

San José State University
College of Social Science/Department of Environmental Studies
ENVS 10: Life on a Changing Planet, Spring 2022
SECTION 86

Course and Contact Information

Instructor:	Rainbow DeSilva
Office Location:	Virtual: (Via Zoom)
Telephone:	ENVS main office: (408) 924-2772
Email:	rainbow.desilva@sjsu.edu or Canvas Inbox
Office Hours:	Wednesday 9:30am – 11:00am, and by appointment
Class Days/Time:	Asynchronous: Lectures will be posted to Canvas
GE Area Covered:	B2

Course Format

This course will be taught 100% online, with weekly recorded lectures posted on our Canvas website. The course will have online assignments, quizzes, and exams, etc. The course requires a computer with internet connectivity. Course materials will be made available on the Canvas website [here](#). You are responsible for checking Canvas regularly for announcements, assignments, and other course information and materials.

Course Overview and Description

This course is designed to provide the basic skills and knowledge necessary to engage in biological and environmental problem solving. Living systems are complex and in constant flux. The course materials emphasize understanding the scientific method and using the weight of scientific evidence in the analysis of conflicting data and viewpoints. Students will obtain knowledge of biological and ecological science as a basis for understanding current threats to biodiversity. My main goal is to provide a basic understanding of living systems, give information on a multitude of environmental issues we face, and prepare you to critically examine biological and environmental issues. This a GE/SJSU Studies category B2 course.

Learning Outcomes

Program Learning Outcomes (Environmental Studies)

1. Students are able to write a logical analytical paper using good writing style and construction, supported by appropriate research. Assignments will require students to understand and summarize materials in relevant scholarly/technical articles, and to identify basic solutions from an interdisciplinary standpoint.
2. Students are able to determine, apply, and interpret appropriate basic statistical or other quantitative analyses to environmental data. Students will be able to articulate and test hypotheses, and read and understand graphs and basic statistics.

Course Learning Outcomes (CLO)

1. Students should be able to use the methods of science and knowledge derived from current scientific inquiry in life or physical science to question existing explanations.
2. Students should be able to demonstrate ways in which science influences and is influenced by complex societies, including political and ethical issues.
3. Students should be able to use the methods of science, in which quantitative, analytical reasoning techniques are used, as well as be able to express themselves in proper written English.

GE Learning Outcomes (GELO)

This is a Category B2 General Education course, and as such, students will develop and demonstrate the following objectives:

1. gain a basic understanding of the structures and processes of living systems;
2. learn about the scientific method and how the body of scientific knowledge advances;
3. gain experience with the testable frameworks and the qualitative and quantitative methods scientists use to collect data;
4. develop tools to critically analyze controversial scientific issues from a life scientist's perspective;
5. acquire an understanding of the interrelationships between science, economics, ethics, and policy in environmental decision-making by society;
6. develop an understanding of how and to what extent human activities are affecting the earth's living systems.

Information Literacy Learning Outcomes (ILLO)

1. An information literate student determines the nature and extent of the information needed. The information literate student defines and articulates the need for information, as well as identifies a variety of types and formats of potential sources for information.
2. An information literate student evaluates information and its sources critically and incorporates selected information into his/her knowledge base. Students summarize the main ideas to be extracted from the information gathered, articulates, and applies criteria for evaluating both the information and its sources and synthesize main ideas to construct new concepts.
3. The information literate student understands the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Required Texts/Readings

Textbook: Simon, Eric J. 2019. *Biology: The Core*. Third edition. Pearson Publishing. ISBN10: 0-13-489151-1. Additional readings/videos will be provided/accessible on Canvas.

Other technology requirements / equipment / material

This class is taught 100% online. We will do everything online through Canvas. Canvas will be used for assignment submission, discussions, testing and communication. Lectures will be recorded asynchronously and posted on Canvas. You will need access to a computer with a reliable internet connection, Microsoft Word/ Google docs, Power Point/Google slides, CANVAS and Zoom.

