

SYLLABUS

ANTH 100 (online) – History and Theory of Biological Anthropology

Anthropology Department, UC Santa Cruz

Summer 2024

Course developed by: Jay S. Reti, Ph.D.

Lecture Time: Online, asynchronous

Class Location: Online

Instructor: Renee D. Boucher, M.A.

Contact: rdbouche@ucsc.edu

Office hours: Monday-Thursday by Zoom appointment, please email me to schedule a meeting and I will create a time slot on Canvas ☺

COURSE DESCRIPTION:

This course is designed to provide the historical and theoretical overview of biological anthropology through the history of evolutionary theory and thought. By watching lectures, weekly readings, and mini quizzes, students will learn about the emergence of evolutionary theory and the key scholars who have contributed to its development. Course topics will include the development of evolutionary theory and the modern synthesis, the advent of evolutionary developmental biology, reactions against rising adaptationist conclusions, modern applications to biological anthropological theory, and how researchers today are reframing biological anthropology considering its origins. These topics will help students understand how biological anthropology has emerged as a major discipline within the social sciences.

COURSE OBJECTIVES:

In this course, students will be exposed to a wide array of academic literature concerning the history and theory of biological anthropology. A successful student will:

- 1) have working knowledge of the key historic texts and ideas that have contributed to our understanding of evolutionary principles today,
- 2) be able to articulate how changing evidence has influenced our understanding of evolutionary theory,
- 3) apply their knowledge of evolutionary theory to topics in biological anthropology, and
- 4) form a critical eye in analyzing textual sources related to evolutionary theory and biological anthropology.

Course assignments (papers and discussion responses) will allow students to actively engage with the literature to demonstrate their broader understanding of how the theory of evolution has changed through time.

REQUIRED TEXT:

This course will be using an assortment of research articles. These articles are available on the Canvas website. Students will also be required to read excerpts of Darwin's *On the Origin of Species* over the 5-week class. Students may purchase a paper copy of the book or access the pdf version of the book available on the UCSC Canvas course website.

COURSE REQUIREMENTS:

Your grade will be determined via the following:

Discussion Forum Posts: 30%

Midterm Exam: 30%

Final Evolution Story: 30%

Quizzes: 10%

Lecture Viewing & Readings

All lecture, reading material, and documentary videos must be viewed **by Tuesday** at the latest to stay on track for this course. My recommendation is to try to get most of the reading and lecture viewing done by Monday, using the weekend to prepare for the upcoming week (and that is why the schedule below says "due Monday").

Discussion Forum Posts

Weekly discussions will be based on assigned question groups (3-4 students per group). Each individual in a group will be responsible for coming up with a collaborative response to a weekly question concerning the lecture and assigned articles (your "individual discussion post"). Weekly individual discussion participation should take place by the due date noted for each module (*noted in the course schedule and below*). Then, each individual should respond to at least two other individual's discussion posts by the due date listed in the schedule below. For full credit on discussion posts (25 pts), each individual student should submit **(1)** a small discussion post (500-1,000 words) and **(2)** a response to two other individual's small discussion post. *Therefore, you should have **three posts** for each Module by the end of each week to receive full credit.*

As a general rule of thumb, individual discussion posts are due on Wednesdays, and individual responses to individual discussion posts are due on Thursdays. These deadlines will shift up a day (Tuesdays, Wednesdays) when there is an exam or a writing assignment due on Friday, when you read the schedule below, look for the asterisk (*), which indicates a schedule change!

Midterm Exam

The exam will consist of a combination of short responses and open-ended longer response questions and will assess all content up until the midterm. The midterm will open on August 9th, and be due by Friday, August 16th.

Final Evolution Story

Please conduct research of a major figure in evolutionary theory in biology and/or evolutionary anthropology, then create a **fictional evolution story as if you are that researcher.**

During our second class, we will watch a documentary that introduces you to some major figures in evolutionary theory, but a few prominent ones are below. Try to understand their theory and beliefs, and then construct a fictional story of the evolution of a species. The species can be an existing one, or something completely made-up from a science fiction lens (this is your chance to be creative!).

