#### **ENVS 456: Environmental Governance**

CRN: 23062; Spring 2016; 4 Credits

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Office hours: Monday 10:30-12, Friday 9-10:30, and by appointment.

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Classroom: CF 225

Meeting time: Tuesday, Thursday 8:00-9:50

## **Course Description**

As you move through your environmental education, you are likely beginning to notice that occasionally even people who share a technical understanding of an environmental problem have divergent – sometimes incompatible – ideas of what policy interventions are appropriate to address that problem. These preferences for different forms of intervention can result from several causes, but a common one is that we frequently disagree on any number of fundamental questions about how we can and should organize and govern society and our interactions with our environment.

So, how do/should societies bring about change to improve social and environmental conditions? This course treats environmental governance as comprising the structure, norms, and activities of the social, political, and economic institutions that shape our interactions with the environment, and these institutions and norms as being rooted in particular histories, cultures, and political philosophies. Students will examine several competing environmental governance worldviews, and readings will expose students to both laudatory and critical perspectives of each.

Here is a small sampling of the contested questions related to governance that we will discuss and debate:

- Is our world fundamentally resilient, or is nature a finely balanced system prone to collapse under anthropogenic stresses?
- Is our reliance on technology the *cause* of our environmental problems, or is technological innovation the *solution* to those very problems? Can it be both?
- How should we balance the needs of the present with the needs of the future, given that technology changes resource constraints?
- Can market-based mechanisms correct the damages wrought by market behavior, or must we rely on different mechanisms of change?
- Can *consumer behavior* bring about improved environmental conditions, or are more significant structural changes necessary?
- What are appropriate roles for *markets* and *financial interests* in a democracy?
- Should government intervene in markets to correct for failures? If so, when should government *regulate*, as opposed to working through *market-based incentives* (e.g., creating cap and trade mechanisms)?
- What should the government's role be in *sponsoring innovation*? In working to *alter citizen behavior*?
- What are appropriate roles for *democratic citizens* and *technical experts* in environmental decisions, which are inherently technical *and* value-laden?

These questions are hotly contested, and reasonable people can disagree on them. As such, ending policy disputes is rarely as simple as educating those who disagree with you about the "science" of an environmental problem.

**Learning Objectives** 

The Environmental Studies department has identified six student learning objectives, and the faculty of the Environmental Policy major have laid out an additional four. Please be aware of these goals, as they describe the skills and abilities we feel are crucial for graduates in our fields.

The ENVS objectives are that upon graduation, Environmental Studies students will be able to:

- 1. ethically evaluate social priorities and their risks in the context of environmental problem solving;
- 2. apply an integrative approach towards understanding human-environment interactions;
- 3. work collaboratively to identify and analyze complex environmental problems, recognize diverse stakeholder perspectives, and synthesize creative solutions;
- 4. transfer academic learning to a real-world context of constraints and opportunities;
- 5. produce, interpret, and apply research in a solution-oriented context (in the case of ENVPOL, "research" includes a broad set of policy, legislative, judicial and empirical types of scholarship);
- 6. analyze and communicate ideas effectively in oral, written, and visual forms.

And the Environmental Policy objectives state that upon graduation our majors will be able to:

- 1. Articulate the role of political context in shaping policy dynamics, using historical and contemporary examples.
- 2. Articulate the roles of legislation, regulation, and litigation in the context of environmental problem-solving.
- 3. Assess environmental governance efforts for their impacts on stakeholders, communities, and the environment.
- 4. Apply knowledge and skills to effectively contribute to policy dialogue.

Within and beyond these objectives, each class has its own learning objectives. Below are my goals in this course with a brief annotation as to how I see each fitting in with the ENVS and ENVPOL objectives:

- Understand competing approaches to environmental governance and their importance in ongoing policy controversies (Contributes to ENVS objectives 2 & 3, and ENVPOL 3 & 4);
- Recognize the roles of various institutions in shaping our approaches to governing the environment (Contributes to ENVS 4 and ENVPOL 1,2);
- Develop and articulate your own thinking on questions of environmental governance;
- Understand how you as an individual can interact with and influence policy processes (ENVPOL 4);
- Build a skillset to empower yourself as a citizen in a polarized democracy;
- And hone your reasoning and written and oral communication skills (ENVS 6).

