

**San José State University**  
**ANTH 12: Introduction to Human Evolution**  
**Section 4 (47942), Fall 2013**  
**Department of Anthropology/ College of Social Sciences**

<b>Instructor:</b>	Viviana Bellifemine Sanchez-Chopitea
<b>Office Location:</b>	Clark 402G
<b>Telephone/Fax:</b>	(408) 924-5712 (department fax: 924-5348)
<b>Email:</b>	viviana.sanchezchopitea@sjsu.edu
<b>Office Hours:</b>	Thursdays 6-7 pm
<b>Class Days/Time:</b>	Tuesdays and Thursdays 4:30 – 5:45 pm
<b>Classroom:</b>	WSQ 004
<b>GE/SJSU Studies Category:</b>	B2/Life Science

### **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.

This foundation will then be used to explore the specific evolutionary history of major groups of organisms with a specific focus on human evolutionary history. Comparative perspectives will be incorporated so as to provide a basis for understanding how humans are related to other primates (and what this implies structurally, physiologically, and behaviorally). Furthermore, data provided directly by the fossil and molecular records will be comprehensively reviewed in tracing the major features of human evolution. In summary, this course attempts to place our species in a clear evolutionary context and to ask basic questions relating to human origins, such as what kind of creature are we, how did we get to be this way, and where did we come from.

Major topics will include:

- The history of evolutionary theory
- Biological basis of life: cells, DNA, and genes
- Evolution and heredity
- Overview of primates
- Hominid/human origins
- Modern human origins
- Human variation and adaptation

### **Course Goals and Objectives**

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.

At SJSU, students are encouraged to recognize that education is a participatory experience. Thus, each student is expected to contribute to further refining the course objectives (so as to better articulate your individual expectations and needs), to give feedback to the instructor regarding the adequacy of your learning and how well the course assessment measures that learning (and how these assessment tools can be improved). Finally, each student is challenged to be engaged in the exploration of the fascinating material covered this semester, to participate in class discussions, and to relate in assignments and exercises how you can apply these concepts to your everyday life.

The most important contribution this course can make to your education is to provide you with greater ability to think critically. As a result, this skill will contribute permanently to your further education, that is, for the remainder of your lifetime.

### **GE B/SJSU Studies Learning Outcomes (LO)**

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; and
- LO3 recognize methods of science, in which quantitative, analytical reasoning techniques are used.

### **Course Content Learning Outcomes**

More specifically, Area B2 Life Science courses such as Anth 12 focus on:

- LO4: structures and functions of living organisms;
- LO5: levels of organization of living systems, from atom to planet;

- LO6: strategies for survival and reproduction;
- LO7: patterns of evolution;
- LO8: principles of genetics, including the basis for variation; and
- LO9: interaction of organisms and their natural environment

### **Department of Anthropology objectives**

The Department of Anthropology seeks to enhance student knowledge and skills in a number of areas. Each course offered by the department fulfills one or more of the following ten objectives;

- Understanding of culture as the distinguishing phenomenon of human life, and the relationships of human biology and cultural processes in human behavior and evolution.
- Awareness of human diversity and the ways in which humans categorize diversity.
- Knowledge of the significant findings of archaeology, cultural anthropology, and physical anthropology, and familiarity with the important issues in each sub-discipline.
- Knowledge of the history of anthropological thought and its place in modern intellectual history.
- Comprehension of migration, colonialism, and economic integration as significant phenomena shaping global society.
- Ability to access various forms of anthropological data and literature.
- Awareness of the importance and value of anthropological knowledge in contemporary society, and the ability to apply it to social issues.
- Knowledge of the research methods of the sub-disciplines of anthropology, and ability to apply appropriate research methods in at least one sub-discipline.
- Ability to present and communicate anthropological knowledge and the results of anthropological research to different audiences.
- Knowledge of political and ethical implications of social research.

### **Required Texts/Readings**

- Exploring Biological Anthropology: The Essentials. 3<sup>rd</sup> edition. Stanford Craig, John S. Allen, Susan C. Antón, Pearson Publishing Company, 2013. ISBN: 978-0-205-90733-5
- Supplemental readings or other material will be posted on Canvas.

### **Classroom Protocol**

Laptops are only permitted for note taking and for specific in-class exercises only under the specific approval of the instructor. Any other electronics need to be off during class. Activities such as texting, surfing the web, chatting, or emailing during class are disruptive and disrespectful behavior towards the instructor and other students. Please be courteous and respectful. Any behavior deemed disruptive to the instructor or other

students may result in being asked to leave the classroom or being referred to the Judicial Affairs Officer of the University.

