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

If you ever lie awake at night and wonder “why are humans such a weird species?” this is the class for you! 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 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 read about in popular media. Acquiring knowledge isn’t just about retaining information, but learning 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

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas
Leaning 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 at 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 (https://www.sjsu.edu/ecampus/software-tools/teaching-tools/canvas/student-resources/index.php).
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: Demonstrate knowledge of scientific theories, concepts, and data used in the physical and life sciences.

   LO2: Apply scientific principles and communicate in ways appropriate to the discipline about the process and results of scientific discovery.

   LO3: Access, critically evaluate, and represent scientific information in various forms and draw appropriate conclusions.

   LO4: Use methods derived from current scientific inquiry to form evidence-based opinions about science-related matters of personal, public, and ethical concern.

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

Textbooks

- Physical Anthropology
  - Readings on the course website: https://akanthro.wordpress.com/

- Explorations: An Open Invitation to Biological Anthropology
  - Author(s): Beth Shook, Katie Nelson, Kelsie Aguilera, and Lara Braff
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/.

GE Writing requirement: Students are required to complete 6 pages of writing in this GE course. This requirement will be divided into several assignments throughout the course. 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! If you need help with the writing process, consult with the Writing Center (https://www.sjsu.edu/writingcenter/).

Exams: There are 2 in-class exams (Exam 2 is cumulative). Make-up exams will only be given for unforeseen circumstances (illness, family emergency), and only if the legitimacy of the emergency is adequately documented AND the student contacts me within 24 hours of the exam date. If you have any concerns about disability accommodations, please discuss this with me ahead of time so that accommodations can be made. Students must complete both 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. Drop-in office hours are available. This is a great opportunity to get feedback and assistance with the course.

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.”

Evolution Assignments: In these assignments, students will complete practice quizzes or apply course knowledge to problem-solving exercises. All written responses need to be appropriate for an academic setting (complete sentences, proper grammar, etc.). They should reflect college-level writing, and they should be specific to the concepts discussed in class.

In-Class Activities: I strongly believe in student-centered active learning, so we will have various lab exercises, case studies, video clips, and class polls that will provide opportunities to engage with the concepts in a hands-on environment. These activities are designed to assess your skills as a critical thinker and to apply the concepts taught in class. 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. Some of the activities submitted during class will be graded.
If you miss an in-class activity, you can complete an extended assignment to replace it (details will be provided on Canvas). It must be completed and submitted on Canvas within 7 days of the in-class activity that was missed.

**Other Info:** All assignments will be due on Sundays by 11:59 pm unless otherwise specified. Keep in mind that I will only respond to emails during business hours (M-F). I make requests of students (accountability with assignments, coming to class on time, etc.), but you can expect certain things of me as well (well-prepared lectures, fostering a classroom environment of respect through my role as the instructor). I consider my students adults, so I will not be strictly grading for attendance, though I do keep records of attendance for statistical purposes. I understand that situations come up and you may need to miss class. Reach out to a classmate to get any information you missed. This is a class that I like to have fun with, so if you come across any interesting articles, current events, or memes you are more than welcome to send them to me!

**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):

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<tbody>
<tr>
<td>Exams</td>
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<tr>
<td>EX x 2 (200 pts)</td>
<td>= 40%</td>
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<tr>
<td>Evolution Assignments</td>
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<tr>
<td>EA x 10 (250 pts)</td>
<td>= 50%</td>
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<tr>
<td>In-Class Activities (50 pts)</td>
<td>= 10%</td>
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<tr>
<td>Total (500 pts)</td>
<td>100%</td>
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Grading is as followed:

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<tr>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
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<tbody>
<tr>
<td>97%</td>
<td>92-100% = A plus</td>
<td>92-96% = A</td>
<td>90-91% = A minus</td>
<td>87-89% = B plus</td>
<td>82-86% = B</td>
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<tr>
<td></td>
<td>92-96% = A</td>
<td>82-86% = B</td>
<td>77-79% = C plus</td>
<td>72-76% = C</td>
<td>67-69% = D plus</td>
</tr>
<tr>
<td>90%</td>
<td>80-81% = B minus</td>
<td>70-71% = C minus</td>
<td>70-71% = C minus</td>
<td>60-61% = D minus</td>
<td>Below 60% = F</td>
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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)
- [University Attendance and Participation Policy F15-12](http://www.sjsu.edu/senate/docs/F15-12.pdf)
- [University Grading System Policy F18-5](http://www.sjsu.edu/senate/docs/F18-5.pdf)

**Grading Policies**

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. If you are experiencing a difficult circumstance, reach out to me before the exam or assignment is due.