#### Required book:

Magdoff, Fred, and John Bellamy Foster. What Every Environmentalist Needs to Know about Capitalism: A Citizen's Guide to Capitalism and the Environment. New York: Monthly Review Press, 2011. ISBN: 9781583672419

## **Anticipated Class Schedule and Readings**

	Date	Topic	Assignments – read before class
1	Tu Mar 29 <sup>th</sup>	Introduction to the Course; The myths of nature	Familiarize yourself with the syllabus and develop a strategy for taking reading and discussion notes!

2	Th Mar 31 <sup>st</sup>	Foundational Knowledge: Cultural theory and cultural cognition	Kahan, Dan M., and Donald Braman. "Cultural Cognition and Public Policy." Yale Law & Policy Review 24, no. 1 (January 1, 2006): 149–72.		
	Technology and the environment				
3	Tu Apr 5 <sup>th</sup>	Market Innovations and Natural Capitalism	Lovins, A., H. L. Lovins, and P. Hawken. "A Road Map for Natural Capitalism." <i>Harvard Business Review</i> , no. May-June (1999): 145–58.		
4	Th Apr 7th	Salvation through Technology?	Shellenberger, Michael, and Ted Nordhaus. "Evolve: A Case for Modernization as the Road to Salvation." <i>Orion Magazine</i> , October 2011. <a href="http://www.orionmagazine.org/index.php/articles/article/6402/">http://www.orionmagazine.org/index.php/articles/article/6402/</a> .  Ausubel, Jesse H. "The Return of Nature: How Technology Liberates the Environment." <i>The Breakthrough Journal</i> , Spring 2015. <a href="http://thebreakthrough.org/index.php/journal/issue-5/the-return-of-nature">http://thebreakthrough.org/index.php/journal/issue-5/the-return-of-nature</a> .  Duane, Daniel. "The Unnatural Kingdom." The New York Times, March 11, 2016. <a href="http://www.nytimes.com/2016/03/13/sunday-review/the-unnatural-kingdom.html">http://www.nytimes.com/2016/03/13/sunday-review/the-unnatural-kingdom.html</a> .		
5	Tu Apr 12 <sup>th</sup>	Technology, with nuance  Heads up: Students have found the first reading to be difficult. Don't get too hung up on the technical details of green chemistry and nanoscience. The gist is this: Science is not unitary, and choosing different research would yield different technologies (and attendant problems/opportunities). Neither science nor society automatically steers researchers toward the relatively benign options; in fact, many of our incentive structures governing innovation do the opposite.	<ul> <li>Woodhouse, E.J. "Nanoscience, Green Chemistry, and the Privileged Position of Science." In <i>The New Political Sociology of Science Institutions, Networks, and Power</i>, edited by Scott Frickel and Kelly Moore. Madison: University of Wisconsin Press, 2006.</li> <li>Optional reading:</li> <li>Valdivia, Walter D., and David H. Guston. "Responsible Innovation: A Primer for Policymakers." <i>The Brookings Institution</i>. Accessed May 5, 2015. <a href="http://www.brookings.edu/research/papers/2015/05/05-responsible-innovation-valdivia-guston">http://www.brookings.edu/research/papers/2015/05/05-responsible-innovation-valdivia-guston</a>.</li> </ul>		
6	Th Apr 14 <sup>th</sup>	On Loving Monsters	Nordhaus, Ted, and Michael Shellenberger. "The Monsters of Bruno Latour." <i>The Breakthrough Journal</i> , Spring 2012. http://thebreakthrough.org/index.php/journal/past-		

