

Environmental Studies: ES 101

Fall 2011

Course description and goals

Over the past 200 years, humans' impact on the natural world has changed dramatically. The goal of this course is to explore our relationship with the natural world and how our behaviors and actions affect it. To do this, we will explore four case studies: wolves and people in Yellowstone National Park, climate change, environmental toxins, and sustainable agriculture. Central themes of the course will include changing perceptions of the relationship between nature and culture; the different cultural lenses through which people look at nature; the role of science and the media in environmental policy making; and the responsibilities that we have as individuals and communities to maintaining healthy, sustainable environments.

An additional goal of this class is to further your liberal arts education. What does this mean? The liberal arts education focuses on general learning, intellectual ability, and critical thinking rather than technical or professional skills. The goal of this class is not just to convey specific information about environmental issues (although you will learn much about this) but to teach you how to interpret this information critically, and how to understand modern environmental issues in their social, historical, and political context. A liberal arts education provides the tools we need to be active citizens of our communities. As we will learn this semester, active citizenship plays a key role in resolving the complex environmental dilemmas that we as a society face today.

In Spring 2008, UW Oshkosh adopted a set of Essential Learning Outcomes to help define the meaning of a liberal education. One of these outcomes is the recognition that a liberal education recognizes our "Responsibility, as individuals and communities." This includes "Knowledge of sustainability and its applications." This course is designed to help us think about our responsibilities to each other, to our communities, and to our environment.

Instructor/class information

Instructor

M. Elsbeth (Misty) McPhee

mcpheem@uwosh.edu

424-0644

office hours:

Tues 11:00 am – 1:00 pm

Wed 12:40 pm – 1:40 pm

If these don't work for you, I'm happy to set up an appointment at a more convenient time. My schedule is posted on D2L so you can see when I'm available.

office: 3448 Sage

Class

Meeting times/locations:

Monday, Wednesday, Friday

11:30 am – 12:30 pm

Sage 2221

Required Texts & Materials

Renee Askins, *Shadow Mountain: A Memoir of Wolves, a Woman and the Wild* (New York: Anchor Books, 2002)

Michael Pollan, *In Defense of Food: An Eater's Manifesto* (New York: Penguin, 2009)

Sandra Steingraber, *Living Downstream: An Ecologist's Personal Investigation of Cancer and the Environment* (Da Capo Press, 2010)

Bill McKibben, *Hope, Human and Wild* (Canada: Milkweed Editions, 2007)

Other readings will also be required. These are listed below and will be available as pdfs through D2L. As we go through the class I might change reading assignments based on class discussion so pay attention to announcements so that you don't read the wrong papers.

Grading

Your grades will be based on six things:

1. Class participation	100
2. 10 short quizzes (5 pts each)	50
3. Reading responses (3 @ 30 pts each)	90
4. Two exams (100 pts each)	200
5. Group presentations	50
6. Final paper	100

Total points: 590

To figure your grade at any point throughout the term, add the total points earned and divide by the total points possible up to that point. Attendance is expected and that, with participation, can raise a borderline grade.

<u>% of total points</u>	<u>Grade</u>	<u>% of total points</u>	<u>Grade</u>
94-100	A	73-76	C
90-93	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D-
77-79	C+	≤ 59	F

1. **Class participation** will be graded based on attendance and overall participation and engagement in the course. Obvious signs of engagement are questions and participation in discussion; other signs are coming to talk to me in office hours or before/after class; and finally, just general attitude and attendance in the classroom.

Participation grades will be given as follows:

A = participates often and meaningfully in class discussions

A- = participates a fair amount

B = participates some

B- = participates rarely

C = in class but doesn't participate

2. I will frequently give a short **quiz** at the beginning of class. These will always be on the **readings and material from the most recent lectures**, so I strongly recommend you go over your notes immediately after each class and immediately prior to the following class.

Quizzes can NOT be made up under any circumstances.

3. There will be four journal responses due throughout the semester. These will be 2-3 page (double spaced) written responses to assigned readings and lectures.
- a. They will begin with at least **three** questions that you can use in class discussion. Your discussion questions will NOT be questions about details of the readings but big-picture questions that foster discussion. For example, do not ask, “How many bushels of corn were harvested in 2004?” but, “What implications does the increase in corn production have on family farms?”
 - b. You can either (1) write as you read which means you will turn in a 'journal' with regular entries that respond to the readings or (2) write an overall response at the end of the unit.
 - c. In either case, these responses are just that – your *response* to the reading/movie. Tell me what you think, how it relates to what we've talked about in class, etc. A great reading response refers to **every** assigned paper but doesn't just regurgitate what it said – it actually shows that you have thought about the topic.
 - d. Though this is not a formal paper, **you must correctly cite the papers** you read and any other sources you used to formulate your ideas. For example, in text, you will cite a paper in this way (Smith et al. 2008). At the end of the paper, please use the following format:

