

Introduction to Environmental Studies

Instructors: Dr. Monalisa Chatterjee Email: monalisc@usc.edu Office hours: TTH 2.00 – 3.00 pm, CAS 110

Sections: 33000 (TTH 12:30-1:50 PM) Units: 4.0 Room: WPH 102 Prerequisites: none

Text: *Essentials of Environmental Science* https://www.amazon.com/Essentials-Environmental-Science-Andrew-Friedland/dp/131906566X

Supplemental reading: assigned periodically throughout semester, available on Blackboard

Course description:

This course will give you an overview of how the natural world works, the ways in which humans are perturbing the natural world, and the ways in which governments and society are (or are not) addressing environmental degradation

Course Goals:

- Gain knowledge of the physical, chemical, biological aspects of the environment
- Understand issues facing the environment from a scientific and social perspective
- Explore how environmental issues affect humans, from multiple perspectives
- Discuss solutions to environmental degradation through law, policy, and human behavior

Broader Learning objectives:

- Understanding an interdisciplinary approach to complex environmental problems using basic tools of natural and social sciences;
- The ability to work effectively as a member of an interdisciplinary team on complex problems involving multiple competing stakeholders and agendas;
- The ability to critically evaluate the economic and policy ramifications of diverse energy portfolios on air and water quality, climate, weapons proliferation and societal stability;
- An experience-based understanding of economic policies in California including water and energy needs, air quality, marine and coastal issues;
- The ability to write effectively about complex environmental problems and do so for both specialist and general audiences with equal facility;

• And the ability to apply quantitative reasoning skills to environmental problems including basic calculations related to sustainability issues and the use of quantitative methods in data analysis and argumentation.

Please refer to <u>https://dornsife.usc.edu/environmental-studies/learning-objectives/</u> for more information.

Course requirements and expectations:

- Come to class prepared and engage in discussions and group work
- Be respectful of me and other students in class
- Please leave cell phones outside the classroom or turned off
- If you have to miss class make sure you arrange to get notes and announcements.

Other course information:

This course will use Blackboard for communication, information and turning in assignments. I will make lecture slides available after the lecture is given, as well as post and accept assignments there. Some additional readings will be assigned periodically throughout the semester, and these will be announced in class, posted on Blackboard. You are expected to check blackboard often for any updates/announcements.

Grading:		Grading scale: A = 89.5-100%
Midterm 1	75 pts	B = 79.5-89.4%
Midterm 2	75 pts	C = 69.5-79.4%
Pop quizzes	25 pts	D = 59.5-69.4%
Final exam	75 pts	F = < 59.5%
Brochure assignment	60 pts	
Letter to congress	40 pts	
In class debate	50 pts	
Class assignments	50 pts	

Both midterm exams will cover material immediately after the preceding exam (or beginning of class for midterm 1) up to the exam. The final exam will be a midterm. Exams will focus on lecture and reading material. During exams, students will NOT be allowed to have notes, books, cell phones, etc. Only pens/pencils and a calculator are required. Failure to comply with exam policies will automatically result in a grade of "0" for that particular exam.

Late/make-up policy:

If there is a conflict with an exam, you must email the instructor 2 weeks in advance to see if arrangements can be made (under reasonable circumstances). Otherwise, make-up exams will not be given except in extreme emergencies. Make-up exams will also be more difficult, so it is in your best interest to take the exam on the day it is scheduled. If you have an emergency on exam day, you must get in touch with us before the exam if possible. Assignments will not be accepted late but under unusual circumstances you can check with the instructor to submit with a late grade.

Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* <u>https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions</u>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <u>http://policy.usc.edu/scientific-misconduct</u>.

Discrimination, sexual assault, and harassment are not tolerated by the

university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <u>http://equity.usc.edu</u> or to the *Department of Public Safety* <u>http://adminopsnet.usc.edu/department/department-public-safety</u>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage <u>http://sarc.usc.edu</u> describes reporting options and other resources.

Support Systems:

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <u>http://emergency.usc.edu</u> will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Emergency Preparedness/Course Continuity in a Crisis

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.

Lecture Schedule (tentative)

Week 1 (Jan 7)	Introduction Chapter 1: Studying the state of our earth; what is science?
Week 2 (Jan 14)	Chapter 2: Matter, energy and change Chapter 3: Ecosystem ecology
Week 3 (Jan 21)	Chapter 4: Global climates and biomes

Chapter 5: Evolution and biodiversity

- Week 4 (Jan 28) Chapter 6: Population and community ecology Chapter 7: Population growth
- Week 5 (Feb 4) Endangered species brochure due: Thursday, February 7th 2019 Chapter 8: Natural resources
- Week 6 (Feb 11) Midterm 1: Tuesday, February 12th 2019 Chapter 9: Water resources
- Week 7 (Feb 18) Chapter 10: Land use Chapter 11: Food and Agriculture
- Week 8 (Feb 25) Chapter 11: Food and Agriculture Chapter 12: Energy
- Week 9 (Mar 4) Chapter 13: Renewable energy

SPRING BREAK

- Week 10 (Mar 18) Midterm 2: Thursday, March 21st 2019 Chapter 14: Water pollution
- Week 11 (Mar 25) Chapter 15: Air pollution
- Week 12 (Apr 1) Chapter 16: Waste Chapter 20: Sustainability Letter to congress due: Thursday, April 4th 2019
- Week 13 (Apr 8) Chapter 18: Biodiversity and conservation biology
- Week 14 (Apr 15) Chapter 19: Science of climate change
- Week 15 (Apr 22) **Debates**
 - May 8th 2019 FINAL EXAM (2-4pm)