

# ANTHROPOLOGY 1: INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY

Spring 2017 - Section 95412

Cabrillo College - Online through CANVAS

Class Web page: <http://www.bioanth.weebly.com>

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Office Hours: Monday 9:00 - 10:00 am ONLINE; Wednesdays 5:30-6:20 pm in Rm. 429C at Aptos  
campus and Tuesdays & Thursdays 5:30 - 6:00 pm at the Watsonville Center, Rm. A304

## Introduction

Biological Anthropology is the study of human ancestry, or how we came to be what we are today. This branch of anthropology focuses on human biological origins, adaptations, and evolution through time. This course draws on knowledge and information from several specialized scientific fields including genetics, primatology, osteology, forensics, paleontology, and archaeology in order to trace the physical and cultural development of humans. The dynamic field of biological anthropology forces us to consider what it means to be human and the nature of our relationship to other living things (including each other!).

The course is divided into three parts. First, we'll discuss the nature of science and scientific explanations and how this relates to human evolutionary theory. Then, we'll consider the principles of natural selection, evolution and genetic inheritance in order to understand biological variation and the process of evolution. We will then turn our attention to the pros and cons of genetic engineering and how this technology affects natural selection and our lives. Next, we'll explore the anatomy and behavior of the primates in order to uncover clues to our own anatomical adaptations and the behaviors they engendered. Finally, we will examine the human fossil and archaeological record, which is made up of the physical remains of our ancestors and the traces of their behavior in order to answer questions about when humans began walking on two feet, when they started making tools, and when they began to "act human." We will look at our earliest bipedal ancestors as well as trace the evolution of the genus *Homo*, including the debates surrounding the fate of the Neanderthals, and their relationship to early *Homo sapiens*.

**Student Learning Outcome:** By the end of the course students should be able to compare living and fossil primates, including humans to critically analyze theories of human behavior, diversity and evolution.

**Course Advisory:** Eligible for English 100 and Reading 100.

ANTHROPOLOGY 1: Introduction to Biological Anthropology fulfills the requirements for the following General Education programs:

- **Area B - Natural Science:** *Life Forms* requirement for the Associate in Arts and/or Associate in Science degrees
- **Area B2 and B3 - Natural Science and Mathematics - *Life Forms*** requirement for the Cal-State University Transfer program
- **Area 5 - Physical & Biological Sciences:** *Biological Sciences* for the Intersegmental General Education Transfer Curriculum (IGETC) for the UC and CSU systems

## Student-Instructor Communications Policy

As an on-line class, communication between students and the instructor is critical for success. In addition to my on-line office hours (Mondays 9-10am), I will be available via email, text or phone **Monday through Saturday from 8:00 a.m. to 5:00 p.m.** Messages/Texts received after 5 p.m. will receive a response by 8 am the next day. For messages received during hours of availability, I will respond to you as soon as possible but generally no later than two to three hours after I receive your message. If, however, you do not hear back from me within 24 hours, assume that I did not receive your message and resend it. Please make sure to identify yourself if sending a text.

**Course Pacing:** This course has been designed to be semi-self paced to allow you as much flexibility as possible for integrating this course into your schedule. You will be able to work at your own pace as long as

deadlines for graded assignments are met. This includes exams, written assignments, and the semester project. There are three units (described above) and organized in Canvas, which means you can work through the material in each unit, complete the required assignments and exams and then move on to the next unit.

**However, ALL graded assignments must be completed by the designated due dates.**

For those students who would like to distribute the work across the semester, I have provided a suggested weekly schedule to help pace yourself in what I consider to be a manageable weekly schedule that follows the format of a regular 17 week semester, but you can work through the material in whatever mode fits your schedule best.

**IMPORTANT NOTE: You must sign in to CANVAS no later than Friday, January 27th and complete the check-in activities to verify your participation and intended enrollment in the class.**

## **COURSE REQUIREMENTS:**

### **1. Reading & Video Assignments**

All of the assigned readings for this class are available in CANVAS or other online sources. Therefore, you are not required to purchase a textbook. Follow the Topical Outline to complete the assigned readings (best to do them in the order listed on the syllabus outline) & videos for this class.