			issues/online-content/the-monsters-of-bruno-latour.	
			Latour, Bruno. "Love Your Monsters Why We Must Care for Our Technologies as We Do Our Children." The Breakthrough Journal, no. Winter 2012 (2012). http://thebreakthrough.org/index.php/journal/past-issues/issue-2/love-your-monsters/.  Sarewitz, Daniel. "Liberalism's Modest Proposals."	
			Breakthrough Journal, no. 2 (Fall 2011). http://thebreakthrough.org/index.php/journal/past- issues/issue-2/liberalisms-modest-proposals/.	
7	Tu Apr 19 <sup>th</sup>	Technology as the problem	Excerpt from: Owen, David. The Conundrum: How Scientific Innovation, Increased Efficiency, and Good Intentions Can Make Our Energy and Climate Problems Worse, 1st Riverhead trade pbk. ed. New York: Riverhead Books, 2012.	
8	Th Apr 21 <sup>st</sup>	Our problems with technology	Perrow, Charles. "Introduction" and "Normal Accident at Three Mile Island." In <i>Normal Accidents: Living with High-Risk Technologies</i> . Princeton, NJ: Princeton University Press, 1999.	
9	Tu Apr 26 <sup>th</sup>	In-class video on nuclear power:  Containment: Life After Three Mile Island <i>or</i> Pandora's Promise	Alvarez, Lizette. "Nuclear Plant Leak Threatens Drinking Water Wells in Florida." <i>The New York Times</i> , March 22, 2016. <a href="http://www.nytimes.com/2016/03/23/us/nuclear-plant-leak-threatens-drinking-water-wells-in-florida.html">http://www.nytimes.com/2016/03/23/us/nuclear-plant-leak-threatens-drinking-water-wells-in-florida.html</a> .	
		What do you think: Pursue advanced nuclear technology? What are the barriers? What are the risks?	Frequently Asked Questions About Nuclear Power. (n.d.). Retrieved March 8, 2016, from <a href="http://thebreakthrough.org/index.php/programs/energy-and-climate/nuclear-faqs">http://thebreakthrough.org/index.php/programs/energy-and-climate/nuclear-faqs</a>	
10	Th Apr 28 <sup>th</sup>	Writing day: Does technology solve or cause problems? Is that the appropriate phrasing of the question?		
11	Tu May 3 <sup>rd</sup>	Case study: Geoengineering	Nicholson, Simon. "Intelligent Design?: Unpacking Geoengineering's Hidden Sacrifices." In <i>The</i> Environmental Politics of Sacrifice, edited by Michael Maniates and John M. Meyer. Cambridge, Mass: MIT Press, 2010.  Sarewitz, Daniel, and Richard Nelson. "Three Rules for	
			Technological Fixes." <i>Nature</i> 456, no. 7224 (2008): 871–72.	
Capitalism and the environment				

12	Th May 5 <sup>th</sup>		Meyer, John M. "A Democratic Politics of Sacrifice?" In <i>The</i>		
12	Till Way 3	Freedom, individualism, and sacrifice	Environmental Politics of Sacrifice, edited by Michael Maniates and John M. Meyer. Cambridge, Mass: MIT Press, 2010.		
13	Tu May 10 <sup>th</sup>	The cultural context: Neoliberalism	McCarthy and Prudham 2004 Neoliberal Nature and the Nature of Neoliberalism  Skim this, as I will use it to frame up the discussion for the day: Maniates 2001  **Technology essay due***		
14	Th May 12 <sup>th</sup>	Capitalism and markets as solutions to problems	Max, D. T. "Green Is Good." <i>The New Yorker</i> , May 12, 2014. <a href="http://www.newyorker.com/magazine/2014/05/12/green-is-good">http://www.newyorker.com/magazine/2014/05/12/green-is-good</a> .		
15	Tu May 17 <sup>th</sup>	Economics and conservation: Bestest Frenemies Forever	Sagoff, Mark. "The Rise and Fall of Ecological Economics A Cautionary Tale." <i>The Breakthrough Journal</i> , Winter 2012. http://thebreakthrough.org/index.php/journal/past-issues/issue-2/the-rise-and-fall-of-ecological-economics.  Jigsaw: Markets, prices, and incentives		
16	Th May 19 <sup>th</sup>	Capitalism as the root cause of environmental problems	Magdoff and Foster I		
17	Tu May 24 <sup>th</sup>		Magdoff and Foster II  ** final exam questions handed out**		
18	Th May 26 <sup>th</sup>		Magdoff and Foster III		
19	Tu May 31 <sup>st</sup>	Democracy in a time of environmental crisis	Blandy, S., & Parsons, D. (2000). Freedom, governance and questions of global environmental control.  Interdisciplinary Environmental Review, 2(2), 48. <a href="http://doi.org/10.1504/IER.2000.053992">http://doi.org/10.1504/IER.2000.053992</a> Stehr, Nico. "Exceptional Circumstances: Does Climate Change Trump Democracy?" Issues in Science and Technology, Winter 2016. <a href="http://issues.org/32-2/exceptional-circumstances-does-climate-change-trump-democracy/">http://issues.org/32-2/exceptional-circumstances-does-climate-change-trump-democracy/</a> .		
20	Th Jun 2 <sup>nd</sup>	Course wrap-up and evaluations			

