

San José State University
College of Social Sciences | Department of Environmental Studies
ENVS 158, Environmental Education, Summer 2015
Section 1, Course Number 30108

Instructor	Rachel Lazzeri-Aerts
Classroom	Hugh Gillis Hall 217
Class Days/Time	Tue/Thur 9am-12:45pm
Office Hours	After class and by appointment
Office Location	WSQ 115E
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Prerequisites	ENGL 1A & ENGL 1B; upper division standing or instructor consent.

“In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught.” ~ Baba Dioum, Senegalese conservationist

Course 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 Student 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.

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.

Required Textbooks/Readings

Grant, Tim & Gail Littlejohn, (eds). 2005. Teaching Green: The Elementary Years. (available from Spartan bookstore, Amazon.com, Barnes and Noble online)
Course reader (Available on Canvas)

Recommended Readings

Carter, Forest. 1976. The Education of Little Tree. University of New Mexico Press, New Mexico
Cornell, Joseph. 1998. Sharing Nature with Children. Dawn Publications, Nevada City, California.
Gonick, Larry, and Alice Outwater. 1996. The Cartoon Guide to the Environment. Harpercollins, New York, New York. (available from Amazon.com)
Grant, Tim and Gail Littlejohn, (eds). 2005. Teaching Green: The Middle Years.
Grant, Tim and Gail Littlejohn, (eds). 2005. Teaching Green: The High School Years.
Louve, Richard. 2005. Last Child in the Woods: Saving our Children from Nature-Deficit Disorder. Algonquin Books, Chapel Hill North Carolina.
Orr, David. 1994. Earth in Mind: On Education, Environment, and the Human Prospect. Island Press, Washington, D.C.
Orr, David W., Michael K. Stone, Zenobia Barlow, and Fritjof Capra. 2005. Ecological Literacy: Educating Our Children for a Sustainable World (The Bioneers Series) Sierra Club Books, San Francisco, CA (available on Amazon.com)
Sobel, David. 2004. Place-Based Education: Connecting Classrooms & Communities. The Orion Society, Great Barrington, MA

Electronic Devices

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. Cell phones, music players, and any other electronic devices must be turned off and stored in your backpack/purse. **Any** use of electronic devices during quizzes and exams is considered cheating, and will result in a failing grade. 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. 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, or homework solutions without instructor consent.

Course Requirements

Canvas Learning Management System

For this course, all take home assignments must be turned in through the Canvas learning management system, unless otherwise noted.

Class Participation, Readings, In-Class Activities

Students will be expected to actively participate in their learning. As much of this course is based on activities, presentations, and discussions, each student's participation is necessary for the class to function. Students should arrive on time, prepared, be creative when they are presenting, and attentive and supportive when others are sharing their work. Be sure to complete assigned readings before class. Readings may also include articles distributed by instructor. You will receive participation points for attending class and contributing to debates and discussions and participating in activities. **You must be present and prepared to receive participation points; there are no makeup points for missed class.** Group activities, example games, and other in-class assignments will also count towards participation points.

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Children's Literature (See Grant and Littlejohn pages 218-224 for ideas.)

Select a children's book that helps teach about an environmental topic or concept. Write a one-two page summary of the book and how it might be a useful teaching tool. Include:

- Title, author, publisher, date
- Environmental topic
- Age/grade level
- Summary of the story
- Suggestions for hands-on activities related to the book...how to use it in a hands-on, minds-on classroom

California Bioregions Map

After doing some preliminary research on an assigned California bioregion at home, you will work in small groups to create a map that shows some of the basic environmental features of this bioregion. After creating your map, the group will informally share what has been learned about the bioregion with the rest of the class. This activity will serve as an introduction to the many unique features of our state.

Features that must be included on each map	Other things that might be interesting to include
<ul style="list-style-type: none">• Compass points (ie. North arrow)• Major bodies of water• Hills/mountains• Native plants and animals (min. 3 each)• Minimum 2 negative human influences (ie. Sources of pollution)• Minimum 2 positive human influences (ie. Restoration projects)	<ul style="list-style-type: none">• Unique soil types• Endangered species• Foods produced• National/state parks• Environmental education opportunities

Lesson Plan

A large portion of your time in this course will be spent researching and developing a lesson plan. Each lesson plan will relate to a particular environmental issue and **will include a hands-on activity or game**. You will work in groups of 2-3 students for the in-class teaching portion of this assignment, however the bibliography and lesson plan are individual assignments.

Annotated Bibliography

In order to prepare a lesson plan on a particular subject, it is important to research that subject first. Giving a lesson without adequate knowledge is a nerve-racking experience. In order to prepare for your in-class teaching day and written lesson plan, you will research your assigned topic and prepare a summary of the information you have learned.

- 8 sources minimum: 3-4 peer reviewed, 2-3 secondary academic (ie. textbook), 1 printed media (ie. newspaper), 1 website (examples of appropriate websites will be given in class)
- Complete publishing information for each source
- Brief summary of the information you learned from each source
- For media and website sources, evaluate the quality of the source

In-Class Teaching

Using the information that each member of the group has gathered in the annotated bibliography, the group will prepare a lesson to teach the class about your topic. You should include a variety of teaching/learning styles. In addition to teaching the material, you need to include **at least one** example of a hands-on activity, game, or art project that could be used to demonstrate some part of the topic.

