ANTH 12
Introduction to Human Evolution

Fall 2019, Section 60 (41310)
San José State University
Department of Anthropology/ College of Social Sciences

Instructor: Viviana Bellifemine Sanchez-Chopitea
Office Location: Clark 402H
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Office Hours: Tuesdays 10:30-11:30 or by appointment
Class Days/Time: Tuesday and Thursday 12:00-1:15
Classroom: Clark Hall 204
GE/SJSU Studies Category: B2/Life Science

Canvas and MYSJSU Messaging

Copies of the course materials such as the syllabus, major assignment handouts, and grades can be found on Canvas Learning Management System course login website. You are responsible for regularly checking with the messaging system through MySJSU or Canvas 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.

**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**
  

- **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.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.pdf)

**Course Assignments and Grading Policy**

Students will be graded on the following assignments:

- **Three Exams:** (each exam = 100pts). All exams are multiple-choice format.

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

- **Term paper:** (110 pts) A research paper of 1500 words (approximately 6 pages, double spaced) of original work is required for this course. **Papers will not be accepted after the deadline or with a Turnitin score greater than 15%**.

  *Failure to complete this assignment will result in a failing grade regardless of other completed work.*

- **In-class Exercises:** (50 pts). There will be a number of class interactive exercises and discussions in individual or group form throughout the semester. All written activities are due the same day during class and **cannot be made up**.

- **Class participation/discussion:** (50pts). There will be a number of class interactive discussions in individual and group format throughout the semester. Participation in class activities as well as 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.

- **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.

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

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

**Assignments and Grade Break-down**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Exam # 1</td>
<td>100</td>
</tr>
<tr>
<td>Exam # 2</td>
<td>100</td>
</tr>
<tr>
<td>Final</td>
<td>100</td>
</tr>
<tr>
<td>Term Paper (110pts.)</td>
<td>110</td>
</tr>
<tr>
<td>In-class exercises</td>
<td>50</td>
</tr>
<tr>
<td>Class participation</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
</tr>
<tr>
<td></td>
<td>100%</td>
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Below are basic guidelines for grading. Letter grades will be assigned based on score percentages, as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>97-100%</td>
</tr>
<tr>
<td>B plus</td>
<td>87-89%</td>
</tr>
<tr>
<td>B</td>
<td>77-79%</td>
</tr>
<tr>
<td>C plus</td>
<td>67-69%</td>
</tr>
<tr>
<td>C</td>
<td>57-59%</td>
</tr>
<tr>
<td>D plus</td>
<td>47-49%</td>
</tr>
<tr>
<td>D</td>
<td>37-39%</td>
</tr>
<tr>
<td>F</td>
<td>Below 60%</td>
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**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.

**Classroom Protocol**

- **Arriving late and leaving early is not acceptable** unless there is an exceptional circumstance or has been previously arranged with the instructor. Students will be asked to leave the classroom when this occurs on a regular basis since it is disruptive to the class.

- **All electronic devices including laptops, tablets, and cell phones, must be turned off and out of sight during class.** Students should be aware that according to Title 5 of the California Code of Regulations, "Standards for Student Conduct," grounds for student discipline includes: "Participating in an activity that substantially and materially disrupts the normal operations of the University," {Section 41301(b)(4)} which could include use of electronic devices in classroom settings.

- **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 not be accepted. All assignments are due before the last day of class.**

- **In-class activities/assignments/exercises cannot be made up.**

- **Assignments described as mandatory and all exams are needed to pass the class.**

- **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 for 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 test (or turn in a late assignment). Make-up exams will only be scheduled within one week from the original due date.

- **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)

- **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.

- **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**

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/)

**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)

**Resources**

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

- [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 2019, Tentative Course Schedule

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

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
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<tbody>
<tr>
<td>1</td>
<td>8/22</td>
<td>Introduction to the course: Biological Anthropology.</td>
</tr>
</tbody>
</table>
| 2    | 8/27 | **Module 1**: Anthropology and its subfields. Foundations of biological anthropology.  
Reading: Material from lecture  
Reading: Ch 1 |
|      | 8/29 | |
| 3    | 9/3  | **Module 2**: Genetics: Cells and molecules. DNA and molecular anthropology.  
Reading: Ch 2  
Genetics: Genotype to phenotype.  
Reading: Ch 2 |
|      | 9/5  | |
| 4    | 9/10 | Mendelian genetics.  
Reading: Ch 2  
9/12 | Mendelian genetics: Mutation.  
Reading: Ch 2 |
| 5    | 9/17 | Genetics: Beyond Mendel.  
Reading: Ch 3  
9/19 | Video |
| 6    | 9/24 | The forces of evolution and the formation of species.  
Reading: Ch 4  
9/26 | Human variation and race.  
Reading: Ch 14 |
| 7    | 10/1 | Human adaptation.  
Reading: Ch 14  
10/3 | Review |
| 8    | 10/8 | EXAM #1  
**Module 3**: Primates: classification  
Reading: Ch 5 |
|      | 10/10| |
| 9    | 10/15| Primate diversity.  
Reading: Ch 5  
10/17 | Primate matting systems  
Reading: Ch 6 |
Reading: Ch 7  
10/24 | Primate life histories and the evolution of intelligence  
Reading: Ch 8; video |
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<tr>
<th></th>
<th>Date</th>
<th>Topic</th>
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</table>
| 11| 10/29  | **Module 4**: Fossils. The hominid record. Dating fossils, and evolutionary time.  
Climate change and early primate evolution.  
**Reading**: Ch 9  
Early hominins and *Australopithecus*.  
**Reading**: Ch 10 |
|   | 10/31  | **Review**  
**EXAM # 2** |
| 12| 11/5   | **Review**  
**EXAM # 2** |
| 11/7|       | **Review**  
**EXAM # 2** |
| 13| 11/12  | Early *Homo* species and relatives  
**Reading**: Ch 11  
Neanderthals and contemporaries  
**Reading**: Ch 12 |
| 13| 11/14  | Early *Homo* species and relatives  
**Reading**: Ch 11  
Neanderthals and contemporaries  
**Reading**: Ch 12 |
| 14| 11/19  | Origins of Modern Humans.  
**Reading**: Ch 13  
11/21  
Dispersal of Modern Humans. The Upper Paleolithic  
**Reading**: Ch 14 |
| 15| 11/26  | Evolution of Human behavior  
**Reading**: Ch 15  
11/28  
No Class, Thanksgiving Holiday |
| 15| 11/28  | Evolution of Human behavior  
**Reading**: Ch 15  
11/28  
No Class, Thanksgiving Holiday |
| 16| 12/3   | **Module 5**: Evolution of human culture  
**Reading**: Ch 16  
**Review** |
| 16| 12/5   | **Module 5**: Evolution of human culture  
**Reading**: Ch 16  
**Review** |
| Final Exam| 12/17 | 9:45 – 12:00 (Tuesday) |