

Sustainability and Society

ENV 207: Syllabus

University of Michigan

Fall 2015

Lecture: Tuesday and Thursday 11:00am-12:00pm, Dana 1040

Discussion Sections: A. Thursday 12:00-1:00pm (Dana 2024), B. 4:00-5:00pm (Dana 1028), and C. Friday 11:00am-12:00pm (Dana 1028)

3 Credits

Instructor: Professor Josh Newell, 1064 Dana, jnewell@umich.edu
Office Hours: Tuesday & Thursday, 1:00-2:00pm, Dana 1064; and by appointment

Graduate Student Instructor: James (J.T.) Erbaugh, jerbaugh@umich.edu
Office Hours: Monday 1:30-2:30pm, Tuesdays 2:00-3:00pm in Dana 1528 or Fridays 10:00-11:00am or by appointment in Dana 4020

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 sustainable 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. 2014. *Environment and Society: A Critical Introduction*. Second 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>.

Discussion Sections

The goals of discussion section are to clarify and elaborate upon the concepts introduced in lecture and within the readings and to further the learning objectives of the course. Discussion sections will consist of some combination of lecture, discussion, and interactive learning. You are expected to attend each period your discussion section is held. If you are unable to attend, please contact GSI Erbaugh by email at least three days in advance or, in the case of emergency, as soon as possible. Your attendance and participation in discussion sections will largely determine the class participation/attendance portion of your grade. Although discussion sections will adhere to Michigan Time, students are invited to arrive early, especially to ask clarifying questions about the material and generally to ask GSI Erbaugh about components of the course.

Grading

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

- Midterm Examination: 28%
- Final Examination (non-cumulative): 28%
- Two essay papers (5 pages each): 22%
- Class participation and attendance: 22%
 - 8% mini-assessments, 14% attendance

Grades will be posted in the “Gradebook” tab in Ctools shortly after each assessment. Rather than ‘curving’ individual exams and essays, we will likely curve overall course grades (to your advantage), prior to their final submission.

Essay Papers

You are required to write two short essays. These essays should be a minimum of five pages in length, and a maximum of seven pages (**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. For these two essays, **please use the APA referencing style** and include a bibliography at the end of your essay. This bibliography does not count towards the length requirement. Your essays will be evaluated based on the clarity and completeness, as well as on spelling, grammar, and referencing. These essays will be based largely on the course reading. The essay assignments will be discussed in class and posted on Ctools at least two weeks prior to their due date. The due dates for the essays are: **Essay #1, October 6th**; **Essay #2, November 24th**. These essays are due by the beginning of class on these days. **You will turn in and receive comments on your essays via Ctools.** 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 October 27th. This exam covers the first half of the course, while the final exam covers material from the second half. In accordance with the UM exam schedule, the final exam will be held on Thursday, December 17th, 1:30-3:30 pm. There will not be any alternative dates for these exams. As you make travel plans, please keep these dates in mind.

Mini-Assessments

You are required to submit five mini-assessments over the course of the term (roughly every two weeks). These mini-assessment will be posted on the Test Center tab in CTools. They are timed (45 minutes), composed of 5-10 questions (e.g. multiple choice, true/false, fill-in-the-blank), and designed to assess how well you are grasping key course concepts. Furthermore, these mini-assessments anticipate (sometimes directly) exam questions and important material. Mini-assessments are ‘open-note,’ but they must be done individually (rather than in groups). Once the mini-assessment is posted on Ctools, you have one week to complete it. Failure to do so will result in a mini-assessment grade of 0. We will drop the lowest mini-assessment score and average the other four scores to determine your overall mini-assessment grade for the course.

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 GSI Erbaugh at least one week in advance of the assignment due date.

