San José State University
College of Social Science/Department of Environmental Studies
ENVS10 - SEC01 (27782)
Life on a Changing Planet
Spring 2023

Course and Contact Information

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Class Days/Time:	M/W 3:00-4:15pm
Classroom:	Dudley Moorhead Hall (DMH) 164
GE/SJSU Studies Category:	B2

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 intricately linked, though rarely taught together. By presenting this information together, it is my hope that at the end of the course you will have gained both the basic understanding of living systems, and the environmental issues that such systems currently face. It is also my hope that those of you who will go on in the field of Environmental Studies will have gained the basic scientific tools to support your arguments.

This a GE/SJSU Studies category B2 course. Life Science B2 courses focus on: a) structures and functions of living organisms; b) levels of organization of living systems - from atom to planet; c) strategies for survival and reproduction; d) patterns of evolution; e) principles of genetics, including basis for variation; and f) interaction of organisms with the natural environment.

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 of 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/Materials

Textbook

Simon, Eric J. 2019. Biology: The Core. Third edition. Pearson Publishing. ISBN10: 0-134-8915-11. This book is available through the bookstore or from online retailers.

Packback

Packback deep dives is a writing and critical thinking application. You must have Packback to participate in this course. The application costs about $29 for the semester.

Other Readings and Materials

Additional readings, videos, and other course materials will be available on Canvas.

Other technology requirements / equipment / material

You will need access to a computer with an internet connection, Microsoft Word, Powerpoint, Canvas, You Tube and Zoom for both in-person and online classes. Canvas will be used extensively for all aspects of class: assignment submission, discussions, testing and communication. By University mandate our first lectures will be online until 2/14/2022. During this time, we will use Zoom for lecture and discussion time. Lectures may be recorded asynchronously and posted on Canvas. During in-person class time, always bring paper, a pencil and/or pens to class.

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.*

Library Liaison

Peggy Cabrera (peggy.cabrera@sjsu.edu) is the Library Liaison for the Department of Environmental Studies. She is a great resource, available for helping with research projects and scientific reference searches.

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. Such permission allows the recordings to be used for your private study purposes only.

Additionally, 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, homework solutions, in-class audio/video recordings, etc. without instructor consent.

See University Policy S12-7 at http://www.sjsu.edu/senate/docs/S12-7.pdf.

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 at http://www.sjsu.edu/senate/docs/F15-7.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 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 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 University Academic Integrity Policy F15-7 requires approval of both instructors.

Plagiarism, intentional or not, will not be tolerated in this course. This course is designed to provoke critical thought and writing, and plagiarism will not help you to become a better thinker or writer. For an extensive read of the University guidelines for dealing with plagiarism, see the [University Academic Integrity Policy F15-7](sjsu.edu/senate/docs/F15-7.pdf) at sjsu.edu/senate/docs/F15-7.pdf. *The first incidence of plagiarism will result in a zero (0) for the assignment and a report filed with the Office of Student Conduct and Ethical Development as required by SJSU. A second incidence of plagiarism may result in a failing grade for the course and a second report filed.* **Cite the source for any fact not understood to be common knowledge.**

Here is an idea of what plagiarism looks like – this does not replace the definition of plagiarism found at the above link to the Academic Integrity Policy:

You are plagiarizing or cheating if you:

✔ For written work, copy anything from a book, article, or website and add or paste it into your paper without using quotation marks and/or without providing the full reference for the quotation, including page number.

✔ For written work, summarize/paraphrase in your own words ideas you got from a book, article, or the web without providing the full reference for the source (including page number in the humanities).

✔ For an oral presentation, copy anything from a book, article, or website and present it orally as if it were your own words. You must summarize and paraphrase in your own words and bring a list of references in case the professor asks to see it.

✔ Use visuals or graphs you got from a book, article, or website without providing the full reference for the picture or table.

✔ Recycle a paper you wrote for another class.

✔ Copy from a classmate or use someone else's work as if it were your own.

✔ Use technology or smuggle in documents to obtain or check information in an exam situation.

In writing a paper, it is always better to include too many references than not enough. When in doubt, always err on the side of caution. If you have any questions or uncertainty about what is or is not cheating, it is your responsibility to ask your instructor.

AI (Artificial Intelligence) in the Classroom

We are on the cusp of potentially great changes to our academic world related to AI. The following information was put together by our ENVS department technology in education expert, Mary Poffenroth, and is a beginning to engaging with these unfolding technologies.

From Mary Poffenroth, ENVS Department:

"The crux of the problem with AI in education is threefold:

1. Submitting work as your own that you did not create is defined as academic dishonesty under our current university guidelines and has a sliding scale of consequences, from failing the assignment to failing a class to being removed permanently from the university, depending on the severity and number of occurrences.
2. AI content creation engines, like OpenAI, are not always correct, and for general education classes like ours, you don't always have the content area expertise to know when things are wrong.
3. The act and practice of writing are official requirements of our class, as set forth by the university. If you have an external source – whether another person or tech – complete your writing requirement, then you can't be said to have mastery over the writing requirements of our class.

So, you may ask yourself where the line is drawn between an assistive tool that uses AI machine learning and NLP-Natural Language Processing like Grammarly or Packback (which is 100% approved for usage) and an AI content creation engine like OpenAI (which is not approved for use in our class). The best way I can describe the difference would be to use the analogy of building a house. Whether you have the best hammer or the cheapest, if you are hammering the nails into the wood itself, you can say to have built the house yourself. However, if you just gave a work crew the address and some general guidelines and then left, you can't claim to be a house builder. Grammarly is a tool, like having a really nice hammer. OpenAI (Jasper, ChatGPT, GPT-3, GPT-4, etc) is leaving a work crew with just some basic guidelines and an address while you're on the other side of town having lunch.

