

San José State University
College of Social Science/Department of Environmental Studies
ENVS 158, Environmental Education, Fall 2024 (44396)

Course and Contact Information

Instructor:	Rachel Lazzeri-Aerts
Class Days/Times/Location:	Mon/Wed 1:30-2:45pm BBC 223
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Office Hours:	Mon/Wed 9:30-10:15am or by appointment WSQ 111B

Course Overview and Description

Our ability to relate to the natural world is influenced by the experiences we had with nature as children. The development of our technological society has separated us from the rhythms and cycles of the Earth. In the synthetic environments that we have created, childhood curiosity has become increasingly focused on artificial pursuits and entertainments. By introducing children to the natural environment we can open the door to their native inquisitiveness about other species and the processes that sustain life on our planet. In our role as teachers, we have the opportunity to plant the seeds of understanding that will eventually germinate into a more environmentally conscious generation.

In addition to a review of current environmental issues this course explores the use of experiential learning techniques, environmental games, and hands-on activities as tools for helping children to become aware of their connection to the natural world. Unlike many subjects environmental studies is taught not only in a standard classroom setting, but also in a variety of outdoors settings. Alternative methods for teaching about the environment such as outdoor education, park interpretation, and community workshops will be explored in this course as well. Because of the wide range of possibilities for teaching environmental issues students who take this course do not need to be on the teaching credential track, though those that are will find this course valuable. Because this course is designed for those who are interested in some form of teaching I will expect a high level of self-motivation and professionalism.

Course Goals and Learning Objectives

The purpose of this course is to give students who are considering a teaching-related career a basic understanding of environmental issues, and the tools necessary to build environmental studies into a classroom curriculum. Within the context of this course each student will have the opportunity to develop and implement a lesson plan in an educational context. Students will also be exposed environmental education in a variety of different contexts, particularly experiential teaching/learning methods.

Program Learning Objectives (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 Objectives

Upon successful completion of this course students will have a clear understanding of basic ecology, environmental studies, and sustainability topics. Students will be able to create and teach an effective lesson on a science or environmental topic including hands on activities. Specific CLOs are:

- 1) Students will be able to answer the questions: What is environmental education? Who am I as an educator?
- 2) Students will be able to understand pedagogical approaches through theory, application, and praxis.
- 3) Students will possess working knowledge of basic science and environmental science concepts and current environmental issues.
- 4) Students will develop, deliver, and reflect on an original environmental education lesson plan that includes hands-on activities and integrates California K-12 teaching standards.

Information Literacy Learning Objectives

- 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.

Library Liaison

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. Email her for help via email or to set up a Zoom appointment.

Required Course Materials

Readings

Broda, H.W. 2007. *Schoolyard Enhanced Learning: Using the Outdoors as an Instructional Tool, K-8*. Stenhouse Publishers. ISBN-13: 978-1571107299.

The Broda book is available in the SJSU Bookstore, [on Amazon](#), and in Canvas as a scanned PDF. The scanned PDFs are not screen reader compatible, so if you need the AEC to create alternate formats, please get a copy from the bookstore. All additional course readings and materials will be integrated into the course Modules and available on Canvas as PDFs or links. These materials will be screen reader compatible.

Technology

You will need consistent access to a computer with an Internet connection. You should be using the latest version of Chrome, Firefox, Edge, Respondus Lockdown Browser (as applicable), or Safari, and can view a complete list of [Supported Browsers through Canvas Guides](#). Zoom may be used for Office Hours. Additionally, we will sometimes be using video recordings to share thoughts and ideas as part of activities or discussions. Canvas has a built-in Media Recorder that is easy to use.

Students are expected to have the following basic computer skills:

- Utilize Canvas LMS and associated tools/features
- Microsoft Office including Word, Excel, and PowerPoint
- File management including downloading, uploading, creating, editing, and saving
- Email including sending, receiving, and managing attachments
- University library searches
- Navigating internet searches, websites, and interactive components

Please note that I do not provide technical help beside instructions on how to access or utilize a particular application. If you need computer or technical help, please utilize the following resources:

- [Student Canvas Help Guide](#)
- [SJSU Information Technology](#)
 - itservicedesk@sjsu.edu
 - 408-924-1530
- In Canvas, click the “Help” button in the left-side menu for several options.

Course Requirements and Assignments

Class Format

This course has in-person class meetings. We will also be utilizing Canvas. Some class content, readings/videos, and activity instructions and submissions will be available within Canvas and will be organized into Modules by topic. The course is designed to expand and grow with each Module, and many sections will refer back to previous Modules. Complete the tasks in the order presented to get the most out of the course. Class communications (outside of our meetings) will also be through Canvas.

While some of the material can be done at a time of your choosing (such as readings), there are specific due dates for activities, assessments, discussions, teaching experiences, and exams. You must complete these components before the due date and time. Late work is not accepted. Almost all in-person class meetings will be required.

Additionally, there will be one day in mid-November that you will be teaching a lesson in-person to a K-5 grade class. We will discuss the details within the first few weeks of the semester so that you have plenty of time to plan.

Student Responsibilities

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.

