

San José State University
College of Social Sciences/Department of Environmental Studies
ENVS 10 S1 Life on a Changing Planet, Spring 2016

Course and Contact Information

Instructor:	Gina Bacigalupi
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Office Hours:	By appointment.
Class Days/Time:	Mondays & Wednesdays: 9-10:15am
Classroom:	Dudley Moorhead Hall (DMH) 164
LAST DAY of CLASS:	Monday, May 16 th , 2016
FINALS DAY:	WEDNESDAY, MAY 18 th , 2016: 7:15-9:30am

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 content emphasizes 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, it is hoped 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 hoped that those of you who will go on into the field of Environmental Studies will have gained the basic scientific tools to support your arguments.

Learning Outcomes

*Please see the Overview of Points Available section for specifics on how each Outcome is met.

GE Learning Outcomes (GELO)

Upon successful completion of this course, students will be able to:

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)

Upon successful completion of this course, students will be able to:

1. Use the methods of science and knowledge derived from current scientific inquiry in life or physical science to question existing explanations
2. Demonstrate ways in which science influences and is influenced by complex societies, including political and ethical issues
3. 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

Program Learning Objectives (Environmental Studies) (PLO)

Upon successful completion of this course, students will be able to:

1. 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. 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.

Information Literacy Learning Objectives

Upon successful completion of this course, students will be able to:

1. Determine 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. Evaluate 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. Understand the economic, legal, and social issues surrounding the use of information, and accesses and uses information ethically and legally.

Required Text/Readings

Textbook

Simon EJ. 2014. Biology: The Core. Pearson Publishing 408 p.
ISBN10: 0-321-73586-2; ISBN-13: 978-0321735867

Other Reading

Additional readings may be assigned but will be handed out in class and/or posted on Canvas

Other equipment / materials

- Writing implement (pencil and black/dark blue pen)
- Notebook or loose-leaf binder paper
- (Optional but helpful) 3"x 5" index cards

Course Requirements and Overview of Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. 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>.

*Details regarding point value & grading can be found below, under Grading Policy. Also, specific details of assignments will be given as an assignment nears.

Reading & Participation:

This is a lecture course, however there is a participation component. **Students are expected to attend each class on time, complete the assigned readings BEFORE class, take good notes, ask questions, turn assignments in on time, pick up any class handouts, and participate in group discussions and class activities.** You will receive participation points for contributing to discussions and participating in class activities. **You must be present and prepared to receive participation points; there are no makeup points for missed class.** There will also be multiple opportunities for in-class assessment of your progress, which will take the form of (the occasional pop) quizzes, writing responses, group activities, etc and will be put towards participation points.

Canvas:

Copies of the course materials such as the syllabus, calendar, assignment handouts, field trip sites, lecture PowerPoints, etc. will be posted on Canvas. It is YOUR responsibility to register for the course on Canvas and REGULARLY checking it for updates about the course. You may also sign up for alerts. Be proactive and thoroughly search for what you are looking for before contacting the instructor. The instructor will post (and/or email) any last minute changes. You will also be submitting assignments through Canvas (& its Turnitin feature). If you are unsure how to submit assignments through Canvas, please speak with the instructor BEFORE assignments are due.

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. In-class assignments are expected to be completed neatly and thoroughly, while at home assignments are expected to be typed (unless otherwise noted) in **12pt Times New Roman, double-spaced with 1-inch margins all around**. **Failure to follow the formatting instructions will result in a 10% grade reduction for the assignment.** Cumulatively, the assignments will make up a major portion of your grade for this course. **For this class, all assignments are to be completed by the individual student unless otherwise specified.**

General Note about Submitting Assignments:

At home assignments should be turned in as a **hard copy to the instructor at the beginning of the class they are due AND submitted electronically to Canvas by 7am** on the due date, unless otherwise mentioned. The instructor will be using the Turnitin feature on Canvas.

Exams:

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.

Field Trip Assignment:

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

Classroom Protocol

University policy F69-24 at <http://www.sjsu.edu/senate/docs/F69-24.pdf> states, “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.”

