ENR 1300: Foundations of Sustainability

University of Wyoming, Fall 2017 MWF 9:00-9:50 AM, CR 147

Course site: https://uwyo.instructure.com/courses/498628

Instructor

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Course Overview & Approach

Over the past few decades, the term 'sustainability' has become widespread—but what does it actually mean? What are the implications of applying a sustainability framework to global environmental, social, and economic challenges? The Foundations of Sustainability course examines the basic concepts, theories, and practice of sustainability as a foundation for future learning in the field. This course explores principles of sustainability in our community and personal lives. We will define sustainability from an interdisciplinary perspective and investigate if and how we can achieve it at both individual and societal levels.

The class will use a learner-centered and participatory approach. As students develop a deeper understanding of sustainability, they will additionally build and demonstrate skills and capacities relevant to sustainability solutions. Sustainability is a messy and collaborative thing; accordingly, we will utilize both more traditional approaches to classroom instruction as well as a variety of teaching and learning formats that differ from traditional classroom instruction, including: student-led facilitation; group discussion; reflective writing and self/peer evaluation; in-class exercises; guest speaker dialogue; and tours.

Foundations of Sustainability- ENR 1300 is the required introductory course for all tracks of the ENR Sustainability minor. It will prepare students who are pursuing the minor for their future coursework, including the minor capstone, Campus Sustainability- ENR 4600. Additionally, the course is one of two required for participation in the Sustainability Freshman Interest Group (FIG). However, the course is open to and appropriate for any student who has a professional, academic, or personal interest in sustainability. Welcome!

Learning Objectives

Upon successful completion of this course, students should be able to:

- Define the concept of sustainability and articulate its historical development, multi-faceted and interdisciplinary nature, and relationship to a variety of topical domains
- Demonstrate critical evaluation, communication, and collaboration skills relevant to the identification of sustainability problems and solutions

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- Incorporate sustainability concepts and activities into personal and professional practice
- By engaging with these objectives, students will begin to achieve components of the learning outcomes for the ENR Sustainability minor, which include:
- 1. Demonstrate a theoretical and historical understanding of sustainability.
- 2. Explore and evaluate the implications of personal sustainability values. Develop a model of sustainability informed by personal values and integrated into student's worldview. Think holistically about consequences of actions. Ability to intellectually respond to perspectives of sustainability outside their own.
- 3. Develop and implement sustainability solutions. Student will feel motivated and empowered to find solutions to sustainability challenges in his/her own life and community and have the ability to apply sustainability principles to his/her home discipline and professional career.

Required Texts

- Choices for Sustainable Living (2012). Northwest Earth Institute (Eds).
 - o Available for purchase only at the University Bookstore.
- Our Common Future: Report of the World Commission on Environment and Development (1987)
 - o Posted as a pdf to the course website.
- Costanza, Robert. 2000. "Visions of Alternative (Unpredictable) Futures and Their Use in Policy Analysis." Conservation Ecology, 1(5): http://www.consecol.org/vol4/iss1/art5.
 - o Posted as a pdf to the course website and available at the above URL.
- Additional readings posted to the course site, to be announced

Course Assignments

The instructor will provide detailed guidelines and grading criteria for each assignment in class and on the course site well in advance of the assignment due date. Assignments are due as file uploads to the course site on the specified due date unless otherwise noted.

Participation

Active participation is of the utmost importance in our course, as we will continually interact with and learn from each other. We will evaluate participation frequently and in a number of ways, each of which will inform both a midterm and final participation assessment:

- Quality- Quality participation counts more than quantity. During the first week in class, we will work together to create a participatory classroom and adhere to that joint participation policy throughout the duration of the course. You reflect on and assess your own participation during the course, as will the instructor. Both of these assessments will contribute to the final participation evaluation.
- In-class Exercises and Homework- To aid in discussion of course content such as readings, lectures, and tours, students will complete a number of brief and informal in-class and take home exercises. These typically consist of short, preparatory or reflective writings that will

