

Sustainability and Society

ENV 207: Syllabus

University of Michigan

Winter 2014

Tuesday and Thursday 1:00pm-2:30pm, Dana 1024

3 Credits

Instructor: Professor Josh Newell, 1064 Dana, jpnewell@umich.edu
Office Hours: Tuesday & Thursday, 2:30-3:30pm, Dana 1064;
and by appointment

Graduate Student Reader: Jenny Cooper, jacoop@umich.edu
Office Hours: Thursday, 2:30-3:30 pm, Dana 3556; and by appointment

Introduction and Purposes

Sustainability has become perhaps the most pressing scientific and social challenge of our time. Typically defined as utilizing natural resources so as to create a high quality of life for *future* as well as current generations, the idea of sustainability has been strongly contested since its introduction in the 1980s. Nonetheless, global climate change, habitat loss and species endangerment, desertification and deforestation, and the effects of rapid urbanization have fueled political debates over sustainability policies in both the industrialized and industrializing worlds.

In this course, you will gain an understanding of how key global challenges, such as population growth and consumption, are creating a sense of urgency in terms of developing and promoting theories, methods, and practices that foster sustainability in our society. Through a concentrated study of this emerging sphere we call sustainability, you will learn to articulate the relationships among observed phenomena, the principles and policies those observations can inform, particularly how best to integrate technology, education, and policy to best meet identified goals. Finally, you will gain an appreciation for why interdisciplinary approaches to sustainability are often necessary and useful.

The course is divided into four interdependent sections or modules: 1. *Concepts and Concepts for Sustainability*; 2. *Challenges of a Planet*; 3. *Global Economy and the Search for Solutions*; and 4. *Social Activism and Change Agents*. In addition to the two weekly lectures, which students are expected to attend, the course has an experiential component consisting of field trips and in-class exercises.

Learning Objectives

At the end of this course, you should be able to:

1. Connect sustainability concepts and technology to real-world challenges, including individual/social needs and political debates;
2. Evaluate scientific and popular claims about sustainability;
3. Discuss pathways toward a more sustainability society and their significance to diverse audiences;
4. Learn how to write and read more effectively, both essential skills for your future.

Course Reading

Required Textbook: Paul Robbins, John Hinz, and Sarah A. Moore. 2010. *Environment and Society: A Critical Introduction*. First Edition. London: Blackwell. This book has been stocked at local bookstores and you can buy it via the internet. The other required readings are posted on Ctools. Please note that only some chapters from the textbook are required. Also, the reading list may change slightly as the semester progresses. I will provide ample notice of these minor changes in class and a revised syllabus will be posted electronically on Ctools. Readings have been carefully selected, with particular attention to the reading load, which varies based on the topics, but averages less than fifty pages per week. In terms of how to read strategically, you might find this weblink useful: <http://www.swarthmore.edu/SocSci/tburke1/reading.html>.

Grading

Your course grade will be based on a mid-term exam, a final exam, two short essay papers, and class participation and attendance. Please check the course schedule on Ctools for key deadlines. The grading breakdown is as follows:

- Midterm Examination: 30%
- Final Examination (non-cumulative): 30%
- Two essay papers (5 pages each): 24%
- Class participation and attendance: 16%

Essay Papers

You are required to write two short essays. These essays should be a minimum of five pages in length (double spaced, 1" margins, and 12 pt Times New Roman font). All ideas, terms, and quotes that are not your own need to be properly cited in your essay. You may choose a referencing style (e.g. author, date; footnotes; endnotes) and you will need to include a bibliography at the end of your essay. This bibliography does not count towards your five-page length requirement. Your essays will be evaluated based on the clarity and completeness of your answer, as well as on spelling, grammar, and referencing. These essays will be based largely on the course reading. The essay assignments will be distributed in class and posted on Ctools at least two weeks prior to their due date. The due dates for the essays are as follows: Essay #1, February 4th; Essay #2, April 3rd. These essays are due by the beginning of class on these days. You will turn in your essays via Ctools. Please be sure to answer the essay question(s) completely and be sure to proofread your essays carefully before submitting them.

Exams

There is an in-class mid-term exam on February 27th. This exam covers the first half of the course, while the final exam covers material from second half. In accordance with the UM exam schedule, the final exam will be held on Thursday, April 25th, 4-6 pm. There will not be any alternative dates for these exams. So as you make travel plans, please keep these dates in mind.