**Arriving late and leaving early is not acceptable** unless there is an exceptional circumstance or it has been previously arranged with the instructor. If you are late to class, sit quietly in the back to avoid disrupting the class.

## Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Dropping is your responsibility. Be aware of the drop deadline provided in the University schedule of classes.

## Course Assignments and Grading Policy

You will be required to enroll in Canvas to access course materials, grades, course announcements, and submit papers and assignments. A quick guide is found at: [http://www.sjsu.edu/at/ec/canvas/student\\_resources/index.html](http://www.sjsu.edu/at/ec/canvas/student_resources/index.html)

### Preparation and Participation requirements

Success in this course is based on the expectation that students will spend, **for each unit of credit, a minimum of forty-five hours over the length of the course** (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practice. Other course structures will have equivalent workload expectations as described in the syllabus.

- **Exam requirements:** Two tests and a comprehensive final exam will be given during the semester. The dates are indicated in the schedule table at the end of the syllabus. The tests and final exam are multiple choice and will require use of **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. I will post in Canvas **pre-tests** for you to practice on. The final exam will include some of the main concepts introduced from the beginning of the semester. All exams are required to pass the class. **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.

**Writing requirements** include two at least 750 word papers. 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. A possible list of topics will be provided, however, I encourage you to select your own subject manifesting further reflection of a subject presented during lecture or class discussion. 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. 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 information further down in this syllabus. Guidelines for the written assignments will be provided during class. All writing assignments are required to pass the class.

**Class participation:** There will be a number of class interactive exercises and discussions during Forum days in individual or group form throughout the semester. These activities are scheduled during class and cannot be made up. Student participation is important to promote critical thinking and evaluate the understanding of class material.

**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 post the PowerPoints of the lecture in Canvas although I do not provide class notes. Missing lectures may result in failing the class.

**Extra credit:** This project is optional and worth 25 points. Details and instructions will be mention in class and posted on Canvas.

**Reading assignments:** It is important that you read the chapters and articles prior to coming to class in order to understand the material, ask questions, and interact with the class. Unscheduled surveys or questions may be given at any time during the semester.

**Forum days:** Additional reading material will be selected and provided in Canvas for analysis and discussion. A short survey based on the content of the articles will be provided on Canvas before the class meeting to prepare for the discussion. A short written assessment to be completed in class individually or in a group will be required at the end of the class. Guidelines for these exercises will be given in class. Participation in this activity is important since you will be able to apply the concepts learned during lecture and have a glimpse at the current issues and controversies surrounding the discipline.

Summing up, grade will be based on the following:

Exam # 1	100	20%
Exam # 2	100	20%
Final (Comprehensive)	150	30%
Writing Assignments (2 x 50pts.)	100	20%
Class participation	50	10%
Extra credit	25	5%
Total	500	100%

Grading is as follows:

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

To pass this course, you must receive a grade of D- or higher. **Failure to take the final exam or submit a writing assignment will result in a failing grade regardless of other completed work.**

Make-up Policy: **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 arrange previously with me an alternative date prior to its scheduled date, 2) if any reason arises beyond your control you need to notify me before class by email or phone 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. Unexcused **late written assignments** will be subject to a 10% penalty per day and not accepted after the third day from its original due date.

IMPORTANT: Read the syllabus, familiarize yourself with Canvas, and keep up with the reading. 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.

## University Policies

### Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The [University's Academic Integrity policy](http://www.sjsu.edu/senate/S07-2.htm), located at <http://www.sjsu.edu/senate/S07-2.htm>, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student Conduct and Ethical Development website](http://www.sa.sjsu.edu/judicial_affairs/index.html) is available at [http://www.sa.sjsu.edu/judicial\\_affairs/index.html](http://www.sa.sjsu.edu/judicial_affairs/index.html).

Instances of academic dishonesty will not be tolerated. **Cheating** on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy S07-2 requires approval of instructors.

At SJSU **plagiarism** is the act of representing the work of another as one's own (without giving appropriate credit) regardless of how that work was obtained, and submitting it to fulfill academic requirements. Plagiarism at SJSU includes but is not limited to: the act of incorporating the ideas, words, sentences, paragraphs, or parts thereof, or the specific substances of another's work, without giving appropriate credit, and representing the product as one's own work; and representing another's artistic/scholarly works such as musical compositions, computer programs, photographs, painting, drawing, sculptures, or similar works as one's own. In written works this may include the over use of quoted materials to build a paper that is otherwise lacking in original content. *The instructor reserves the right to fail the assignment or assign a failing grade for the entire course depending on the assessed severity of plagiarism.*

### 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 [Disability Resource Center](http://www.drc.sjsu.edu/) (DRC) at <http://www.drc.sjsu.edu/> to establish a record of their disability.

