

Environmental Studies 101 Seminar on Environmental Issues

Winterim 2011 Syllabus

Course overview: All of humanity ultimately relies on the natural environment for its welfare, yet problems often arise from interactions between humans and the environment. The field of environmental studies strives to solve existing environmental problems and avoid future problems. A crucial part of solving and preventing environmental problems is to recognize that humanity does not exist as a separate entity from the natural environment.

"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect." –Aldo Leopold

This course is designed to provide an opportunity to explore a limited number of environmental issues in a deep and focused way, so that you develop an appreciation for the complexity of environmental problems. It is specifically not intended to be a broad survey of environmental problems. To meet this requirement, we will explore in detail the following issues:

- Are honeybees the “canaries” of modern agriculture?
- Population, peak oil, and climate change: can technology balance the equation?
- Wildlife management: why do we now want wolves?

As we explore these issues, central themes will emerge, including 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.

This course will require a large amount of reading and writing on a daily basis.

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Office Hours: 12:00-1:00 M,W
Class Days/Time: M-F 9:00-12:00
Classroom: Halsey 270

Required Books

- Askins, R. 2004. *Shadow Mountain: A Memoir of Wolves, a Woman, and the Wild*. Knopf Doubleday Publishing Group. (ISBN: 9780385482264)
- Jacobsen, R. 2009. *Fruitless Fall: The Collapse of the Honey Bee and the Coming Agricultural Crisis*. Bloomsbury USA. (ISBN: 9781596916395)
- McKibben, B. 2010. *Eaarth: Making a Life on a Tough New Planet*. Times Books. (ISBN: 9780805090567)

Policies and Expectations

- Read the assignment *before* coming to class.
- No late assignments will be accepted unless arrangements have been made *in advance*. Arrangements for any special need must be made *in advance*, except in the case of unforeseen circumstances.
- Late assignments will be accepted with a point reduction of 10% per day.
- As a courtesy to others - and to yourself - please turn off all electronic distractions during class. If your cell phone goes off you will be asked to leave and you will lose all points for the day.
- Laptops may be used in the class, but I do not recommend them. If I see that are using your notebook for anything outside of class, I will deduct 25 points from your final grade.
- Plan for a 3 hour class. It is your responsibility to attend each class. If you plan to be absent for any reason, notify me as soon as possible
- Writing assignments are expected to be of the highest quality. Anything turned in shorthand will be given a 0 until you hand in a legitimate version (at which point penalties for handing in the work late will apply).
- Email and D2L will be used throughout the term. 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.
- Academic dishonesty will not be tolerated. If you decide to engage in academic misconduct you will be subject to the Student Academic Disciplinary Procedures as outlined in the Student Disciplinary Code (<http://www.uwosh.edu/dean>). Under Chapter

UWS 14 (Student Academic Disciplinary Procedures), “academic misconduct” means an act in which a student (UWS 14.03):

- a) seeks to claim credit for the work or efforts of another without authorization or citation;
- b) uses unauthorized materials or fabricated data in any academic exercise;
- c) forges or falsifies academic documents or records;
- d) intentionally impedes or damages the academic work of others;
- e) engages in conduct aimed at making a false representation of a student’s academic performance; or
- f) assists other students in any of these acts.

Disabilities

Students who have physical or learning disabilities that wish to request academic adjustments should notify the Disabilities Office so that appropriate accommodations can be made. For more information contact the Counseling Center or Disabilities Services (424-2404).

Grading

Exams (3).....300 pts

Assignments (10).....100 pts

Participation.....100 pts

Grading Scale

93 – 100% = A	80 – 82.9% = B-	68 – 69.9% = D+
90 – 92.9% = A-	78 – 79.9% = C+	63 – 67.9% = D
88 – 89.9% = B+	73 – 77.9% = C	60 – 62.9% = D-
83 – 87.9% = B	70 – 72.9% = C-	< 60% = F

Exams

Exams will primarily be in the format of short answer/essay, so study accordingly. If you will miss an exam due to a University-sponsored activity (*e.g.* athletics contest), your coach should have provided you with a letter. Bring a copy of that letter to permit a make-up exam. If you miss an exam for any other University-accepted reason (*e.g.* illness or bereavement), go to the Dean of Students Office in Dempsey Hall, obtain a written excuse, and bring the written excuse to permit a make-up exam. **Absolutely NO** late exams will be scheduled for reasons of holiday or end-of-term travel.