Accommodations for Students with Disabilities

Please contact the GSI Erbaugh 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	Discussion Section	Deliverable
<i>Section 1: Concepts and Contexts for Sustainability</i>					
9/8/15	1	Introduction to Course	<i>No reading</i>		
9/10/15	2	Sustainability: Brief History	<i>Kates et al. (2005) (Recommended Only)</i>	1. Introductions 2. Societal Collapse	
9/15/15	3	Current Discourses in Sustainability	<i>Orr (1991), Vos (2007), Zency (2010)</i>		
9/17/15	4	Introduction to Environmental Ethics	<i>Chapter 5 in Robbins et al. (2014), McKibben (2010), Landrigan (2015)</i>	1. Theses on Sustainability 2. Hog Farming and Environmental Ethics	Essay #1 Assigned
9/22/15	5	Key Thinkers in Environmental Ethics	<i>Chapter 5 in Robbins et al. (2014), Devall & Sessions (1985)</i>		
9/24/15	6	Sweetland Writing Presentation and Sustainability on Campus	<i>Burg (2015), Zernike (2008)</i>	1. Campus Sustainability Walk	

Section 2: Challenges of a Planet

9/29/15	7	Introduction: Population and Scarcity	<i>Chapter 2 in Robbins et al. (2014)</i>		
10/1/15	8	Guest Presentation: Paul Robbins and Sarah Moore	<i>Living Planet Report Executive Summary (2014)</i>	1. Review Section One 2. Footprint Calculation	
10/6/15	9	Biodiversity Loss	<i>Living Planet Report Executive Summary (2014)</i>		Essay #1 Due
10/8/15	10	Climate Change	<i>Chapter 9 (pp. 139- 148) in Robbins et al. (2014); McKibben (2012); Hoffman (2015)</i>	1. Ecosystem Dynamics	
10/13/15	11	Consumption and IPAT	<i>Maniates (2002); Ehrlich and Ehrlich (2008)</i>		
10/15/15	12	Globalization, Technological Change, and Rise of Consumption	<i>Assadourian (2010); Princen (2002)</i>	1. Discourse and Climate Change	
10/20/15		No Class Study Break			
10/22/15	13	Institutions and the Commons	<i>Chapter 4 in Robbins et al. (2014); Hardin (1968)</i>	1. Commons Activity 2. Mid-Term Review	
10/27/15		Mid-Term Exam			Essay #1 Returned

<i>Section 3: Markets and Commodities</i>					
10/29/15	14	Introduction to Markets and Commodities	<i>Chapter 3 in Robbins et al. (2014)</i>	1. Markets and Commodities Activities 2. Review first essays	
11/3/15	15	Critique of Capitalism: Political Economy 1	<i>Chapter 7 in Robbins et al. (2014)</i>		Mid-Terms Returned
11/5/15	16	Critique of Capitalism: Political Economy 2	<i>Chapter 7 in Robbins et al. (2014); Chapter 9 (pp. 149-162) in Robbins et al. (2014);</i>	1. Mid-Term Discussion 2. Capitalism and Sustainability	
11/10/15	17	Ecosystem Services and Valuation	<i>Daily (2000); Pacala and Socolow (2004); Bayon (2008)</i>		Essay #2 Assigned
11/12/15	18	Industrial Ecology and Greening of Production	<i>Frosch et al. (1992), Lovins (2008)</i>	1. The Wedge Game	
11/17/15	19	"Green" Consumerism and Trees	<i>Chapter 10 in Robbins et al. (2014)</i>		
11/19/15	20	Green Consumerism Continued and Section 3 Summary	<i>TBD</i>	1. Case analysis: Valuing Forests	

<i>Section 4: Social Activism and Change Agents</i>					
11/24/15	21	Introduction: Activism and Change Agents Guest: Mike Shriberg, Regional Executive Director, National Wildlife Foundation	<i>Hawken (2007), NWF Background Site and Video</i>		Essay #2 Due
11/26/15	22	No Class Thanksgiving Break			
12/1/15	23	Sustainability in Community: Ann Arbor Guest: Matt Naud, Environmental Coordinator, City of Ann Arbor	<i>City of AA Sustainability Framework, Browse City of AA Sustainability Action Plan Dashboard</i>		
12/3/15	24	Sustainable Cities	<i>Kunstler (2011), Newman (2010)</i>	1. What is activism?	
12/8/15	25	Environmental Justice Movements	<i>McKibben (2013)</i>		Essay #2 Returned
12/10/15	26	Sustainable Food Movements and Urban Agriculture	<i>Barlett (2011, pp. 101-105, pp. 111-112), Campus Farm Video, Metes 2015</i>	1. Review Essay 2 2. What is Justice?	
12/15/15	27	Optional Exam Review (Location and Time TBD)		Final Exam Review	
12/17/15	28	Final Exam: Room 1040 1:30-3:30 PM	12/17/14		

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.

