

San José State University
Anthropology Department
ANTH 12, Introduction to Human Evolution, Section 1, Fall 2020

Course and Contact Information

Instructor: Amanda Kadkly
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Office Hours: MW 12:30 – 1:30 PST
Class Days/Time: Online
Classroom: N/A
GE/SJSU Studies Category: B2/Life Science

ANTH 12: The human organism from an evolutionary perspective. The foundations of life and evolutionary theory. Introduction to primate behavior and the fossil record. Human biocultural evolution over the last sixty million years. Prerequisites: None.

Course Description

I'm Amanda Kadkly, and I am excited to work with you this semester! In this course, we will be exploring human and primate variation within an evolutionary framework. This is a scientific course with roots in evolutionary biology, primatology, and paleoanthropology. As part of this class, we will carry out several lab activities that will allow you to observe evolutionary processes in action. These activities will also give you a better understanding of the scientific processes involved in conducting research and critically evaluating the validity of claims using the scientific method.

Throughout this course, we will examine where humans fit into the animal kingdom, and we will synthesize the biological & cultural processes at work in shaping human adaptation. I believe education is a cooperative enterprise in which you have an active role. Therefore, I want to encourage active participation on your part throughout the semester!

Most importantly, I want you to *think* about the content—I don't want you to simply absorb the information you hear from talk-show experts. Knowledge isn't just about retaining information. Knowledge involves having the ability to question – to know what questions to ask and how to ask them. To facilitate this process, this class will engage in reflection exercises and discussions. I hope these experiences will allow you to apply the material we cover to your own life. Welcome to class! 😊

Course Format

Technology Intensive, Hybrid, and Online Courses

This course adopts an asynchronous delivery format, and there are no required synchronous meetings in this course. You must have regular access to a computer and to the internet, must have access to Excel or Google Sheets, and must have your one.sjsu, Canvas, and SJSU email accounts set up. If you share a computer or workspace, you should negotiate time and privacy with other users so that you have reliable access to the tools you need. Please check Canvas and your SJSU email account regularly to stay up to date in this course.

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on [Canvas Learning Management System course login website](#) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the messaging system through MySJSU on [Spartan App Portal](#) <http://one.sjsu.edu> (or other communication system as indicated by the instructor) to learn of any updates. For help with using Canvas see [Canvas Student Resources page](http://www.sjsu.edu/ecampus/teaching-tools/canvas/student_resources) (http://www.sjsu.edu/ecampus/teaching-tools/canvas/student_resources).

Course Goals

Students completing this course will achieve a fuller understanding of (a) how to think scientifically, (b) how evolution works, (c) humans as primates, (d) human evolutionary history, and (e) human variation.

GE Learning Outcomes (GELO)

Upon successful completion of this course, students will be able to:

LO1: use methods of science and knowledge derived from current scientific inquiry in life or physical science to question existing explanations;

LO2: demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues;

LO3: recognize methods of science, in which quantitative, analytical reasoning techniques are used.

Course Learning Outcomes (CLO)

In this course, students will learn the principles of evolutionary theory and how the study of human evolutionary history, adaptation, and variation plays a fundamental role in the evolutionary processes that affect the human species. In addressing our understanding of the human condition, students will be challenged to think critically, interpret and assess the validity of scientific methodologies, examine quantitative data, and engage in class discussions.

Upon successful completion of this course, students will be able to:

CLO 1: explain the evolutionary process, how it works, and how scientists have come to understand the process (specifically to understand ourselves).

CLO 2: describe the evolutionary history of our species and the biological bases that are at the foundation of this process.

CLO3: comprehend basic biological knowledge relating to molecular biology, cell reproduction, fundamental principles of micro- and macro-evolutionary theory (especially the role of natural selection), and the intellectual background leading to the development of evolutionary theory.

CLO4: explain from a comparative perspective how humans are related to other primates (and what this implies structurally, physiologically, and behaviorally).

Required Texts/Readings

Textbook

Exploring Biological Anthropology: The Essentials, 4th Edition
Author(s): Craig Stanford, John S. Allen, and Susan C. Antón
ISBN: 978-0134014012

Selected Readings

Selections will be provided on Canvas

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus ([University Policy S16-9](#), Course Syllabi <http://www.sjsu.edu/senate/docs/S16-9.pdf>).

Other course structures will have equivalent workload expectations as described in the syllabus. More details can be found in Office of Undergraduate Education's [Syllabus Information web page](#) at <http://www.sjsu.edu/gup/syllabusinfo/>.

Exams: There are 2 open-book exams that will be taken on Canvas (a midterm and a cumulative final exam). Exam 1 will cover the material from Week 1 – Week 7. Exam 2 is cumulative but will focus on Week 8 – Week 17. If you have any concerns about accommodations, please discuss this with me ahead of time so that accommodations can be made. Please do not make travel plans that will conflict with the exams, and be aware that students must take all exams to pass this course.

