

# **ANTH 12**

## **Introduction to Human Evolution**

**Spring 2019, Section 1 (21506)**  
**San José State University**  
**Department of Anthropology/ College of Social Sciences**

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<b>Office Hours:</b>	Thursday 14:00-15:00 or by appointment
<b>Class Days/Time:</b>	Monday and Wednesday 15:00-16:15
<b>Classroom:</b>	Clark 204
<b>GE/SJSU Studies Category:</b>	B2/Life Science

### **Faculty Web Page and MYSJSU Messaging**

Copies of the course materials such as the syllabus, major assignment handouts, and grades can be found on my faculty web page at <http://www.sjsu.edu/people/viviana.sanchezchopitea> and/or on [Canvas Learning Management System course login website](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the messaging system through [MySJSU](http://my.sjsu.edu) at <http://my.sjsu.edu> (or other communication system as indicated by the instructor) to learn of any updates.

### **Course Description**

Introduction to Human Evolution is a course designed to allow students to appreciate the evolutionary history of our species and the biological bases that are at the foundation of this process. The course is an introductory one; thus, no specific prior knowledge is assumed. There are no prerequisites to take this course.

During the semester, students will acquire 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.

At a general level, this course is primarily about the nature of the evolutionary process, how it works, and how scientists have come to understand the process (specifically to understand ourselves). The evidence relating to human evolution is used to illustrate evolutionary and

biological processes (such as natural selection, reproduction, heredity, etc.). In addressing the fundamental questions relating to human origins, you will be challenged to think critically, apply sound scientific methodologies, understand and assess quantitative data, and communicate your knowledge.

### **GE B/SJSU Learning Outcomes (GELO)**

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

- GELO1 use methods of science and knowledge derived from current scientific inquiry in life or physical science to question existing explanations;
- GELO2 demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues; and
- GELO3 recognize methods of science, in which quantitative, analytical reasoning techniques are used.

In all CLO the core GE requirements of Information Literacy, Qualitative and Quantitative Reasoning, and Critical Thinking are addressed through particular assignments or parts of assignments.

Course Learning Outcome	Assessment Instrument	Basic Competency Measure
1- use methods of science and knowledge derived from current scientific inquiry in life or physical science to question existing explanations	Writing exercises on particular topics focusing on underlying methods. Targeted exam questions.	Accurate identification of methods expressed in written assignments. 85% or higher reflects competence.
2- demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues	Writing exercises and in-class discussions weighing validity of methods. Targeted exam questions.	Accurate identification of methods expressed in oral or written assignments. 85% or higher reflects competence.
3- recognize methods of science, in which quantitative, analytical reasoning techniques are used.	Writing exercises and in-class activities of cause-effect analysis. Targeted exam questions.	Correct application of developed concepts in written exercises and examinations. 85% or higher reflects competence.

### **Course Learning Outcome (CLO)**

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

- CLO1 explain the evolutionary process, how it works, and how scientists have come to understand the process (specifically to understand ourselves).
- CLO2 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*. Stanford Craig, John S. Allen, Susan C. Antón, Pearson Publishing Company, 2013. 4th edition (earlier editions acceptable). ISBN: 978-0-13-401419-7 (or same book, Revel on line access: ISBN: 9780135193525).

- **Other readings:**

Supplementary course readings or handouts in PDF format. Available on the course Canvas page.

## Recommendations

“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 Syllabus Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>)

**NOTE:** “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.” [University Attendance and Participation Policy F15-12](http://www.sjsu.edu/senate/docs/F15-12) (<http://www.sjsu.edu/senate/docs/F15-12.pdf>)

## Course Assignments and Grading Policy

Students will be graded on the following assignments:

- **Three Exams**

Conceptual understanding and application of knowledge is the principal objective of the course and will be targeted by assessment. Objective questions are included to assess core content. Exams are multiple-choice and will require use of a **Scantron T&E 0200**. Make sure that all the required fields in the form (name, student number, etc.) are completed before you turn in your test. You can fill in the form before you arrive to the class. The Final exam is scheduled according to the official University list (provided here on the Course Schedule Table [University policy S17-1](http://www.sjsu.edu/senate/docs/S17-1) (<http://www.sjsu.edu/senate/docs/S17-1.pdf>)). Timely arrival is required for all the exams. (each exam = 100pts).