- require thoughtful and timely completion. Exercises and homework will be graded simply as 'satisfactory' or 'unsatisfactory'.
- Attendance- Students should plan to attend every class session. Each student will receive a "freebie" absence that will not affect her or his participation grade. Subsequent unexcused absences will count against the participation grade, however, university-excused absences will never count against the participation grade. Conferences, religious holidays, emergencies, etc. understandably come up. Please provide appropriate documentation for relevant university-excused absences, and in the event of a planned absence, please inform the instructor at least one week prior to the date of nonattendance. Continued absence may result in a significant final course grade deduction.

Defining Sustainability, Envisioning the Future Paper(s)

For your first written assignment in the course, you will define what sustainability currently means to you and how you envision this impacting your approach to the course. You will also articulate your vision for the future and preferences for technology in sustainability solutions and analyze how this affects your definition of sustainability. At the end of the semester for your take-home final, you will revisit this paper and refine your definition and vision for the future based on your experience in this course.

Our Common Future Presentations & Reading Facilitation

Professional and personal practice of sustainability requires that you converse with others (who may have diverse perspectives and opinions) and continually build your own knowledge. We will practice this in class. Once per week, a small group of students (2-3) will facilitate discussion of weekly readings. First, the group will give a *brief* presentation of an assigned chapter of *Our Common Future*—a foundational sustainability text. Then, the group will lead a critical discussion of other assigned readings for the remainder of the class period. Together, student groups will submit a thoughtful, one-page facilitation plan that they will revise during a constructive meeting with the instructor the week before facilitation.

The instructor will provide and model effective facilitation techniques in class. Facilitation is an opportunity for creativity; in addition to guiding reading discussion, you can make connections to previous lectures and activities, bring in videos and podcasts, design your own related activities and games, etc. Have fun with it!

All students will regularly participate in facilitated discussions to support their peers. In other words, we should all do the readings in order to fully support each other and participate.

Sustainability Project Proposal

Whether you plan to engage in sustainability personally, professionally, or even to take an upper-level sustainability course that requires an applied project, you will need to be able identify complex sustainability problems and propose flexible solutions. Projects will almost necessarily require collaboration with partners or mentors in the community or on campus. Each student will identify a local sustainability problem and develop a realistic a plan for collaboration and project implementation through both a written proposal and brief, elevator presentation.

Extra Credit Opportunities

Throughout the semester, the instructor will present various opportunities to engage in campus or community sustainability events that will count for extra credit. You may attend up to 5 of these events for credit, earning 1 point per event toward your *final course grade*. In order to earn your point, you must complete a 1 page summary for each event in which you a) explain what the event entailed, b) describe how the event related to sustainability, and c) make connections to materials or discussions from our course. These summaries are due within a week of your attendance of the event (i.e. summaries cannot be piled up at the end of the semester). If there is an event that you would like to attend for extra credit that has not been announced in class, please propose it to the instructor for consideration at least one week in advance of the event.

Course Evaluation

Assignment	0/0
	2701
Participation	25%
Defining Sustainability/Envisioning the Future Pre-Paper	12.5%
Our Common Future Presentation/Reading Facilitation	25%
Sustainability Project Proposal	25%
Defining Sustainability/Envisioning the Future Post-Paper	12.5%
Total percentage possible	100%

^{*}Note that we will be using the newly approved +/- evaluation system, as detailed in UW Regulation 6-722.

Evaluation Key		
A	93-100 %	
A -	90-92 %	
B+	87-89 %	
В	83-86 %	
B-	80-82 %	
C+	77-79 %	
С	73-76 %	
C-	70-72 %	
D+	67-69 %	
D	60-66 %	
F	59 % & below	

Course Expectations

The single greatest expectation for this course is that you be present and engaged—both physically in class and also with your peers, guests, and the instructor. You can expect the same from me as your instructor. Sustainability is a dynamic interdisciplinary concept, which requires flexibility and continual learning. I look forward to collaborating on our learning experience, together.

