

Environmental Issues (ENV 201)

Dr. Lucas Johnston

Fall 2012

M,W 2:00pm-3:15pm

Office: 219 Wingate Hall

Office Hours: M,T,W 10:45am-12:15, or by
appointment

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Course Description:

Environmental issues increasingly occupy social and political discourse and impact people in various ways in their daily lives. Careful analysis of complex environmental problems is an important prerequisite for a sustainable culture. This class introduces students to some of the key issues related to the environment, highlights the important contributions and limitations of environmental sciences, and analyzes the values that lie behind public policy, relevant research, and activism.

Learning Outcomes:

By the end of the course students should be able to:

- Define basic concepts central to the science of ecology and the complex ways in which human cultures interact with their habitats
- Discuss terminology related to environmental sciences and studies, and be able to speak coherently and intelligently about environmental issues
- Identify and relate some of the historical circumstances and trends that led to specific environmental problems
- Analyze the ways in which various stakeholders with diverse value sets influence the formulation of public policy
- Synthesize these diverse values in terms that constructively work toward dispute resolution
- Relate theoretical and factual knowledge from the class to actual local circumstances and events
- Apply concepts and methods from the class to evaluate the effectiveness of community groups, and to evaluate students' own ability to contribute positively to their communities

Required Texts:

Adelson, Glen et al. 2009. *Environment: An Interdisciplinary Anthology*. New Haven: Yale University Press.

Brown, Lester. 2011. *World on Edge: How to Avoid Environmental and Economic Collapse*. New York: W.W. Norton and Co.

Salatin, Joel. 2012. *Folks, This Ain't Normal: A Farmer's Advice for Happier Hens, Healthier People, and a Better World*. New York: Center Street.

Office Hours and Student Communication:

I will be in my office every Monday through Wednesday from 10:30am-12:15pm. In the event you cannot make it to my office hours, I am glad to make an appointment with you at another time provided I have at least twenty-four hours' notice. I strongly encourage you to come to these office hours to discuss the material, or to go over any questions you may have. I much prefer in-person meetings to email. I am glad to answer minor clarifications through email, but I generally will not respond to emails regarding late or missing assignments, or absences.

Assignments and Grading:

Quizzes (6x5pts = 30 pts)

There will be seven quizzes which will focus on an understanding of the readings and class discussion. A student will receive a zero for any quiz missed. If the student has an excused absence on the day a quiz is given, the instructor will administer a make-up quiz that will require an essay, rather than short answers. (See policy below regarding what is considered an excused absence).

Participation (10pts)

Class attendance and participation is expected from all students. This grade is for participation and not simply attendance. You can imagine that the participation grade at the beginning of class is a 5/10, with the grade adjusted up or down dependent on attendance and participation. Perfect attendance with little contribution to classroom discussion will earn the student a grade of 5/10 on participation.

Students are allowed one unexcused absence. Each unexcused absence beyond this will result in a three point reduction in class participation grade. Students missing four or more classes will fail the course, or will be asked to withdraw. Absences may be excused if written requests are submitted *in advance* or if written explanations are submitted *with valid documentation*. *Valid* documentation is signed by a doctor (if a health-related absence) or by the Office of Academic Advising (if a personal or family-related matter). Emails or other informal notifications are not considered documentation of an absence.

Engaged or Service Learning Project (30pts):

Engaged teaching fosters critical thinking, gives each student a voice, and encourages each student to engage with issues affecting the Wake Forest community and the community beyond. Within the broader concept of engaged teaching is the recognized pedagogy of service-learning, which purposefully integrates meaningful service to the community with civic and academic learning. Other forms of engaged teaching may not involve service but nevertheless engage students in the process of identifying and understanding community-related issues.

This course incorporates engaged teaching and includes a mandatory engaged or service-learning project. The options for the projects all involve a hands-on experience relevant to course themes that will be integrated with the classroom component of the course. **Twenty hours** of engaged learning or service are **required** over the course of the semester.

Project Options:

WFU Campus Garden Intern Assistant: This engaged learning project requires the student to participate as an assistant to the WFU Campus Garden Intern. Students will be expected to meet with the garden intern, assess needs, and to engage in respectful, meaningful, collaborative, and mutually beneficial partnership with the intern as well as other student volunteers.