Sensitive topics may come up in class. If you have any specific concerns, I encourage you to seek accommodations and/or discuss your situation with your academic advisor. Requests for extensive assignment
extensions due to emergency situations must be formally submitted in writing. A plan to get back on track must be approved before an extension will be granted (if the extension request meets the requirements).

When turning in assignments/exams on Canvas, it is your responsibility to make sure you uploaded the correct document, and that it is a working file that I can access. Be sure to check your submission on Canvas.

Any grade disputes or concerns should be addressed within 7 days of receiving the grade for the assignment. Grade curves already get factored into the final grade, so there are no additional extra credit opportunities or grade boosts after Exam 2 is graded. Final grades do get rounded up (for example, an 89.5% is rounded up to an A-).

Students must adhere to SJSU’s Academic Integrity Policies (https://www.sjsu.edu/issss/current-students/integrity/). Any form of cheating, plagiarism, unauthorized assistance, or academic dishonesty will not be tolerated, and a formal investigation will be pursued if this behavior is found. It is the student’s responsibility to understand and comply with all academic integrity protocols. Every assignment will be individually evaluated for adhering to academic integrity standards. Some common examples of academic dishonesty include (but are not limited to):

- Posting or sharing any course materials (readings, assignment questions, study guides, exams), including on Chegg, Course Hero, Quizlet, Discord servers, text messages, emails, GroupMe chats
- Uploading or sharing materials to check your work in an exam or assignment, even after submitting it
- Copying phrases or using wording that is too similar to any other source (includes peer-reviewed sources, websites, videos, textbooks, lecture slides, other assignments, and other students’ work)
- Submitting a previous assignment from a different class, or reusing written content from another assignment
- Using AI writing generators, text spinners, translators, and paraphrasing websites to change the wording of another source
- Lying about excused absences to receive an academic advantage
- Requesting a grade boost or additional extra credit to receive an academic advantage
- Fabrication (altering experimental data or citing sources that you did not use in your work)
- Acting in any way that is intended to deceive an instructor
- Allowing other students to use your work when collaboration is not allowed, even if you do not intend to use their work
- Helping others commit academic dishonesty

Classroom Protocol

I enjoy facilitating discussions in an engaging and comfortable environment! 😊 This works best when students are prepared, courteous, and open-minded. It is important to maintain a structured classroom environment where students can learn with without distractions, so please keep this in mind when reading through these guidelines:

- It is the student’s responsibility to understand when they need to consider disenrolling from a course. Refer to SJSU’s Schedule for dates and deadlines for registration.
- Check Canvas and your SJSU email regularly. You should aim to check Canvas and email at least every few days during the week. I will not send reminder emails about assignments. Keep track of all due dates in the syllabus and on Canvas.
- Assignments need to be submitted on Canvas. Cybersecurity threats are a concern, so I do not accept assignments attached in emails.
• In the Subject Line of an email, always include the class and section number. Refer to the email professionalism guidelines on Canvas, and note that I respond to emails/Canvas messages during business hours (9 am – 5 pm) within 24-48 hours.
• Be respectful and courteous to others in this class. The classroom should be a comfortable learning environment where ideas can be shared and discussed. Be positive and constructive when making contributions.
• Being respectful also includes respecting everyone’s time. Please do not show up late because it is quite distracting.
• I strongly recommend handwritten notes, but if you must use a laptop, use it for note-taking only.
• If you have questions about the content, other students may have similar questions and could benefit from this information. I encourage you to speak up and not feel embarrassed to ask questions! Questions about grades and assignments, however, should be addressed in office hours.
• Office hours are drop-in and will be held within the scheduled time slot. Please note that when you join Zoom, you will be placed in a waiting room, and I will meet with students one at a time.

