

**ANTH 1020**  
**Introduction to Biological Anthropology**  
**Utah State University**  
**Fall 2014**

**Instructor:** Dr. Diane Wallman

**Contact:** diane.wallman@usu.edu

**Online Office Hours:** Via Canvas Conference tool Tuesday/Thursdays 4-6pm, and Wednesdays 9-11am.

I am also available by appointment, and we can chat online.

\*\*For most email inquiries, I will respond the same day, when possible. If you respect my time, I will respect yours and respond in a timely manner. I do not check email at every moment throughout the day, and if you email me last minute before a due date or test, I might not be available.

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**Objectives:**

This course is an introduction to the science of biological anthropology, and addresses the complex interaction of biology and culture in the evolutionary development of the human species. We study the basic concepts and mechanisms of evolution and the evolutionary history of humankind from primate beginnings to anatomically and behaviorally modern *Homo sapiens*, and finally the development of human cultural systems. Students will learn basic methods used in biological anthropology, the principles of genetics, natural selection and evolution. The material emphasizes the ways in which anthropologists learn about the past and how we can use our knowledge of the past to understand the present.

The course focuses on human origins, evolution, and prehistory, with the principal goal of learning how scientific anthropological approaches contribute to our understanding of what it means to be a member of the human species. We are a product of our past as well as present, and this course hopes to show how understanding our biological and cultural history (through the theory and method of the science of anthropology) can provide us with a better understanding of humanity.

**Learning Outcomes:**

By the conclusion of this course, students will be able to:

- Describe the basic objectives of paleoanthropology and archaeology
- Define the basic principles of genetics and evolution
- Define the biological and behavioral characteristics of the order primates
- Summarize the fossil record from the first primates to modern humans
- Understand the reasons for modern human variation
- Understand the cultural and biological evolution of humans and variation as seen in the archaeological record.

## Evaluation:

Syllabus Quiz	5%
Tests (2 @ 10% each)	20%
Final	15%
Hominid Paper (5-7 pages)	15%
Genetics Activity	5%
Ardipithecus Assignment	10%
Ancient DNA Activity	5%
Weekly Participation in Discussion Board	25%

## Grading Scale:

A	100%	to	93%
A-	< 93%	to	90%
B+	< 90%	to	87%
B	< 87%	to	83%
B-	< 83%	to	80%
C+	< 80%	to	77%
C	< 77%	to	73%
C-	< 73%	to	70%
D+	< 70%	to	67%
D	< 67%	to	60%
F	< 60%	to	0%

## Course Content

Each weekly unit will consist of a video and a introduction/overview lecture, which is a narrated Power Point slideshow, the Power Point presentation with notes and without narration, possibly a video, and a reading assignment. For the Power Points, be sure to read the notes sections for each slide, as this is where details are provided. For some units, you will have an additional activity to complete, and you are required to participate in weekly discussion board. I suggest using the calendar tool on Canvas to keep track of assignments/exams.

## Text

*Our Origins* by Clark Spencer Larsen

Available in a variety of formats (paperback and Ebook)

<http://books.wwnorton.com/books/detail-formats.aspx?ID=4294978514>

## Assessment

### Syllabus Quiz

Brief quiz during the first week on the content of the syllabus and organization of course, to introduce students to the online assessment format and to ensure understanding of expectations for the course

### Tests

The two semester exams are a combination of multiple choice, short answer, and short essay, and are to be completed in 1.5 hours. While not cumulative, *per se*, the course content generally builds on itself, and the each test will therefore require an understanding of the concepts and ideas introduced throughout the course.

Study guides will be provided a week prior to the exams, and I will hold special office hours the week before the exam for review and questions.

\*\*\*These are online, timed exams, and are not open book, although I do not require a proctor. You are expected to adhere to the University's Honor Code for exams. Attempts to use notes or a book will significantly affect your ability to finish the entire exam in the time provided (this is why the exam is timed). You can take the exam at any point throughout the week it is assigned, but once you log in and begin the exam, you MUST finish at this time. You cannot stop and re-start.\*\*\*

### Final

The Final will be a two hour exam to be taken during finals week. 50% of this exam will consist of material from your first two exams, with 50% from the last 1/3 of course material presented. As with the other exams, I will provide a study guide for the final.

### **Assignments:**

\*Detailed assignment explanations are posted under Assignments on Canvas.

### Weekly Discussion Posts

Each week you are given a topic relevant to course material to post on the discussion board. In order to receive full credit for your participation grade, you must post at least one question or comment, and then reply to **TWO** other postings. The post must be relevant to the assigned topic, and should be intended to promote discussion among classmates. Posting more than the assigned number of posts/replies is always encouraged!!

Please feel free to use the discussion board as a free and open space for raising any questions you have regarding course material and content.

Please be courteous and respectful in your posts and replies. This is not a place for aggressive debates or criticisms of others' questions/comments. If I see any behavior I consider inappropriate for the discussion board, I will deduct points from your discussion participation grade.

### Genetics Activity

This is an activity that will help you understand the mechanisms behind micro and macro evolution. The assignment will involve some interactive activities and problems to solve. It will be completed on the textbook website, via Smartwork. Instructions are under the assignment for UNIT 4.

