

Introduction to Biological Anthropology- Online

ANT3514C

Spring 2022

Instructor: Aaron Ellrich

Email: ellricham@ufl.edu

Virtual Office Hours: Tuesdays and Wednesdays, 2:00-3:30pm

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

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

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. Please note: the 14th edition of this textbook will have most of the content required for the course, but some things will be missing. Any earlier versions of the textbook will not suffice.

Course Description:

ANT 3514C is a four-credit course that satisfies the biological science and laboratory requirements for General Education, and partially satisfies the general distribution requirement for Liberal Arts and Sciences. This course is required of all Anthropology majors and 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.

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 to which 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 goals, 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 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 are non-cumulative and will include objective questions (matching, multiple choice, true/false). Exams 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. A minimum grade of C is required for general education credit.

There are 12 course modules, and each module includes a quiz to assist in your review of the material. Quizzes will be open book, open note, and students will have unlimited attempts until the designated closing time of the quiz. Students will have 60-75 minutes to complete each of the three exams once the exam has been initiated. For the lab practicals, students will have 20 minutes to complete the practical once it has been initiated. Discussions for the course will be required for even numbered modules, starting with Module 2. Assignments for the course will be required for odd numbered modules, starting with Module 1. However, there is no discussion or assignment for modules 11 and 12. Students' original posts are due at 11:59pm EST on Wednesdays, while responses to at least one other classmate are due at 11:59pm the following Sunday. One point will be deducted per day for a late discussion response.

Assessment Breakdown: Percentile Breakdown:

- Exam 1 12%
- Exam 2 13.5%
- Exam 3 14.5%
- Quizzes (n=12) 10%
- Labs (n=12) 20%
- Lab Practicals (n=2) 10%
- Assignments (n=5) 10%
- Discussions (n=5) 10%

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

Late Work or Missed Work:

Unexcused late work is not accepted for full credit. There are no opportunities to make up missed assignments or exams except for reasons of medical or family emergency (documentation is required). The acceptance of late work under additional circumstances is up to the discretion of the Course Instructor. Such work missed may be made up by arrangement with the Instructor. Exams may not be retaken.

Please note, most of the assignments for this class require you to upload a Word document. It is your responsibility to ensure the document you uploaded is the correct document when you submit your assignment. Attempts to re-submit an assignment after the deadline due to an uploading error will not be accepted. If you experience issues uploading the assignment, contact the UF Help Desk to file a ticket with them, and email your instructor with the ticket number.

Accommodations:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas

course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/.

Course Outline and Schedule:

ANT3514C is divided into twelve modules. Canvas is your interface for downloading material, taking quizzes, exams, and lab practicals, holding group discussions, uploading assignments, and checking your grades.

For each Module, you have lectures to view (the PowerPoints are also available as downloadable PDFs), textbook chapters to read, and a quiz to take. Discussions and assignments alternate for Modules 1-10 (there is no discussion or assignment for Modules 11 and 12). For five (5) of the modules, you have a discussion to contribute to, both an original post and a response to the post of at least one other student. For the other five (5) modules (the ones without discussions), you will have an assignment to complete. All required readings and videos are posted with the materials for that module.

Unless otherwise indicated, due dates and other relevant dates for each module are scaled to the respective week, which starts on Sunday at 12:00 am EST and runs through the following Sunday at 11:59 pm EST. Quizzes and assignments for each module will open at the beginning of each respective week, and close at the end of that week (Sunday to Sunday). Discussions require that you make your original post no later than Wednesday at 11:59 pm for that week and post your additional response by the following Sunday at 11:59 pm at the end of that same week. The weekly labs will open on Sundays and be due the following Sunday at 11:59 pm. The three exams are available for three full days each; however, as noted previously, once you start an exam, you will have 60-75 minutes to complete it. Finally, your lab practicals will also be open for three days, and you will have 20 minutes to complete each; there is one mid-semester and one at the end of the semester. Due dates are in the course schedule below.

Module	Assignment	Due Date
Module 1: Science January 5 – January 16	Assignment 1	Jan. 16
	Lab 1	Jan. 16
	Module 1 Quiz	Jan. 16
Module 2: Evolution January 16 – January 23	Discussion 1 Original Post	Jan. 19
	Discussion 1 Response	Jan. 23
	Lab 2	Jan. 23
	Module 2 Quiz	Jan. 23
Module 3: The Modern Synthesis January 23 – January 30	Assignment 2	Jan. 30
	Lab 3	Jan. 30
	Module 3 Quiz	Jan. 30
Exam 1	(Modules 1-3)	Jan. 31 – Feb. 2

Module 4: Primates- Extant January 30 – February 6	Discussion 2 Original Post	Feb. 2
	Discussion 2 Response	Feb. 6
	Lab 4	Feb. 6
	Module 4 Quiz	Feb. 6
Module 5: Primate anatomy, ecology, and behavior February 6 – February 13	Assignment 3	Feb. 13
	Lab 5	Feb. 13
	Module 5 Quiz	Feb. 13
Module 6: Primates- Extinct February 13 – February 20	Discussion 3 Original Post	Feb. 16
	Discussion 3 Response	Feb. 20
	Lab 6	Feb. 20
	Module 6 Quiz	Feb. 20
Practical 1	(Labs 1-6)	Feb. 21 – Feb. 23
Module 7: Hominin Origins February 27 – March 6	Assignment 4	Feb. 27
	Lab 7	Feb. 27
	Module 7 Quiz	Feb. 27
Exam 2	(Modules 4-7)	Feb. 28 – Mar. 2
Spring Break: March 7 – March 12		
Module 8: Early Hominins March 13 – March 20	Discussion 4 Original Post	Mar. 16
	Discussion 4 Response	Mar. 20
	Lab 8	Mar. 20
	Module 8 Quiz	Mar. 20
Module 9: Early <i>Homo</i> March 20 – March 27	Assignment 5	Mar. 27
	Lab 9	Mar. 27
	Module 9 Quiz	Mar. 27
Module 10: Later <i>Homo</i> March 27 – April 3	Discussion 5 Original Post	Mar. 30
	Discussion 5 Response	Apr. 3
	Lab 10	Apr. 3
	Module 10 Quiz	Apr. 3
Module 11: <i>Homo sapiens</i> April 3 – April 10	Lab 11	Apr. 10
	Module 11 Quiz	Apr. 10
Module 12: Mod. Human Variation April 10 – April 17	Lab 12	Apr. 17
	Module 12 Quiz	Apr. 17
Practical 2	(Labs 7-12)	Apr. 18 – Apr. 20
Exam 3	(Modules 8-12)	Apr. 18 – Apr. 20