IMPORTANT NOTES: 1) It is *essential* to do the readings for this class in order to be successful. Reviewing Lecture Notes alone will not provide the background depth and details needed for some of the more technical material associated with this class (for example, genetics and the fossil record).

2) Although there may be multiple articles assigned for a particular day, these are all relatively short and manageable---don't be intimidated by multiple readings! I have carefully selected the most current, relevant and interesting articles which are much more manageable (in terms of length and time) and engaging than textbook chapters. **DO NOT SKIP THE READINGS!** 3) Watch the assigned videos---there will be questions on the exams from them.

### **2. Note-Taking**

Reading & Reflection Guides as well as Video Viewing Guides are provided to help you take notes on the assigned readings and videos. These note-taking guides are provided to help emphasize important points and to prepare you for the exams. *You will not be turning in your notes.* They are strictly for your use to guide your reading & retention of important class material.

### **3. Lecture Presentations**

The bulk of the course content comes from the lecture lessons which are in the form of PowerPoint presentations uploaded to YouTube. To help you plan your time, most of the lecture lessons are under 40 minutes in length, averaging around 20-30 minutes. NOTE: Exams are based heavily on lecture content. Do not rely on reading & video assignments alone for class content.

### **5. Written Assignments**

Students will complete one "Semester Paper" and one "Semester Project" on topics related to biological anthropology. I will assign the topic(s) and provide instructions & requirements separately with more detailed information on each assignment (see Evaluation section of this syllabus for point distribution).

#### **\*IMPORTANT NOTE: Late Assignments**

Late papers will be accepted but will carry an automatic 5 point deduction per week late. *Written assignments submitted more than TWO WEEKS after the original due date will only be eligible for half credit (as a starting grade).* This policy only applies to the Semester Paper and certain components of the Semester Project.

### **6. Additional Assignments**

In addition to the written assignments there will be one graded quiz and one Primate research assignment (see Evaluation section of this syllabus for point distribution). The due dates for the Unit Quiz and the Primate Profile are non-negotiable, and therefore, no extensions will be granted or late assignments

accepted. Other activities such as worksheets, practice problems, etc. will be assigned, but will not be submitted for grading. These are supplemental assignments designed to prepare you for the exams.

## 7. Exams

There are a total of THREE exams, each following the unit of material covered. For example, the first exam will relate to science & evolutionary processes; the second exam will relate to the Primates; and the third or Final exam will relate to hominid evolution. The final exam is not cumulative/comprehensive. All three exams will contain a variety of questions which MAY include but are not limited to the following: Matching section, multiple choice questions and True-False statements, short answer responses, and essay questions. Study guides will be posted to Canvas in advance of the exams to help you prepare. (see Evaluation section of this syllabus for point distribution).

**STUDENTS MUST TAKE THE EXAMS BY THE SCHEDULED DEADLINES. NO EXCEPTIONS AND NO MAKE UPS WILL BE GIVEN.** (See “Important Dates” Section of this Syllabus)

## 8. Extra Credit

Every student has an opportunity to earn up to a MAXIMUM of 25 extra credit points outside of the graded assignments and extra credit opportunities on exams (10 points extra credit available on each of the exams) over the course of the semester. **Please consult the class webpage for extra credit opportunities.** Always feel free to ask me if there’s something you saw, read or did that relates to the class that may be used for extra credit purposes as well.

### Evaluation

Grades are based upon the successful completion of the assignments listed below with the distribution of points per assignment as follows:

Unit Quiz	20 points
Primate Profile	20 points
Semester Paper	50 points
Exam 1	80 points
Exam 2	80 points
Exam 3	100 points
Semester Project	100 points
<b>TOTAL POINTS</b>	<b>450 (Maximum number of points)</b>

### Point Assessment/Letter Grades:

405 points and higher = A  
404-360 points = B  
359-315 points = C  
314-270 points = D  
269 and below = F

*A note about grades:* You should be able to determine where you stand in the class in Canvas as it tracks your total points for graded assignments. Divide your points by the total number of graded points recorded to get a percentage based standing (90-100% = A, 89-80% = B, 79-70% = C, 69-60% = D, and 59% or below = F) at any point during the semester, but remember that *final letter grades are determined by the number of TOTAL POINTS earned in the class* for ALL graded assignments, so use the grade scale above to determine the total point range you will need to earn to achieve your desired grade outcome.

