San José State University Biol. 101, Origins of Life, Sect 1, Fall 2013 (rev.)

Instructor: Dr. Elizabeth McGee

Office Location: DH 546

Telephone: (408) 924-5277

Email: <u>elizabeth.mcgee@sjsu.edu</u> (preferred contact)

Office Hours: Tuesdays & Thursdays 9:15 to 10:15 a.m.

Class Days/Time: M 5:00 – 7:50 p.m. and on-line

Classroom: Duncan Hall 448

Prerequisites: Passage of WST; upper division standing (56 units); completion of Core GE;

100w is a co-requisite or pre-requisite to all Area R, S, and V courses

GE/SJSU Studies Category: Area R

Course Description

Although it is frequently said that evolution is a unifying concept in science, what does this really mean and why is it so important to understanding the natural world? This course is a conceptual tour of the origin and evolution of life from both a macroevolutionary (i.e., "evolution above the species level" or major evolutionary innovations such as bipedality in humans) and a microevolutionary ("evolution below the species level" or fine-scale changes through time) perspective. Here we examine themes and concepts in evolution, with particular emphasis on human evolution.

GE/SJSU Studies Learning Outcomes

At the conclusion of this course, you will: 1) demonstrate an understanding of the nature and limits of scientific investigation and science in general (LO1); 2) distinguish science from pseudo-science (LO2); and 3) apply a scientific approach to answer questions about the earth and environment (LO3). To satisfy the University's writing requirement for SJSU Studies courses, you are required to write a minimum of 3000 words with an overall grade of C or better.

Required Texts/Readings/Other Materials

- Gibbons, Ann. 2006. *The First Human*. (Note: any version of this is fine). Available in bookstore, through Amazon.com, or in electronic form from the MLK library:
 - http://libaccess.sjlibrary.org/login?url=http://site.ebrary.com/lib/sjsu/Doc?id=10130895
- Parker, Robert. 2001. *Voodoo Science*. Oxford University Press, **ISBN-10**: 0195147103, **ISBN-13**: 978-0195147100. (You just need Chapter 1 of this book, which I will make available electronically.)
- Biology 101 Study Guide
- Seven (7) 882-E scantrons
- Access to internet to watch documentaries.
- Adobe Acrobat Reader (or higher)
- Transportation to the San Francisco Zoo (ride-sharing is highly encouraged)

Assignments and Grading Policy

	Points
Exams:	
Exam 1 (20%)	40
Exam 2 (15%)	30
Final Exam (25%)	50
Assignments & Quizzes:	
First Human Quizzes (3 total) (15%)	30
"Science, According to Rigo" (LO1) (2.5%)	5
Voodoo Science (LO2) (2.5%)	5
Mystery Fossil (LO3) (5%)	10
"An Excursion to the Zoo" assignment (15%)	<u>30</u>
Total Points Possible	e 200

Additional Information on Exams and Papers

Exams 1 – 2 are "closed book". For the Final Exam, you may bring one (1) hand-written (*not* word processed or otherwise digitally produced) 3x5 index card with any information you think might be useful (you may use both sides). Each student must use his or her own card – you may not photocopy another student's card for use during the exam. You will turn in your card with your exam. Any student who uses a card and who does not comply with these rules will receive a failing grade on the Final Exam.

As a GE course, students are expected to write on topics relevant to the course. The GE writing requirement will be met through a major paper (An Excursion to the San Francisco Zoo), "Science, According to Rigo" write-up, the Mystery Fossil write-up, and the Voodoo Science write-up.

Grades will be assigned by taking the total number of points earned for all exams and calculating the percentage earned. Letter grades (with +/-) will be determined using the following scale:

%	%	%
A = 92-100	B - = 80 - 81	D + = 65-67
A = 90-91	C + = 78-79	D = 60-64
B + = 88 - 89	C = 72-77	D- = 50-59
B = 82-87	C = 68-71	F = < 50

Late and Missed Assignments

Exams may not be made up under any circumstances without a verifiable excuse from a physician (MD) or a court officer. If you require a make-up exam and have acceptable documentation, you MUST contact me within two days of the missed exam. The make-up exam must be taken within three days of the missed exam. Papers will lose 3% of the maximum credit possible for every day the paper is submitted late. Papers and assignments will not be accepted more than one week after the deadline.

"Extra Credit"

You can earn extra credit for submitting your responses to questions for the Voodoo Science discussion in advance (to Canvas by noon the day of the discussion). Additional opportunities for extra credit in this class are limited to occasional "bonus" questions on exams that are available to all students equally.

Incompletes

Incompletes are permitted only if a student is in good standing, has completed and least two-thirds of the course, and has a serious and compelling reason to take an incomplete.