Exam questions will test your knowledge of course concepts and material, as well as your ability to apply this knowledge to novel situations and examples. I truly believe in your success as a student, so I will provide study guides and practice questions to help you grasp the material. Please remember, if you have any questions, concerns, or comments, to let me know right away. I welcome any feedback you're willing to offer.

Assignments: This course includes participation in class exercises, polls, and discussions. The discussion board assignments are designed to assess your skills as a critical thinker and to apply the concepts taught in class to research. Becoming a critical thinker will help you in your future career by enabling you to be accurate in your assumptions and predictions. To excel in these tasks, complete the course readings, ask questions, and be prepared to contribute.

Lab Activities: Students are required to complete 6 pages of writing in this GE course. I strongly believe in student-centered active learning, so the writing portion of this course will be divided into 5 lab assignments that will provide opportunities to engage with the concepts in a hands-on environment. Some lab assignments will involve examinations of skeletal material, examination of primate characteristics, and the use of statistical calculations in Excel or Google Sheets. We will also discuss academic writing in this course. Lab write-ups will be submitted on Canvas.

Writing is a personal process that is ever evolving. I strongly believe that we all (and by that, I mean myself too) can improve our writing with practice! I encourage you to read and apply the feedback I provide, and if you need help with the writing process, consult with the [Writing Center](https://www.sjsu.edu/writingcenter/) (<https://www.sjsu.edu/writingcenter/>). This is a resource you have paid for in tuition!

Extra Credit - Zoom Sessions: There are 3 optional Zoom sessions where we will discuss the course material, and you will have the opportunity to engage with the class and ask questions. Extra credit is offered for each attended session.

Online Format: Lectures will be posted on Canvas each week on Mondays. Since the course is asynchronous, you can review the material and complete assignments at your own pace. All discussion assignments and lab assignments will be due on Thursdays by 11:59 pm unless otherwise specified.

Final Examination or Evaluation

University Policy S06-4 (<http://www.sjsu.edu/senate/docs/S06-4.pdf>) states that “Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment.”

Grading Information

To pass this course, students must receive a grade of C or higher.

Grades will be based on the following (each assignment is graded on a scale of 100):

Exams (250 points) Exam 1 Exam 2	=	50%
Assignments/DBs (100 points)	=	20%
Labs (150 points) Labs (5)	=	30%
Total (500 points)		100%

Grading is as followed:

A	B	C	D	F
97% - 100% = A plus 93-96% = A 90-92% = A minus	87-89% = B plus 83-86% = B 80-82% = B minus	77-79% = C plus 73-76% = C 70-72% = C minus	67-69% = D plus 63-66% = D 60-62% = D minus	Below 60% = F

More guidelines on grading information and class attendance can be found from the following university policies:

- [University Syllabus Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>)
- [University Attendance and Participation Policy F15-12](http://www.sjsu.edu/senate/docs/F15-12.pdf) (<http://www.sjsu.edu/senate/docs/F15-12.pdf>)
- [University Grading System Policy F18-5](http://www.sjsu.edu/senate/docs/F18-5.pdf) (<http://www.sjsu.edu/senate/docs/F18-5.pdf>)

Make-up Work

It is important to maintain a system of fairness to students who complete work on-time in this course. Therefore, only students with a valid, *documented* excuse will be able to take an exam late or submit an assignment late. An assignment submitted after the due date will incur a penalty of 20% off the maximum score for every late day (including non-class days and weekends).

Classroom Protocol

Please refer to the following guidelines:

- All students must adhere to [SJSU's Academic Integrity Policies](https://www.sjsu.edu/iss/current-students/integrity/) (<https://www.sjsu.edu/iss/current-students/integrity/>).
- Check Canvas and your SJSU email regularly for announcements and updates.
- Assignments need to be submitted on Canvas. Security threats are a concern, so I do not accept assignments attached in emails.
- Remember that we are all in this together! Please be respectful to others during class discussions (see “netiquette” guidelines on Canvas).
- As mentioned, you all are here to learn how to engage and correspond with one another in a professional, academic environment. Now is a good time to learn about effective communication practices! Refer to the email professionalism guidelines on Canvas, and please note that I respond to emails during business hours (9 am – 5 pm).
- If you have questions about the content, other students may have similar questions and could benefit from this information. I encourage you to make use of the Q/A thread on Canvas.
- With all that said, I enjoy facilitating discussions in an engaging and comfortable environment. This works best when students are prepared, courteous, and respectful! 😊

University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo) (<http://www.sjsu.edu/gup/syllabusinfo>), which is hosted by the Office of Undergraduate Education. Make sure to visit this page to review and be aware of these university policies and resources.