### Attendance

Although this is an online class, you will need to complete activities by the required deadlines so that the instructor knows that you are active in (i.e. “attending”) the class.

NOTE: Please refer to the *Cabrillo Community College Catalog* for official attendance requirements.

### Netiquette

Questions and discussions will help us all to learn and be exposed to different points of view. I therefore encourage your participation in online class discussions, forums and group activities. Your questions, ideas, and opinions are always welcome, provided you are courteous and respectful of others' viewpoints and opinions. Disrespectful, disruptive or inflammatory comments or remarks will be cause for discipline and possible removal from the course. Please do your part to help promote an equitable and successful online learning environment.

Regarding class management, student behavior expectations and progressive consequences, please visit: <http://go.cabrillo.edu/studentreports> If you have any questions regarding Classroom Management or information on this link, please contact the Dean of Student Services at 479-6525.

### Academic Honesty

Classroom standards and student conduct for this class follow the Student Code of Conduct outlined in the Cabrillo College Catalog. Students are expected to exercise academic honesty and integrity in accordance with the ASB initiated policy (copies of the policy are published in the general catalog and the "Student Handbook"). *All work turned in for grading should be original (that means YOUR OWN). Copying another's work without giving them credit, whether an essay or answers during a test, is considered plagiarism. Plagiarism is a form of cheating and will result in disciplinary action that may include a recommendation for dismissal.*

### Student Responsibilities

Students are responsible for knowing and adhering to due dates for readings, exams, and written assignments, as well as the policies outlined in this syllabus.

*Students who do not wish to continue the course are responsible for completing the drop/withdrawal process through Web-Advisor. **Please note that it is the student's responsibility to drop the class.** If you need assistance, please contact Admissions and Records for drop & withdrawal procedures. Failure to officially drop the course may result in an "F."*

Important Dates:	2/4	Last day to add a full term course
	2/4	Last day to drop a course with a refund/reversal of fees
	2/5	Deadline to drop course without a "W" appearing on record
	2/24	Deadline for pass/no pass grade option
	4/22	Deadline to withdraw from course with a "W" on record

### Students Requiring Accommodations

Students needing accommodations should inform the instructor. As required by the Americans with Disabilities Act (ADA), accommodations are provided to insure equal access for students with verified disabilities. To determine if you qualify or need assistance with an accommodation, please contact ACCESSIBILITY SUPPORT CENTER (Formerly DSPS), Room 1073, (831) 479-6379.

**Concerning Evolution:** This class is about human evolution. It is very important that you understand that I am not asking you to BELIEVE in evolution (it's NOT an ideology, it is a biological process). Rather, I am asking that you understand the nature of science, including its limitations, and the mechanisms that drive the process of biological evolution as they apply to our understanding of human beings as biological organisms. It is therefore unacceptable for you to not answer questions by saying that you do not believe in evolution. Your job is simply to keep an open, critical, and inquiring mind

**Finally-** If at any point in the semester you have questions, or find you are having challenges with the material, please do not hesitate to contact me. Please do not wait until the end of the semester to address whatever issues arise. Successful students seek help and I am here to help you succeed in this class!

# ANTHRO 1 - Spring 2017

## Topical Outline

### Unit 1 - Evolutionary Processes

- Introduction to Anthropology
- An Evolutionary Worldview
- Natural Selection
- Evolutionary Genetics
- Evolutionary Processes
- **Unit Quiz - MUST BE COMPLETED BY 3/4 (closes at 11:55 PM)**
- **Exam 1 - MUST BE COMPLETED BY 3/5 (closes at 11:55 PM)**
- **Semester Paper - Due by 3/12**
- Bio-engineering (Semester Project)

