

Goal 3: To offer students integrated, multidisciplinary, and innovative study in which they pose challenging questions, address complex issues, and develop cooperative and creative responses.

More information about the General Education Program Learning Outcomes (PLOs) can be found on the [GE website \(https://sjsu.edu/general-education/ge-requirements/overview/learning-outcomes.php\)](https://sjsu.edu/general-education/ge-requirements/overview/learning-outcomes.php).

Course Goals

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.

Availability: Campus Bookstore

Additional Readings

Available on Canvas.

Other Technology Requirements/Equipment/Materials

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

Library Liason

Peggy Cabrera (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 course.

| Grade | Range | Notes |
|------------|------------|---------------------------|
| C | 73% to 76% | Point Spread: 588-619 |
| C- (minus) | 70% to 72% | Point Spread: 564-587 |
| D+ (plus) | 67% to 69% | Point Spread: 539-563 |
| D | 63% to 66% | Point Spread: 507-538 |
| D- (minus) | 60% to 62% | Point Spread: 483-506 |
| F | 59% | Point Spread: 482 & Below |

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 university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on [Syllabus Information web page](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) (<https://www.sjsu.edu/curriculum/courses/syllabus-info.php>). Make sure to visit this page to review and be aware of these university policies and resources.

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.

| When | Topic | Notes |
|--------|--|---|
| Week 1 | Introduction to course, what is science? / Hypothesis testing, theories, evaluating evidence and sources | Readings: <ul style="list-style-type: none"> Syllabus and other course materials |
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| When | Topic | Notes |
|---------|--|---|
| Week 4 | The diversity of life / Evolution and the tree of life | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 12.11 • Ch. 7.1, 7.4-7.9 <p>Assignments:</p> <ul style="list-style-type: none"> • GV Icebreaker Summary |
| Week 5 | Team meeting / Natural selection | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 7.2-7.3 |
| Week 6 | Species concepts / Darwin documentary | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 7.10-7.13 <p>Assignments:</p> <ul style="list-style-type: none"> • GV Individual Topic Paper |
| Week 7 | Genetics / Genetic Engineering | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 5 • Ch. 6 <p>Assignments:</p> <ul style="list-style-type: none"> • Darwin Questions |
| Week 8 | Population growth / Biomes, biomes activity | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 12.1-12.6 • Ch. 12.12-12.13 <p>Assignments:</p> <ul style="list-style-type: none"> • GV Conversation #2 Summary |
| Week 9 | Midterm | |
| Week 10 | Biodiversity | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 8-9, Ch. 12.9 <p>Assignments:</p> <ul style="list-style-type: none"> • GV Project Draft |
| Week 11 | Team meeting / Conserving biodiversity | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 10, Ch. 12.10 |
| Week 12 | Sea otter case study / Water and nutrient cycles | <p>Readings:</p> <ul style="list-style-type: none"> • Ch. 12.14-12.16 <p>Assignments:</p> <ul style="list-style-type: none"> • GV Project Peer Review • Sea Otter Case Study |