General:

Inappropriate use of phones during class is a disruption to all and will NOT be tolerated. This includes texting. Phones should be on silent or off and put away. A first offence will result in a verbal warning, with repeat disruption of the class resulting in forfeiture of participation points, with placing the phone on the instructor’s desk for the remainder of the class meeting or dismissal from the class meeting possible. Notify the instructor in advance if you are expecting a phone call. If you need to take a call, please step outside.

If you would like to or have special needs that require you to use an electronic device (i.e. a laptop) to take notes during lecture, please speak with the instructor. Inappropriate use of electronic devices such as laptops and tablets will NOT be tolerated. They must be used for note-taking, unless otherwise instructed.

Music players and any other electronic devices must be turned off and stored in your backpack/purse.

Please do not come to class intoxicated in any way. You will be asked to leave, and your grade will suffer.

Bottom line: Treat instructor, classmates, and any guest speakers with respect. Be considerate of others.

Reading & Participation:

Please see above, under Course Requirements and Assignments.

Per [University Policy F-69-24](http://www.sjsu.edu/senate/docs/F69-24.pdf) located at <http://www.sjsu.edu/senate/docs/F69-24.pdf>, you will not be awarded points just for attending class. Active participation is critical to success.

Grading Policy

Your final course grade will be based on your assignments and class participation. For each major assignment, you will receive a grading rubric along with assignment instructions. It is your responsibility to ask questions about the instructions and/or the rubric prior to submitting the assignment. Claiming you didn't understand what was expected is not an excuse.

For major assignments, your work will be returned to you with feedback and a completed rubric. It is your responsibility to ask the instructor if you do not fully understand how a portion of the assignment was evaluated. For more minor assignments, such as video responses, you will be graded on completeness and correctness (for non-opinion-based prompts).

There will be participation points assigned to most class meetings. Students will be evaluated using a -, ✓-, ✓, ✓+ system, which will later be converted into a numerical value (0, 1, 3, 5, respectively). As stated above, you will receive participation points for contributing to discussions and participating in class activities.

Grade Scale:
A = 93%-100%
A- = 90%-92%
B+ = 87%-89%
B = 83%-86%
B- = 80%-82%
C+ = 77%-79%
C = 73%-76%
C- = 70-72%
D = 60-69%
F = < 60%

Please note: Grades will not be curved. It is up to the discretion of the instructor whether to bump up a student's grade at the end of the semester. Quality of work, general improvement, and evident effort may be taken into consideration when considering a grade bump. It is also up to the instructor's discretion whether or not to give an A+.

Also, according to [University Policy F13-1](http://www.sjsu.edu/senate/docs/F13-1.pdf) at <http://www.sjsu.edu/senate/docs/F13-1.pdf>, "All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades."

Overview of Points Available*

<i>Assignment</i>	Point Value	Learning Objectives
Midterm	100	CLO #2, 3, PLO # 2
Final Exam	100	CLO #2, 3, PLO # 2
Activities		
Invaders Questions	10	GELO#2, 3, 5, CLO #3, PLO #2
Darwin Questions	10	GELO #1, CLO #2, 3
Scientific Paper Analysis	50	GELO#2, 3, CLO #3, PLO #1, 2, ILLO# 1, 2, 3
Case Study #1	40	GELO #2, 3, 4, CLO #1, 3, PLO #2
Life on the Reef Questions	12	GEO #1, 6, CLO #1, 2, 3
Ethics Discussion Response	10	GELO #4, 5, 6, CLO #2, ILLO# 1, 2, 3
Sustainability Activities	15	GELO #6, CLO #2
Field Trip Write-Up	20	CLO #2, 3
<i>Class Participation</i> (including quizzes, writing responses, & discussions)	150	GELO #1, 2, 3, 4, 5, 6, CLO #1, 2, 3 PLO #2
Total	517*	
(*subject to change)		

Extra Credit:

The instructor will announce in class any opportunities for extra credit. It is YOUR responsibility to record details of these assignments. Think of extra credit as a buffer, not a reason or excuse to not do your best on regular assignments. It is up to the instructor's discretion whether to cap the amount of extra credit students can get. This cap would be the same for all students.