### Unit 2 - The Primates

- Introduction to Primates
- Primate Taxonomy
- Primate Social Organization & Behavior
- **Primate Profile Assignment - MUST BE COMPLETED BY 4/8 (closes at 11:55 PM)**
- **Exam 2 - MUST BE COMPLETED BY 4/9 (closes at 11:55 PM)**

### Unit 3 - Hominid Evolution

- Studying the Human Past
- Pre-Australopithecines
- Early Bipedes - The Australopithecines
- Evolution of the Genus Homo
- Neanderthals and Homo sapiens
- Being Human
- **Name That Hominid: Practice Test - MUST BE COMPLETED BY 5/17 to proceed to FINAL EXAM (closes at 11:55 PM)**
- **Final Exam - MUST BE COMPLETED BY 5/19 (closes at 11:55 PM)**

## Weekly Semester Schedule/Topical Outline

### Week 1 - January 23rd

#### *Introduction to Course & Biological Anthropology*

- 1) Read Syllabus
- 2) Complete Syllabus quiz and check in activity
- 3) Watch Lecture Lesson 1
- 4) Read "Using Science to Think Anthropologically"

### Week 2 - January 30th

#### *Science, Evolution & Creationism*

- 1) Read "Science & Evolution," "The Nature of Science," and "Critical Thinking"
- 2) Review Science & Evolution Vocabulary Sheet
- 3) Watch Lecture Lesson 2
- 4) Watch Video: "What About God?" using Note-taking/Viewing Guide

### Week 3 - February 6th

#### *Natural Selection*

- Semester Paper Assigned - "Humans, Potatoes & Natural Selection"
- 1) Read "The Evolution of Evolution"
- 2) Watch Lecture Lesson 3

- 3) Read “Natural Selection in a Nutshell” and Watch Lecture Lesson 4
- 4) Read “Who Killed All the Honeybees?,” “Saving Coffee,” and “Antibiotic Resistance”
  - a. Use Reading Guide for note-taking
- 5) Watch Video: “Origin of Species: The Beak of the Finch” using Note-taking/Viewing Guide

**Week 4 - February 13th**

***Evolutionary Genetics, Part 1***

- 1) Read “Understanding Genetics,” “Evolutionary Genetics Cheat Sheet,” “From Atoms to Traits,”
- 2) Watch YouTube video “18 Things You Should Know about Genetics”
- 3) Watch Lecture Lesson 5
- 4) Complete Practice Solving Genetics Problems (non-graded assignment)

**Week 5 - February 20th**

***Evolutionary Genetics, Part 2***

- 1) Read “Epigenetics,” and “Annotating the Book of Life”
- 2) Watch Lecture Lesson 6
- 3) Visit “Learn Genetics” Website (follow directions in Canvas)

**Week 6 - February 27th**

***Evolutionary Processes***

- 1) Watch Lecture Lesson 7
- 2) Read “Genes in Populations,” “Sickle Cell,” “Got Lactase?” and “Cancer’s Wandering Gene”
  - a. Use Reading Guide for note-taking
- 3) Watch video “Got Lactase?” using background info sheet & Note-taking/Viewing Guide
- 4) Watch video “Evolving Switches, Evolving Bodies” using Note-taking/Viewing Guide
- 5) **Take Unit Quiz - must be completed by 3/4 (closes at 11:55 pm)** to unlock study guide and Exam 1
- 6) Work on Study Guide for Exam 1
- 7) **EXAM 1 - Must be completed by 3/5 (closes at 11:55 pm)**

**Week 7 - March 6th**

***Bio-engineering***

- **Semester Project** - “Bioengineering Debate” assigned (Assignment description, guidelines & requirements posted in Canvas)
  - 1) Watch “The Island” and complete reflection activity
  - 2) Work on Semester Project

**Week 8 - March 13th**

***Introduction to Primates***

- 1) Watch video “The Day the Mesozoic Died” & take notes using Guide
- 2) Read “Our Primate Relatives,” and “Why Can’t Chimps Speak?”
- 3) Review Primate Vocabulary Sheet
- 4) Watch Lecture Lesson 8
- 5) Watch Video “Life in the Trees”

**Week 9 - March 20th**

**SPRING BREAK**

- 1) Do Something Fun & Enjoy the Break!