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

“Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”

“Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”

## **Student Resources**

### **Technological resources**

Computer labs for student use are available in the Academic Success Center located on the 1<sup>st</sup> floor of Clark Hall and on the 2<sup>nd</sup> floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library. Please see <http://www.sjsu.edu/asc/>.

### **Learning Assistance Resource Center**

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. The LARC website is located at <http://www.sjsu.edu/larc/>.

### **SJSU Writing Center**

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The Writing Center website is located at <http://www.sjsu.edu/writingcenter/about/staff/>.

### **Peer Mentor Center**

The Peer Mentor Center is located on the 1<sup>st</sup> floor of Clark Hall in the Academic Success Center. The Peer Mentor Center is staffed with Peer Mentors who excel in helping students manage university life, tackling problems that range from academic challenges to interpersonal struggles. On the road to graduation, Peer Mentors are navigators, offering “roadside assistance” to peers who feel a bit lost or simply need help mapping out the locations of campus resources. Peer Mentor services are free and available on a drop-in basis, no reservation required. Find all of the Academic Success Services at: <http://www.sjsu.edu/asc/services/>.

## ANTH 12:Introduction to Human Evolution, Fall 2013, Course Schedule

The schedule is subject to change with fair notice; changes will be announced on Canvas and at the beginning of the class. You are responsible for finding out any changes made to the original schedule.

Week	Date	Topics, Readings, Assignments, Deadlines
1	8/22	Introduction to the course.
2	8/27 8/29	Anthropology and its subfields. Foundations of biological anthropology. Science, epistemology, science and religion, the scientific method. <b>Reading:</b> Ch 1 <b>Activity:</b> In-class exercise
3	9/3 9/5	Origins of evolutionary thought. Linnaeus, Wallace/Darwin: Theory of evolution by natural selection. Genetics: Cells and molecules. DNA and molecular anthropology. <b>Reading:</b> Ch 2, Ch 3
4	9/10 9/12	Genetics: Genotype to phenotype. Mendelian genetics. <b>Reading:</b> Ch 4
5	9/17 9/19	The forces of evolution and the formation of species. Human variation and race. Human adaptation. <b>Reading:</b> Ch 5-6
6	9/24 9/26	<b>EXAM # 1</b> Primates: classification, Prosimians and Tarsiers. <b>Reading:</b> Ch 7
7	10/1 10/3	Anthropoids. Primates as models of human evolution. <b>Forum Day:</b> Primates and tools, what separates Man from other primates? <b>Reading:</b> Ch 8 <b>Writing assignment # 1 Due on Monday 3<sup>rd</sup>.</b>
8	10/8 10/10	Fossils. The hominid record. Dating fossils, and evolutionary time. Climate change and early primate evolution. <b>Reading:</b> Ch 9
9	10/15 10/17	Early hominins and <i>Australopithecus</i> . <b>Video:</b> Becoming Human. <b>Reading:</b> Ch 10

10	10/22 10/24	<b>EXAM # 2</b> Early <i>Homo</i> species and Oldowan Tools. Humans disperse: <i>Homo erectus</i> and <i>Homo ergaster</i> . Little people from Flores: <i>Homo floresiensis</i> . <b>Reading:</b> Ch 11
11	10/29 10/31	<b>Forum:</b> The Hobbit. African, Asian, and European Archaic <i>Homo sapiens</i> . <b>Reading:</b> Ch 12
12	11/5 11/7	Neanderthals. <b>Video:</b> Neanderthals Origins of anatomically Modern Humans. Distribution of early Humans. Archaeology of Modern Humans. <b>Reading:</b> Ch 13
13	11/12 11/14	Arriving in the New World: Paleo-Indians <b>Video:</b> Becoming human. <b>Reading:</b> Ch 13 <b>Writing assignment # 2 Due on Monday 12th</b>
14	11/19 11/21	Origins of agriculture and its effects on health. Evolution of the brain <b>Reading:</b> Ch 14
15	11/26 11/28	Biomedical and forensic anthropology in practice <b>Reading:</b> Ch15 <b>No Class-Thanksgiving</b>
16	12/3 12/5	Bioarchaeology in practice <b>Reading:</b> Ch15 REVIEW
Final Exam	12/13	WSQ 004 14:45 – 17:00