

**San José State University**  
**College of Social Sciences/Department of Environmental Studies**  
**EnvS 10, Life on a Changing Planet, Sections 80 & 81, Fall, 2021**

**Course and Contact Information**

Instructor:	Dr. Metha Klock
Office Location:	Washington Square Hall 115C
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Email:	metha.klock@sjsu.edu
Office Hours:	Thursdays 10:00pm – 12:00pm, or by appointment
Teaching Assistant:	Charlotte Miranda (charlotte.miranda@sjsu.edu)
Class Days/Time:	Section 80: Monday/Wednesday 9:00am – 10:15am Section 81: Monday/Wednesday 10:45am – 12:00pm
Classroom:	Online
Prerequisites:	GE B2
Finals Day:	Section 80: Thursday, December 9, 2021, 7:15am – 9:30am Section 81: Wednesday, December 8, 2021, 9:45am – 12:00pm

**Course Format**

This course has online via Canvas and in person via Zoom lectures, online assignments, quizzes, and exams. This course requires the daily use of a computer with Internet connectivity. Course materials such as the syllabus, assignment instructions, quizzes, and exams are on the [Canvas Learning Management System \(Canvas\)](http://sjsu.instructure.com) course website at <http://sjsu.instructure.com>. You are responsible for regularly checking Canvas for announcements and emails from your instructor.

**Course Description**

The purpose of this course is to give you the basic skills and knowledge necessary to critically examine biological and environmental issues. Living systems are in a constant state of change, both as a result of natural processes and human activities. The course materials emphasize the understanding and use of the scientific method and the analysis of conflicting data and viewpoints. Students will use life science information to analyze environmental issues and debates by considering scientific consensus and the weight of scientific evidence.

This course is, at its heart, a biology course. What makes it different is the application of the material to environmental issues. These two subject areas are closely linked, though rarely taught together. By presenting this information together students gain both a basic understanding of living systems and the environmental issues that such systems currently face. This course should also provide students who will go on in the field of Environmental Studies the basic scientific tools to support their arguments and communicate within the scientific community.

## **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.

### **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.

### **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.

### **Information Literacy Learning Outcomes**

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 synthesizes 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, 3<sup>rd</sup> Edition. Pearson Publishing. ISBN10: 0-134-8915-11.

Other readings may be assigned and will be available on Canvas. Text is available at the SJSU bookstore and from online retailers.

### **Other Readings**

Additional readings available on Canvas.

## Other technology requirements / equipment / material

You will need access to a computer with Microsoft Word and the Internet.

## Library Liaison

Peggy Cabrera ([peggy.cabrera@sjsu.edu](mailto:peggy.cabrera@sjsu.edu) or 408-808-2034) is the Library Liaison for the Department of Environmental Studies. She is a great resource who is available at the Reference Desk in MLK Library Tuesdays 11am-1pm, or by appointment.

## Course Requirements and Assignments

I expect all students to be prepared and actively participate in ALL scheduled meeting times and Canvas course modules. Preparation for the lecture involves reading the assigned material before class. This will help you understand and remember the material that I go through during in person via Zoom and online Canvas classes, allow you to ask any questions over topics you are not clear on, be able to effectively participate in class activities, and do well on assignments and exams. It is extremely important for you to check Canvas regularly and your syllabus. You are responsible for all announcements, information, and material that you miss.

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. More details about student workload can be found in [University Policy S12-3](http://www.sjsu.edu/senate/docs/S12-3.pdf) at <http://www.sjsu.edu/senate/docs/S12-3.pdf>.

## Attendance

**YOU MUST ATTEND IN PERSON VIA ZOOM CLASS and COMPLETE CANVAS MODULES to get a good grade in the class. Exam questions will be based on information covered during lectures, and important information about tests and assignments will be given during lectures and in person via Zoom. If YOU MISS an in-person via Zoom assignment, such as a quiz, exam, or activity that is worth points toward your grade and do not have a University sanctioned excused absence, you will receive a 0 on that assignment.**

## Canvas Instructions

**For this class, all assignments are to be completed by the individual student unless otherwise specified.** All assignments are to be submitted in electronic form through Canvas unless otherwise noted. If you have trouble with this, please come see me before the due date and time. **All assignments are due at 11:59pm on the due date listed in the course calendar.**

## Lecture Materials

PowerPoint slides and other materials provided during lecture will not always be posted on Canvas. You are expected to work outside of class, attend class in person via Zoom and online via Canvas, and take notes.

## 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. Assignments are expected to be typed and submitted through Canvas (unless otherwise noted). Quizzes will be given based on lectures and readings and as part of your grade you are expected to participate in Canvas discussions. Cumulatively, the assignments will make up a major portion of your grade for this course.

