

Energy in the Pacific Northwest: A Model for the Future?

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Course Description:

In the past, the inexpensive hydroelectric power suggested the supply of electricity in the Pacific Northwest was seemingly limitless. But decades of population growth and the development of “high tech,” energy-dependent industries up and down the West Coast have put a strain on that electric supply. Concerns over salmon spawning grounds and greenhouse gas emissions have spurred interest in renewable energy sources and even new nuclear power plants. At the same time, declines in oil production in the United States, increasing oil imports, and rising gas prices have increased awareness of the problems with an oil-based society and have focused attention on mass transit and the development of biofuels. Evidence linking the burning of coal, natural gas, and other fossil fuels to global climate change also has generated interest in cleaner ways of powering the economy.

What might all these changes mean for the future of energy in the Pacific Northwest? Is the Northwest likely to be a source of models and inspiration for the US and the rest of the world? Will the Northwest find pathways to a new energy economy that will conserve human and environmental health for the indefinite future while supplying adequate energy services at a reasonable price?

This survey course will examine energy in the Pacific Northwest, past, present, and possible future, through the eyes of professionals and practitioners in various energy fields. After a brief introduction to the basics of energy—the vocabulary, the units of measurement, and how energy is produced and distributed—the class will explore the different energy options now being employed in the Northwest utilities as well as some still under investigation. The class will mix weekly readings and seminars with guest lectures and field trips to help students better understand the exciting diversity of energy issues facing the Pacific Northwest.

Expectations:

Energy in the Pacific Northwest will use guest lectures, class discussions, seminars, and special class activities to explore a variety of energy topics. Students are expected to attend all class sessions, read the assigned books and articles, ask informed questions, participate in seminar discussions and class activities, and turn in assigned papers on time. If a student cannot attend class or will be late with an assignment for any reason, he/she must contact the faculty in advance of the class session/due date.

Assignments:

1. Readings.

Required books:

Brilliant: The Evolution of Artificial Light, by Jane Brox*Climate Hope: On the Front Lines of the Fight Against Coal*, by Ted Nace*Apollo's Fire*, by Jay Inslee

Plus articles posted on the class Moodle site:

<http://moodle.evergreen.edu>or <http://my.evergreen.edu>

and click on Energy in the Pacific Northwest.

2. Each week, each student will need to bring one energy-related article to share with the class. The article need not specifically address the Pacific Northwest, but the student should be prepared to explain the implications of the information it contains for energy or energy policy in this region.

3. For each of the three required books, students will write a 3 – 5 page paper addressing one of the questions that will be announced in class and posted on the Moodle site the week before the due date. Papers will be due via email (.doc format is a must!) before 5 p.m. the Friday after the seminar for that book.

These papers must have a title (not the question itself!), an introduction (to catch the reader's attention), thesis statement or paragraph (what will this paper cover?), body (the meat of the paper), and conclusion (often revisiting the introduction in some manner). The author's name must appear on each page and the pages must be numbered in the lower right corner.

4. Field Trips (to be scheduled): SolarWorld (outside Portland, OR) and Grays Harbor Paper (Hoquiam, WA).

5. Class project: "Your Electrical Footprint."

Program Schedule:

Week	Date	Topic	Guest Speaker	Activity	Assigned Reading/Seminar Topic
1	Jan 5	Introduction to Energy		Playing with Food	
	Jan 8 & 9	Coal in WA		Environmental Priorities and Sierra Club Training "Coal Free WA," Seattle, WA	
2	Jan 12	The Grid		Video: Enron, The Smartest Guys in the Room	See Moodle

3	Jan 19				<i>Brilliant</i> Paper due Fri Jan 21, 5 pm
4	Jan 26	Siting Renewable Energy Projects	Travis Nelson, Department of Fish and Wildlife; Nature Conservancy (?)		
5	Feb 2				
6	Feb 9	More on Coal	James Holbery, Grid Mobility		<i>Climate Hope</i> Paper due Fri Feb 11 by 5 p.m.
7	Feb 15 Feb 16			Environmental Lobby Day, Olympia	
8	Feb 23	Tidal/Wave Energy	Jason Busch, Oregon Wave Energy Trust		
9	Mar 2	Washington's Energy Plan			<i>Apollo's Fire</i> Paper due by 5 p.m. Fri Mar 4
10	Mar 9				
11	Mar 16		Evaluations		