General Communication

WyoCourses-We will utilize WyoCourses for course management, assignment uploads, announcements, grading, scheduling, etc. Please regularly visit the course site. We will additionally make announcements in class, but you can always find key information on the course site, posted at least one week in advance of use or due date.

Email Policy- Students should regularly check their UW email and messages via our WyoCourses page. The instructor will make all attempts to respond to emails promptly, and definitely within 24 hours during the week. Please do not expect an immediate response, however, if you email past 8:00 PM or on the weekend. It's likely that I will be able to get back to you quickly during these "off" times, but I can't guarantee it.

Speaking Up- Are you feeling behind or overwhelmed? Please come visit during office hours or get in touch via email to let me know what's going on. I am usually able to support students if I know about extenuating circumstances in advance. This kind of support becomes much more difficult if I only hear from you the night before, day of, or after an assignment due date.

Writing

"When we make students struggle with their writing, we are making them struggle with thought itself. Often the struggle of writing, linked as it is to the struggle of thinking and to the growth of a person's intellectual powers, awakens students to the real nature of learning" (Bean 2001: xiii). We write 1) to communicate to others, but also 2) to clarify our own thinking, feelings, and understanding.

This course is not a designated COM/writing course, but clear and professional writing skills are essential to your success in the course. All assignment evaluations will emphasize grammar, spelling, and communication style. While each assignment will include its own guidelines and rubric for writing, you should generally adhere to the following **formatting guidelines**:

- Typed, unless otherwise indicated
- 1-inch margins all around
- Double-spaced, unless otherwise indicated
- 12-point, standard font (Times New Roman, Arial, Calibri)
- Consistent, parenthetical author-date style citations and references (e.g., APA, Chicago Author-Date, etc.)*
- Include full name, date, and assignment title in top right hand corner of first page of assignment
- Electronic file names should be saved as Word documents (.doc, .docx) or powerpoints (.ppt, .pptx) unless otherwise specified. Save assignments with an easily identifiable filename, such as Your lastname_assignment_date (e.g., Budowle_Def Sust Pre-Paper_083017)

*Note: whenever you make a claim that is not your own and draw on other resources, you must support that claim with credible evidence that you cite both in text and include as a full reference at the end of your assignment. Early in the course, we will complete an information literacy and critical source evaluation exercise to help you practice citation systems.

The Writing Center is a free resource that helps all writers (students, faculty, staff, and community members) develop their writing skills at every stage in the writing process. Graduate, Undergraduate, and Professional writing consultants are available to help writers as they brainstorm ideas, organize their thoughts, construct drafts, and revise their writing. While the Writing Center is available to help writers with course-related writing (essays, reports, exercises, memos, proposals, research papers, etc.) they can also assist with other types of projects (employment/application materials, on-the-job writing, emails, letters, theses, dissertations, etc.).

The Writing Center is located in Coe Library, room 302, and it is generally open from 9:00am-5:00pm Monday-Friday. You can view availability and make an appointment by visiting http://www.uwyo.edu/ctl/writing-center/index.html.

Other Course Policies and Support

Late assignments- Assignments are due to the course site (as specified in the individual assignment guidelines or stated in class) on the date and time stated on the assignment, syllabus, and/or course calendar. Late assignments will not be accepted without prior instructor approval, and even then, only in advance and under extenuating circumstances.

Policy on Academic Dishonesty- Each participant in this course is expected to abide by the UW policy on Academic Dishonesty. It is a university-wide expectation that written work submitted by a participant in this course for academic credit will be the participant's own work. Cheating and plagiarism will not be tolerated. For full information on the Undergraduate Honor System, please see UW Reg 6-802. Refer to the Haub School Policy on Scholarly Writing at the end of this syllabus for further details.