***Failure to take any exam will result in a failing grade regardless of other completed work***

- **Writing requirements**

Two papers of at least 750 words are required for this course. All writing assignments must be turned in via Canvas by the scheduled due date. Details on these assignments will be discussed in class and posted in Canvas. Topics need to address the GE learning objectives detailed above. Writing assignments will be assessed for grammar, clarity, conciseness and coherence. Run your papers through the spell checker before submitting. **Papers will not be accepted after the deadline or with a Turnitin score greater than 15%.**

I encourage you to consult with the Writing Center if you need assistance to proof your grammar and construction. This is a resource you have paid for with your tuition!! I provide some further information later in this syllabus. Guidelines for the written assignments will be provided during the semester. (each essay = 50pts)

***All writing assignments are required to pass the class. Failure to complete any of the two writing assignments will result in a failing grade regardless of other completed work.***

- **In-class Exercises**

There will be a number of class interactive exercises and discussions in individual or group form throughout the semester. Some exercises may include additional reading material providing a glimpse at the current issues and controversies surrounding the discipline. This material will be provided in Canvas for analysis and discussion. All written activities are due the same day during class and **cannot be made up** (50pts).

- **Class participation/discussion:**

There will be a number of class interactive discussions in individual and group format throughout the semester. Contribution to the class in the form of questions, comments, or ideas will be also evaluated and considered for the final grade in the class. Student participation is important to promote critical thinking and evaluate the understanding of class material. It provides an indication of your engagement in your own education (50pts).

- **Attendance**

Roll will be taken sporadically. Attendance is strongly encouraged and expected. Your success in the class depends on your presence during lecture and class activities. I do not provide the PowerPoints of the lectures hence you are responsible for obtaining class notes. Missing lectures may result in failing the class.

**A grade of Incomplete will not be given to avoid an F in the class.**

#### Assignments and Grade Break-down

Exam # 1	100	20%
Exam # 2	100	20%
Final	100	20%
Writing Assignments (2 x 50pts.)	100	20%
In-class exercises	50	10%
Class participation	50	10%
Total	500	100%

Below are basic guidelines for grading. Letter grades will be assigned based on score percentages, as follows:

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

**IMPORTANT:** Read the syllabus, familiarize yourself with Canvas, and keep up with the reading (must be up to date and ready to discuss the material in class). Your presence in class is very important, if you miss a day you are responsible to get the notes from a classmate. If you have any questions or issues do not hesitate to contact me or see me during office hours. Do not wait too long to communicate if you are having problems in class or with the class material. Your success in the class depends on your understanding of the material and completing the assignments on time. I strongly encourage you to reach me through email or in person for any questions you may have that are not already addressed in the syllabus or Canvas.

**I do not drop students for non-attendance; you are responsible for your registration status.**

### Classroom Protocol

- **Student participation and attendance is essential** for academic success. Students are expected to attend class. Students are encouraged to attend class regularly since material presented and discussed in the classroom may be additional to the information presented in the assigned textbook.
- **Arriving late and leaving early is not acceptable** unless there is an exceptional circumstance or has been previously arranged with the instructor.
- Laptops are only permitted for note taking and for specific in-class exercises, and only under the specific approval of the instructor. Any other electronic devices need to be off during class. Activities such as texting, surfing the web, chatting, or emailing during class are disruptive and constitute disrespectful behavior towards the instructor and other students. Please be courteous and respectful.
- **All assignments are due the date marked in the class schedule** unless the date has been officially changed by the instructor. **All written assignments are to be submitted through “Turnitin” in Canvas or as indicated by the instructor.** **Unexcused late written assignments** will be subject to a grade penalty and not accepted after one week from the original due date. **All assignments are due before the last day of class.**
- **In-class activities/assignments/exercises cannot be made up.**
- **Make-up exams** will be given only if 1) you know in advance that you are unable to attend due to an important and verifiable reason and have arranged in advance with the instructor an alternative date prior to its scheduled date, 2) if any reason arises beyond

your control you need to notify the instructor before class by email and provide a verifiable reason (note from physician/nurse, etc.) for the absence. Only students with a valid documented excuse will be able to take a make-up a test. Make-up exams will only be scheduled within one week from the original due date. Make-up exams will take place at the Testing Office and it is the student's responsibility to make the arrangements in a timely manner through <http://testing.sjsu.edu/makeupstudents/>. Keep in mind that they need an advance notice of at least 48 hours as well as the instructor's copy of the exam. Please read their instructions before the day of the exam and keep in mind you have only a week allowance.