WiFi hotspots are available to check out locally through the San Jose Public Library System, which has 25 branches throughout San Jose. For more information on Wi-Fi hotspots check sjpl.org/hotspot. *If you have challenges with computer equipment or internet service, please let me know as a variety of help is available.*

Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The [University Academic Integrity Policy F15-7](#) 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](#) is available for further review. 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 F06-1 requires approval of both instructors.

Resources for Students

There are many resources on campus available to you. Some examples include: SJSU Peer Connections Center, the College of Social Science Access Center, SJSU Writing Center, SJSU Computing Services, SJSU Counseling and Psychological Service, SJSU Student Health Center, the Academic Success Center, and many places to use or get help with technology. For links to some available resources please see the [Syllabus Information web page](#) or reach out to me and I can provide additional information.

Course Requirements and Assignments

Time commitment: Set aside enough time for our class each week to get through the material. Is expected that for each unit of credit the student will spend approximately three hours per week for instruction, preparation/studying, or course related activities. This is a 3-unit class. As such, please expect to spend ~9hours per week on class materials, including class time, reviewing your notes, doing assignments and readings, and exam preparation.

Exams

Two exams will be given to test your understanding of the material presented in the lectures, readings, and in-class activities. The midterm exam will be available through canvas and available for limited time period. Please do not miss an exam as you will not have the opportunity to make it up. **We will have a midterm exam on Monday March 21st and a final exam on Wednesday May 18th. These exams will open at 6:00am on the day of the exam and be available for 24hours.**

Make-up exams may be considered for legitimate and documented circumstances (i.e., medical emergency, death in the family).

Quizzes

Several quizzes will be given throughout the semester. These will be short, timed quizzes to be completed on Canvas by 11:59pm on the assigned day. These quizzes will be based on previous class material as well as the readings/videos assigned for the week. Quizzes are timed but will be available for a period of up to 24 hours prior to the due date. During the quiz open period you may log-in to Canvas and take the timed quiz at a time of your choosing. Be sure to log-in and complete the quiz BEFORE the closing time. Quizzes are individual activities and are not to be taken with other classmates. **During Canvas quizzes and exams, do not use ANY other electronic devices (cell phones, tablets, other computers).** This is considered cheating and will result in a failing grade. There will be no make-up quizzes available. I will provide 9- quizzes and your grade will be based on the top 8 scores (your lowest quiz score will be dropped).

Assignments

There will be varying types of assignments throughout the semester. These assignments are designed to aid in your understanding of the course material, as well as develop skills in evaluating, analyzing, and communicating information about environmental issues. All assignments are expected to be typed and submitted through Canvas unless otherwise noted. Cumulatively, the assignments will make up a major portion of your grade for this course.

Field Trip

You will be given a list of field trip locations (or virtual locations) and are required to visit one. This will be done outside of class time, but you will have the entire semester to visit and learn about one of the field trip locations (or virtual field trip activity) and complete a write-up. Details will be given in class.

Class Participation

This is an asynchronous online course, however students are expected to complete the assigned readings, watch recorded lectures, take good notes, ask questions, turn assignments in on time, and participate in online discussions and activities. You will receive participation points for contributing to online discussions and participating in activities. Over the semester, I will also be organizing several online study hours and will also have office hours regularly. Coming to these hours is optional, but a highly recommended way to participate in the learning process. **Also**, a thoughtful question shows that you are working with the material. Questions are

appreciated and encouraged.

Formatting

Please note that all assignments need to be formatted as follows: 12 point font, Times New Roman, 1 inch margins, doubled spaced, include a header with student ID and date, and uses Turabian/Chicago author-year citation style where applicable. A 10% deduction will occur for not following these guidelines.

Canvas Instructions

All assignments are due before 5:00pm on the due date listed in Canvas. It is your responsibility to check Canvas and for announcements about class activities, assignments, posting of lecture videos, etc..