You will also complete a team assignment that will require you to work together in small groups to examine a current environmental issue. More information about this assignment will be provided during class and on Canvas.

Assignment	Point Value	Learning Objectives
<b>Individual Assignments:</b>		
Scientific Paper Analysis	35	CLO 3, PLO 1, 2, ILLO 1, 2, 3, GELO 2, 3, 4, 5, 6
Darwin Questions	15	CLO 1, 2, 3, GELO 1, 2
Biomes Activity	30	CLO 2, GELO 1, 6
Sea Otter Case Study	40	CLO 1, 2, 3, PLO 2, GELO 1, 2, 3, 5
Sustainability Activity	25	CLO 2, GELO 5, 6
Ethics Response	20	CLO 2, GELO 4, 5, 6
Climate Change Reflection	10	CLO 1, 2, 3, GELO 4, 5, 6
Canvas Quizzes and Discussion	+/- 200	CLO 1, 2, 3 PLO 1, 2, GELO 1, 2, 3, 4, 5, 6
<b>Exams:</b>		
Midterm	100	CLO 2, 3, PLO 2, GELO 1, 2, 5, 6
Final Exam	100	CLO 2, 3, PLO 2, GELO 1, 2, 5, 6
<b>Team Assignments:</b>		
	<b>Team</b>	<b>Individual</b>
Team Contract	20	
Individual Topic Idea		20
Icebreaker Summary	10	20
Individual Topic Research Paper		60
Topic Presentations	20	
Conversation #2 Summary	20	
Individual Webpage Draft		50
Peer Review of Webpage	30	
Global Views Website	30	70
Team Evaluation	20	
<b>Estimated Total</b>	<b>+/- 945</b>	

### Final Examination or Evaluation

One midterm and one final exam will be given to test your understanding of the material presented in the lectures, readings, and in-class activities. The final will be cumulative and partially based on the midterm. The exams will constitute a large portion of your grade. Please do not miss an exam as you will not have the opportunity to make it up. Make-up exams may be considered for legitimate and documented circumstances (i.e., medical emergency, death in the family) with proper documentation.

More details can be found in [University policy S17-1](http://www.sjsu.edu/senate/docs/S17-1.pdf) (<http://www.sjsu.edu/senate/docs/S17-1.pdf>) which states that “Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment.”

### Grading Information

Your grade will be based on your exams, assignments, and class participation. All assignments are to be turned in through Canvas before the specified due date and time unless otherwise indicated.

### Determination of Grades

Grade	Points	Percentage
<i>A plus</i>	917-945	97 to 100%
<i>A</i>	879-916	93 to 96%
<i>A minus</i>	851-915	90 to 92%
<i>B plus</i>	823-850	87 to 89 %
<i>B</i>	785-822	83 to 86%
<i>B minus</i>	756-784	80 to 82%
<i>C plus</i>	728-755	77 to 79%

<i>Grade</i>	<i>Points</i>	<i>Percentage</i>
<i>C</i>	<i>690-727</i>	<i>73 to 76%</i>
<i>C minus</i>	<i>662-689</i>	<i>70 to 72%</i>
<i>D plus</i>	<i>634-661</i>	<i>67 to 69%</i>
<i>D</i>	<i>596-633</i>	<i>63 to 66%</i>
<i>D minus</i>	<i>567-595</i>	<i>60 to 62%</i>

### **Extra Credit**

If appropriate, there may be an extra credit assignment for this course.

### **Penalty for Late or Missed Work**

Assignments are due on the date given as a due-date on Canvas. Assignments turned-in later than the due date/time will have 10% subtracted from the overall score for each day late (starting immediately after the time the assignment is due), and assignments that are three or more days late will not be accepted or graded. If four or more assignments are turned in late you will not pass this class. There are no late quiz or exam allowances or extensions unless you have a University sanctioned excused absence. If you are going to miss class due to an excused absence, please let the instructor know as soon as possible and ideally a week in advance of your absence.

### **Classroom Protocol**

#### **Participation**

This is a lecture course, however there is a participation component. Students are expected to participate in Canvas quizzes and discussions, attend class in-person via Zoom meetings, complete the assigned readings before class, take good notes, ask questions, turn assignments in on time, and participate in class debates, discussions, and activities. You will receive points for contributing to debates and discussions and participating in activities. A thoughtful solid question shows that you not only understand the material but are thinking about it on a deeper level; as such, credit will be given for thoughtful questions.

#### **Acceptable Classroom Behavior**

Any behaviors that disrupt the classroom or show disrespect to the lecturer or other students will not be tolerated.