You may construct your story in the first person as the major figure, such as if you are on a research expedition e.g., lab notes/journal entries or from third person, as a story describing the researcher and their observations, e.g., third person omniscient.

You can discuss their theories in a positive or negative light, but you need to be able to explain and describe in your **summary page**:

1. *what evolutionary theory was thought to be during the time of research,*
2. *how their research contributed to the understanding of that theory during a part of their lifetime, and*
3. *showcase this evolutionary theory in your species' evolution.*

You should be able to answer the following questions with your **evolution story**:

1. *How did the public perceive evolutionary theory at the time of the research?*
2. *How does your evolution story change or not change the public's understanding of evolutionary theory?*
3. *How does your fictional species showcase the chosen researcher's evolutionary theory?*

You will have the entire quarter to work on your evolution story, and it ***will be due the last week of the course, on Friday, August 30th at 12:00 PM (Noon)***. If you would like me to review your story, then please submit your rough draft to me (rdbouche@ucsc.edu) by **Thursday, August 15th**. Any drafts submitted after this will not be reviewed.

STUDENT PARTICIPATION:

The expectation within the University of California system is that for each credit hour of a course, students spend 3 hours in preparation during the week. A summer course is a condensed version of a 10-week quarter into a 5-week session. For a 5-credit course, this means that the students should be spending about 30 hours/week preparing for class! An approximate distribution of the work time for this course each week is as follows: roughly 6 hours viewing/engaging with lectures, roughly 15 hours reading and reviewing course material, and 4 hours conducting research or writing for class assignments.

MISSING DEADLINES:

Missed assignments are scored as zero. If you need an extension, then request one ***at least 24 hours before the deadline***. In the event of illness or emergency, you are responsible to inform the instructor as to why your assignments will be late.

STUDENT ACCOMMODATIONS:

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your “Accommodation Authorization Letter” from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, as soon as possible in the academic quarter, preferably within 1 week and please not later than 2 weeks. I also am open to and want to encourage you to discuss with me ways I/we can ensure your full participation in this course. If you have not already done so, I encourage you to learn more about the many services offered by the DRC. You can visit their website (<http://drc.ucsc.edu/index.html>) make an appointment and meet in-person with a DRC staff member. The phone number is 831-459-2089 or email drc@ucsc.edu.

SCHOLARSHIP AND CLASS ETIQUETTE:

Students are responsible for making themselves aware of and understanding the policies and procedures of UCSC’s policy on Academic Misconduct: www.ue.ucsc.edu/academic_misconduct. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity, and computer misuse. If there is reason to believe you have been involved in academic dishonesty, you will be referred to your College Provost and may be dismissed from the course. Please visit www.plagiarism.org for more information.

COURSE SCHEDULE

Course Dates: Jul.29-Aug.30	
<p><i>Week 1</i> (July 29-Aug 2nd)</p> <p>Introduction & Pre-Darwinian Concepts of Evolution</p>	<p><u>Module 1:</u> Introduction to the course Small Groupwork Preference Survey</p> <ol style="list-style-type: none"> 1. Introduce Yourself on the Discussion Form 2. Syllabus Acknowledgment Quiz 3. Orientation Quiz <p><u>Module 2:</u> Pre-Darwinian concepts of humans, science, evolution</p> <p>Readings Nott 1843 – “Mulatto as a hybrid” Farber 1972 – “Buffon and the concept of species”</p> <p>Assignments</p> <ol style="list-style-type: none"> 1. Lecture viewing due by Monday, July 29th 2. <u>Module 2</u> Individual discussion posts due by Wednesday, July 31st 3. <u>Module 2</u> Discussion post responses due by Thursday, August 1st