University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) at <http://www.sjsu.edu/senate/docs/S16-9.pdf>, relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is 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/>". Make sure to visit this page, review and be familiar with these university policies and resources.

Consent for 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. See [University Policy S12-7](http://www.sjsu.edu/senate/docs/S12-7.pdf), <http://www.sjsu.edu/senate/docs/S12-7.pdf>.

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.

Grading Overview and Assessment of Learning Objectives

<i>Assignment</i>	<i>Points</i>	<i>Learning Objectives</i>
Quizzes (8)	80	CLO #1, 2, PLO #2, GELO #1, 2, 3
Exam 1	100	CLO #2, 3, PLO # 2, GELO #1, 2, 5, 6
Exam 2	100	CLO #2, 3, PLO #2, GELO #1, 2, 5, 6
Scientific Paper Analysis	60	CLO #3, PLO #1, 2, ILLO# 1, 2, 3, GELO # 2, 3, 4, 5, 6
Ecology Assignment	25	CLO #1, 2, 3, GELO #4, 5, 6
Evolution Assignment	25	CLO #2, GELO #5, 6
Conservation Assignment	25	CLO #2, GELO #5, 6
Sustainability Assignment	25	CLO #2, GELO #5, 6
Field Trip Write-Up	60	CLO #2, 3, GELO #1, 5, 6
Discussion Participation	50	CLO #1, 2, 3 PLO #2, GELO #1, 2, 3, 4, 5, 6
TOTAL	550	

Grade Scale

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

Late Work

All assignments are **due before 5:00pm on the due date** unless noted otherwise. Late work is **NOT** accepted. Exceptions will be considered for legitimate and documented circumstances (i.e. medical emergency, death in the family).

Course Schedule (May be changed based on course progress)

Date	Class Topics/Activities	Readings	Assignments
Week 1: 26 Jan	Intro/syllabus/Scientific method		Meet and Greet
Week 2: 31 Jan	Scientific papers and information	SJSU Academic Integrity	
	Biology: Cells and Chemistry	C1: Sec 1.4-1.10	Quiz 1
Week 3: 7 Feb	Biology: Cells and Chemistry	C1: Sec 1.1-1.3; C2 & C3	
	Photosynthesis, Respiration	C4	Quiz 2; Env. Project topic
Week 4: 14 Feb	Water and nutrient cycles	C12: Sec 12.15-16	
	Water and nutrient cycles		Quiz 3
Week 5: 21 Feb	Ecology: energy flow	C12: Sec12.1-12.14	
	Ecology: interactions, population		Env. Project Due
Week 6: 28 Feb	Sea-Otter case study	Sea Otter PDF	Quiz 4
	Ecology: Biomes	C12	
Week 7: 7 Mar	Ecology: Biomes		Ecology assignment
	Genetics	C5, C6	Quiz 5
Week 8: 14 Mar	Genetics and inheritance		
	Midterm review		
Week 9: 21 Mar	Midterm EXAM (Monday)		
	Evolution	C7: Darwin Video	
28-31 Mar	SPRING BREAK		
Week 10: 4 Apr	Evolution / Diversity of life	C8 - C10	Evolution assignment
	Bio Impact: habitat loss and pollution	C12: Sec 12.10-11	Quiz 6
Week 11: 11 Apr	Impact: invasives, overconsumption	C12: Sec 12.19	Conservation Assignment
	Impact: Climate change		
Week 12: 18 Apr	Climate change continued	Climate reading	Field trip visit
	Trends in Biodiversity		Quiz 7
Week 13: 25 Apr	Marine - systems	Ocean acidification	
	Forests - systems		Quiz 8
Week 14: 2 May	Food - systems		
	Sustainability	C12 Sec 12.17-18	Sustainability Assignment
Week 15: 9 May	Environmental Ethics and Justice		Quiz 9
	Policy, ethics, justice		Field Trip Write-up
Week 16: 16 May	Final review		
FINAL EXAM	Wednesday May 18		