Late Work:

It is **NOT** accepted, so please get your assignments in on time. If you have extenuating circumstances, please speak with the instructor. For instance, if you are ill, please notify the instructor; you will need to provide a doctor's note.

Citation Method:

We will use the Council for Science Editors (CSE) Name-Year citation method. Your go-to resource for citation formatting help is: http://writing.wisc.edu/Handbook/DocCSE_NameYear.html. Any ideas that are not 100% yours MUST be properly cited.

University Policies

General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU's policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. To learn important campus information, view University Policy S90-5 at <http://www.sjsu.edu/senate/docs/S90-5.pdf> and SJSU current semester's Policies and Procedures, at <http://info.sjsu.edu/static/catalog/policies.html>. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not address the issue, it is recommended that the student contact the Department Chair as the next step.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Add/drop deadlines can be found on the current academic year calendars document on the [Academic Calendars webpage](http://www.sjsu.edu/provost/services/academic_calendars/) at http://www.sjsu.edu/provost/services/academic_calendars/. The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) 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](http://www.sjsu.edu/advising/) at <http://www.sjsu.edu/advising/>.

Consent for Recording of Class and Public Sharing of Instructor Material

[University Policy S12-7](http://www.sjsu.edu/senate/docs/S12-7.pdf), <http://www.sjsu.edu/senate/docs/S12-7.pdf>, requires students to obtain instructor's permission to record the course and the following items to be included in the syllabus:

- “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.”
 - It is suggested that the greensheet include the instructor's process for granting permission, whether in writing or orally and whether for the whole semester or on a class by class basis.
 - In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.
- “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/>.

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](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the [Accessible Education Center](http://www.sjsu.edu/aec) (AEC) at <http://www.sjsu.edu/aec> to establish a record of their disability.

Accommodation to Students' Religious Holidays

San José State University shall provide accommodation on any graded class work or activities for students wishing to observe religious holidays when such observances require students to be absent from class. It is the responsibility of the student to inform the instructor, in writing, about such holidays before the add deadline at the start of each semester. If such holidays occur before the add deadline, the student must notify the instructor, in writing, at least three days before the date that he/she will be absent. It is the responsibility of the instructor to make every reasonable effort to honor the student request without penalty, and of the student to make up the work missed. See [University Policy S14-7](#) at <http://www.sjsu.edu/senate/docs/S14-7.pdf>.

Student Technology Resources

Computer labs for student use are available in the [Academic Success Center](#) at <http://www.sjsu.edu/at/asc/> located on the 1st floor of Clark Hall and in the Associated Students Lab on the 2nd 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. A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.

SJSU Peer Connections

Peer Connections' free tutoring and mentoring is designed to assist students in the development of their full academic potential and to inspire them to become independent learners. Peer Connections tutors are trained to provide content-based tutoring in many lower division courses (some upper division) as well as writing and study skills assistance. Small group and individual tutoring are available. Peer Connections mentors are trained to provide support and resources in navigating the college experience. This support includes assistance in learning strategies and techniques on how to be a successful student. Peer Connections has a learning commons, desktop computers, and success workshops on a wide variety of topics. For more information on services, hours, locations, or a list of current workshops, please visit [Peer Connections website](#) at <http://peerconnections.sjsu.edu> for more information.

Library Liaison

Peggy Cabrera (peggy.cabrera@sjsu.edu) is the Library Liaison for the Department of Environmental Studies. She is a great resource who is available via email and in person by appointment.