Written Lesson Plan

Based on your annotated bibliography and your experience teaching in class, you will write a lesson plan that can be taught at the K-12 level. The lesson may be designed for use in a classroom, on a field trip, at a nature center, or in any other education setting. You must include at least one experiential learning technique, such as hands-on activities, art projects, or single concept field trips. The written plan should be 3 to 5 double spaced pages in length and will be organized in a standard lesson plan format. The lesson should be designed to be 30-60 minutes in length, and should include the grade level and how the lesson addresses California state mandated curriculum standards.

Final Exam

A written final exam will be given covering all material from the readings, lectures, discussions, and other activities. The exam may consist of short answer, essay, and multiple-choice questions.

Environmental Education Philosophy

You will conclude the course by writing your own educational philosophy. This paper should be 2-3 pages in length and will express your goals as an educator, why you believe teaching is important, and what role you feel that environmental issues have in the broader context of education. You may have done something similar in other classes; however, this educational philosophy should focus on environmental topics, and how you believe they fit into your personal views on education.

Extra Credit

Extra credit assignments may be offered in class. Students are responsible for recording the details of these assignments.

Late Work

All assignments are due by 9am on the due date listed in the course calendar. Late work is NOT accepted. Exceptions may be considered for legitimate and documented circumstances (medical emergency, death in the family) with proper documentation.

Field Trips

We will be going on three field trips during the course of this class. All field trips will be during the scheduled class time. These field trips have been chosen to showcase some of the many wonderful educational opportunities in our area. Attending, participating, and engaging in the various activities will hopefully enhance your understanding of the class material, give you inspiration for activities and field trips for your future students, and simply be enjoyable!

Where	Date	Cost	Meeting Place
TBD	Tue 14 July		
Don Edwards Environmental Education Center 1751 Grand Blvd Alviso 95502	Tue 29 July	None	Parking lot of the center @ 9:15am
YSI at Alum Rock Park 16260 Penitencia Creek Rd San Jose 95127	Thur 6 Aug	\$6/car parking fee; carpool suggested	Parking lot at the end of the road @ 9:50am

Grading Policy

Your grade will be based on your assignments and class participation. All assignments are to be turned in through CANVAS before the specified due date and time or at the beginning of the due date class unless otherwise indicated. ***Late work is NOT accepted.***

Grade scale: 97%-100% = A+	93% - 96% = 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	

Grading Overview

Assignment	Points
Children's Literature	10 (5%)
California Bioregion Map	10 (5%)
Lesson Plan	70 (35%)
<i>Annotated bibliography</i>	(20)
<i>In-Class Teaching</i>	(30)
<i>Written Lesson Plan</i>	(20)
Environmental Education Philosophy	10 (5%)
Final Exam	50 (25%)
Class Participation/Activities	50 (25%)
TOTAL	200 (100%)

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's Catalog Policies section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the current academic year calendars document on the Academic Calendars website at http://www.sjsu.edu/provost/services/academic_calendars/. The Late Drop 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 at <http://www.sjsu.edu/advising/>.

University Policies

Academic Integrity

Students should know that the University's Academic Integrity Policy is available at <http://www.sjsu.edu/senate/docs/S07-2.pdf>. Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require 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 website for Student Conduct and Ethical Development 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 SJSU's Academic Policy F06-1 requires approval of both instructors.

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 at <http://www.sjsu.edu/president/directives/current/pd9703/> requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at <http://www.sjsu.edu/aec> to establish a record of their disability.

Student Technology Resources

Computer labs for student use are available in the Academic Success Center located on the 1st floor of Clark Hall, on the 2nd floor of the Student Union, and in the Martin Luther King Library. Additional computer labs may be available in your department or college. Media Services in IRC 112 lends a variety of A/V equipment, including digital and VHS camcorders; VHS and Beta video players; 16 mm, slide, overhead, DVD, CD, and audiotape players; sound systems and wireless microphones; and projection screens and monitors.

Peer Connections Center

Peer Connections is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. See the website at <http://peerconnections.sjsu.edu/index.html>

Course Calendar (The schedule is subject to change with fair notice.)

Date	Content	Readings	Assignments Due
Tue 7 July	*Syllabus/adds/introductions *Defining ENVIS education/sense of place *Intro to children's literature		
Thur 9 July	*Ecological Principles and Cycles *Population Growth *Group time to work on preparing lesson	G/L: Intro, pgs. 1-8, skim pgs. 9-32, 118-121, 218-224 Reader: Pgs. 1-60	Children's Literature
Tue 14 July	*TBD		Annotated Bibliography
Thur 16 July	* <u>Aquatic and Terrestrial Ecosystems</u> *Food Webs *Activity: Group Bioregion Map Project	G/L: Pgs. 42-48, 74-95, 99-100, 108-116 Reader: Pgs. 45-47, 61-74	Research for bioregion map
Tue 21 July	* <u>Agriculture</u> and Resource Use * <u>Biodiversity</u> and Extinctions	G/L: Pgs. 38-41, 145-147 Reader: Pgs. 75-108	
Thur 23 July	*Climate Change *Energy * <u>Pollution</u>	G/L: Pgs. 122-125, 130-144, 148-150, 172-178, 186-188 Reader: 110-194	
Tue 28 July	*Field Trip: Don Edwards Wildlife Refuge	G/L: Pgs. 34-37	Written Lesson Plan
Thur 30 July	* <u>Sustainability</u> *Environmental Ethics *Video: Future Conditional	G/L: Pgs. 206-212	
Tue 4 Aug	* Final Exam *Environmental Restoration		
Thur 6 Aug	*Field Trip: YSI @ Alum Rock Park *Class Wrap-up	\$6/car parking	ENVIS Educ. Philosophy

Underlined = student led lectures

G/L = Gail and Littlejohn book