Environmental Science and Environmental Studies Learning Outcomes: This is an engaged learning research-based project which consists of conducting a comprehensive survey and assessment of learning outcomes for environmental studies and environmental science curricula at the university level. Students are expected to: a) provide a comprehensive list of programs and the degrees offered; b) provide an overview of the requirements for such programs; c) generate a searchable database (possibly on the web) for this data; d) provide an analysis of best practices with supporting argumentation. Ideally this could be a resource published digitally by Wake Forest, which could be shared internationally through membership organizations and scholarly networks.

Creating a Digital Resource for a Specific Course Module (possibly a group project): This is an engaged, creative research project in which students will dig deeper into literature related to one specific course module. Students will endeavor to create an online learning database related to that topic that can be used for future ENV 201 courses, and possibly shared with national and international educational organizations for use with other students (depending on the quality and accessibility of the final project).

Service Learning Projects:

Tutoring students at El Buen Pastor, Latino Community Services: This service learning project requires the student to provide tutoring and mentoring to children at El Buen Pastor, whose mission is to strengthen Latino families in the Old Town area. Students will be expected to meet with the Executive Director of El Buen Pastor Latino Community Services, learn about the needs of the community, learn about and assess the needs of the community, and engage in a respectful, meaningful, collaborative, and mutually beneficial partnership with the center and individual students. Please see the Appendix titled “Service Learning Do’s and Don’ts” before you begin your service learning project.

Garden Collaborators for El Buen Pastor Latino Community Services: This service learning project requires the student to provide labor, research support, and to document best practices to the new community garden at El Buen Pastor whose mission is to strengthen Latino families in the Old Town area near Wake Forest University. Students will be expected to meet with the Executive Director of El Buen Pastor Latino Community Services, learn about and assess the needs of the community, and engage in a respectful, meaningful, collaborative, and mutually beneficial partnership with the center and individual community members. Please see the Appendix titled “Service Learning Do’s and Don’ts” before you begin your service learning project. . The final product of this service learning project should include a notebook, electronic database, or other transferable medium which contains a compiled list of seasonally appropriate best practices.

Compost Collaborators for El Buen Pastor Latino Community Services: This service-learning project requires the student to provide labor, research support, and to document best practices to the new community garden at El Buen Pastor at El Buen Pastor, whose mission is to strengthen

Latino families in the Old Town. The specific goal of this project will be to set up a comprehensive composting program with documentation. Students will be expected to meet with the Executive Director of El Buen Pastor Latino Community Services, learn about and assess the needs of the community, and engage in a respectful, meaningful, collaborative, and mutually beneficial partnership with the center and individual community members. Please see the Appendix titled “Service Learning Do’s and Don’ts” before you begin your service learning project. The final product of this service learning project should include a working compost bin or area, as well as a notebook, electronic database, or other transferable medium which contains a compiled list of best practices.

Recycling Collaborators for El Buen Pastor Latino Community Services: This service-learning project requires the student to provide labor, research support, and to document best practices for a recycling program at El Buen Pastor, whose mission is to strengthen Latino families in the Old Town. The specific goal of this project is: a) to determine the recycling needs of the El Buen Pastor community and of community members; b) create an educational campaign to encourage recycling and illustrate to students and parents why it’s important, and c) to help facilitate the development of a comprehensive recycling program for the center. Students will be expected to meet with the Executive Director of El Buen Pastor Latino Community Services, learn about and assess the needs of the community, and engage in a respectful, meaningful, collaborative, and mutually beneficial partnership with the center and individual community members. Please see the Appendix titled “Service Learning Do’s and Don’ts” before you begin your service learning project. The final product of this service learning project should include a working compost bin or area, as well as a notebook, electronic database, or other transferable medium which contains a compiled list of best practices.

Journals (20pts):

A bi-weekly journal is required for all students. The journals will be turned in twice during the course of the semester. They should be appropriately dated, including the week (matching the week #s on the syllabus) and day. Each journal entry should include four types of information: ***Objective:*** Relate the specifics of the concrete experience. If engaged in a service learning project, relate what you saw, observed, heard, people with whom you interacted, and possibly outcomes of your experiences. If a participant in a research-oriented engaged project, then detail the specific processes and channels by which you tracked down information, and processed it into useable data.

Reflective: In this section, students should address the affective experience. What did the experience feel like? What did it remind you of? Did you feel apprehension or fear, or confidence? Did these feelings change? Do you feel successful or effective in your task?

Interpretive: Explore the cognitive experience. How did this experience change your thinking (or if it did not, discuss)? What did you learn? What strategies pursued worked, and which did not? How does the experience connect to classroom learning?