University Policies

Per University Policy S16-9 (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). 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 2022, Course Schedule

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

Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Readings, Assignments, and Deadlines</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>8/22 – 8/26</td>
<td>Introduction to Physical Anthropology</td>
<td>Reading: (PA) Introduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Course introduction, scientific revolution</td>
<td>EA 1</td>
</tr>
<tr>
<td>2</td>
<td>8/29 – 9/2</td>
<td>History of Evolutionary Theory</td>
<td>Reading: (PA) Evolutionary</td>
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<tr>
<td></td>
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<td>Darwin, natural selection</td>
<td>Theory</td>
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<tr>
<td>3</td>
<td>9/5 – 9/9</td>
<td>Cellular Biology</td>
<td>Reading: (EXP) Ch. 3</td>
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<td>9/5 Labor Day</td>
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<td>EA 2</td>
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<tr>
<td>4</td>
<td>9/12 – 9/16</td>
<td>Genetics</td>
<td>Reading: (EXP) Ch. 4</td>
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<td>DNA, genetic inheritance</td>
<td>EA 3</td>
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<td>9/19 – 9/23</td>
<td>Evolutionary Complexities</td>
<td>Reading: (PA) Evolution</td>
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<td>Modern synthesis of evolution</td>
<td>EA 4</td>
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<td>6</td>
<td>9/26 – 9/30</td>
<td>Speciation</td>
<td>Reading: (PA) Speciation</td>
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<td>Cladistics, speciation</td>
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<td>7</td>
<td>10/3 – 10/7</td>
<td>Exam</td>
<td>Reading: Study for exam</td>
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<td>Review, Exam 1</td>
<td>Exam 1: 10/5 (in class)</td>
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<td>8</td>
<td>10/10 – 10/14</td>
<td>Primate Evolution</td>
<td>Reading: (PA) Primate Evolution</td>
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<td></td>
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<td>Mammals, strepsirrhines, tarsiers, monkeys</td>
<td>EA 6</td>
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<tr>
<td>9</td>
<td>10/17 – 10/21</td>
<td>Apes</td>
<td>Reading: (PA) Apes</td>
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<td>Lesser and great apes, social structures, sexual</td>
<td>EA 7</td>
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<td>selection</td>
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<td>10</td>
<td>10/24 – 10/28</td>
<td>Environmental Influences</td>
<td>Reading: (PA) Fossilization, (EXP) Ch. 9</td>
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<td>Human biology, fossilization, ecological</td>
<td>EA 8</td>
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<td>10/31 – 11/4</td>
<td>Cultural Influences</td>
<td>Reading: (EXP) Ch. 10</td>
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<td>Social complexity, diet, culture, genus Homo</td>
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<tr>
<td>Week</td>
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<td>Readings, Assignments, and Deadlines</td>
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| 12   | 11/7 – 11/11 | **Human Adaptation**  
Human variation, adaptation, acclimatization | Reading: *(PA)* Adaptation,  
*(EXP)* Ch. 12 |
| 13   | 11/14 – 11/18 | **Modern Humans**  
Adaptation continued, trends, modern lifestyles | Reading: *(PA)* Methods  
EA 9 |
| 14   | 11/21 – 11/22  
11/23 – 11/25  
*Thanksgiving Break* | **Modern Humans Cont.**  
Modern lifestyles continued | Reading: *(PA)* Modern Humans |
| 15   | 11/28 – 12/2 | **The Anthropocene**  
Health, disease, human impacts | Reading: *(PA)* Anthropocene  
EA 10 |
| 16   | 12/5 – 12/6 | **Conclusions**  
Review | Reading: Study for exam |
|      | Final Exam  | **Final exam day - Exam 2**  
*https://www.sjsu.edu/classes/final-exam-schedule/index.php* | **Exam 2**: 12/12 at 9:45 am – 12:00 pm (in class) |