Smith, M., P. Jones, and S. Johnson. 2008. Effects on toxins on behavior in children. *Ecotoxicology* 25:54-58.
- If you have any questions, please ask me.
- e. Please turn in documents as **Pdfs**. I can NOT open .wps documents – any document that I can't open will be disregarded.
 - f. If you are late and the dropbox is closed, put your assignment in the "Late assignments" dropbox. **I WILL NOT ACCEPT ANY ASSIGNMENT VIA EMAIL – EVER.** If it goes into the late dropbox, I don't guarantee it will get graded before the end of the term. Do not complain about timing – if you were late, I have no obligation to be timely. All late submissions are subject to a 10 - 20% penalty and will appear as a 0 until I grade it.

- g. Four responses will be assigned but you can opt out of one. If so, you still have to put something in the drop box that says you are not writing a response for that topic.
4. On the Monday of Thanksgiving week, there will be no class. You, however, are to watch a movie that relates to any of the topics we've covered. Below is a list of possible movies, but you are welcome to choose another if you'd like. The Monday after break you are to turn in a reading response that describes the movie (don't assume I've seen it!), talks about why you chose that movie, and how it relates to what we've covered in class.

Wildlife

Milking the Rhino (on reserve at Polk)

Climate change

An Inconvenient Truth

Fuel

The 11th hour

Who Killed the Electric car?

Note: "Day After Tomorrow" is NOT acceptable!

link to more ideas on D2L

Sustainable Food

Food, Inc.

Sustainable Table

Ingredients

Fresh

The Future of Food

Food Matters

Chemicals

Erin Brockovich

Living Downstream

Amphibian Extinction

Cancer Causing Agents

Other

The Pacific: Biodiversity and the Protection of Coral Reefs

Also, on the Polk Library's home page (link on D2L), there is a link for Films on Demand – this gives you access to TONS of cool documentaries!

5. There will be **two** exams in this course. They will be a mix of short answer and essay questions. I do not give multiple choice questions. The class before each exam, you will have a reading response due. I see the preparation of the reading response as a great way to study for the exam as you will need to think about and synthesize what we've read and learned.

- I **never give exams earlier** than the announced date and time.
- If you miss an exam due to a University-sponsored activity (e.g. athletics contest), you will know ahead of time and your coach will have provided you with a letter. Bring a copy of that letter to me ahead of time, to permit a make-up to be arranged.
- If you miss an exam for any other University-accepted reason (e.g. illness or bereavement), provide me with written proof to permit a make-up to be arranged.
- **Absolutely NO** late exams will be scheduled for reasons of holiday or end-of-term travel.

6. Final paper.

For your final paper, you are to choose one of the projects described in McKibben's *Hope, Human, Wild* and research the current status of the project. This book is a few years old, so what has become of these communities? There are several places in the book that McKibben describes things that are in process or about to be done. Did they happen? Did it work?

In addition to your update on the project – what do you think of it? Is it something we could apply here in Oshkosh?

7. Extra credit. One thing I highly encourage is participation in campus events and lectures. In October, the University hosts the Earth Charter Summit that typically has wonderful speakers and activities. If you attend an event or lecture that is relevant to our discussions in ES 101, I will give you 5-10 points if you write up a one-page description of the event. A basic description will yield 5 points; a well-written description with a critique and discussion of how the topic fit into ES 101 will yield 10 points.

Miscellaneous – but *important* – comments

1. Cell phone use will NOT be permitted in my classroom. If your cell phone goes off or you text during class, you will be asked to leave and you will receive an F for that day's participation.
2. Laptops: you are more than welcome to use laptops in class to take notes, but you are NOT to use them for any other purpose. If I see you using your laptop for anything other than note-taking, I will ask you to close your computer and you will receive an F for that day's participation.
3. I will NOT tolerate emails or assignments written in shorthand – if you send me anything in shorthand I will consider it unreadable and, thus, won't read it. If it is a graded assignment, you will receive a 0 until you hand in a legitimate version (at which point penalties for handing in the work late will apply).
4. **STUDENTS WITH DISABILITIES ARE WELCOME IN THIS COURSE.** Please contact me after the first day or two of class so that we may arrange all possible accommodation ahead of time.
5. **EMAIL COMMUNICATION and D2L** will be used frequently throughout the semester to communicate between Instructors and Students. Emails constitute legal, official University communication. Not checking your email is not an excuse for performance problems in the class. Contact Academic Computing or any Campus Computer Lab supervisor for assistance with email and D2L.
6. **ACADEMIC HONESTY** policies are clearly defined at this University and all students are expected to abide by them. Penalties for violations are severe in this course. Cheating on an exam (including looking at someone else's paper) at a MINIMUM leads to zero on that exam, with no opportunity for a make-up or extra credit. A second offense is an F in the course and a report to Dean of Students.

