

Environmental Studies 370: Environmental Science, Policy and Problem Solving

Fall 2008

Class Sessions: Monday, Wednesday, Friday 12:40 p.m. – 1:40 p.m., Halsey 456

Instructor: Stefan Becker; Office: 314 Halsey; Phone: 424 7115; E-Mail: beckers@uwosh.edu

Office Hours: Monday and Wednesday (2:00 p.m. – 4:00 p.m.),
Tuesday (10:00 a.m. – 12:00 a.m.) and by appointment or chance

Readings: Environmental Law, 5th edition, 2005 by Kubasek, N.K. and Silverman, G.S., Pearson
Prentice Hall

Course Objectives:

The objective of this course is to provide you with an understanding about the complexities of environmental issues and the U.S. policies which are related to them. Special emphasis will be given to developments in aspects of air pollution, energy generation, and waste handling. Apart from learning about basic concepts, developments, and policies we will explore various aspects of these issues by controversial discussions and analyzing opposing viewpoints.

A more general goal of this class is to contribute to your overall "liberal arts" education. Such an education gives you a broad background in the ideas and events that have in some way shaped our modern lives (for better or for worse). It increases your awareness of the diversity and complexity of human life and thought, it "expands your mind". For this reason, while a liberal arts education does not usually teach you how to do a particular sort of job, it does develop skills that are increasingly necessary in any job. These include the ability to quickly understand complicated readings on unfamiliar subjects, to express your thoughts clearly and persuasively, and to reason critically, creatively, and independently. For those who are confused about the word "liberal" in reference to education. Used in this context, the word "liberal" has no political connotations, but refers instead to the word liberate, as in freeing the mind from ignorance. And a liberal education is built on the proven philosophy that individuals with a broad education will possess critical thinking skills as well as a strong sense of values, ethics, and civic engagement. A liberal education is clearly a treasure as problem solving and analysis are at its core. It liberates as it prepares our students for a world without borders, careers with endless possibilities and a life of enrichment and ongoing engagement. The liberal education philosophy applies to education at all levels, its benefits reaped both individually and community wide.

Student Requirements:

Your successful performance in this course depends on the following points:

- A) Regular attendance of the lectures
- B) Presentation of one subject and subsequent discussion
- C) Timely completion of the assignments and the term paper
- D) Active and well prepared participation at classroom discussions
- E) Participation at the exams

A) Attendance Policy:

Discussions are an important part of the course and essential for the understanding and contemplation of the material. This is one of the reasons why it is essential that you will participate at the lectures. On top of this, I will do my best to make the course interesting and enjoyable for you. You will get 15 points (out of the 100) for your regular attendance and participation in the discussion. You can miss 2 lectures without providing any reason and without any consequences on the points. You can miss another 3 classes without consequences on the points if you provide a valid reason for your absence by e-mail no later than 2 days after the missed class. Not providing a valid reason for more than 2 missed classes or missing more than 5 classes altogether will lead to subtraction of 1 point per missed class.

B) Presentations:

You will present one of the subjects which are listed in the "Course Outline" below. The presentation should include an introduction to the subject and reasoning for one of the two options of the statements. The time-frame for the presentation is 25 to 35 minutes. You will also be prepared for the subsequent discussion that will challenge your presented viewpoint.

The criteria for the grading of your performance will be the timing (minus one point for each minute beyond the time-frame), the content (that is the quality of the research or the provided arguments), the quality of the media, and the quality of your presentation. Your presentation will also be evaluated by the students according to the following checklist:

The presenter appeared to be an expert on the subject.
The arguments and reasoning were convincing.
Facts and opinions were clearly distinguishable.
The presentation was well structured.
The presenter kept eye-contact to the audience, spoke clearly and did not cling to his notes or slides.
The slides were well designed.
The presenter adhered to the time limits.

There will be a discussion after the presentation which will be facilitated by a mediator. One or two debaters will argue against the position of the presenter who has to defend his position in the discussion.

C) Assignments:

To gain an understanding of the various environmental issues and the related policies and for the successful completion of the course you will be required to read various articles from the book and search for additional material by yourself. You will find the assignments listed in the "Course Outline" below.