# Final exam essays due: Tuesday, June 7, 1pm. No late essays accepted!

#### Assessment

**Reading journals**: Students will keep a journal on the Canvas platform in which they will identify tensions and synergies between the readings in this course, with outside readings, and with common cultural understandings of governance of the environment. I invite you to respond to and ask questions about the daily readings in these broader contexts. **These journal entries should be completed no later than 6am, two hours prior to our class meeting.** Take your time with these, as they comprise the single largest component of your overall grade. I will skim them prior to our class and use them to guide our daily activities.

Each reading journal entry should take the form of a summary of one or more key ideas from the day's readings culminating in **two or more well-developed and contextualized questions** about or motivated by the readings. Make sure your questions are more philosophical than technical; these questions should be of the sort that you would be happy to spend 10 or so minutes in class discussing them. It is fine to ask, for example, what an author meant by "socio-technical system" as long as you pose additional questions that grapple more deeply with the authors' ideas.

I ask you to write these reading journals for three reasons. First, informal daily writing is, in my opinion, the best thing you can do to improve your writing skills. Second, I find the best way to truly digest and understand difficult written material is to summarize and respond to it in your own writing. Third, as I stated above, the questions you ask in these reading journals will allow us to make the most of our classroom time together.

Your grades on these journal entries do not depend on you having a perfect understanding of the readings; rather, they will be based upon the depth of your effort to make sense of them. Excellent daily responses are those that integrate ideas across multiple readings, reflect an understanding of the relevance of the readings, and ask insightful questions. These discussion questions will be graded on a scale of 0-5 as follows:

- 5/5: Well-informed and formulated questions, linking ideas across readings and making connections with real-world cases.
- 4/5: Well-written questions that demonstrate significant effort and understanding, but lacking integration with other ideas.
- 3/5: Questions demonstrate that the student did at least some of the readings and tried to understand the information.
- 2/5: Ill-informed or articulated questions.
- 1/5: The questions suggest little understanding of the reading and are poorly written.
- 0/5: No attempted question.

I will drop the 4 lowest grades on these discussion questions, and they will collectively be worth 20% of your final grade.

In addition, students will complete a mid-term and a final exam essay, and will participate in daily classroom discussions and debates.

Course grades will be determined approximately as follows:

Synergies and Tensions journal	25%	Α	>94.0%
Technology essay	20%	A-	>90.0%
Jigsaw	5%	B+	>87.0%
Final exam essays	30%	В	>84.0%
Classroom participation	20%	B-	>80.0%
		C+	>77.0%
		С	>74.0%
		C-	>70.0%
		D+	>67.0%
		D	>64.0%
		D-	>61.0%
		F	<61.0%

Late papers will be penalized 10% per day, with the penalty beginning at the time stated on the syllabus (i.e., a paper turned in within the first 24 hrs but after the deadline has a maximum possible grade of 90%). I will not accept late final exam essays or jigsaw write-ups.

I do not typically offer extra credit or make-up assignments.

**Participation:** Participation is important in this class; arriving on time to class meetings is necessary, but not sufficient if you would like a good grade. I want to hear all of your opinions, not only because this class is about successful communication, but also because **you have valuable things to say** (when you come well-prepared).