SJSU Writing Center

The SJSU Writing Center is located in Clark Hall, Suite 126. All Writing Specialists have gone through a rigorous hiring process, and they are well trained to assist all students at all levels within all disciplines to become better writers. In addition to one-on-one tutoring services, the Writing Center also offers workshops every semester on a variety of writing topics. To make an appointment or to refer to the numerous online resources offered through the Writing Center, visit the [Writing Center website](#) at <http://www.sjsu.edu/writingcenter>. For additional resources and updated information, follow the Writing Center on Twitter and become a fan of the SJSU Writing Center on Facebook. (Note: You need to have a QR Reader to scan this code.)



Study/Work Area & Academic Support: ACCESS Success Center

The Academic Counseling Center for Excellence in the Social Sciences (ACCESS Success Center) is located on the 2nd floor of Clark Hall. Quiet study/work areas are available as well as tutoring (i.e. writing & statistics) and academic and professional advising. Visit <http://www.sjsu.edu/access/> to learn more. Note: They have writing tutors available; this could be an additional option/resource to the Writing Center for you.

SJSU Counseling and Psychological Services

The SJSU Counseling and Psychological Services is located on the corner of 7th Street and San Carlos in the new Student Wellness Center, Room 300B. Professional psychologists, social workers, and counselors are available to provide confidential consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit Counseling and Psychological Services website at <http://www.sjsu.edu/counseling>.

ENVS 10 S1 Life on a Changing Planet Calendar - Spring 2016 (subject to change)

As of 3/5/16		Date	Topic/Content	Reading	Assignments Due
Week 1	M	1-Feb	Course Overview; Intro to Env Issues; Sci Method	Ch. 1	
	W	3-Feb	Video: Invaders	Pgs. 316-317	
Week 2	M	8-Feb	Chemistry	Ch. 2	
	W	10-Feb	Cells	Ch. 3	Invaders Questions
Week 3	M	15-Feb	Photosynthesis; Respiration	Ch. 4	
	W	17-Feb	Biogeochemistry	Pgs. 302-305	
Week 4	M	22-Feb	Biogeochem Cont; Environmental Issue: Climate Change	Pgs. 330-331	
	W	24-Feb	Finish Clim Ch; Activity: Scientific Papers		
Week 5	M	29-Feb	Genetics	Ch. 5 to pg. 99; Pgs. 110-113	
	W	2-Mar	Genetics	Ch. 6 to pg. 129; Pgs. 100-109	
Week 6	M	7-Mar	Environmental Issue: Genetic Engineering	Pgs. 140-153	
	W	9-Mar	Environmental Issue: Agriculture & Future of Food	Gliessman 2007 (Ch. 1&2)	Scientific Paper Analysis
Week 7	M	14-Mar	Video: Charles Darwin and the Tree of Life		
	W	16-Mar	Evolution	Ch. 7	
Week 8	M	21-Mar	Evolution	Ch. 8 & 9	Darwin Questions
	W	23-Mar	Evolution; Activity: Animal Evolution	Ch. 10	
x	M	28-Mar	SPRING BREAK - NO CLASS		
x	W	30-Mar	SPRING BREAK - NO CLASS		
Week 9	M	4-Apr	Environmental Issue: Biodiversity Loss	Pgs. 316-319	
	W	6-Apr	Midterm Review		
Week 10	M	11-Apr	Midterm		
	W	13-Apr	Ecology	Pgs. 296-301, 320-325, 332-333	
Week 11	M	18-Apr	Ecology	Pgs. 310-315	
	W	20-Apr	Ecosystems/Succession	Pgs. 306-309	
Week 12	M	25-Apr	Video: Life on the Reef		
	W	27-Apr	Case Study #1		Life on the Reef Questions
Week 13	M	2-May	Pollution	TBD	Field Trip Write-Up
	W	4-May	Alternative Energy	TBD	
Week 14	M	9-May	Sustainability	Pgs. 326-329; TBD	Case Study #1
	W	11-May	Environmental Ethics & Justice; Discussion		Sustainability Activities
Week 15	M	16-May	Class Activity: Case Study #2; Final Exam Review; Informal Course Evals		Discussion Response
FINAL	W	18-May	FINAL EXAM: 7:15-9:30 AM		