It is your responsibility to access the Canvas course, engage thoroughly with each Module and associated components, participate in lecture activities, carefully read directions, prepare thoughtful submissions for assignments, discussions, and activities, submit all assignments on-time, and make a commitment to quality work in this course. If you are in doubt about something in the course, ask! Utilize the Question Café Discussion board, send me a Canvas Message, or attend office hours.

Assignments

There will be varying types of assessments, activities, and assignments throughout the course. Some will delve deeper into science topics while others will build your “toolbox” of teaching resources, such as incorporating children’s literature, art, and field trips into interdisciplinary lessons. These assignments are designed to aid in your understanding of the course material, as well as develop skills in evaluating, analyzing, and teaching and communicating information about science and environmental issues.

Assignments may include low stakes short quizzes, written work, short video responses and discussions via Canvas, cases studies, and in-person activities. The major project for the course will be writing and teaching a science or environmental science related lesson plan. We will be collaborating with the SJSU affiliated [CommUniverCity](#) to teach a lesson to elementary school students.

Formatting for Written Work

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 use Turabian/Chicago, MLA, or APA author-year citation style where applicable. There will be a points deduction for not following these guidelines.

Participation

Students will be expected to actively participate in their learning. This means that you must actively engage with the material presented both in-person and in the Canvas Modules. Do the reading. Watch the videos. Think about the questions presented to you. Participate in activities and discussions. Additionally, as much of this course is based on activities, presentations, and discussions, each student's participation is necessary for the class to function successfully. Discussions, video responses, in-person assignments, and any other activities that come up during the semester may be used as participation points toward final course grade. **You must be present and prepared to receive participation points for activities; there are no makeup points for missed activities or classes.**

Exams

One final exam will be given to test your understanding of the material presented. The exam will be cumulative, and may consist of multiple choice, true-false, matching, and short answer questions. Please do not miss the exam as you will not have the opportunity to make it up. Make-up exams may be considered for legitimate and documented circumstances (medical emergency, death in the family).

Grading Policy

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

Grade Scale

<i>Grade</i>	<i>Percentage</i>
A plus	97 to 100%
A	93 to 96%
A minus	90 to 92%
B plus	87 to 89 %
B	83 to 86%
B minus	80 to 82%
C plus	77 to 79%
C	73 to 76%
C minus	70 to 72%
D	60 to 69%
F	Less than 60%

Late Work

All graded work is **due BEFORE 11:59pm on the due date**. Late work is **NOT** accepted. Plan accordingly, and do not wait until the last minute to submit an assignment. Exceptions may be considered for legitimate and documented circumstances (ie. medical emergency, death in the family).

Rubrics

Most assignments will be graded using a rubric. For assignments and discussions that utilize a rubric, you can review the rubric before submitting your work to ensure you have met all assignment guidelines and requirements.

- [How to view a rubric for an assignment?](#)
- [How to view a rubric for a discussion?](#)
- [How to view rubric results for my assignments?](#)

Extra Credit

Students are responsible for recording the details of any offered extra credit assignments.

Grading Overview and Assessment of Learning Objectives

Please note that points possible may change based on class progression.

Assignment	Points	Learning Objectives
Lesson Plan Dissection	15	CLO # 2
Backward Design Template	20	CLO # 2, 4
Written Lesson Plan	50	CLO # 2, 3, 4, ILLO #1, 2, 3
Lesson Plan Teaching Experiences	50	CLO # 2, 3, 4
Environmental Education Philosophy	40	PLO # 1, CLO #1, 2, 4
Biome Poster	25	CLO #2, 3, ILLO #1, 2, 3
Conservation Activity	20	PLO # 1, 2, CLO #2, 3
Sustainability Activities	20	PLO # 1, 2, CLO #2, 3
Final Exam	100	PLO # 2, CLO #1, 2, 3, 4
Other Activities, Discussions, and Participation	300-400	PLO # 1, 2, CLO #1, 2, 3, 4, ILLO #1, 2, 3
TOTAL	~800	

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](#).

Diversity, Inclusion, and Accessibility

In accordance with San José State University's Policies, the Student Code of Conduct, and applicable state and federal laws, discrimination based on gender, gender identity, gender expression, race, nationality, ethnicity, religion, sexual orientation, or disability is prohibited in any form. The [SJSU Diversity website](#) has information on campus policies and programs, the Office of Diversity, Equity, and Inclusion, and how to report instances of bias.

Students are expected to participate fully in all class activities. It is expected that students will be open-minded, participate fully in discussions in-class and online, and debate in a mature and respectful manner. Use of derogatory, condescending, or offensive language including profanity is prohibited. Expressing disagreement should always include an explanation of your reasoning and whenever possible, evidence to support your position.

The CSU and SJSU both mandate that all students, staff, faculty, and visitors have equal and inclusive access to information and educational materials and programs. Therefore, all instructional documents and materials, electronic materials and programs, and web based materials and programs must be created to be accessible by all. The [Accessibility at SJSU website](#) has information on the specific laws and policies regarding accessibility,

as well as information on SJSU's programs to ensure accessibility. In this course, my goal is to have all materials, readings, videos, etc. created in an accessible format. If you find a course component that is not accessible to you, please let me know, so that I can make corrections.

