

Spring 2016
SUST 134 – Creating a Sustainable Future:
Introduction to Environmental, Social and Economic Health

Instructor: Jessica Rowland
Location: Centennial Engineering 1028
Time: Tuesday/Thursday 9:30-10:45 am
Office: Castetter Hall, room 163B
Office Hours: Monday/ Wednesday 1:00-3:00 pm, or by appointment
Email: jrowland@unm.edu
Phone: Office - 505.277.3431 Cell - 505.506.6612
Website: <http://sust.unm.edu>
Required Text: Various articles, book chapters, videos & podcasts on *UNM Learn* (<https://learn.unm.edu/>)

Course description: This course provides a broad survey of various aspects of sustainability. We will explore topics such as climate change, renewable energy, water, agriculture, green building, socially responsible business, microlending, environmental justice, smart growth and alternative progress indicators, among others. The course will focus on how to create a sustainable future that supports environmental health, social equity and economic vitality (the triple bottom line). We will examine challenges and examples of integrated, creative strategies on local, national and global levels.

Course goals and expectations: This course is suited for students interested in applying the principles of sustainability to their everyday lives. The class is a springboard for students to engage in independent or collaborative projects that promote sustainability on campus and in the community. Students should leave this class with a major mastery of one topic and a minor mastery of another topic. This means that students will be able to verbalize facts and background context about these topics, and demonstrate competency in how to take action and to influence others. Throughout the semester, students will hone their writing and public presentation skills, as well as their leadership skills. *To declare the Sustainability Studies minor or to discuss the Program, set up a meeting with Terry Horger via Lobo Achieve (thorger@unm.edu).*

Grading: Your grade will be determined from the following:

Attendance & Participation	15%
Community Engagement	15%
Ecological Footprint Project	20%
Midterm & Final Exams	25%
Short Essays	25%

A+	> 99%	B+	87-89.9%	C+	77-79.9%	D+	67-69.9%	F	< 60%
A	93-99%	B	83-87%	C	73-77%	D	63-67%		
A-	90-93%	B-	80-83%	C-	70-73%	D-	60-63%	C/NC	not allowed

Attendance & Participation (15%): This class requires your active participation and team work, so it is expected that you show up on time and participate fully in discussions and activities. Your perspectives, knowledge, and enthusiasm are valuable and necessary to make the class a good experience for all involved. Please be prepared to be a part of discussions about assigned readings. The readings are available on *UNM Learn*, and are organized in folders that correspond to the topics on the syllabus. Worksheets and reading assessment quizzes will count toward your participation grade and may be given throughout the semester to ensure that you keep up with the material.

Community Engagement (15%): An important component of this class is your engagement in sustainability-related activities both in the greater Albuquerque community and on the UNM campus. You will identify your major interests and design a plan of action to participate in activities related to these interests. Completion of ten (10) hours of community engagement will satisfy this requirement.

I may organize work parties or field trips to community farms, solar arrays, recycling and/or composting facilities. There will also be numerous on-campus sustainability events in which you can participate, including lectures, film screenings, workshops, and sustainability-oriented committee or organization meetings. It is required that you seek out opportunities that fit your specific interests. Complete the Community Sustainability Experience Form on *UNM Learn* to document your community engagement. Be sure to fill in the form within two weeks of participating in each activity and submit it to the instructor.

Ecological Footprint Project (20%): You will begin by assessing your household's ecological footprint, using the Wackernagel et al. (2012) spreadsheet calculator. You will then determine a suitable course of action and adopt practices that will enable your household to reduce its ecological footprint by 20%. These practices may include changing your mode of transportation, your method of food selection, your buying practices, your energy or water usage, etc. Your assignment is to provide evidence that you have implemented one or more ways to reduce your footprint by about 20% over the semester. Choose the footprint area that interests you most, and track your progress for 8 weeks. At the end of the semester you will turn in a report that discusses how your footprint has changed and give a brief presentation to the class.

Midterm & Final Exams (25%): Exams will be mainly in short-essay format, although there will also be some fill-in-the-blank and/or matching questions. The exams will cover material from assigned readings, lectures, video clips and class discussions.

Short Essays (25%): During the semester, you will turn in three essays that are unique to this class and 3-4 pages in length. I will provide some questions that are designed to guide your writing; you should integrate relevant data, examples and case studies. To ensure that you receive full credit, hardcopies of the essays are due in class or electronic versions must be emailed to the instructor by 5pm the day they are due. *Late papers will be accepted for only one week after the due date and will be graded down one full grade point.*

CLASS POLICIES

Academic Honesty: At UNM, academic honesty is considered one of the cornerstones of academic development. All UNM policies regarding academic honesty apply to this course. Academic honesty includes, but is not limited to, 1) plagiarism (claiming credit for the words or works of another, taken from any source – print, Internet, or electronic database – or failing to cite the source), 2) fabricating information or citations, 3) facilitating acts of academic dishonesty by others, or 4) submitting the work of another person or 5) submitting work previously used for another course. Students should communicate and act, both in class interactions and in assigned coursework, in a manner directed by personal integrity, honesty, and respect for self and others. Any incident of blatant academic dishonesty will result in the instructor reporting the student to the Dean of Students Office and potentially a failing grade in the class or expulsion from the university.