In our class, the process is part of the point. The process of researching and writing with low stakes now will better equip you to navigate higher-stakes, more complex problems in the future.

Whether a paid ghostwriter or an AI, using any person or service to create work for you that you submit for credit as if it were your own goes against our academic integrity policy. Additionally, ensure you feel confident in understanding the SJSU Academic Integrity Policy, and please let me know if any questions come up!

Like the calculator, AI is here to stay. It will just be up to us as ethical members of the academic community to discern how, when, and where it's appropriate to use."

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. See the Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/ for more info or come see me.

Course Requirements and Assignments

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.

Class Attendance and Communication

You must attend class to achieve a good grade in the class. It is your responsibility to check Canvas and your email daily for announcements about class activities and assignments. Quiz and exam questions will be based on the information covered during the lecture, and important class information about tests and assignments will be given during the lecture. If you miss class and you do not have a university sanctioned absence excuse, you will not be able to make up any quizzes, exams, participation points, or assignments on that day. You will receive 0 points. If you are absent, it is your responsibility to find out what you missed by checking Canvas for any announcements and class assignments and then asking another student what you missed in class that day. Do not email me asking what you missed or what you need to do until you have first followed both these steps.

Canvas Instructions

For this class, all assignments are to be completed by the individual student unless otherwise specified. All written take home assignments are to be submitted in electronic form through Canvas unless otherwise noted. If you have trouble with Canvas submissions, please discuss with me *before* the due date and time. **All assignments are due on the due date and time listed in the course calendar.**

Lecture Materials

PowerPoint slides and other materials provided during lectures will not always be posted on Canvas. You are expected to work outside of class, attend class, and take notes during lectures.

Quizzes and Exams

Two exams and several quizzes will be given to test your understanding of the material presented in the lectures, readings, and in-class activities. Exams may be in-class or online and open for a certain period. 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 only (i.e., medical emergency, death in the family).**

Several quizzes will be given throughout the semester. These will be short, timed quizzes to be completed either on Canvas, due on the assigned day, or given in person in class. These quizzes will be based on previous class material, readings, and videos assigned for the week. 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) to look up question answers. This is considered cheating and will result in a failing grade. No make-up quizzes will be given.*

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

This course requires a field trip, which is self-directed and in-person. This will be done outside of class time, but you will have most of the semester to visit and learn about one of the field trip locations and complete a write-up. Details will be given in class.

Class Participation

This is a lecture course with a strong participation component. Students are expected to review all assigned lecture slides and videos, complete the assigned readings before class, take good notes, attend question and

discussion sessions, turn assignments in on time, read book chapter assignments and class handouts, and participate in class discussions and group activities. You will receive participation points for contributing to 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. **You must be present and prepared to receive participation points; there are no make-up points for a missed class**.

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 name and date, and uses Turabian/Chicago author-year citation style where applicable. All documents must be submitted in Word, PPT or PDF format. A 10% deduction will occur for not following these guidelines. Put your name and section number on every document you submit. Note: this document follows our class format.

Classroom Protocol

In person/On Campus class: Turn off and put away cell phones when you enter the classroom. The use of laptops during class time will be restricted to in-class activities and note taking. Students who use their computers for other activities or who abuse the equipment in any way, at a minimum, will be asked to leave the class and will lose participation points for the day. Any use of electronic devices while taking online (Canvas) or in-class quizzes and exams is considered cheating and will result in a failing grade.

University Policies

Per University Policy S16-9 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 at http://www.sjsu.edu/gup/syllabusinfo/". Make sure to visit this page, review and be familiar with these university policies and resources.

COVID

All students are expected to comply with campus/CSU policies regarding covid precautions. Review the University policies and directives and the resources below to ensure that you understand and follow current policies and guidelines.

Grading Information

Your grade will be based on your quizzes, exams, assignments, and class participation. Total points possible may change based on progress of the semester.

Grading Overview and Assessment of Learning Objectives

Assignment	Points	Learning Objectives
Quizzes (4)	60	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
Env. Science Topics (3)	120	CLO #3, PLO #1, 2, ILLO# 1, 2, 3, GELO # 2, 3, 4, 5, 6
Ecology Assignment	30	CLO #1, 2, 3, GELO #4, 5, 6
Evolution Assignment	30	CLO #2, GELO #5, 6
Sustainability Assignment	30	CLO #2, GELO #5, 6
Field Trip Write-Up	30	CLO #2, 3, GELO #1, 5, 6
Participation/Discussion	100	CLO #1, 2, 3 PLO #2, GELO #1, 2, 3, 4, 5, 6
TOTAL	***600***	

Grade Scale

100% = A+	93% - 99% = 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	

Penalty for Late or Missed Work

Assignments are due on the date given on your course schedule and in Canvas. Assignments turned in later than the due date/time will have 10% subtracted from the score per day for each day late. Assignments more than one week late will not be accepted for grading. *Exceptions may be considered for legitimate and documented circumstances only (i.e. medical emergency, death in the family).* ***There will be no make-up quizzes or exams. Please plan accordingly and consider submitting extra credit activities to make-up for missing a quiz.***

Extra Credit

Life happens and missing a class or deadline may happen too. Extra credit is offered periodically, to allow students to make up points they may have missed. Students are responsible for recording the details of any offered extra credit assignments that may be offered.