All students must obtain the instructor's permission if they wish to record lectures or distribute materials from the class. University Policy S12-7 <http://www.sjsu.edu/senate/docs/S12-7.pdf>

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the DRC (Disability Resource Center <http://www.drc.sjsu.edu/>) to establish a record of their disability.

Resources

Academic Success Center <http://www.sjsu.edu/at/asc/>
Peer Connections website <http://peerconnections.sjsu.edu>
Writing Center website <http://www.sjsu.edu/writingcenter>
Counseling Services website <http://www.sjsu.edu/counseling>

ANTH 12 / Introduction to Human Evolution, Fall 2020, Course Schedule

This schedule is subject to change with fair notice; any changes will be announced and posted to Canvas.

Course Schedule

Week	Date	Topics	Readings, Assignments, and Deadlines
1	8/19 – 8/21	Introduction to Physical Anthropology Course overview, anthropological case study, scientific method Optional Zoom session: 8/19 at 11:30 am – 12:30 pm PST	Reading: Ch. 1 Syllabus quiz, Intro DB
2	8/24 – 8/28	History of Evolutionary Theory The scientific revolution, the geologic timescale, natural selection	Reading: Ch. 2 DB 1
3	8/31 – 9/4	Cellular Genetics and Molecular Anthropology Cell biology, chromosomes, DNA Lab 1	Reading: Ch. 3 Lab 1
4	9/7 – 9/11 <i>9/7 Labor Day</i>	Mendelian Genetics Genetic inheritance, human genetics DB 3: Genetic disorders <ul style="list-style-type: none"> Film 1: “Sound and Fury” 	Reading: Ch. 4 DB 2, DB 3
5	9/14 – 9/18	Modern Synthesis of Evolution Forces of evolution, population genetics, “nature vs. nurture”	Reading: Ch. 5
6	9/21 – 9/25	Evolutionary Relationships Cladistics, homology and homoplasy, speciation	Reading: Ch. 6 (<i>up to Adaptation</i>) Lab 2
7	9/28 – 10/2	Osteological Foundations Osteology, bipedalism, skeletal determinations Lab 2 Optional Zoom session: 9/28 at 11:30 am – 12:30 pm PST	Reading: Ch. 15 DB 4
8	10/5 – 10/9	Mammalian Evolution Mammal characteristics, primate species characteristics Exam 1 (due by 11:59 pm on 10/8)	Reading: Explorations Ch. 5 (<i>up to Suborder Strepsirrhini</i>) Exam 1 opens/due: 10/8

Week	Date	Topics	Readings, Assignments, and Deadlines
9	10/12 – 10/16	Primate Evolution Strepsirrhines and tarsiers, New World and Old World monkeys	Reading: Ch. 7
10	10/19 – 10/23	Apes Lesser and Great apes, social structures, primate behavior Lab 3	Reading: Ch. 8 DB 5, Lab 3
11	10/26 – 10/30	Paleoanthropology Paleoecology, early hominins, Australopithecines	Reading: Ch. 9, 10 DB 6
12	11/2 – 11/6	Comparative Morphology of Genus <i>Homo</i> Early species in <i>Homo</i> , evolution of Genus <i>Homo</i> DB 8: Human variation <ul style="list-style-type: none"> Film 2: “The Eye of the Storm” 	Reading: Ch. 11 DB 7, DB 8
13	11/9 – 11/13 <i>11/11 Veteran’s Day</i>	Advanced Species in <i>Homo</i> Dietary and cultural adaptations, origins of <i>Homo sapiens</i> , dispersal	Reading: Ch. 12, 13 Lab 4
14	11/16 – 11/20	Human Adaptation Behavioral ecology, adaptation, acclimatization	Reading: Ch. 6 (<i>Adaptation – end of chapter</i>) DB 9
15	11/23 – 11/27 <i>11/25 – 11/27 Thanksgiving Break</i>	Analyzing Human Populations Research methods, data interpretations	Reading: <i>The Importance of Social Statistics</i> Lab 5
16	11/30 – 12/4	Modern Humans Intelligence, modern lifestyles, disease, altruism DB 11: The Anthropocene <ul style="list-style-type: none"> Film 3: “Waste Land” 	Reading: Ch. 14 DB 10, DB 11
17	12/7	Concluding the Course Anthropological perspectives, Exam 2 review Optional Zoom session: 12/7 at 11:30 am – 12:30 pm PST	Reading: <i>Review</i> DB 12
Final Exams	12/9 – 12/11	Exam 2: 12/10 (Thurs) 5:15 pm – 7:30 pm PST https://www.sjsu.edu/classes/final-exam-schedule/index.php	Exam 2 opens/due: 12/10