

ENVIRONMENTAL SCIENCE AND MANAGEMENT 429/529: ENVIRONMENTAL IMPACT ASSESSMENT

Winter Quarter 2020

Tuesdays & Thursdays, 2:00 – 3:50 p.m.

Science Research & Teaching Center, Rm. B1-82

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Overview

This course teaches the aims and practice of environmental impact assessment (EIA), using the National Environmental Policy Act (NEPA) as a focal framework. NEPA is not the only statute directing EIA activities in the United States, and there are variations in NEPA practice across agency settings, however the law was a cornerstone of movement-era environmental policy in this country, and it influenced the development of EIA policies at the state level, in multi-national institutions, and in countries around the world. Environmental Impact Statements (EIS)— the primary vehicle for analyzing and disclosing the environmental effects of individual projects under NEPA— are routinely prepared for numerous types of activities in the United States, and it is likely that you will encounter these types of documents and their state-level cousins either in your career or in your capacity as a member of the public who is attentive to environmental issues. Familiarity with NEPA— and the broader category of public policies that it represents— will therefore help you understand the landscape of U.S. environmental policy and politics while also providing more immediate and instrumental value to you as an engaged citizen and an emerging professional.

To that end, the focus of this class will be on the process of assessing environmental impacts under NEPA, but we will also explore the political and policy context that gave rise to NEPA, examine the successes and failures of the law, and review the ways that different types of law give government agencies the authority to protect the environment (or the discretion to decline to do so). You will finish this quarter with a strong foundation in the *mechanics* of NEPA, but we will also use the statute as an entry point for helping you practice the *habits of mind* that make environmental politics and policy tractable, debatable, and exciting to you— as a scientist, as a practitioner, or as a citizen

Textbook and Readings

The textbook for this course is *The NEPA Book* (Bass, R.E. A.I. Herson, and K.M. Bogdan, 2001, Solano Press), which is available for rent or purchase at the campus bookstore. Additional readings, mostly drawn from actual NEPA documents, will be posted on D2L.

Course Requirements

This is a joint graduate and undergraduate class. Course requirements will differ depending on whether you are enrolled in the course at the 400- or 500-level.

ESM 429 (Undergraduate)

Examinations	There will be two in-class examinations, a midterm and a final.
Case Study Session	Each student will be required to work with one other student to design and direct a 30-minute class session that provides deeper engagement with one category of environmental impact (e.g., geology, wetlands, noise,

	environmental justice) using case studies of how that impact type was analyzed in actual EIA documents.
Comment Letter	Each student will write a comment letter on an actual Draft EIS (DEIS) or Draft Environmental Assessment (DEA) (selection must be approved by the instructor). Students are strongly encouraged to submit their comments to the lead agency.
Participation	You will be evaluated on your participation in class activities, including the support you show your peers through active engagement with their case study sessions. Poor attendance and frequent tardiness disrupt the class and will impact your grade. If you miss class, you are responsible for making arrangements with another student to get filled in on what happened in your absence.

ESM 529 (Graduate)

Graduate students will be required to meet the above requirements, with the following additions and exceptions:

Examinations	Graduate students will be required to take the midterm exam, but <u>not</u> the final exam.
Term Paper and Presentation	In lieu of a final exam, graduate students will be required to write a term paper analyzing a draft Environmental Impact Statement (DEIS) or draft Environmental Assessment (DEA) of their choosing (with instructor approval). Student will give a 10-minute PowerPoint presentation on the documents they selected and their major conclusions in the last week of class.
Class Facilitation	In lieu of preparing a 30-minute class session that illustrates how impact analysis is conducted through case studies, graduate students will facilitate an hour-long class session on a broader NEPA topic (e.g., NEPA and the Trump Administration; critiques of NEPA).

Final grades will be calculated as follows:

ESM 429 (Undergraduate)		ESM 529 (Graduate)	
Case Study Session	25%	Class Facilitation	25%
Midterm Exam	25%	Midterm Exam	20%
Final Exam	20%	Term Paper	25%
Comment Letter	15%	Comment Letter	15%
Participation	15%	Participation	15%

Tentative Course Outline

Week	Date	Topic	Homework (due today)
1	Jan. 7	Course introduction U.S. Environmental Policy	n/a
	Jan. 9	Review: Types of Law NEPA: Why, What, and How	<i>The NEPA Book</i> , Ch. 1
2	Jan. 14	Types of Environmental Assessments Steps in the Process	<i>The NEPA Book</i> , Ch. 2-3, Ch. 4 pp. 71-83
	Jan. 16	Impacts to the Physical Environment Workshop: Selecting Case Studies	Reading TBA Case study selection due Friday by 5 p.m.
3	Jan. 21	Impacts to the Biological Environment	Reading TBA
	Jan. 23	Workshop: Planning Case Studies	Reading selections due Friday by 5 p.m.
4	Jan. 28	Impacts to the Built Environment	Reading TBA
	Jan. 30	Impacts to Human Resources	Reading TBA
5	Feb. 4	Midterm Exam	Study for the midterm exam
	Feb. 6	Evaluating Alternatives Cumulative Impacts	<i>The NEPA Book</i> , Ch. 5 pp. 91-97 and 102-110
6	Feb. 11	Public Participation Review of Midterm Exams	Reading TBA
	Feb. 13	Commenting on NEPA Documents	Reading TBA
7	Feb. 18	Case Studies: Physical Environment	Reading TBA
	Feb. 20	Workshop: Draft Comment Letters	Come to class with four copies of a complete draft of your letter
8	Feb. 25	Case Studies: Biological Environment	Readings to be selected by student-presenters and approved by instructor
	Feb. 27	Case Studies: Built Environment	Readings to be selected by student-presenters and approved by instructor
9	Mar. 3	Case Studies: Human Resources	Readings to be selected by student-presenters and approved by instructor
	Mar. 5	Evaluating NEPA	Readings to be selected by student-facilitators and approved by instructor
10	Mar. 10	NEPA and the Trump Administration	Readings to be selected by student-facilitators and approved by instructor
	Mar. 12	Graduate Student Presentations Exam Review	Come with questions
F	Mar. 16	Final Exam, 10:15 a.m. - 12:05 p.m.	Comment letters and term papers due Mar. 17 at 5 p.m.