Additionally, the accessibility statements and resources (as available) for websites, software, and tools that we may be using in the course can be found at the links below.

[Canvas](#): Learning Management System used by SJSU

[Canvas Studio](#): audio/video recording tool within Canvas LMS

[Google](#): SJSU email, calendar, and online tools

[OpenStax](#): online open access textbooks

[Pressbooks](#): online open access textbooks

[Turnitin](#): plagiarism check tool used in Canvas LMS

[YouTube](#): video hosting/viewing

[Zoom](#): synchronous web conferencing

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>

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

Please read the [Academic Integrity Policy](#). You should know and understand both plagiarism and cheating.

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The University's [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](#) has more information. Instances of academic dishonesty will not be tolerated. **Cheating 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 already submitted, or plan to submit for another class, please note that SJSU's Academic Policy F15-7 requires approval of both instructors.

AI Tool Use

Generative artificial intelligence (AI) tools—software that creates new text, images, computer code, audio, video, and other content—have become widely available. Well-known examples include ChatGPT for text and DALL•E for images.

In this course, you may use generative AI tools only for assignments that include explicit permission in the assignment instructions. If you use generative AI tools on these assignments, you must properly document and credit the tools themselves. Cite the tool you used both in-text and in the Works Cited and include a brief description of how you used the tool. This description should be included at the end of your assignment as an Appendix.

If you choose to use generative AI tools, please remember that there are limitations to the content produced. The datasets used to train AI are limited, often out of date, include copyrighted material, and may include

biased information. This has the potential to result in AI created content that is inaccurate, biased, and/or a copyright violation. It is your responsibility—not the AI tool’s—to assure the quality, integrity, and accuracy of work you submit in any college course.

As a reminder, all written work for the course will be submitted through Canvas and will be submitted to Turnitin. Turnitin also includes detection tools for AI-generated text. If you use generative AI tools to complete assignments in this course, in ways that have not been explicitly approved, the SJSU Academic Integrity Policy and this course’s plagiarism and cheating policy will apply.

Portions of this policy were created using the non-AI [“Generative AI Syllabus Statement Tool \(Seaver College\)”](#).

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](#) for more info. If you are not sure where to get assistance, please send me a Canvas Message/come see me. I can help you find the right campus resources and get you connected with them.

SJSU Cares

Students experiencing challenges meeting their basic needs including, but not limited to, access to food, shelter, and a safe space are encouraged to contact SJSU Cares. The SJSU Cares program can help connect students to both on and off campus resources. Contact information:

- [SJSU Cares Information website](#)
- sjsucares@sjsu.edu
- 408-924-1234
- Direct link to the [Request Assistance Form](#)

Accessible Education Center (AEC)

The Accessible Education Center is committed to redefining ability for students with disabilities by providing comprehensive services in support of the educational development and success of students with disabilities in a student-centered and professional environment. To receive appropriate accommodations for temporary or permanent disabilities, you must register with the AEC. Additionally, please make an appointment with me as soon as possible, so we can discuss the best ways to implement your accommodations to ensure your success in the course. AEC contact information:

- [AEC website](#)
- aec-info@sjsu.edu
- 408-924-6000

Counseling and Psychological Services (CAPS)

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. Numerous workshops for students are offered every semester. Hours are Monday through Friday 8:30am to 5:30pm and Friday 8:30am to 4:30pm. For 24/7 crisis intervention help, call the number below and select “option 4”. Contact information:

- [Counseling and Psychological Services website](#)
- counseling.services@sjsu.edu
- 408-924-5910

Course Schedule

Please note that this is a high-level course outline. A detailed schedule is available in Canvas.

Module and Dates	Weekly Topics	Major Assignments
M0: Aug 21-25	Introductions and Getting Started	
M1: Aug 26-Sept 1	What is Environmental Education?	Draft ENVS Education Philosophy
M2: Sept 2-8	Lesson Plans	Lesson Plan Dissection
M3: Sept 9-15	Evolution and Natural Selection	Backward Design
M4: Sept 16-22	Interpretation, Field Trips, Children's Literature	
M5: Sept 23-29	Biology, Ecology, Biomes	Biome Poster LP Project Check #1
M6: Sept 30-Oct 6	Biodiversity and Habitat Loss	Conservation Activity
M7: Oct 7-13	Pollution	LP Project Group Check-Ins
M8: Oct 14-20	Energy, Climate Change (tentative)	
M9: Oct 21-27	Invasive Species (tentative)	
M10: Oct 28-Nov 3	LP Project Work (tentative)	LP Project Check #2
M11: Nov 4-10	Resources (tentative)	Resource Summary Paper
M12: Nov 11-17	Feeding the World (tentative)	
M13: Nov 18-24	Climate Fair	Teaching Experience
M14: Nov 25-Dec 1	Sustainability	
M15: Dec 2-8	Ethics, Environmental Justice, Policy	Environmental Ethics Activity
M16: Dec 9	Course Wrap-Up	
Finals Week		Written Lesson Plan Final Exam