- **The Final Exam cannot be made-up. You must take the Final Exam at the scheduled time or earlier with the approval of the instructor.** [University policy S17-1](http://www.sjsu.edu/senate/docs/S17-1.pdf) (<http://www.sjsu.edu/senate/docs/S17-1.pdf>)
- **Students may not leave the room during an examination.** This will be an indication to the instructor that the student has completed the exam and it will be collected without further opportunity to continue.
- **If extra credit is offered in this class, it will apply toward only one extra activity.**
- **All lectures and course materials, including exams, assignments, quizzes, handouts, and exercises, are copyrighted and may not be distributed without written permission from the instructor.**
- Discussions of controversial topics can become emotional. Such discussion demands respect and intellectual honesty toward and between fellow students, instructor, and from instructor toward students. Personal attacks on individuals holding non-conventional/controversial ideas will not be tolerated.
- Students are encouraged to ask questions before, during, and after class and to take full advantage of scheduled office hours or to make appointments.

## University Policies

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Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>

### Consent for Recording of Class and Public Sharing of Instructor Material

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) <http://www.sjsu.edu/senate/docs/S12-7.pdf>

## Resources

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The university provides resources that can help you succeed academically. Just look here.

[Academic Success Center](http://www.sjsu.edu/at/asc/) <http://www.sjsu.edu/at/asc/>

[Peer Connections website](http://peerconnections.sjsu.edu) <http://peerconnections.sjsu.edu>

[Writing Center website](http://www.sjsu.edu/writingcenter) <http://www.sjsu.edu/writingcenter>

[Counseling Services website](http://www.sjsu.edu/counseling) <http://www.sjsu.edu/counseling>

## ANTH 12: Introduction to Human Evolution, Fall 2018, Tentative Course Schedule

*Schedule is subject to change with fair notice made available from the instructor by email and class announcements.*

Week	Date	Topics, Readings, Assignments, Deadlines
1	Jan 28, 30	Introduction to the course: Biological Anthropology. <b>Module 1:</b> Anthropology and its subfields. Foundations of biological anthropology. <b>Reading:</b> Ch 1
2	Feb 4, 6	Origins of Evolutionary Thought: Linnaeus, Wallace/Darwin: Theory of evolution by Natural Selection. <b>Reading:</b> Ch 2
3	Feb 11, 13	<b>Module 2:</b> Genetics: Cells and molecules. DNA and molecular anthropology. <b>Reading:</b> Ch 3  Genetics: Genotype to phenotype.
4	Feb 18, 20	Mendelian genetics. <b>Reading:</b> Ch 4  Mendelian genetics: Mutation. <b>Reading:</b> Ch 4
5	Feb 25, 27	Genetics: Beyond Mendel. <b>Writing assignment # 1 (topic)</b>  The forces of evolution and the formation of species. <b>Reading:</b> Ch 5
6	Mar 4, 6	Human variation and race. Human adaptation. <b>Reading:</b> Ch 6  <b>Review</b>
7	Mar 11, 13	<b>EXAM # 1</b>  <b>Module 3:</b> Primates: classification <b>Reading:</b> Ch 7
8	Mar 18, 20	Prosimians and Tarsiers. <b>Reading:</b> Ch 7  Anthropoids. Primates as models of human evolution. <b>Writing assignment # 1 Due</b>

9	Mar 25, 27	<b>Module 4:</b> Fossils. The hominid record. Dating fossils, and evolutionary time. Climate change and early primate evolution. <b>Reading:</b> Ch 9  Early hominins and <i>Australopithecus</i> I <b>Reading:</b> Ch 10
10	<b>April 1, 3</b>	<b>Spring recess</b>
11	April 8, 10	Early Hominins and <i>Australopithecus</i> II Early <i>Homo</i> species and relatives <b>Reading:</b> Ch 11  Review
12	April 15, 17	<b>EXAM # 2</b>  African, Asian, and European Archaic <i>Homo sapiens</i> . <b>Reading:</b> Ch 12 <b>Writing assignment # 2 (Topic)</b>
13	April 22, 24	Neanderthals. Origins of Modern Humans. <b>Reading:</b> Ch 12, 13  Dispersal of Modern Humans.
14	April 29,  May 1	<b>Module 5:</b> Evolution of the brain <b>Writing assignment # 2 Due</b>  Bioarchaeology of Modern Humans. <b>Reading:</b> Ch 14
15	May 6, 8	Origins of agriculture and its effects on health. Bioarchaeology in practice. Forensics.  <b>Reading:</b> Ch15
16	May 13	REVIEW
Final Exam	May 20	12:15 – 14:30 (Monday)