Plagiarism: Plagiarism involves presenting someone else's words or ideas as your own. This includes using someone else's assignment as your own as well as failing to properly cite the sources of ideas or words. We will report students who plagiarize to the Academic Judiciary Board. Plagiarizing can also result in getting a zero on the assignment and failing the course. For information on citing sources, check the *Chicago Manual of Style* or contact me during office hours. Please see the following link for more information on plagiarism:
<http://www.lsa.umich.edu/english/undergraduate/advising/plagNote.asp>

Writing Help: One of the objectives of this course is to develop your writing skills. You may want to contact the Sweetland Writing Center (1139 Angell Hall, 764-0429, <http://www.lsa.umich.edu/sweetland/>) to get feedback on drafts of your work, as well as general guidance on how to improve your writing.

Late Work: Please turn in all assignments on time. Late assignments will be marked down one letter grade per day late, beginning as soon as the assignment is due. If you have extenuating circumstances, then please contact Jenny Cooper at least one week in advance of the assignment due date.

Accommodations for Students with Disabilities

Please contact the GSI during the first week of class so that your needs can be accommodated. Accommodations cannot be made retroactively; protect your legal rights by contacting the GSI before any graded assignments are turned in. You may also wish to contact Services for Students with Disabilities (G-664 Haven Hall, 505 South State St.: 734-763-3000, <http://ssd.umich.edu>).

| Date | | Class Topic | Reading (on Ctools or via internet link) | Activity/Event | Deliverable |
|--|-----|--|--|--|--------------------------|
| <i>SECTION 1: CONCEPTS AND CONTEXTS FOR SUSTAINABILITY</i> | | | | | |
| 9 Jan | #1 | Course Overview | No reading | | |
| 14 Jan | #2 | Sustainability: A Brief History | Kates et al. (2005) | <i>Why do societies collapse?</i> | |
| 16 Jan | #3 | Discourses of Sustainability Today | Orr (1991), Vos (2007), Zency (2010) | <i>How to Write an Essay Special Guest: Sweetland Writing Center</i> | |
| 21 Jan | #4 | A Brief Introduction to Environmental Ethics | Chapter 5 in Robbins et al. (2010) McKibben (2010) | <i>Hog Farming</i> | |
| 23 Jan | #5 | Key Thinkers in Environmental Ethics / Section 1 Review | Devall & Sessions (1985) Chapter 5 in Robbins et al. (2010) | | |
| <i>SECTION 2: CHALLENGES OF A PLANET</i> | | | | | |
| 28 Jan | #6 | | | | |
| 30 Jan | #7 | Introduction / Population and Scarcity | Chapter 2 in Robbins et al. (2010) | | |
| 4 Feb | #8 | Carrying Capacity and Biodiversity Loss | Living Planet Report (2012); Chapter 1 in Marsh and Grossa (2004) | <i>Rabbits Grass Weeds</i> | Essay #1 due |
| 6 Feb | #9 | Climate Change | Chapter 9 (pp. 138-144) in Robbins et al. (2010); McKibben (2012) | <i>Carbon Footprint</i> | |
| 11 Feb | #10 | Globalization, Technological Change, and Rise of Consumption | Assadourian (2010); Princen (2002) | | |
| 13 Feb | #11 | Consumption and IPAT | Maniates (2002); Kates (2000) | <i>The Story of Stuff</i> | |
| 18 Feb | #12 | Institutions and "The Commons" | Chapter 4 in Robbins et al. (2010); Hardin (1968) | <i>Tragedy of Commons Game;</i> | <i>Essay #1 returned</i> |
| 20 Feb | #13 | Summary 2 Review | No reading | <i>Midterm Exam</i> | |

| | | | | | |
|--|--|--|--|---------------|--|
| | | | | <i>Review</i> | |
|--|--|--|--|---------------|--|