Proposed lecture and assignment schedule

<u>Lecture</u>	<u>Date</u>	<u>Topic</u>	<u>Assignments due</u>
<u>1. Introduction</u>			
1.1	Wed, 7 Sept	Intro and discussion: What is environmental studies? Sustainability?	
<u>2. People and wildlife: Wolves</u>			
2.1	Fri, 9 Sept	Why do we care about wolves? Ecology and conservation	<u>Read:</u> Chadwick 2010, <i>Wolf Wars</i> <u>Read:</u> Manning et al. 2009
2.2	Mon, 12 Sept	<i>Movie: A Legend Returns</i>	<u>Read:</u> Askins, pp 3-35, 53-73
2.3	Wed, 14 Sept	Policy and stakeholders	<u>Read:</u> Maclennan et al. 2009
2.4	Fri, 16 Sept	<i>Movie: Wolves in Paradise</i>	<u>Read:</u> Askins, pp. 77-138, 153-176
2.5	Mon, 19 Sept	Wolves in Wisconsin	<u>Skim:</u> 1999 Wisconsin Wolf Mgt Plan
2.6	Wed, 21 Sept	<i>Role play exercise</i>	
2.7	Fri, 23 Sept	<i>Discussion</i>	<u>Due:</u> Reading Response #1
<u>3. Climate Change</u>			
3.1	Mon, 26 Sept	<i>Movie: Are We Changing Planet Earth?</i>	<u>Read:</u> Dobson 2002
3.2	Wed, 28 Sept	Climate change and nature	<u>Read:</u> Both et al. 2006 <u>Read:</u> Hansen 2008
3.3	Fri, 30 Sept	How climate change affects humans	<u>Read:</u> Patz et al. 1996 <u>Read:</u> Houghton 2009 pp. 172-175, 181-187, 190-202
3.4	Mon, 3 Oct	Climate change and social justice	
3.5	Wed, 5 Oct	<i>Exercise: Climate Case Studies</i>	
3.6	Fri, 7 Oct	Climate policy	<u>Read:</u> Soroos 2002
3.7	Mon, 10 Oct	<i>Movie: Can We Save Planet Earth?</i>	<u>Read:</u> Brooke 2008 <u>Read:</u> McKibben 2009
3.8	Wed, 12 Oct	<i>Discussion</i>	<u>Due:</u> Reading Response #2
	Fri, 14 Oct	EXAM #1	

<u>4. Sustainable Food</u>			
4.1	Mon, 17 Oct	Industrial and sustainable agricultural systems	<u>Read:</u> Pimentel 2005 <u>Read:</u> Berry 1977
4.2	Wed, 19 Oct	Agricultural policy	<u>Read:</u> Pollan excerpt from <i>Omnivore's Dilemma</i> pp 15-64 <u>Read:</u> Boody et al. 2005
4.3	Fri, 21 Oct	Our culinary roots	<u>Read:</u> Pollan <i>In Defense of Food</i> pp 83-136
4.4	Mon, 24 Oct	You are what you eat	<u>Read:</u> Pollan <i>In Defense of Food</i> pp 17-82
4.5	Wed, 26 Oct	From field to plate: <i>Processing and distribution activity</i>	
4.6	Fri, 28 Oct	Food on the local and global stage	<u>Read:</u> Hazell and Wood 2008
4.7	Mon, 31 Oct	<i>Discussion</i>	<u>Due:</u> Reading Response #3
<u>5. Chemicals in our environment</u>			
5.1	Wed, 2 Nov	Chemicals and us	<u>Read:</u> Steingraber, Trace Amounts, pp 1-15
5.2	Fri, 4 Nov	From war to agriculture	<u>Read:</u> Steingraber, War, pp 89-103 <u>Read:</u> Steingraber, Earth, pp 154-169 <u>Read:</u> Van Den Bosch 1978
5.3	Mon, 7 Nov	Air and water	<u>Read:</u> Steingraber, Air, pp 175-185 <u>Read:</u> Steingraber, Water, pp 187-211
5.4	Wed, 9 Nov	Chemicals and wildlife	<u>Read:</u> Steingraber, Animals, pp 133-141 <u>Read:</u> Zala and Penn 2004
5.5	Fri, 11 Nov	<i>In-class exercise</i>	
5.6	Mon, 14 Nov	The bottom line	<u>Read:</u> Steingraber, Ecological Roots, pp 261-285
5.7	Wed, 16 Nov	<i>Discussion</i>	<u>Due:</u> Reading Response #4
	Fri, 18 Nov	EXAM #2	
<u>6. Thanksgiving break</u>			
6.1	Mon, 21 Nov	<i>No class: Movie assignment</i>	
6.2	Wed, 23 Nov	<i>No class</i>	
6.3	Fri, 25 Nov	<i>No class</i>	