Internet and email responsibility: It is expected that you visit the *UNM Learn* course website regularly to stay up to date with readings and assignments. Check your UNM email account, as the instructor will use this account to keep in touch regarding course requirements, field trips or other updates. If you regularly use another email address, forward your UNM mail to that account. As a courtesy to the instructor, please observe proper *netiquette*. Instructor responses to student emails can be expected within 48 hours of receipt.

Technology: Be respectful of each other's learning by turning off cell phones and not using the internet while in class. No texting in class!

ADA accessibility: Qualified students with disabilities needing appropriate academic adjustments should contact Accessibility Services (277-3506) and inform the instructor as soon as possible to ensure your needs are met in a timely manner.

Schedule:

Class	Date	Topic	Read & Discuss	Assignment Due
I. The Context of Sustainability				
1	T 1/19	Introduction	-Syllabus	Read the syllabus and explore the Sustainability Studies website
2	R 1/21	What is Sustainability?	-WCED, 1987 -UNCED, 1992 -Drexhage, 2010	Essay #1: What is sustainability?
3	T 1/26	Human Population Growth & Consumption <i>Short Film - The Story of Stuff</i>	-Cohen, 2011 -Population Reference Bureau, 2015	
4	R 1/28	The Ecological Footprint	-Wackernagel, 1996 -Living Planet Report, 2014	Community engagement: Initial plan of action
II. The Environment (Planet)				
5	T 2/2	Climate Change; Human Domination of Ecosystems	-Vitousek, 1997 -NCA, 2014 -Brown, 2009	
6	R 2/4	Global Energy Usage; Peak Oil <i>Short Film - Crash Course on Peak Oil</i>	-McKibben, 2009 -Inman, 2013	Community engagement: Final plan of action
7	T 2/9	Renewable Energy Overview: Solar, Wind, Biomass, Geothermal & Tidal	-Wald, 2009 -Smil, 2014	
8	R 2/11	Solar Energy	-US Solar Market Insight Report, 2014	
9	T 2/16	Biofuels	-Huber, 2009 -Worldwatch, 2009	
10	R 2/18	Water Consumption & Conservation	-Selcraig, 1994 -Gleick, 2010 -Rogers, 2008	Ecological footprint project: Baseline footprint spreadsheet
11	T 2/23	The Industrial Food System; Food Access & Food Waste	-Walsh, 2009 -NRDC, 2012 -UCS, 2013 -Little, 2014	
12	R 2/25	Sustainable Agriculture & The Local Foodshed	-Foley, 2011 -SARE, 2010 -Seydel, 2008	Ecological footprint project: Brainstorm footprint reduction
13	T 3/1	Permaculture	-Harland, 2009	
14	R 3/3	Global Waste: Trash, Recycling & Composting	-EPA, 2014 -UN, 2012	Essay #2: Case study - climate change, clean energy, water or food
15	T 3/8	Green Architecture <i>Site Visit: College of Education Building</i>	-Vale, 1991 -Su Casa, 2008 -Architecture 2030	Community engagement: 5 hours completed
16	R 3/10	MIDTERM EXAM		Midterm Exam
X	3/13 – 20	SPRING BREAK – no class		Relax and have fun!

**This reading list is subject to modifications at the discretion of the instructor.*

Class	Date	Topic	Read & Discuss	Assignment Due
III. The Economy (Profit)				
17	T 3/22	Capitalism & Growthmania	-Daly, 1973 -Korten, 2007	<u>Ecological footprint project:</u> Check in #1
18	R 3/24	Green Economics: Biomimicry & Cradle to Cradle Design	-Milani, 2006 -Benyus, 2010 -McDonough, 2002	
19	T 3/29	Green & Socially Responsible Business	-Patagonia, 2012 -Sturcken, 2014 -Goleman, 2009	
20	R 3/31	Ecosystem Valuation: The Land Ethic & Natural Capitalism	-Leopold, 1949 -Hawken, 1997 -Economist, 2012	
21	T 4/5	Cap & Trade Programs	-Conniff, 2009 -Sierra Club, 2008 -CCL, 2014 -Meyer, 2015	
22	R 4/7	Microlending & the Microcredit Revolution	-Yunus, 2007	
IV. Social Equity (People)				
23	T 4/12	Environmental Justice	-Melosi, 2012 -JCPEs, 2012 -Meiklejohn, 2003 -Gottlieb, 2009	
24	R 4/14	Smart Growth: Transportation & Urban Design	-Smart Growth Network, 2006 -Newman, 1999	<u>Ecological footprint project:</u> Check in #2
25	T 4/19	A Case Study of Curitiba, Brazil	-Rabinovitch, 1996	<u>Community engagement:</u> 10 hours completed
26	R 4/21	Ecovillages & Transition Towns	-Dawson, 2006 -Hopkins, 2008	<u>Essay #3:</u> Reflection on community engagement
27	T 4/26	Gross Domestic Happiness; Alternative Progress Indicators	-Talberth, 2008 -Speth, 2008 -McKibben, 2007	
V. Presentations & Course Wrap-Up				
28	R 4/28	Ecological Footprint Presentations		<u>Ecological footprint project:</u> Final report
29	T 5/3	Ecological Footprint Presentations Continued		
30	R 5/5	Final Exam Review & Course Evaluation	-Lappé, 2013	
31	T 5/10	FINAL EXAM, 7:30am – 9:30am		Final Exam

**This reading list is subject to modifications at the discretion of the instructor.*