**Week 10 - March 27th**

***Primate Taxonomy***

- 1) Read “World of Primates”
- 2) Watch Lecture Lesson 9
- 3) Watch Video: “Among the Wild Chimpanzees” using Note-taking/Viewing Guide
- 4) Begin Primate Profile Assignment

### Week 11 - April 3rd

#### ***Primate Behavior & Social Organization***

- 1) Read “Powers of Two,” “One for All,” and “What Makes us Human?”
  - a. Use Reading Guide for note-taking
- 2) Watch Lecture Lesson 10
- 3) Watch Video “The New Chimpanzees” using Note-taking/Viewing Guide
- 4) **Primate Profile Due by 4/8 (closes at 11:55 PM)**
- 5) Work on Study Guide for Exam 2
- 6) **Take Exam 2 by 4/9 (closes at 11:55 PM)**

### Week 12 - April 10<sup>th</sup>

#### ***Studying the Human Past***

- 1) Read “Building Bodies,” “Dating Techniques,” and “The Human Family Tree”
- 2) Watch Lecture Lesson 11

### Week 13 - April 17th

#### ***Early Hominid Evolution - Early Biped: The Pre-Australopithecines***

- 1) Read “Early Hominids” (Part 1) and “Welcome to the Family”
  - a. Use Reading Guide for note-taking
- 2) Watch Lecture Lesson 12

### Week 14 - April 24th

#### ***Early Hominid Evolution - Ancestors & Relatives: The Australopithecines***

- 1) Read “Early Hominids” (Part 2) and “Climate Shocks”
  - a. Use Reading Guide for note-taking
- 2) Watch Lecture Lesson 13
- 3) Watch Video: “Secrets of the Dead - Search for the First Human” using Note-taking/Viewing Guide

### Week 15 - May 1st

#### ***Evolution of the Genus Homo***

- 1) Read “Origin and Evolution of the Genus Homo,” “Stone Age Brains,” “Cooking up Bigger Brains,” and “First of our Kind”
  - a. Use Reading Guide for note-taking
- 2) Watch Lecture Lesson 14
- 3) Watch Video: “In Search of Human Origins, Episode 2” using Note-taking/Viewing Guide

### Week 16 - May 8th

#### ***Neanderthals & Homo sapiens***

- 1) Read “Twilight of the Neanderthals,” “What Will Become of Homo Sapiens?,” “Anthropologists Know Where You’ve Been,” and “The Anthropocene”
- 2) Watch Lecture Lessons 15 and 16
- 3) Listen to NPR Program “Sapiens”
- 4) Watch Video: “Neanderthals on Trial” using Note-taking/Viewing Guide
- 5) **Take Name That Hominid Practice Test by 5/17 (must complete to unlock study guide & Final exam)**
- 6) Work on Study guide for Final Exam

### Week 17 - May 15th

**FINAL EXAM must be completed by Friday, May 19<sup>th</sup> at 11:59pm**

NOTE: This schedule is provided as a guide. Dates, scheduled topics, and other information are subject to change. All changes will be announced in class, and any major changes will be provided to you in written form.

## *Important Dates*

March 4th – Unit Quiz  
March 5th – Exam 1  
March 12<sup>th</sup> – Semester paper due  
Semester Project Due Date: See Assignment Sheet  
April 8<sup>th</sup> – Primate Profile due  
April 9<sup>th</sup> – Exam 2  
May 17<sup>th</sup> – Hominid Identification Practice Test  
May 19<sup>th</sup> – Final Exam

## *Tips for Success in this Class*

- ✓ COMMUNICATE with me - it's essential for an online class!
- ✓ Manage your time wisely, however you pace yourself. DO NOT TRY TO COMPLETE UNIT MATERIAL AT THE LAST MINUTE before taking exams
- ✓ Do the readings
  - They provide lots of context and real world examples of the processes and concepts we learn about in this class
  - Use the Vocab Sheets & Reading Guides
- ✓ Watch the videos
  - Exams contain questions from video content
- ✓ Complete the major assignments (Semester Paper & Semester Project)
- ✓ Use the study guides to prep for exams