For the essay assignments you will write a short essay (computer-typed, Arial 10 point, 1-inch margin, single-spaced, one page plus references) regarding the issue of the day. The essay should contain arguments for and against the controversial issue of the scheduled presentation and your own evaluation. The quality of the provided arguments, the cognizable research effort, and the style of the paper will be grading criteria. All essay assignments are due at the beginning of the sessions where they are listed. Late assignments will not be accepted and the three lowest scores for will be dropped.

The information in the essays must be referenced appropriately. Literature cited must have the appropriate number (minimum of 3), appropriate type (not only opinions), and proper format (see below for examples).

Example of proper format for references IN TEXT:

Book or Journal Article: The wild boar has caused extensive damage to the wildlife reserve (Smith, 1993).

Examples of proper APA (American Psychological Association) format for LITERATURE CITED:

Journal Article: Adelligid, B. W. (1999). Killing fraser firs in the Smoky Mountains. *Journal of Exotics and Introduced Species*. 1 (15), 13-15.

Book: Boar, E. W. (1993). *Upsetting the balance of the Merritt Island Wildlife Refuge*. (3rd ed.). London: Island Press.

On-Line Sources: Mussel, Z., Loosestrife, P. (September 23, 1999). *Gaining a foothold in a new environment* [On-Line]. Available: <http://www.eliminatingnativespecies.com/>
(n.d. = no date given)

Term paper

You will write an essay (computer-typed, Arial 10 point, 1-inch margin, single-spaced, 4-5 pages) which elaborates on the subject of your presentation including all relevant references. The essay should contain arguments regarding different viewpoints on the controversial subjects and your personal evaluation. The quality of the provided information and arguments and the cognizable research effort will be the criteria for

the grading of the essay. The first draft of the term paper is due on October 31 and it will go through a peer review process. The final version of the paper is due on the last day of the semester (December 12).

Grades:

Your final grade is based on the following components:

- Lecture exams: 25%
- Presentation and discussion = 15%
- Attendance: 15%
- Term paper: 15%
- Essay assignments: 20%
- Term paper peer review: 2%
- Discussion and mediation: 8%

Excellence in performance or effort is expected. Mediocrity is not rewarded.

The total course grade will be assigned according to the following system:

A >= 93%	B >= 83%	C >= 73%	D >= 60%
AB >= 88%	BC >= 78%	CD >= 68%	F < 60%

Academic Integrity

(from the Dean of Students Office)

The University of Wisconsin Oshkosh is committed to a standard of academic integrity for all students. The system guidelines state: "Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors." (UWS 14.01, Wisconsin Administrative Code)

Students are subject to disciplinary action for academic misconduct, which is defined in UWS 14.03, Wisconsin Administrative Code. Students on the UW Oshkosh campus have been suspended from the University for academic misconduct.

Students are encouraged to review the procedures related to violations of academic honesty as outlined in Chapter UWS 14, Wisconsin Administrative Code. The system guidelines and local procedures are printed in the University of Wisconsin Oshkosh Student Discipline Code 2006-2007 and can be found on the Dean of Students website at www.uwosh.edu/dean/conduct.htm.

Additional Note:

Please feel free to see me during my office hours or directly after the meetings. I would like to see you all complete the course successfully. Let me know if there is anything I can do to help you with that.

Course Outline (tentative):

Day	Subject	Assignment
Wed, Sep 03	Introduction to the course	
Fri, Sep 05	Basic aspects of environmental policy	
Mon, Sep 08	Basic aspects of environmental policy	Read pages 127 - 132
Wed, Sep 10	History of environmental policy	Read pages 135 - 146
Fri, Sep 12	History of environmental policy	Read pages 132 – 135
Mon, Sep 15	How can we find standards for environmental protection? Presentation 1: "Environmentalism is / is not a danger for our economy and the American way of life"	Essay 1