Access and Inclusion for Students with Disabilities

PSU values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, useable, inclusive, and welcoming. If any aspects of instruction or course design result in barriers to your inclusion or learning, please notify me; I am open to your feedback.

The Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment. If you have, or think you may have, a disability that may affect your

work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations. The DRC is located in 116 Smith Memorial Student Union, 503-725-4150, drc@pdx.edu, <https://www.pdx.edu/drc>. [If you already have accommodations, please contact me to make sure that I have received a faculty notification letter and discuss your accommodations.](#)

For information about emergency preparedness, please go to the Fire and Life Safety webpage (<https://www.pdx.edu/environmental-health-safety/fire-and-life-safety>) for information.

Academic Integrity

In the American college and university system, scholars and students use the ideas of their peers and predecessors to build new knowledge and understandings; in interdisciplinary fields such as environmental science and management, collaboration is an essential part of problem-solving, and one we emphasize in undergraduate courses. Institutions that depend on the free and open exchange of ideas and information also depend on a culture of academic integrity. Consequently (and as you have probably noticed) there are strong formal and informal sanctions against academic misconduct in this university and in this department. I take plagiarism and cheating very seriously, and I expect that all work that you submit in this class will represent an original synthesis of your own ideas and the ideas of others. That means that information generated by others and used in your work must be clearly attributed to its original source, and either paraphrased in your own words or placed in quotation marks. Ask questions early and often. If you can't ask questions early, ask them late, and err on the side of transparency. For help identifying plagiarism and learning how to avoid it, this online guide from the UCLA library is a good starting place: <http://guides.library.ucla.edu/bruin-success/citing>.

D2L

We will make (limited) use of D2L-Daylight in this course. Although this web-based course management system can display material on a wide range of platforms from desktops to tablets to phones, you may need to use functions that are only available on a fully functioning browser. You should check if the devices and browsers that you intend to use are supported in D2L-Daylight by checking this page:

https://d2l.custhelp.com/app/answers/detail/a_id/1483/kw/supported%20browsers

If your device/browser combination is not fully supported, it is your responsibility to make arrangements for taking quizzes or submitting work.

Title IX Reporting Obligations

Please be aware that federal, state, and PSU policies require faculty members to report any instances of sexual harassment, sexual violence and/or other forms of prohibited discrimination. (PSU faculty are also required to file a report under other circumstances, e.g., if we become aware of child abuse.) If you are experiencing or have experienced any form of sexual harassment or violence and would like to get support and learn about your options without triggering a report or an investigation, the PSU Women's Resource Center hosts advocates who can maintain confidentiality. Their services are available to students of all genders. To book an appoint with a confidential advocate, go to psuwrc.youcanbook.me or call (503) 725-5672. You may also wish to seek help from the Center for Student Health and Counseling (SHAC), where counselors are not subject to the same reporting requirements as your instructors.

Mandatory Safe Campus Online Training Module

PSU requires all students to take the learning module entitled "Creating a Safe Campus: Preventing Gender Discrimination, Sexual Harassment, Sexual Misconduct and Sexual Assault." The module should take about 45 minutes to complete and contains important information and resources. If you have not done so already, please complete the Safe Campus Module in D2L. If you have technical difficulties with the module, contact OIT's help desk at (503) 725-HELP (4357) or help@pdx.edu. If you have any questions about the module requirement refer to Safe Campus Module FAQs or contact saveact@pdx.edu. PSU's Student Code of Conduct makes it clear that violence and harassment based on sex and gender are strictly prohibited and may result in a range of sanctions, including suspension and expulsion.

Students' Right to Privacy

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. §1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. Under FERPA, students have the right to inspect and review their education records maintained by the school. Generally, schools must have written permission from the student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to certain parties or under the specific conditions. Schools may also disclose, without consent, "directory" information such as a student's name, address, telephone number, unless the student has requested that the school not disclose directory information about them. These sites provide additional information on FERPA:

<https://www.pdx.edu/registration/student-records-privacy-policy>

http://www.pdx.edu/sites/www.pdx.edu.education/files/gse_handbook_student_privacy.pdf

OTHER RESOURCES AND SUPPORT FOR PSU STUDENTS

PSU offers an extensive array of services for students based on the diverse life experiences and needs you collectively bring to campus, as well as your varying interests and goals. They are designed to help you succeed here, to help you feel supported and build community, and, ultimately, to help you complete your degree, so we very much want you to be aware of them and to use them. Please visit our course website on D2L for a list of student centers and services that may be useful to you during your time here. Note that I also keep fliers and other literature from many campus offices providing specialized resources to students in my office; feel free to come and peruse them, or to ask me about what is available.