7. Our environmental responsibility

7.1	Mon, 28 Nov	Group projects: Class meets in Computer Lab	<u>Read:</u> McKibben, Chpt 1 <u>Due:</u> Movie Reading Response
7.2	Wed, 30 Nov	Looking for hope, Part I	<u>Read:</u> McKibben, Chpt 2
7.3	Fri, 2 Dec	Sustainability at UWO	<u>Read:</u> McKibben, Chpt 3
7.4	Mon, 5 Dec	<i>Group presentations</i>	
7.5	Wed, 7 Dec	<i>Group presentations</i>	
7.6	Fri, 9 Dec	<i>Group presentations</i>	
7.7	Mon, 12 Dec	Looking for hope, Part II	<u>Read:</u> McKibben, Chpt 4 <u>Read:</u> Diamond 2005
7.8	Wed, 14 Dec	<i>Final class exercise and discussion</i>	
7.9	Fri, 16 Dec		Final papers due

Bibliography

- Berry, Wendell. "The agricultural crisis as a crisis of culture" from "The Unsettling of America: Culture and Agriculture. Sierra Club Books (1977).
- Both, C., S. Bouwhuis, C.M. Lessells, and M.E. Visser. "Climate change and population declines in a long-distance migratory bird." *Nature* 441, no. 7089 (2006): 81-83.
- Brooke, Cassandra. "Conservation and adaptation to climate change." *Conservation Biology* 22, no. 6 (2008): 1471-1476.
- Chadwick, Douglas. "Wolf Wars." *National Geographic*, March 2010.
- Diamond, Jared. "Collapse: How societies choose to fail or succeed." Penguin Books (2005).
- Dobson, David. "From ice cores to tree rings". In "Global Climate Change" (S. Spray, K. McGlothlin, Eds), pp. 3-30. Rowman & Littlefield Publishers (2002).
- Hansen, James. "Tipping Point: Perspective of a climatologist." In "State of the Wild 2008-2009. A Global Portrait of Wildlife, Wildlands, and Oceans" (E. Fearn, Ed.), pp. 7-15. Island Press Publishers (2008).
- Hazell, Peter, and Stanley Wood. "Drivers of change in global agriculture." *Philosophical Transactions of the Royal Society B: Biological Sciences* 363, no. 1491 (February 12, 2008): 495 -515.
- Houghton, John. "Global Warming: The Complete Briefing," pp. 172-202. Cambridge University Press, New York (2009).
- Maclennan, Seamus D., Rosemary J. Groom, David W. Macdonald, and Laurence G. Frank. "Evaluation of a compensation scheme to bring about pastoralist tolerance of lions." *Biological Conservation* 142, no. 11 (November 2009): 2419-2427.
- Manning, Adrian D., Iain J. Gordon, and William J. Ripple. "Restoring landscapes of fear with wolves in the Scottish Highlands." *Biological Conservation* 142, no. 10 (October 2009): 2314-2321.
- McKibben, Bill. "Surviving Climate Change through Mitigation and Adaptation." *Conservation Biology* 23, no. 4 (2009): 796.
- Patz, J.A., P.R. Epstein, T.A. Burke, and J.M. Balbus. "Global climate change and emerging infectious diseases." *Journal of the American Medical Association* 275, no. 3 (1996): 217-223.

Pimentel, David, Paul Hepperly, James Hanson, David Douds, and Rita Seidel.
"Environmental, Energetic, and Economic Comparisons of Organic and
Conventional Farming Systems." *BioScience* 55, no. 7 (2005): 573.

Pollan, M. *The Omnivore's Dilemma: A Natural History of Four Meals*. Penguin Books
(2007).

Soroos, Marvin S. "Negotiating our Climate". In "Global Climate Change" (S.
Spray, K. McGlothlin, Eds), pp. 121-144. Rowman & Littlefield Publishers
(2002).