Learning Needs- Any participants with special learning needs should consult with the instructor about those needs as soon as possible so that we can work together to make necessary accommodations. Anything you discuss with the instructor will be held in strictest confidence. For additional information about assistance for special learning needs for all University of Wyoming students, see the office of University Disability Support Services (UDSS).

Haub School Policy on Scholarly Writing

Scholarly writing is a necessity in a university setting. It consists of artistically, accurately, and thoroughly combining your own ideas with those of other scholars, and attributing the ideas to your sources properly. When using others' ideas, you must either paraphrase the idea and cite the source, or put the exact words into quotation marks and use quotation marks, as well as citing the source.

The University of Wyoming does not tolerate academic dishonesty in any form. <u>Plagiarism</u> is one form of academic dishonesty and consists of representing the writing of others as your own work. The University of Wyoming policy on academic dishonesty is University Regulation 6-802 and can be found at: http://www.uwyo.edu/generalcounsel/_files/docs/uw-reg-6-802.pdf. <u>Plagiarism in work you conduct in your Haub School courses and thesis work is not acceptable, and will result in failure in the assignment, course, or possibly in your degree program. We will report plagiarism to the Dean of Students.</u>

In the realm of environment and natural resources, there are several formats that may seem to be ambiguous with respect to quotations. For the Haub School, any use of language that includes more than five words sequentially must be in quotations, showing your source (sometimes fewer words are appropriate as well). Longer quotes may be placed in a free-standing block of text that is indented one inch from other text, but must be clearly identified as a quotation. This will include language from government documents that is sometimes considered to be "boilerplate". Copying language from a source without quotations, then citing the source, is plagiarism.

Should you have any questions about paraphrasing, the definition of plagiarism, or how to cite sources appropriately, speak with your instructor. The plagiarism.org site is a terrific resource and provides the opportunity to submit your paper to check for plagiarism.

A note about notes:

Taking notes from digital sources can result in "accidental" plagiarism, through cutting and pasting. This may still be considered academic dishonesty and an infraction worthy of failure and even dismissal from the university. We recommend taking great care with how you take notes from digital sources. Paraphrasing at the time of taking notes, while tracking sources carefully, will ensure that your work is not plagiarism.

Haub School Honor Code: To be signed by all ENR majors and minors:

policy on academic dishonest	y the Haub School Policy on Schol y. I will conduct independent work is part of the assignment. I will att	x, and neither give nor receive aid on
Signature	Printed Name:	Date:
have neither given nor receiv	n ENR courses, you will be asked to ed aid on this assignment nor have r the UWAcademic Dishonesty po	•

Weekly Schedule

This schedule is dynamic in order to respond to course learning needs. The instructor will announce major schedule changes in class and via the course site. Please check the course homepage and the revised version of this document each week to see finalized readings and activities, which will always be posted no later than the prior Friday at 11:59 PM.

Date	Weekly Topics / Activities	*Complete readings and assignments that are due by the corresponding class period/date (i.e., readings must be completed by beginning of class on specified date). *Assign refers to the instructor's provision of an assignment to the class. *Bring laptops/devices on days indicated, if you have them or share with a classmate.
Week 1- Su	stainability Framework	
Wed. 8/30	 Welcome/Introductions Course format and teaching approach Sustainability minor 	
Fri. 9/1	 Pillars of sustainability Participation policy exercise Reading and note-taking 	READ: Syllabus Course website
Week 2- Su	stainability Framework	
Mon. 9/4	NO CLASS- LABOR DAY HOLIDAY	Be sure to thoroughly read Costanza (2000) and come prepared to discuss on Wednesday!
Wed. 9/6	 Costanza overview Envisioning the Future exercise Course review 	 READ: Costanza, Robert. 2000. "Visions of Alternative (Unpredictable) Futures and their Use in Policy Analysis" Syllabus Course website ASSIGN: Defining Sustainability/ Envisioning the Future Pre-Paper DUE Sunday, September 24 at 11:59 PM