Classroom & Exam Protocol

You must arrive on time for class, and for exams and quizzes! Any student who arrives after the first student has turned in the exam will not be permitted to take the exam and make up exams will not be permitted. In addition, there are three timed quizzes given at the beginning of class in November and December. You MUST be on time in order to take these quizzes. If you are late, you will not be allowed additional time to finish. If you commute to campus, add in additional time for traffic and parking. All cell phones, etc. must be turned off and put away during the exams – absolutely no exceptions.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic calendar web page located at

http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. The <u>Late Drop Policy</u> is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

University Policies

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The <u>University's Academic Integrity policy</u>, 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 <u>Student Conduct and Ethical Development website</u> is available at 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 your assignment or 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.

You are responsible for knowing the University Policy on Academic Dishonesty outlined in the University Catalog. Any student found plagiarizing *any* essay or assignment in Biology 101 will receive an automatic failing grade (F) on the essay or assignment, may receive a failing grade in Biology 101 and will be referred to the Judicial Affairs office. Plagiarism includes copying phrases, sentences, key words, parts or all of another's writing, including papers or articles published on the Internet, newspapers, magazines, books, journals, or any other medium, including the writing of your fellow students from current and/or previous classes. All phrases, key words, sentences, or larger sections of writings taken from an outside source and used in a student's paper should be appropriately reworded by the student AND cited. Drawing as few as five consecutive words from another's writings will be considered plagiarism, as can improper paraphrasing. All ideas or concepts drawn from another's work should be properly cited. NOTE: A student who shows or lends to their classmates their own work is at risk of being an accessory to plagiarism and, if their work is copied, will suffer the same consequences as the student who plagiarizes (see section 1.1.6 of the Definition of Academic Dishonesty). This policy also applies to students in previous courses who show or lend their work to current students.

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

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/.

Biology 101, Fall 2013, Course Schedule - subject to change with fair warning

	Date		Topics	Assignment Deadlines & Reading Schedule*	
1	Aug 26		Introduction to course (in class) Nature of Science; Card Exchange (Science, According to Rigo) (in class)		
2	Sept 2		No class – Labor Day		
3	Sept 9	Unit	Evolution 1 lecture (in class) Darwin's Dangerous Idea documentary)	BioAnth** Ch 1 & 2 "Science, According to Rigo" write-up due by 5 p.m. to Canvas	
4	Sept 16	<u>-</u>	Evolution 2 lecture (in class) Evolutionary Arms Race documentary (outside of class; see study guide & link on Canvas)	BioAnth Ch 3	
5	Sept 23			Evolution 3 lecture (in class) Why Sex? documentary (outside of class; see study guide & link on Canvas)	BioAnth Ch 4
6	Sept 30		Exam 1 (in class)		
7	Oct. 7	J	Primates 1 lecture (in class) Living Primates documentary (outside of class; see study guide & link on Canvas) Wilds of Madagascar documentary (outside of class; see study guide & link on Canvas)	BioAnth Ch 6: pp. 160-183	
8	Oct. 14	Unit	No class (time credited for field trip to San Francisco Zoo)		
9	Oct. 21	2	Primates 2 lecture (in class) Monkey in the Mirror documentary (outside of class; see study guide & link on Canvas)	BioAnth Ch 6: pp. 184-192	
10	Oct. 28		Exam 2 (in class)	"An Excursion to the Zoo" due at beginni of class in print and also to Canvas.	
11	Nov. 4		Fossils in Geologic Context lecture (in class) Mystery Fossil activity (Part 1)	BioAnth Ch 8; FH xi – xix, plus Introduction;	
12	Nov. 11			Veteran's Day - no class	
13	Nov. 18				First Human Quiz 1 (Chapters 1 – 6) Human Evolution 1 lecture Mystery Fossil activity (Part 2) Great Transformations documentary (outside of class; see study guide & link on Canvas) First Bipeds documentary (outside of class; see study guide & link on Canvas)
14	Nov. 25		First Human Quiz 2 (Chapters 7 – 13) Human Evolution 2 lecture (in class) Mind's Big Bang documentary (outside of class; see study guide & link on Canvas)	BioAnth Ch 12 & 13 FH Ch 7 – 13 Voodoo Science Ch 1	
15	Dec. 2		3	First Human Quiz 3 (Chapters 14-17 plus Introduction) Human Evolution 3 lecture (in class) Voodoo Science – discussion & in-class activity PreModern Humans & Neandertals on Trial documentaries (outside of class; see study guide & link on Canvas)	BioAnth Ch 14 FH Ch 14 – 17 (review Introduction) Mystery Fossil write-up due by 5 p.m. to Canvas Voodoo Science discussion summary due by end of class to Canvas.
16	Dec. 9			No class (time credited for field trip to San Francisco Zoo)	
Final	exam		Final exam : In class on Dec. 12 from 2:45 to 5 p.m.; take home component due Sunday 12/15/2013 at 5 p.m. to Canvas.		