<p><i>Week 2 (Aug 5-9th)</i></p> <p>Lamarck, Darwin, Owen & Huxley</p>	<p><u>Module 3: Lamarck and Darwin</u></p> <p><u>Module 4: Owen & Huxley</u></p> <p>Readings</p> <p>Darwin 1859 – “Preface” and “Chapter 1” Mayr 1972 – “Lamarck Revisited” Owen 1860 – Review of <i>On the Origin of Species</i> Huxley 1887 – On the reception of <i>The Origin of Species</i></p> <p>Assignments</p> <ol style="list-style-type: none"> 1. Lecture viewing due by Monday, August 5th 2. Watch film “What Darwin Didn’t Know” by Tuesday, August 6th 3. <u>Module 3 & 4</u> Individual discussion posts due by Wednesday, August 7th 4. <u>Module 3 & 4</u> Discussion post responses due by Thursday, August 8th
<p><i>Week 3 (Aug. 12-16th)</i></p> <p>Mutationism & Evolutionary Synthesis</p> <p>**MIDTERM**</p> <p><i>Will open Friday, August 9th</i></p>	<p><u>Module 5: Mutationism & Evolutionary Synthesis</u></p> <p>Readings</p> <p>Bowler 1977 – “De Vries and Morgan: The mutation theory and Darwinism” Stauffer 1957 – “Haeckel, Darwin, and Ecology”</p> <p>Assignments **NOTE: revised deadlines**</p> <ol style="list-style-type: none"> 1. Lecture viewing due by Monday, August 12th 2. <u>Module 5</u> Individual discussion posts due by Tuesday, August 13th 3. <u>Module 5</u> Discussion post responses due by Wednesday, August 14th <p><u>Module 6 - Midterm: Due Friday, August 16th via Canvas Upload by 11:59PM</u></p> <p>Readings to prepare</p> <p>Midterm Prompts & Guidelines</p> <p>2 essay prompts, 3-4 pages each, MAX: 8 pages per prompt</p>
<p><i>Week 4 (Aug. 19-23rd)</i></p>	<p><u>Module 7: The Modern Synthesis & Anti-Adaptationists</u></p> <p><u>Module 8: Sociobiology & Sexual Selection</u></p> <p>Readings</p> <p>Mayr & Provine (1981) – “The Evolutionary Synthesis” Barash (1976) – “Male Response to Apparent Female Adultery in the Mountain</p>

<p>The Modern Synthesis, Anti-Adaptationists, Sociobiology, & Sexual Selection</p>	<p>Bluebird” Gould & Lewontin (1979) – “The Spandrels of San Marcos” Dawkins (2006) – Chapter 6 in <i>The Selfish Gene</i> Andersson (1994) – “Sexual Selection”</p> <p>Assignments</p> <ol style="list-style-type: none"> 1. Lecture viewing due by Monday, August 19th 2. Watch film “Lord of the Ants” by Tuesday, August 20th 3. <u>Module 7 & 8</u> Individual discussion posts due by Wednesday, August 21st 4. <u>Module 7 & 8</u> Discussion post responses due by Thursday, August 22nd
<p><i>Week 5 (Aug. 26-30th)</i></p> <p>Ancient DNA, Cladistics & the Modern Debate</p>	<p><u>Module 9: Ancient DNA & Evo-Devo</u> <u>Module 10: Cladistics & the Modern Debate</u></p> <p>Readings</p> <p>Hall (2003) – “Evo-Devo: Evolutionary Developmental Mechanisms” Sankararaman et al. (2014) – “The Genomic Landscape of Neanderthal Ancestry in Present-day Humans” Gunz et al. (2010) – “Humans vs. Neanderthal Brain Developmental Patterns” Wells & Dembski (1989) – Excerpt from <i>Of Pandas and People</i></p> <p>Assignments **NOTE: revised deadlines**</p> <ol style="list-style-type: none"> 1. Lecture viewing due by Monday, August 26th 2. <u>Module 9</u> Individual discussion posts due by Tuesday, August 27th 3. <u>Module 9</u> Discussion post responses due by Wednesday, August 28th 3. <u>Module 10</u> Individual discussion post (“Takeaways and Reflections”) due by Thursday, August 29th
<p><i>Week 5 (August 30th)</i></p> <p>**FINAL**</p> <p><i>Will open Tuesday, July 30th</i></p>	<p>Due Friday, August 30th via Canvas Upload by 12:00PM (NOON)*</p> <p>Readings to prepare</p> <p>Detailed “Evolution Story Final Prompts & Guidelines” available on Canvas</p>