

San Jose State University
Environmental Studies 158 - Fall 2016
Environmental Education for Teachers

*"What is the extinction of the condor to a child that has never
known a wren?"*

- Richard Pyle

Instructor:

Lauren Hanneman

Section 3: 9:30am - 12:15pm

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Office Hours: Fridays 8:20-9:20am

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* Will change once SJSU email address is set-up

COURSE OVERVIEW:

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 teaching in some form I will expect a high level of self-motivation and professionalism.

Prerequisites

Eng. 1A and Eng. 1B; upper division standing or instructor consent.

Required Texts and Readings

Gonnick, Larry, and Alice Outwater. 1996. The Cartoon Guide to the Environment. Harpercollins, New York, New York.

Leslie, Clare Walker. 2015. The Curious Nature Guide. Storey Publishing, North Adams, MA.

Other equipment / material

- Access to a computer with Microsoft Word and the Internet.
- Notebook
- Pencil and/or pens with blue or black ink
- Although some art supplies will be provided, you may wish to bring colored pens, pencils, or crayons.

COURSE GOALS & LEARNING OUTCOMES

Student Learning Objectives (SLO)

The purpose of this course is to give students who are considering teaching as a 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 observe environmental education in a variety of different contexts, and will interact with educational professionals in the field.

Course Learning Outcomes (CLO)

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.

INSTRUCTIONAL METHODS

Classroom Protocol

Inappropriate use of phones during class is a disruption and will not be tolerated. Phones should be silent or off and put away. We need to be unplugged in order to stay present and a big portion of this class involves your ability to participate and be aware. Consider this permission to unplug for a few hours. In addition, proper discussion etiquette by means of respect and consideration for your teachers and classmates is crucial for your success in this course.

Instructor Expectations

My role will be to facilitate your learning process. You can expect me to be engaged in the class because, like you, this will be a learning experience for me. I learn as much from my students as I hope you will learn from your classmates and me. You can expect me to listen carefully and respectfully to your thoughts, ideas, and suggestions, and you can expect me to read your work carefully and provide thoughtful, timely feedback

Student Expectations

I expect active engagement from all students. This course is designed as a semester-long seminar and workshop. You will be working with your peers to create a community of teachers and learners. Each and every one of you brings with you a unique lifetime of experiences that allow you to see things differently from everyone else in the class. Thus, I will expect you to come to class every day with all reading and writing assignments completed, share your unique

perspective with your classmates, and listen thoughtfully. Your attendance and preparation are crucial to the success of this course and represent a commitment you are making to your classmates and to me.

Reading, viewing, and participating thoughtfully in class discussions

Throughout the semester, we will read essays and texts from a variety of sources and perspectives, gaining ideas about education and environmental education, in particular. Short films or clips will either introduce reading topics or reinforce reading topics. Reading and viewing are critical for your knowledge and thought base for your lesson plan and our class discussions.

Acting and Presenting

You'll have a chance to participate in activities and reflect on your attitudes and values. These reflections are incorporated into your lesson plan and our class discussions.

ASSIGNMENTS

Readings

Assigned readings will be discussed in class on the day that they are due. Readings should be done before class.

Nature Journal

Throughout the semester you will keep a nature journal to help connect you with the natural world that one day you will (hopefully) be teaching about. The activities you choose to engage in can be structured or unstructured. You will find a lot of suggestions for how to interact with the outdoor environment in *The Curious Nature Guide*. As you will soon see, nature is EVERYWHERE.

Lesson Plan

A major portion of your time in this course will be spent developing a lesson plan. Each lesson plan will relate to a particular environmental issue and **will include a hands-on activity or game**. This lesson plan will be presented and critiqued in class, and will finally be presented in an educational setting of your choice. You may work in groups of 2-3 students for this assignment.

Environmental issue paper

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. You will utilize the supportive environment of our class to refine your knowledge on the subject that you are teaching. Each group of students will give a 5-minute presentation on her or his subject matter, followed by a class discussion. A 3-5 page paper (double spaced, 12 point type), with a minimum of five bibliographic references, will be required on the day of your presentation.

Written lesson plan

A written lesson plan will be prepared on an environmental theme of your choice. Experiential learning techniques, and hands-on activities are encouraged. The written plan will 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. The lesson plan should include the grade level, and how the lesson addresses California state mandated curriculum standards

Lesson plan in-class presentation

You will present a portion of your lesson in class prior to giving the lesson at your placement. The lesson will be followed by a class discussion focused on how the lesson can be improved. The presentation will include one or two activities from your lesson and will be limited to 15 minutes.

Environmental Education Philosophy:

You will conclude the course by writing your own educational philosophy. This paper should be 3 pages (or more if you wish) 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.

Midterm

A written midterm exam will be given covering all material from the readings and lectures. The midterm will consist of short answer, essay, and multiple choice questions.