Day	Subject	Assignment
Wed, Sep 17	How do we control the sources of pollution so that environmental goals are met? Presentation 2: <i>"The policy of the current government is / is not geared towards the protection of the environment"</i>	Essay 2
Fri, Sep 19	Presentation 3: <i>"Pollution rights trading will be / will not be beneficial for the environment"</i> Focus on "Air quality" Introduction	
Mon, Sep 22	Focus on "Air quality" Main categories	Read pages 165 – 173
Wed, Sep 24	Presentation 4: <i>"Potential methods to reduce urban air pollution"</i> Focus on "Air quality" Atmospheric Controls	
Fri, Sep 26	Focus on "Air quality" Presentation 5: <i>"California's approach to air pollution legislation should / should not be an example for the rest of the states."</i> Air pollution in Wisconsin Health effects Air Quality Index	
Mon, Sep 29	Focus on "Air quality" Air pollution control Air pollution legislation	Read pages 183 - 187
Wed, Oct 01	Global Warming Presentation 6: <i>"Global warming is / is not a serious environmental threat"</i>	Read pages 175 – 180 Essay 3
Fri, Oct 03	Focus on "Air quality" Presentation 7: <i>"Automobile use in America must / does not need to be discouraged to save the environment"</i>	Estimate your annual car emissions www.fueleconomy.gov www.environmentaldefense.org/tailpipe tally/
Mon, Oct 06	The Ozone Hole Presentation 8: <i>"The ozone hole is / is not a threat for us and the environment"</i>	Read pages 173 – 174
Wed, Oct 08	Presentation 9: <i>"The New Source Review issue"</i> Focus on "Air quality" Achievements of air pollution control in the U.S. Miscellaneous issues	Read pages 187 - 203
Fri, Oct 10	Focus on "Air quality" Presentation 10: <i>"The clear skies initiative would be / would not be a valuable tool to improve the quality of our air"</i>	Read pages 203 - 205
Mon, Oct 13	Focus on "Air quality" Miscellaneous issues	
Wed, Oct 15	Exam #1	
Fri, Oct 17	Focus on "Energy" Introduction	Read pages 327 - 340
Mon, Oct 20	Focus on "Energy" Fossil fuels: Oil Presentation 11: <i>"Continued access to oil supplies in the Middle East is / is not a major reason for our military involvement in this region."</i>	Read pages 347 - 352

Wed, Oct 22	Focus on "Energy": Fossil fuels - Oil Presentation 12: <i>"The arctic wildlife refuge should / should not be opened for oil exploration"</i>	Essay 4
Fri, Oct 24	Focus on "Energy" Presentation 13: <i>"Electric or hybrid cars are / are not the solution to our problems with oil supplies"</i>	
Mon, Oct 27	Focus on "Energy" Fossil fuels: Coal, Natural gas	Read pages 340 - 347 Essay 5: Write an essay which discusses critically the development and future of our economy's reliance on fossil fuels
Wed, Oct 29	Focus on "Energy": Fossil fuels Presentation 14: <i>"We will / will not be able to meet our growing demands for fossil fuels in a sustainable way"</i>	
Fri, Oct 31	Focus on "Energy": Nuclear energy - Introduction	Read pages 353 - 357
Mon, Nov 03	Presentation 15: <i>"The promotion of nuclear energy will / will not be beneficial for the environment"</i>	
Wed, Nov 05	Focus on "Energy": Nuclear energy	
Fri, Nov 07	Focus on "Energy": Regenerative energy Presentation 16: <i>"The promotion of regenerative energy sources will / will not be the solution for our future energy needs"</i>	Read pages 357 – 363 Essay 6
Mon, Nov 10	Focus on "Energy": Regenerative energy Presentation 17: <i>"A hydrogen based economy is / is not a viable option for future development."</i>	
Wed, Nov 12	Focus on "Energy": Regenerative energy Presentation 18: <i>"The promotion of hydropower will / will not benefit the environment"</i>	
Fri, Nov 14	Focus on "Energy": Regenerative energy Presentation 19: <i>"We need / don't need more wind power stations"</i>	
Mon, Nov 17	Focus on "Energy" Miscellaneous issues Presentation 20: <i>"Energy conservation is / is not the key to our energy related problems "</i>	
Wed, Nov 19	Focus on "Waste"	Read pages 285 - 294
Fri, Nov 21	Focus on "Waste"	Essay 7: Write an essay which critically discusses methods that could be used to reduce municipal waste production
Mon, Nov 24	Presentation 21: <i>"Recycling is / is not an effective way of protecting our environment"</i>	
Mon, Dec 01	Presentation 22: <i>"The American way of life is / is not a threat to the environment"</i>	

Wed, Dec 03	Focus on "Waste" Hazardous Waste	Read pages 294 - 319
Fri, Dec 05	Presentation 23: <i>"Population is / is not growth causes / doesn't cause environmental problems"</i> Design of an opinion survey on the perception of environmental risks	
Mon, Dec 08	Environmental Risk Ranking	
Wed, Dec 10	Exam #2	
Fri, Dec 12	Final Session	