### Ardipithecus Assignment

The discovery of *Ardipithecus ramidus* has prompted a significant and wide ranging re-evaluation of human evolution, and by extension, chimpanzee evolution. Your assignment will involve critically reading the scientific publications regarding this discovery, and responding to questions based on the readings. UNIT 10

### Ancient DNA Assignment

For this assignment, you will find and post an article (can be newspaper or journal) that presents a recent finding in biological anthropology. The research involved in the finding must include the analysis of ancient DNA. You must summarize the article and discuss how this has shifted previous suppositions in hominid evolution. UNIT 13

### Term Paper

The purpose of the final paper (4-6 pages) is for students to gain some research experience and knowledge of the breadth of scientific journals and other sources of information pertinent to the study of hominid evolution. You are required to choose a fossil hominid species, a fossil locality or site from the list provided or one of your own choosing which is relevant to research and discoveries within paleoanthropology or related fields) and conduct research of your own to supplement our class discussion of these sites. This project is due by the final day of classes (December 5<sup>th</sup>). The assignment is posted on Canvas, and you must choose a topic by Week 10 (October 31) of the course. You must email or message me via Canvas with your chosen topic by this date.

### **Penalties:**

Late assignments will be penalized 1 point/day unless you have a documented, legitimate (medical, legal, bereavement) excuse. Should a medical or legal appointment be unavoidable during a critical date, please make arrangements with your Instructor BEFORE the assignment due date.

### **Academic Integrity and Netiquette:**

All students at Utah State University agree on admission to abide by the university *Honor Code*. Please review the [Academic Integrity](#) tutorial on Canvas to familiarize yourself with USU policies and procedures pertaining to the USU honor code. This tutorial links to an additional, in-depth review on how to [avoid plagiarism and cite sources](#), which you are strongly encouraged to review. Also, please review the [core rules of netiquette](#) on Canvas for some guidelines and expectations on how to behave in an online learning environment.

### **To Succeed in this Class:**

For many of you, the content of this course will be brand new information. This course is heavily focused on the biological sciences, and as anthropologists, we approach the past using a scientific framework. As it is highly scientific, some of the material may seem complex and students will certainly have different levels of previous exposure to the content. You should put aside a couple of hours a week (one hour on each of two days) to re-read any text you may have found confusing, and to review your notes and the Power Points. If you do this you will have a much better chance of retaining the information, and get much better grades on your tests. I will provide various online resources to help with comprehension.



<b>Component</b>	<b>Unit 6 Sept 29-Oct 3</b>	<b>Unit 7 Oct 6-10</b>	<b>Unit 8 Oct 13-17</b>	<b>Unit 9 Oct. 20-24</b>	<b>Unit 10 Oct 27-31</b>
<b>Topics</b>	Living Primates, taxonomy, biogeography, characteristics	Living primates Sociality, social behavior.	Learning about the Past: methods and fossils and dating	Primate evolution	Early Hominids
<b>Objectives</b>	Define the characteristics of the order Primates, and diversity of living primates	Evaluate variation in behavior among non-human primates. How studying primate culture and social behavior impact anthropology.	Define how scientists use fossils to inform about the past. Understand relative and absolute dating techniques. Understand how scientists reconstruct past environments and climates.	Present the origins and evolution of the order Primates,	Describe the origin of hominins, why and how they emerged, and the taxa.
<b>Readings</b>	Chapter 6	Chapter 7	Chapter 8	Chapter 9	Chapter 10
<b>Discussions (Topics)</b>	Discuss the defining characteristics of primates.	Why do we study primates in biological anthropology?	Find an article that uses fossil evidence as evidence of primate or human evolution – post it and post your thoughts/questions	Timeline of primate origin, split from hominids.	Discuss the cost/benefit of bipedalism
<b>Assessment Activities</b>	Discussion  Test 1: Anthropology, Genetics and modern human diversity	Discussion	Discussion	Discussion	Discussion  Ardipithecus Assignment Due  **MUST choose term paper topic by this date**
<b>Notes</b>	1.5 hours for test				Test review

<b>Component</b>	<b>Unit 11 Nov 3-7</b>	<b>Unit 12 Nov 10-14</b>	<b>Unit 13 Nov 17-21</b>	<b>Unit 14 Nov 24-25</b>	<b>Unit 15 Dec 1- 5</b>
<b>Topics</b>	The Genus <i>Homo</i>	The Origins of Modern <i>Homo sapiens</i>	Lower/Upper Paleolithic, Mesolithic, Neolithic revolutions	Evolution in the Present	Wrap up
<b>Objectives</b>	Learn the models for the emergence of the genus <i>Homo</i> , morphological and behavioral characteristics of early species	Describe the origins, evolution and dispersal of modern people Identify variation in the fossil record of Archaic and Modern H. Sapiens	Discuss the cultural and evolutionary developments during the different periods of modern human existence	Discuss the important forces shaping human biology today.	Summary of course.
<b>Readings</b>	Chapter 11	Chapter 12	Chapter 13	Chapter 14	
<b>Discussions (Topics)</b>	Discuss the concept of adaptive flexibility, and how culture plays a role in this in relation to the evolution of the genus homo	Compare/contrast models for explaining origins of anatomically modern <i>H. sapiens</i> .	Discuss the biological and cultural changes that occurred with the transition from foraging to agriculture.	Are humans still evolving? What selective pressures will likely play a role in our future?	Open discussion concerning the Final exam/Review
<b>Assessment Activities</b>	Discussion  Test 2: Primates and early Hominids	Discussion	Discussion  Ancient DNA assignment	Discussion	Final Paper due 12/5
<b>Notes</b>	1.5 hours for test				Work on term papers!!!