September 8th

Required Reading

No Required Reading

September 10th

Recommended 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.

September 15th

Required Reading

Orr, D. 1991. Two Meanings of Sustainability. *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/>

September 17th

Required Reading

Chapter 5 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 65-81.

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

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

Landrigan, M. 2015. Breaking Vegerarianism: The Ethical Implications of eating meat. *Paste Magazine*. April 3rd, 2015. <http://www.pastemagazine.com/articles/2015/04/breaking-vegetarian-the-ethical-implications-of-ea.html?a=1>

September 22nd

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., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 65-81.

September 24th
Required Reading

Burg, N. 2015. How green is the Maize and Blue? UM's Big Sustainability Goals. *Concentrate*. August 19th, 2015. <http://www.concentratemedia.com/features/u-msustainability0338.aspx>

Zernike, K. 2008. The Campus: Green, Greener, Greenest. *New York Times*. July 27th, 2008. http://www.nytimes.com/2008/07/27/education/edlife/27green.html?pagewanted=all&_r=0

September 29th
Required Reading

Chapter 2 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 11-30.

October 1st
Required Reading

No Required Reading

October 6th
Required Reading

World Wildlife Fund. 2012. *Living Planet Report 2012*.
http://awsassets.panda.org/downloads/lpr_2012_summary_booklet_final.pdf

Chapter 1 in Marsh, W. and Grossa, J. 2004. A World in Crisis: Environment and Humanity in the 21st Century. *Environmental Geography: Science, Land Use, and Earth Systems*. Third Edition. John Wiley & Sons Inc. Pp. 1-15.

October 8th
Required Reading

Chapter 9 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 139-148.

Hoffman, A. 2015. From Al Gore to Solyndra: Four Ways Culture Shapes the Climate Change Debate. *GreenBiz*. February 27th, 2015. <http://www.greenbiz.com/article/Al-Gore-Solyndra-Chevrolet-culture-clash-shapes-climate-change-debate>

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

October 13th

Required Reading

Ehrlich, P. and Ehrlich, A. 2008. Too many people, too much consumption. *Yale Environment* 360. August 4th, 2008.

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.

October 15th

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.

October 20th

No Class (Study Break)

No Required Reading

October 22nd

Required Reading

Chapter 4 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 49-64.

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

October 27th
Mid-Term Exam

No Required Reading

October 29th
Required Reading

Chapter 3 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 32-48.

November 3rd
Required Reading

Chapter 7 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 98-118.

November 5th
Required Reading

Chapter 7 (cont.) in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. Pp. 98-118.

Chapter 9 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. (Pp. 149-162).

November 10th
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.

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

November 12th
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.

November 17th
Required Reading

Chapter 10 in Robbins, P., Hintz, J. and Moore, S. 2014. *Environment and Society: A Critical Introduction*. Second Edition. London: Blackwell. (Pp. 149-162).

November 19th
Required Reading

To Be Determined

November 24th
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.

National Wildlife Foundation. 2015. National Wildlife Federation Today. NWF.
<http://www.nwf.org/Who-We-Are/History-and-Heritage/NWF-Today.aspx>

November 26th
No Class (Thanksgiving Break)

No Required Reading

December 1st
Required Reading

City of Ann Arbor. 2015. Sustainability Action Plan Dashboard.
<http://www.a2gov.org/departments/systems-planning/Sustainability/Sustainability-Action-Plan/Pages/Dashboard.aspx>

City of Ann Arbor. 2013. *Sustainability Action Plan*.
<http://www.a2gov.org/departments/systems-planning/Sustainability/Sustainability-Action-Plan/Documents/SAP%20-%20DRAFT%20-%20%20July%202015%20-%20web.pdf>

December 3rd
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.

December 8th

Required Reading

McKibben, B. 2013. Movements without leaders: What to make of change on an overheating planet. *Tomdispatch*. August 18th, 2013 <http://www.tomdispatch.com/blog/175737/>

December 10th

Required Reading

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

Campus Farm Video

<https://www.youtube.com/watch?v=nefeRes5Nh0&feature=youtu.be>

Metea, J. 2015. All Michigan Dining Facilities certified as Platinum for Sustainability. *The University Record*. July 15th, 2015.

December 12th

Final Exam Review

No Required Reading

December 17th

Final Exam