Extra Credit

Students may share a children's book with an environmental message with the class. The book should be short enough to read in class. This extra credit assignment is only available before the midterm. Make arrangements at the beginning of the class period if you are interested in presenting a book. Limit of one book per student (5 points maximum).

GRADING

Your grade in this course will be based on your presentations, your written work, and your participation as follows.

<i>Assignment</i>	<i>Point Value</i>	<i>Grade Percentage Breakdown</i>	
Env. Ed Philosophy	10 points	97% and above	A+
Lesson Plan	50 points	90% - 96%	A
Environmental issue paper	(10 Points)	87% - 89%	B+
Written lesson plan	(20 points)	80% - 86%	B
In-class presentation	(20 points)	77% - 79%	C+
Nature Journal	10 points	70% - 79%	C
Midterm	20 points	60% - 69%	D
In-class activities	10 points	0% - 59%	F
	100 total		

Penalty for late work: All assignments will be turned in by the due date during class time. Assignments turned in after the due date will be dropped a full letter grade, and another full letter grade each week following.

UNIVERSITY POLICIES AND PROCEDURES

a) Academic integrity statement (from Office of Judicial Affairs):

Your own commitment to learning, as evidenced by your enrollment at San José State University and the University's Academic Integrity Policy requires you to be honest in all your academic course work. The policy on academic integrity can be found at

<http://www.sjsu.edu/senate/docs/S07-2.pdf>

b) Campus policy in compliance with the Americans with Disabilities Act:

If you need course adaptations or accommodations because of a disability, or if you need 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 requires that students with disabilities register with DRC to establish a record of their disability.

Cell Phones:

Students will turn their cell phones off or put them on vibrate mode while in class. They will not answer their phones in class. Students whose phones disrupt the course and do not stop when requested by the instructor will be referred to the Judicial Affairs Officer of the University.

Computer Use:

Students may use computers only for class-related activities. These include activities such as taking notes on the lecture underway, following the lecture on Web-based PowerPoint slides that the

instructor has posted, and finding Web sites to which the instructor directs students at the time of the lecture. 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, and, at a maximum, will be referred to the Judicial Affairs Officer of the University for disrupting the course. (Such referral can lead to suspension from the University.) Students are urged to report to their instructors computer use that they regard as inappropriate (i.e., used for activities that are not class related).

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.

** Very tentative schedule. It will most definitely change!

Week	Content	Readings	Assignment Due
8/26	Introduction Environmental Issue Brainstorm		
9/2	Forests and Deforestation Children's Literature: <i>The Lorax</i> Discuss Teaching Philosophies	<i>Chapter 1:</i> Gonnick and <i>Outwater</i>	Community building exercise (in class)
9/9	Ecological Cycles and Evolution 1 st Experience in Nature	<i>Chapter 2, 3:</i> Gonnick and <i>Outwater</i>	Teaching philosophy due 1 st experience with nature (in class)
9/16	Aquatic and Terrestrial Ecosystems and Food Webs Web of Life	<i>Chapter 4 ,5 ,6: Gonnick and Outwater</i>	
9/23	Population Growth and Resource Use Oh Deer!	<i>Chapter 7, 8:</i> Gonnick and <i>Outwater</i>	
9/30	Biodiversity and Extinction Basic Ecology, Biodiversity, and Extinction. Designing a Field Trip	<i>Chapter 9:</i> Gonnick and <i>Outwater</i>	
10/7	Sustainable Future v. Catastrophe Renewable technology or global climate change Scavenger Bingo	<i>Chapter 10, 11, 12:</i> Gonnick and <i>Outwater</i>	Environmental issue paper due Design a lesson plan (in class)
10/14	Sustainable living field trip Frank Schiavo's house.		
10/21	Pollution and Global Climate Change The solution to pollution is not dilution. Midterm Review	<i>Chapter 13, 14:</i> Gonnick and <i>Outwater</i>	
10/28	Midterm		
11/4	Lesson Plan Presentations:		
11/11	Veteran's Day (Campus Closed)		
11/18	Lesson Plan Presentations		Lesson plan due
<i>11/25 Thanksgiving Break</i>			
12/2	Lesson Plan Presentations		
12/7	Final Day Wrap Up		

Additional/Recommended Sources & Readings

Carter, Forest. 1976. *The Education of Little Tree*. University of New Mexico Press, Albuquerque New Mexico
 Cornell, Joseph. 1998. *Sharing Nature with Children*. Dawn Publications, Nevada City, California.

Grant, Tim and Gail Littlejohn, (eds). 2005. Teaching Green - The Elementary Years: Hands-on Learning in Grades K-5.

Grant, Tim and Gail Littlejohn, (eds). 2005. Teaching Green: The Middle Years: Hands-on Learning.

Grant, Tim and Gail Littlejohn, (eds). 2005. Teaching Green: The High School Years: Hands-on Learning.

Louve, Richard. 2005. Last Child in the Woods: Saving our Children from Nature-Deficit Disorder. Algonquin Books, Chapel Hill North Carolina.