Decisional: If you had to do it again, what would you do differently? What decisions did you make, or what new opinions did you form as a result of this experience? Will this experience affect your career path, personal life choices, use of information, or skills?

Presentation of Group Project (10pts):

This is a presentation which introduces your peers to the issue or topic you investigated through your Bibliography project, or through your engaged project. Presentations should last

approximately 10 minutes, and may use any medium students choose. All, however, should include: a) a statement or description of the issue or topic; b) supporting information, including evidence mustered by all stakeholders (if an environmental debate), or description of the scope of the topic; c) the participants' own perspective on the specific environmental issue or topic.

Expectations:

- 1) **Professionalism:** First and foremost, students are expected to treat the requirements of this course and their peers with respect. They should be on time for class (consistent late appearances will affect attendance and participation grade). They should speak and conduct themselves in a manner consistent with being in professional setting. Cell phones, laptops and other electronic devices must be turned off and stowed before class. Students who receive or send phone calls or text messages during class will be asked to leave. The professor reserves the right to ask any student engaging in disruptive behavior (e.g. talking, reading newspaper, etc.) to leave the class.
- 2) **Handing in Assignments:** Assignments should be turned in through Sakai prior to the beginning of class on the due date. Emailed assignments will not be accepted without explicit prior approval from the professor.
- 3) **Late or Make-Up Assignments:** Late assignments will be deducted a half a letter grade each day they are late. Extensions may be granted in extraordinary circumstances with the approval of the professor.
- 2) **Completion of All Assignments:** Students must complete all written and oral assignments and fulfill the requirements for class participation in order to pass the class. Students missing assignments will fail or be granted an incomplete (in special cases and with prior arrangement).
- 3) **Attendance and Participation:** Class participation is counted as a significant portion of the final grade. Please see discussion above for more details (under "Assignments and Grading").
- 4) **The Not So Fine Print:** Plagiarizing is completely unacceptable under any circumstances. Please read and be familiar with the university's definition of and policy regarding plagiarism as described in the Code of Student Conduct as described in the Student Handbook (see <http://www.wfu.edu/studentlife/judicial/pdf/handbook.pdf>, especially the definition on pp. 75-76). Also, please explore this website for more information: <http://www.plagiarism.org/>. Any student caught cheating, plagiarizing, or otherwise violating the honor code in any assignment will fail the course.
- 5) **A Liberal Arts Education:** Read and familiarize yourself with the guiding principles and values that form the basis of Wake Forest's educational philosophy here: http://newstudents.wfu.edu/section.php?s=general&p=guiding_principles.
- 6) **Differently Abled Students and Special Arrangements:** If you require special arrangements (e.g. for note- and/or test-taking), please contact the Learning Assistance Center in Reynolda 117 (758-5929), and/or see this webpage for more information: http://newstudents.wfu.edu/section.php?s=general&p=disability_services. In addition, please contact me within the first two weeks of class to ensure that we make appropriate arrangements for facilitating your educational experience. Every effort will be made to accommodate those with registered different abilities.
- 7) **Counseling Center:** If you need support with personal mental and emotional health, please see the Counseling Center's website: <http://www.wfu.edu/ucc/>.

OUTLINE OF COURSE MODULES

1. Setting the Stage: Environmental Issues on a Global Scale
2. Ecosystem Ecology: The Basics
3. Environmental Consequences
4. Ecological Economics
5. Energy and the Mode of Production
6. Food Production and Consumption
7. Environmental Justice

TENTATIVE COURSE SCHEDULE (*please see Sakai for most recent version*)

Date	Day	Topic	Readings	Notes
WEEK 1: 8/29	W	Introduction to the Course		
WEEK 2: 9/3	M	Setting the Stage: Environmental Issues on a Global Scale	1. Brown, chps. 1-4 (pp. 3-58)	Collapse with Jared Diamond
9/5	W	Ecosystem Ecology: The Basics	1. Peter Raven et al., ch. 3, "Ecosystems and Energy," from <i>Environment</i> (pp. 48-64)	
WEEK 3: 9/10	M	Ecosystem Ecology: The Basics (continued)	1. Peter Raven et al., ch. 4, "Ecosystems and Living Organisms," from <i>Environment</i> (pp. 65-88)	Checkpoint 1 : All Groups
9/12	W	Ecosystem Ecology: The Basics (continued)	1. Edward O. Wilson, from "Biodiversity Reaches its Peak," from <i>The Diversity of Life in Environment</i> (375-377). 2. Michael Soule, "What is Conservation Biology?" <i>Environment</i> (391-397)	Quiz 1 Call of Life
WEEK 4: 9/17	M	Environmental Consequences	1. Brown, chps. 5&6 (pp. 59-83)	Dirt
9/19	W	Ecological Economics	1. Adelson et al. "Economics," (774-777) 2. John Proops, "Ecological Economics: Rationale and Problem Areas," <i>Ecological Economics</i> (1) (on Sakai)	Karen Pinkus on Climate Change, and Jamazon (9/20&9/21)
WEEK 5: 9/24	M	Ecological Economics (continued)	1. Herman Daly, "Carrying Capacity as a Tool of Developmental Policy," <i>Ecological Economics</i> , Vol. 2, No. 1. 2. Herman Daly, "Five Policy Recommendations for a Sustainable Economy," in <i>Sustainable Planet</i>	