SECTION 3: ECONOMY AND THE SEARCH FOR SUSTAINABLE SOLUTIONS

| | | | | | |
|---------------------|-----|--|--|---|----------------------|
| 25 Feb | #14 | Introduction/Markets and Commodities | Chapter 3 in Robbins et al. (2010) | <i>CRLT midterm assessment</i> | |
| 27 Feb | #15 | MIDTERM EXAM | | | |
| SPRING BREAK | | | | | |
| 11 Mar | #16 | Critique of Capitalism: Political Economy 1 | Chapter 7 in Robbins et al. (2007) | <i>Review midterm exams</i> | Midterms returned |
| 13 Mar | #17 | Critique of Capitalism: Political Economy 2 | Chapter 7 in Robbins et al. (2010) | | |
| 18 Mar | #18 | Market-based Approaches to Environmental Problems; Energy, Carbon Dioxide, and Wedges | Chapter 9 (pp. 145-159) in Robbins et al. (2010); Socolow, Hotinski et al. (2004), Pacala and Socolow (2004) | <i>Wedge Game</i> | |
| 20 Mar | #19 | Ecosystem Services and Valuation | Daily (2000) Bayon (2008) | <i>Negotiating Ecosystem Services</i> | |
| 25 Mar | #20 | Industrial Ecology and Greening of Production | Frosch et al. (1992), Lovins (2008) | | |
| 27 Mar | #22 | “Green” Consumerism: The Story of Tuna / Section 3 Summary | TBD | | |

SECTION 4: SOCIAL ACTIVISM AND CHANGE AGENTS

| | | | | | |
|--------|---|---|--|--|----------------------|
| 1 Apr | #23 | Introduction/Activism and Change Agents | Hawken (2007) | <i>NGO Panel</i> | |
| 3 Apr | #24 | Sustainability in Community: Ann Arbor | http://www.a2gov.org/sustainability/Documents/SF_DocumentDraft_9%2020%2012.pdf Browse AA web pages: http://www.a2gov.org/green ; http://www.a2gov.org/sustainability | <i>Note: Meet at Ann Arbor City Hall. Guest Lecture: Jamie Kidwell</i> | Essay #2 due |
| 8 Apr | #25 | Sustainability on Campus: A Walking Tour | Browse UM web page: http://www.ocs.umich.edu/ Rappaport (2008), Zernike <i>New York Times</i> (2008) | <i>Note: Meet in Class Guest Lecture: Mike Shriberg</i> | |
| 10 Apr | No class | | | | |
| 15 Apr | #26 | Sustainable Cities and Environment Justice Movements | Wolch (2004), Kunstler (2011), Newman (2010) | <i>Discussion of campus and community tours</i> | <i>Return essays</i> |
| 17 Apr | #27 | Sustainable Food Movements /Urban Agriculture | Barlett (2011, pp. 101-105, pp. 111-112), <i>The University Record</i> (2013) | | |
| 22 Apr | #28 | Section 4 Summary/UM courses and Future Careers in Sustainability | No Reading | <i>Careers in Sustainability</i> | |
| 25 Apr | FINAL EXAM, Friday, APRIL 25, 4:00 – 6:00 PM | | | | |

Reading List

You are required to purchase the primary course textbook, *Environment and Society: A Critical Introduction*. You may also want to purchase *Blessed Unrest*, as we will read a significant portion of it. The other required readings are on Ctools.

January 9

Required Reading

No Reading.

January 14

Required Reading

Kates, R. W., T. M. Parris, and A. A. Leiserowitz. 2005. What is sustainable development? Goals, Indicators, Values, and Practice. *Environment* 47 (3): 9-21.

January 16

Required Reading

Orr, D. 1991. "Two Meanings of Sustainability." In *Ecological Literacy: Education and the Transition to a Postmodern World*. New York: SUNY Press. Pp. 23-40.

Vos, R. O. 2007. Defining Sustainability: A conceptual orientation. *J. Chemical Technology and Biotechnology*. 82: 334-339.

Zency, E. 2010. Theses on Sustainability: A Primer. *Orion Magazine* May/June.

<http://www.orionmagazine.org/index.php/articles/article/5502/>

January 21

Required Reading

Chapter 5 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. Pp. 63-78.

McKibben, B. 2010. The Only Way to Have a Cow. *Orion Magazine*.

<http://www.orionmagazine.org/index.php/articles/article/5339>

January 23

Required Reading

Chapter 5 in Devall, B. and G. Sessions. 1985. *Deep Ecology*. Salt Lake City: Peregrin Smith Books. Pp. 65-77.

Chapter 5 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. Pp. 63-78.

January 28

Required Reading

Chapter 2 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. Pp. 11-27.

January 30

Required Reading

World Wildlife Fund. 2012. *Living Planet Report 2012*.

http://awsassets.panda.org/downloads/lpr_2012_summary_booklet_final.pdf

Marsh and Grossa, Chapter 1: "A World in Crisis: Environment and Humanity in the 21st Century." 2004. Pp. 1-15.