Assignments

Most reading assignments will require a written response to be turned into the D2L dropbox (preferably in pdf format) before the start of class. Come to class prepared to present your responses to the class and discuss the readings.

The written responses will be 1-2 pages (double spaced, standard format and font). You may ask and address questions based on the reading, or you may select quotes from the reading and explore the meaning. The questions and quotes should amount to 2-3 combined (2 in depth or 3

less in depth). Your questions should not be 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?” An example of a quote to use would be, “Soil becomes stuff that holds your plant upright while you pour oil on it.” McKibben, p. 165.

All responses will be graded for completeness, but only 2 will be randomly selected for full grading. Grades will be based on clarity and effectiveness in communicating main ideas. Grammar and spelling count! You will be allowed two responses where you request that it *not* be fully graded – just note that on the top of the document you turn in, even if it’s just a blank page.

Class participation

You are expected to speak up in this class. Not everyone shares the same points of view. Practice is essential for gaining skills to effectively communicate your knowledge and to gain tact for dealing with opposing points of view. **The classroom is a safe place to practice skills that will help you gain employment some day.** Don’t be afraid to play devil’s advocate!

Furthermore, you should be critical of all the material that is presented to you. The abundance and fast flow of digital information is powerful, but also dangerous. Don’t take anything for face value – **do your research!**

As part of your class participation, you will turn in three questions at the end of each class. They can be in regards to the film, lecture, or any topic we addressed in class. **Some of your questions may be selected to put on the exams, so they should capture important points and comprehension of issues.** For example, “What is IAPV?” is not a good question. A good question might read “IAPV is a virus that was theorized to cause colony collapse disorder. Why has this hypothesis been rejected?”

The following rubric is a rough outline of the qualities you will be graded on for participation.

Exemplary (90-100%)	Perfect attendance/one excused absence, maintains a positive attitude, team player, is engaged in environmental topics inside and outside of class, encourages others, respects others, turns in clever questions, is critical of the material, always alert
Good (80-90%)	One or two excused absences, maintains a positive attitude, team player, participates in most discussions, respects others, turns in good questions, is critical of the material, often alert
Average (60-80%)	One or two excused absences/one unexcused absence, usually has a positive attitude, sometimes participates in discussions, respects others, turns in good questions, occasionally daydreams
Below Average (50-60%)	Two or more unexcused absences, complains, does not typically participate in discussions, respects others, turns in questions, sometimes falls asleep
Poor (below 50%)	Three or more unexcused absences, complains and complains, prevents others from learning, almost never participates in discussions, disrespects others, does not complete assigned work, snores loudly

Winterim 2010 Schedule

Week 1: Are honeybees the “canaries” of modern agriculture?

Day	Topics/Activities	Readings/Assignments
Monday, 3 Jan	<i>Lecture:</i> “Introduction to ES 101” <i>Exercise:</i> What do you think when you think of a “honeybee”? <i>Film:</i> <u>Bees: Tales from the Hive (NOVA)</u>	<i>In class reading:</i> Nemerov “Learning the Trees”
Tuesday, 4 Jan	<i>Discussion:</i> Jacobsen <i>Lecture:</i> “Yogi Bear Teaches BooBoo some Ecology” <i>Exercise:</i> Drawing lines <i>Film:</i> <u>Guns, Germs, and Steel part 1</u>	Jacobsen Chapters 10,1,2 (Written response due before the start of class.) <i>In class reading:</i> Meadows “Lines in the Mind”
Wednesday, 5 Jan	<i>Discussion:</i> Jacobsen <i>Lecture:</i> “From Beasts of Burden to Biotechnology” <i>Exercise:</i> Select a tree <i>Film:</i> <u>Food, Inc</u>	Jacobsen Chapters 3,4,5 (Written response due before the start of class.) <i>In class reading:</i> Leopold “Axe in Hand”
Thursday, 6 Jan	<i>Discussion:</i> Jacobsen <i>Lecture:</i> “The Costs of Modern Agriculture” <i>Exercise:</i> In class ecological footprint quiz <i>Lecture:</i> “Tools to Measure Environmental Impact”	Jacobsen Chapter 6 (p.114-122),8,9 (p.164-183) (Written response due before the start of class.)
Friday, 7 Jan	<i>Discussion:</i> Finish Jacobsen – are bees the “canary” of agriculture? EXAM I <i>Exercise:</i> Population Growth	Jacobsen Ch. 11 and epilogue

Week 2: Population, peak oil, and climate change: can technology balance the equation?