Students who earn an **A** for participation are those who prepare for class by doing all of the readings, come to class with questions in hand, and who speak up. Referencing the readings is a good strategy, but simply restating what you read is not enough; I want you to synthesize and contribute new ideas when you have them. Effort toward quality counts; quantity alone will not earn you an A. Yes, shy people can earn an A. But no, shy people cannot earn an A without speaking. If you're feeling shy but ambitious, come see me about strategies to participate successfully.

Those who earn a **B** for participation are students who reliably do the readings, put forth a good-faith effort to understand them, and participate frequently. These students speak up most weeks to contribute something. It is clear that these students are actively intellectually engaged.

**C**-level participants may find themselves wandering in a few minutes late here and there. They do the readings most of the time and speak up, but less frequently. Their ideas are less-well supported by the readings than A and B level participants, but they're trying. Remember: C is average.

**D**-level participation, as you might guess, is lower in quality and quantity than C-level. Unexcused absences will land you in this realm, as will coming to class unprepared.

Students earn participation grades of F by not coming to class reliably and by not preparing for class.

I attempt to give you credit for attempted participation. I will ask you follow-up questions to help you articulate your ideas. Don't be frightened by this.

## A Note on Notes

This course has significant readings. Complete the readings by the dates listed on the syllabus and come to class prepared to discuss them. I have two suggestions to help you make sense of this new material:

- 1) As you learn new concepts and terms, create a glossary for yourself. Take note of where you first encountered the term, how it is applied, and any connections you note between that concept and others that you know about or are actively learning about.
- 2) I encourage you to try <u>Zotero</u>, Refworks, or EndNote software to take notes on your readings for this and your other classes. All three are databases that will help you create effortless bibliographies and keep track of all of your reading notes. Using them will serve you well, whether you are beginning your academic careers or graduating this year. Come see me or talk to your librarian (they like students who ask questions) to learn about these software programs. Zotero is FREE.

## **Classroom expectations**

We will be discussing emotionally charged issues. You must debate issues with your classmates in a professional and respectful manner. We can and should respectfully disagree with each other, and each of us has something to learn from every other person in the classroom. The classroom environment must be simultaneously supportive and challenging, and each of us has a role to play in creating that atmosphere.

I will reliably be available for discussing any topics related to class during office hours, or by appointment. **My office hours are there for you. Please come see me.** Please note that I only respond to email M-F, 9am-5pm. I aim to reply to all professionally-worded emails within one working day of receiving them.

This syllabus is subject to change. Changes, if any, will be announced in class. Students will be held responsible for all changes.

## **Academic Dishonesty Policy**

Western Washington University has an official policy concerning academic dishonesty that is published in the General Catalog in Appendix D. All students in this seminar are expected to abide by this and other policies listed in the official catalog. Please see the following resources.

- Plagiarism Policies & Guidelines at WWU WWU Libraries
- The Student's Guide to Avoiding Plagiarism WWU Dept. of Sociology
- <u>Understanding and Avoiding Plagiarism</u> (brochure) WWU Libraries
- Appendix D of the Western Catalog: Academic Honesty Policy and Procedure.

Numerous students have failed my classes due to academic dishonesty; most do the right thing and abide by university policies.

## **Reasonable Accommodation Policy**

It is the policy of Western Washington University to provide reasonable accommodation to the known physical, sensory, or mental limitations of qualified individuals except where such accommodation would impose undue hardship on the institution. To request disability accommodation, please contact disAbility Resources for Students office, 650-3844, or for student assistance related to required course procedures, please contact the Student Life office, 650-3706.

#### **Ethical Computing**

Students are also responsible for knowing and adhering to WWU's standards for ethical computing. Refer to these web sites:

Policy for Responsible Computing

http://west.wwu.edu/atus/helpdesk/acceptableusepolicy.shtml

 Ethical Conduct: User Agreement for WWU Network and Computer Resources http://west.wwu.edu/atus/helpdesk/useragreement.shtml