February 4

Required Reading

Chapter 9 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. (Pp. 135-144).

McKibben, B. "Global Warming's Terrifying New Math." 2012. Rolling Stone Magazine. August 2, 2012. <http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719>

February 6

Required Reading

To Be Determined.

February 11

Required Reading

Assadourian, E. 2010. "The Rise and Fall of Consumer Cultures?" *State of the World: Transforming Cultures, From Consumerism to Sustainability*. Worldwatch Institute. New York: W.W. Norton. Pp. 75-82.

Princen, T., 2002. "Consumption and Its Externalities: Where Economy Meets Ecology." Pp. 23-42 in Princen, T., Maniates, M., and Conca, K. *Confronting Consumption*. Cambridge, MA: MIT Press.

February 13**Required Reading**

Kates, R. W. 2000. Population and consumption: What We Know, What We Need to Know. *Environment* 42 (3): 10-19.

Maniates, M. 2002. Individualization: Plant a Tree, Buy a Bike, Save the World? in Princen, T., Maniates, M., and Conca, K. *Confronting Consumption*. Cambridge, MA: MIT Press. Pp. 43-66.

February 18**Required Reading**

Chapter 4 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. Pp. 46-62.

Hardin, G. 1968. The tragedy of the commons. *Science* 162 (3859): 1243-1248.

February 20**Required Reading**

No Reading.

February 25**Required Reading**

Chapter 3 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. Pp. 28-45.

February 27**Required Reading**

No Reading.

March 11**Required Reading**

Chapter 7 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. Pp. 96-115.

March 13**Required Reading**

Chapter 7 (cont.) in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. Pp. 96-115.

March 18**Required Reading**

Chapter 9 in Robbins, P., J. Hintz, and S.A. Moore. 2010. *Environment and Society: A Critical Introduction*. Malden, MA: Wiley-Blackwell. (Pp. 145-159).

Pacala S. and R. Socolow. 2004. Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies. *Science* 305, 968-972.

Socolow, R., R. Hotinski, J. B. Greenblatt, and S. Pacala. 2004. Solving the climate problem. *Environment* 46 (10): 8-19.

March 20**Required Reading**

Bayon, R. 2008. "Banking on Biodiversity." *State of the World: Innovations for a Sustainable Economy*. Worldwatch Institute. New York: W.W. Norton. Pp. 123-137.

Daily, G.C., et al. 2000. "The Value of Nature and the Nature of Value." *Science* 289: 395–396.

March 25**Required Reading**

Frosch, R. A. Industrial ecology: A philosophical introduction. 1992. *Proceedings of the National Academy of Science* 89: 800-803.

Lovins, H. L. 2008. "Rethinking Production." *State of the World: Innovations for a Sustainable Economy*. Worldwatch Institute. New York: W.W. Norton. Pp. 32-44.

March 27**Required Reading**

To Be Determined.

April 1**Required Reading**

Hawken, P. 2007. *Blessed Unrest: How the Largest Social Movement in History is Restoring Grace, Justice, and Beauty to the World*. Pp. 1-47.

April 3**Required Reading**

Browse Ann Arbor City web page: <http://www.a2gov.org/green>

Browse Ann Arbor City web page: <http://www.a2gov.org/sustainability>

City of Ann Arbor. 2012. *State of Our Environment Summary*.

April 8

Required Reading

Browse UM web page: <http://www.ocs.umich.edu/>

Rappaport, A. "Campus Greening: Behind the Headlines." *Environment* (Jan/Feb 2008): 6-16.

Zernike, K. 2008. "The Campus: Green, Greener, Greenest," *New York Times*.

April 10

No class

April 15

Required Reading

Kunstler, J. H. 2011. "Back to the Future." *Orion Magazine*.

<http://www.orionmagazine.org/index.php/articles/article/6336/>

Newman, P. 2010. "Building the Cities of the Future" *State of the World: Transforming Cultures, From Consumerism to Sustainability*. Worldwatch Institute. New York: W.W. Norton. Pp. 133-137.

Wolch, J.R. 2007. "Green Urban Worlds." *Association of American Geographers*. 97: 373-384.

April 17

Required Reading

Barlett, P. 2011. Campus sustainable food projects: Critique and engagement. *American Anthropologist*, 113(1). Pp 101-105 and pp. 111-112

Article and Video from *The University Record*: <http://record.umich.edu//articles/growing-community-campus-farm-engages-learning>

April 22

Required Reading

No required reading.