Monday, 10 Jan	<i>Discussion:</i> Hardin 1968, Diamond 1995 <i>Lecture:</i> “Population Dynamics” <i>Film:</i> <u>World in the Balance</u>	Hardin 1968 “Tragedy of the Commons” Diamond 1995 “Easter’s End” (Written response due before the start of class.)
Tuesday, 11 Jan	<i>Discussion:</i> McKibben <i>Lecture:</i> “350: The Most Important Number on Earth” <i>Films:</i> (split class in 3 and discuss differences) <u>Are We Changing Planet Earth?</u> , <u>Strange Days on Planet Earth: The One Degree Factor</u> , <u>The Great Warming</u>	Styx 1996 “A Climate Repair Manual” McKibben Ch 1 (1-23) (Written response due before the start of class.)
Wednesday, 12 Jan	<i>Discussion:</i> McKibben <i>Lecture:</i> “Climate Change: Who is enduring the consequences?” <i>Exercise:</i> Ecosystem Case Studies <i>Film:</i> <u>Dimming the Sun</u>	McKibben Ch 1 (23-46) Berteaux et al. 2004. Keeping pace with fast climate change: Can Arctic life count on evolution? <i>Integrative and Comparative Biology</i> 44(2):140-151.

		Both et al. 2006. Climate change and population declines in a long-distance migratory bird. <i>Nature</i> 441(7089):81-83. (Written response due before the start of class.)
Thursday, 13 Jan	<i>Discussion:</i> McKibben <i>Lecture:</i> “Our Addiction to Oil” <i>Film:</i> <u>A Crude Awakening</u>	McKibben p.47-59 Campbell and Laherre 1998 “The End of Cheap Oil” <i>Scientific American</i> 78-53 Heinberg and Fridley 2010 “The End of Cheap Coal” <i>Nature</i> 468:367-369 (Written response due before the start of class.)
Friday, 14 Jan	<i>Discussion:</i> McKibben – Should we give Earth a new name? EXAM II <i>Discussion:</i> Leopold <i>Lecture:</i> “Greenfire: Land Ethic” <i>Extra credit:</i> go to Oshkosh Public Museum over the weekend and write a report on the hunting exhibit (ask for details)	McKibben p.102-119 <i>In class:</i> Leopold 1968 “Thinking Like a Mountain”

Week 3: Wildlife management: why do we now want wolves?

Monday, 17 Jan	No Class - Martin Luther King Jr. holiday	
Tuesday, 18 Jan	<i>Discussion:</i> Askins and Manning <i>Exercise:</i> Predator Prey Relationships <i>Lecture:</i> “Reintroduction of Wildlife” <i>Film:</i> <u>A Legend Returns</u>	Askins p.3-35, 53-73 Manning et al. 2009. Restoring landscapes of fear with wolves in the Scottish Highlands. <i>BiolCons</i> 2314-2321. (Written response due before the start of class.)
Wednesday, 19 Jan	<i>Discussion:</i> Askins and Manning <i>Lecture:</i> “Wildlife Management: From Invasive to Endangered” <i>Film:</i> <u>The Cove</u>	Askins p.77-115 Nei 2001 Sociopolitical dimensions of wolf mgt and restoration in the US. <i>Res in Hum Ecol</i> 1-10. (Written response due before the start of class.)
Thursday, 20 Jan	<i>Discussion:</i> Askins and Manning <i>Film:</i> <u>Milking the Rhino</u> <i>Exercise:</i> Role play	Askins 119-138, 153-176 Maclennan et al. 2009. Evaluation of a compensation scheme to bring about pastoralist tolerance of lions. <i>BiolCons</i> 2419-2427 (Written response due before the start of class.)
Friday, 21 Jan	EXAM III	Leopold 1924 “The River of the Mother of God”