

Fall 2018
SUST 134.002 – Creating a Sustainable Future:
Introduction to Environmental, Social and Economic Health

Instructor: Jessica Rowland
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Time: Tuesday/Thursday 9:30-10:45am
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UNM Learn: All articles, book chapters, videos & podcasts available here: <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, waste, green building, socially responsible business, ecosystem valuation, microlending, environmental justice, 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 (often referred to as the *triple bottom line*). We will examine challenges and examples of integrated, creative strategies on local, national and global levels.

Course Objectives:

Students will:

- Explain the facts and context of a variety of current sustainability-related topics and issues
- Use scholarly literature in sustainability writing, presentations and outreach
- Demonstrate problem solving by proposing creative, balanced solutions to sustainability challenges
- Apply the principles of sustainability to their everyday lives
- Engage in activities that promote sustainability on campus and/or in the community

To declare the Sustainability Studies minor or to discuss the program, set up a meeting with Program Administrator Terry Horger via Lobo Achieve (thorger@unm.edu).

Grading: Your grade will be determined from the following:

Attendance & Participation	10%
Community Engagement	15%
Ecological Footprint Project	25%
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 (10%): 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 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 will 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 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 (25%): 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, with some fill-in-the-blank and/or matching questions. Exams will cover material from readings, lectures, videos 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, a hardcopy of the essay is due in class or can be uploaded to *UNM Learn* (as a doc, docx or pdf) by 9:30am the day it is 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, honesty is considered one of the cornerstones of academic development. All UNM policies regarding academic honesty apply to this 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. Academic dishonesty 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. 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 & Email Responsibility: It is expected that students visit the *UNM Learn* course website regularly to stay up to date with course material. 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 silencing cell phones and not using the internet while in class. Laptops may be used for the sole purpose of taking notes. No texting in class.

ADA Accessibility: Qualified students with disabilities needing appropriate academic adjustments should contact Accessibility Services (Mesa Vista Hall 2021; 505-277-3506) and inform the instructor as soon as possible to ensure your needs are met in a timely manner.

TITLE IX: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education. This means that any report of gender discrimination (which includes sexual harassment, sexual misconduct and sexual violence) that is made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the [Office of Equal Opportunity](#) (OEO). Please note that UNM has three offices where you can confidentially discuss any incidents or concerns: [LoboRESPECT Advocacy Center](#), [Women's Resource Center](#) and the [LGBTQ Resource Center](#). The staff in these offices are specially trained advocates and do not share information with the OEO without a student's signed permission.

Schedule:

Class	Date	Topic	Read & Discuss	Assignment Due
I. The Context of Sustainability				
1	T 8/21	Introduction	-Syllabus	Read the syllabus and explore the Sustainability Studies website
2	R 8/23	What is Sustainability?	-WCED, 1987 -UNCED, 1992 -Drexhage, 2010	Essay #1: What is sustainability?
3	T 8/28	Human Population Growth & Consumption	-Population Reference Bureau, 2017 -Bradshaw, 2014	
4	R 8/30	The Ecological Footprint	-Living Planet Report, 2016, ch.#2 -Perkins, 2017	Community engagement: Initial plan of action
5	T 9/4	A Resilient Planet	-Living Planet Report, 2016, ch.#4 -UN SDG website	
6	R 9/6	In-class Workshop: Information Literacy <i>Guest speaker: Amy Jankowski</i>		<i>Meet in Centennial Library L253 classroom</i>
II. The Environment (Planet)				
7	T 9/11	Climate Change & Human Alteration of Ecosystems	-USGCRP, 2017 -Ripple, 2017	Community engagement: Final plan of action
8	R 9/13	Climate Impacts, Adaptation & Global Energy Usage	-Energy Information Administration, 2017 -Inman, 2013	
9	T 9/18	Renewable Energy: Solar	-Wald, 2009 -BCSE, 2018 -US Solar Market Insight Report, 2018	
10	R 9/20	Renewable Energy: Biomass & Biofuel	-NREL Biomass website -US RFS website	Ecological footprint project: Baseline footprint calculation
11	T 9/25	Water Consumption & Conservation	-Gleick, 2010 -Rogers, 2008 -Meyer, 2016	
12	R 9/27	The Industrial Food System; Food Access & Food Waste	-NRDC, 2012 -UCS, 2013 -Little, 2014	
13	T 10/2	Sustainable Agriculture & Permaculture	-Foley, 2011 -SARE, 2010 -Harland, 2009	Ecological footprint project: Brainstorm footprint reduction
14	R 10/4	Global Waste: Trash, Recycling & Composting	-EPA, 2018 -UNEP, 2015	Essay #2: Case study - climate change, clean energy, water or food
15	T 10/9	Green Architecture	-Valiño, 2017 -Architecture 2030	Community engagement: 5 hours completed
X	R 10/11	FALL BREAK – no class		

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

Schedule:

Class	Date	Topic	Read & Discuss	Assignment Due
16	T 10/16	MIDTERM EXAM		Midterm Exam
III. The Economy (Profit)				
17	R 10/18	Growthmania & the American Economy	-Daly, 1973 -Stiglitz, 2015 -Korten, 2007	<u>Ecological footprint project</u> : Check in #1
18	T 10/23	Green Economics: Biomimicry & Cradle to Cradle Design	-Milani, 2006 -Goleman, 2009 -Benyus, 2010 -McDonough, 2002	
19	R 10/25	Green & Socially Responsible Business	-Kelly, 2015 -Walmart, 2018	
20	T 10/30	Ecosystem Valuation: The Land Ethic & Natural Capitalism	-Leopold, 1949 -Lovins, 2007 -Economist, 2012	
21	R 11/1	Environmental Challenges, Economic Solutions	-Conniff, 2009 -CCL, 2014 -Meyer, 2015	
22	T 11/6	Microlending & the Microcredit Revolution	-Yunus, 2007 -Karlan, 2015	
IV. Social Equity (People)				
23	R 11/8	Environmental Justice	-Melosi, 2012 -EPA, 2016 -JCPES, 2012 -Gottlieb, 2009	
24	T 11/13	Smart Growth: Transportation & Urban Design	-Smart Growth Network, 2006 -Arcadis, 2016	<u>Ecological footprint project</u> : Check in #2
25	R 11/15	A Case Study of Curitiba, Brazil	-Adler, 2016	<u>Community engagement</u> : 10 hours completed
26	T 11/20	Sustainable Communities: Ecovillages & Transition Towns	-Litfin, 2013 -Hopkins, 2008	<u>Essay #3</u> : Reflection on community engagement
X	R 11/22	THANKSGIVING – no class		
27	T 11/27	Gross Domestic Happiness & Alternative Progress Indicators	-Talberth, 2008 -Speth, 2008	
V. Presentations & Course Wrap-Up				
28	R 11/29	Ecological Footprint Presentations		<u>Ecological footprint project</u> : Final report
29	T 12/4	Ecological Footprint Presentations Continued		
30	R 12/6	Final Exam Review & Course Wrap-Up	-Lappé, 2013 -Nijhuis, 2015	
31	T 12/11	FINAL EXAM, 7:30am – 9:30am		Final Exam

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