**RESPECT STATEMENT:** A goal of this course is to create and maintain a learning environment that is respectful and open. All students are expected to value and respect the views, beliefs, and opinions of their fellow class members and to contribute to creating a positive learning atmosphere that is open to inquiry and communication. Strongly held views should be expressed in assertive terms rather than with accusation, blame, or judgment. Students should also be mindful of using inclusive language to create a classroom in which people with different gender, racial, sexual, ethnic, ability, and age identities are treated with equal value and respect.

#### **Formatting of Assignments**

- Double spaced with 1" margins
- Times New Roman, 12pt font
- Page numbers in lower right-hand corner of page
- Name, course code and section in the upper right-hand corner of page
- Microsoft Word document

#### **University Policies**

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<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 of 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.

## Academic Integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The [University Academic Integrity Policy S07-2](http://www.sjsu.edu/senate/docs/S07-2.pdf) at <http://www.sjsu.edu/senate/docs/S07-2.pdf> 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.sjsu.edu/studentconduct/) is available at <http://www.sjsu.edu/studentconduct/>. 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 on the assignment 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 Counseling and Psychological Service, SJSU Student Health Center, the Academic Success Center, and many places to use or get help with technology. See the [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/> for more info or come see me.

## EnvS 10 / Life on a Changing Planet, Fall, 2021, Course Schedule

This is a tentative schedule for the class and is subject to change. **It is the student's responsibility to keep up to date with changes in the class schedule.** Quizzes and Canvas discussions are not listed. **Assignments are due to Canvas by 11:59pm on the assigned date unless otherwise posted.** Additional readings will be assigned throughout the semester and posted on Canvas.

Week	Date	Class Topics	Zoom / Online	Readings	Assignments and due dates (due 11:59pm)
1	M 8/23	Introduction to course, what is science?	Online	Academic Integrity Policy S07-2	
1	W 8/25	Team project overview meeting	Zoom		Pre-Course Survey
2	M 8/30	Hypothesis testing, theories, evaluating evidence and sources	Online	Ch. 1	
2	W 9/1	Scientific paper	Online		Team & Class Contracts
3	M 9/6	Labor Day – no class			
3	W 9/8	Team meeting The chemistry of life and cells	Zoom Online	Ch. 2-3	Individual Topic Selection Scientific Paper Analysis
4	M 9/13	Energy and life	Online	Ch. 4, Ch. 12.7-12.8	
4	W 9/15	Energy and life	Online		
5	M 9/20	The diversity of life	Online	Ch. 12.11	
5	W 9/22	Evolution and the tree of life	Online	Ch. 7.1,7.4-7.9	
6	M 9/27	Team meeting	Zoom		
6	W 9/29	Natural selection	Online	Ch. 7.2-7.3	Icebreaker Summary
7	M 10/4	Darwin documentary	Online		
7	W 10/6	Species concepts	Online	Ch. 7.10-7.13	Individual Topic Paper
8	M 10/11	Genetics	Online	Ch. 5	
8	W 10/13	Genetic engineering	Online	Ch. 6	Darwin Questions Topic Presentations
9	M 10/18	Population growth	Online	Ch. 12.1-12.6	
9	W 10/20	Biomes / Biomes activity	Zoom	Ch. 12.12-12.13	Conversation #2 Summary
10	M 10/25	Team meeting	Zoom		
10	W 10/27	Midterm	Online		Individual Webpage Draft
11	M 11/1	Biodiversity	Online	Ch. 8-9, Ch. 12.9	Biomes Activity
11	W 11/3	Conserving biodiversity	Online	Ch. 10, Ch. 12.10	
12	M 11/8	Sea Otter Case study	Online		
12	W 11/10	Water and nutrient cycles	Online	Ch. 12.14-12.16	Peer Review of Webpage
13	M 11/15	Sustainability	Online	Ch. 12.17-12.18	
13	W 11/17	Team meeting Sustainability activity	Zoom Online		Sea Otter Case Study
14	M 11/22	Global climate change	Online	Ch. 12.19	
14	W 11/24	Thanksgiving Holiday – no class			Global Views Website
15	M 11/29	Global climate change	Online		Sustainability Activity
15	W 12/1	Ethics activity Policy, ethics, justice	Zoom Online		Team Evaluation Post-Course Survey
16	M 12/6	Wrap-up and course evaluations	Zoom		Ethics Response
		<b>Final Exam</b>		Section 80: Thursday, December 9, 2021, 7:15am – 9:30am Section 81: Wednesday, December 8, 2021, 9:45am – 12:00pm	