Learning.

This textbook has long been a leader in the field and all chapters are required. There will be additional readings and links to online resources as well, posted in Canvas, by module.

Course Description: Introduces the subfield of anthropology that focuses on the natural history of humankind. Through lecture and laboratory, the course surveys a range of materials that focus on the diversity of the Order Primates with emphasis on human and primate variation, adaptation and evolution. (B)

Purpose of Course: Anthropology is a holistic discipline. As such, anthropologists attempt to view humans, their activities, and their cultural and biological history in as broad a context as possible. Such a vast field is divided into a number of subfields, of which biological anthropology (= physical anthropology) will be introduced to you in this course. Its goal is to understand the biological nature and history of humankind and their living (= extant) relatives.

Biological anthropology is firmly rooted in evolutionary theory. The evolutionary biology of humans is thus the central focus of the course. We will cover many topics pertaining to the group of mammals that humans

belong, the Order Primates. Basic concepts of genetics, geology, paleontology, comparative anatomy, primate biology, ecology, and material culture provide the foundation for understanding humanity's place in nature.

Fundamentals in biology and geology will be related to understanding the context and circumstances that have allowed our bodies and behaviors to change over time. The inheritance of genetic variation will be discussed as it relates to evolutionary change. Aspects of human biological variation, both genetic and "physical," will be discussed with respect to modern human polymorphisms and the evolutionary forces affecting adaptation. "Primates" will be introduced as we learn about the fields of primatology, comparative anatomy, and conservation biology. We will learn about the newest techniques in molecular biology used to address a whole range of issues in evolutionary biology, wildlife conservation, and forensic anthropology.

Stepping far back in time, as paleoanthropologists, we will learn about some of the more significant fossil primate finds with particular emphasis on the common ancestor of humans and the African great apes. At about 2.5 million years ago, our genus *Homo* first appears in the fossil record. At about this same time the first evidence of material culture in the form of stone tools appears in the record. We will review the archaeological and biological evidence of our hominin ancestry and focus on the biocultural revolution that took place from that time in prehistory to the present. Biomedical aspects of health and disease will be reviewed as will the overall state of the human condition.

Course Goals: Through lectures, readings, online media, assignments, and discussions, you will develop the basic skills and knowledge to:

- Identify, describe, explain, and apply factual, conceptual, and procedural knowledge in biological anthropology.
- Apply the scientific approach to investigate human variation in its biological, social and cultural dimensions.
- Integrate different sources and types of knowledge into holistic perspectives about human variation.
- Evaluate the significance, quality and veracity of information and apply it effectively to solve problems.

In addition to course outcomes, each of the 12 modules of this course is structured by detailed objectives that are specific to the subject of that module. Descriptions of module objectives are published on the Canvas e-Learning site for this course.

Student 'mastery' of these outcomes is measured from the overall effectiveness that the course has in meeting its objectives. Student performance on exams, quizzes, assignments, and through participation on discussion boards, all translate to individual performance based on explicit

grading criteria (discussed below). There are a number of criteria used to evaluate course outcomes and student success, and much of these criteria are included within the 'student learning outcomes' (or 'SLO's) as established by General Education mandates in the state of Florida. Below (in parentheses) are how outcomes will be assessed for each student enrolled in this course.

Content: Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline (quizzes, exams, lab assignments, group discussions).

Communication: Students communicate knowledge, ideas and reasoning clearly and effectively in written and oral forms appropriate to the discipline (lab assignments, group discussions).

Critical Thinking: Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems (lab assignments, group discussions).

This course also meets General Education Subject Area Objectives for 'Biological Sciences':

Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems. Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

Assessment and Grading

Grades are determined based on student performance on exams (n=3), course quizzes (n=12), course assignments (n=5), course discussions (n=5), lab assignments (n=12), and lab practicals (n=2). There are three exams in this course, that will increase in rigor, and percentage of course grade as the course progresses. Exams will include objective questions (matching, multiple choice, true/false), and may include short 'problems' to solve, however, no calculators are required. Each exam will also incorporate a 'lab practical' component, thus labs must be completed prior to taking each exam. Exams will not be comprehensive, but concepts will be used as needed throughout the course, and these will be routinely integrated into course assessment.

There are 12 course modules, and each module includes a quiz to assist in your review of the material. The exams are roughly every two weeks, but Exam 1 will be initiated on a Wednesday (May 17th), Exam 2 on a Thursday (June 1st), and Exam 3 on a Friday (June 16th). Due dates are typically at 11:59pm, except for the last week of class, when all required assessments are due by Sunday (June 18th) by 5:00pm.

- Exam 1 12.5%
- Exam 2 13.5%
- Exam 3 14%
- Quizzes (n=12) 10%

- Discussion (n=5) 10%
- Assignments (n=5) 10%
- Labs (n=12) + Lab Practical Exams (n=2) 30%

Percentile Breakdown:

Percent	Grade
100-93	A
92.9-90	A-
89.9-87	B+
86.9-83	B+
82.9-80	B-
79.9-77	C+
76.9-73	C
72.9-70	C-
69.9-67	D+
66.9-63	D
62.9-60	D-
59.9-0	E

University Honesty Policy

All students must comply with the University of Florida’s Student Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>):

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the Instructor or the TAs in this class.