			(209-211) on Sakai	
9/26	W	Ecological Economics (continued)	1. Brown, chps. 8 (pp. 99-115) 2. Paul Ehrlich, "The Limits to Substitution," <i>Ecological Economics</i> , Vol. 1, No. 1.	Quiz 2
WEEK 6: 10/1	M		1. Group Workshop 1	
10/3	W	Energy and the Mode of Production (continued)	1. Brown, ch. 9&10	Last day to drop
WEEK 7: 10/8	M	Energy and the Mode of Production (continued)	1. Adelson et al., "Energy" in <i>Environment</i> (492-497) 2. Cleveland et al. "Energy and the US Economy: A Biophysical Perspective" in <i>Environment</i> (781-786) 3. Costanza et al., "Some Convenient Truths" (on Sakai)	*Journals Due*
10/10	W	Energy and the Mode of Production (continued)	1. Who Killed the Electric Car?	Quiz 3
WEEK 8: 10/15	M	Food Production and Consumption	1. Adelson et al., "Soil and Agriculture" in <i>Environment</i> (413-415) 2. Brown, ch. 5 (59-71)	Checkpoint 2: All groups
10/17	W	Food Production and Consumption	1. Brown, ch. 11&12 (151-181)	King Corn
WEEK 9: 10/22	M		Group Workshop 2	Quiz 4
10/24	W	Food Production and Consumption	1. Alfredo Sfeir-Younis and Andrew Dragun, from <i>Land and Soil Management in Environment</i> (418-426) 2. Robert Manning, "The Oil We Eat," in <i>Environment</i> (426-434). 3. Richard Levins, "Science and Progress: Seven Developmentalist Myths in Agriculture" in <i>Environment</i> (434-439)	Food, Inc. (?); The Botany of Desire MIDTERM GRADES DUE 10/20/10
WEEK 10: 10/29	M	Food Production and Consumption	1. Salatin, (1-110)	The Garden People's Grocery
10/31	W	Food	1. Salatin, (111-224)	Fresh

Production and Consumption				
WEEK 11:	M	Food Production and Consumption	1. Salatin (225-327)	The Future of Food
11/5	W		1. Robert Bullard, "Environmental Justice for All," from <i>Unequal Protection</i> , in <i>Environment</i> (766-769)	Quiz 5
11/7			2. Ken Saro-Wiwa, from <i>Genocide in Nigeria: The Ogoni Tragedy</i> in <i>Environment</i> (712-715)	
			3. Vandana Shiva, "Economic Globalization Has Become a War Against Nature and the Poor" in <i>Environment</i> (274-279)	
WEEK 12:	M	Environmental Justice	1. CM Abraham and Sushila Abraham, from "The Bhopal Case and the Development of Environmental Law in India," in <i>Environment</i> (753-758)	
11/12			2. Brown, ch. 13 (183-202)	
11/14	W	Environmental Justice	1. Garrett Hardin, "Living on a Lifeboat," from BioScience, (http://www.garretthardinsociety.org/articles/art_living_on_a_lifeboat.html)	
WEEK 13:	M	Environmental Justice	Group Workshop 3	Conference
11/19				
11/21	W	Thanksgiving Break		
WEEK 14:	M	Sustainability	1. Charles Redman and Ann Kinzig, "Resilience of Past Landscapes: Resilience Theory, Society, and the <i>Longue Duree</i> " in <i>Conservation Ecology</i> 7(1) (on Saka9)	Quiz 6 *Journals Due*
11/26				
11/28	W	Presentations		
WEEK 15:	M	Presentations		
12/3				
12/5	W	Presentations		Last day of class 12/7/2012