Fri. 9/8	 Complete Costanza Exercise Review Assignment Facilitation sign up and assignment 	ASSIGN: OCF Presentation & Reading Facilitation • DUE based on sign-up sheet	
Week 3- Sus	stainability Framework		
Mon. 9/11	 Our Common Future Model presentation and reading facilitation 	 READ: Choices for Sust. Living (CFSL)- You are Brilliant, pp. 13-15 Definitions, p. 15 Easter's End, pp. 22-26 Systems Thinking, pp. 26-28 BROWSE: Our Common Future (OCF)- Chairman's Forward and From One Earth to One World, PDF pp. 1-27 	
Wed. 9/13	Worldviews and ethicsValue		
Fri. 9/15	 Discussion Group 1- Reading Facilitation and OCF Presentation 	READ: CFSL Ecological Principles, pp. 29-32 What Would it Take? pp. 33-35 Tar Sands pp. 36-37 Visualize Gasoline, pp. 87-88 BROWSE: Chapter 1: A Threatened Future	
Week 4- Sus	Week 4- Sustainability Framework		
Mon. 9/18	 The Scientific Evidence for Climate Change Guest Speaker: Prof. Bryan Shuman, Geology 	BROWSE: Shuman, Bryan. 2012. "Recent Wyoming Temps"	

Wed. 9/20	 Scientific consensus and the climate change "debate" Information literacy and sustainability Critical evaluation exercise Citations and References 	BRING LAPTOPS BROWSE: Oreskes. 2007. "The Scientific Consensus on Climate Change"
Fri. 9/22	Continue critical evaluation exercise Sustainability beyond climate change Overreach Systems thinking	 BROWSE: Crist. (2007). "Beyond the Climate Crisis: A Critique of Climate Change Discourse" CFSL Systems Thinking, pp. 26-28 BRING LAPTOPS
Week 5- Su	ustainability Framework	
Mon. 9/25	■ Discussion ■ Group 2- Reading Facilitation and OCF Presentation	DUE: Defining Sustainability/ Envisioning the Future Pre-Paper Sunday, September 24 at 11:59 PM READ: CFSL Chain of Fuels, pp. 89-92 We Love Our Cars, pp. 93-95 Comparing Emission pp. 98-99 How to Make Biking pp. 100-102 Complete Streets p. 102 BROWSE: Chapter 2: Towards Sustainable Development
Wed. 9/27	More than Technology: Population and Affluence	BRING LAPTOPS
Fri. 9/29	 Discussion Group 3- Reading Facilitation and OCF Presentation 	READ: CFSL Water is Life, pp. 38-40 Sequoia National Park pp. 43-44 The Ecology of Disease, pp. 45-46 The Earth is Full, pp. 47-49 BROWSE:

	OCF Chapter 3: The Role of the International Economy
oving Toward Solutions	
 Continue: Population and Affluence- Environmental footprint The Story of Stuff 	BRING LAPTOPS
 Story of Change Action/Change-maker Project identification 	BRING LAPTOPS
 Discussion Group 4- Reading Facilitation and OCF Presentation 	READ: CFSL My Bother? pp. 16-19 Advice frompp. 20-22 Boulder Votespp. 127-128 Excerpt From pp. 128-130 BROWSE: OCF Chapter 4: Population and Human Resources
oving Toward Solutions/Sustainable Energy	
 Project identification, continued Behavior change/ Sustainability timeline, TBD 	BRING LAPTOPS ASSIGN: "Midterm" 1-page project proposal summary • DUE Sunday, 10/15 at 11:59 PM • TWO PRINTED COPY IN CLASS MONDAY 10/16 ASSIGN: Written Proposal DRAFT (• DUE Sunday, 11/12 at 11:59 PM to the course site • TWO PRINTED COPIES IN CLASS ON MONDAY 11/13
	 Continue: Population and Affluence-Environmental footprint The Story of Stuff Story of Change Action/Change-maker Project identification Discussion Group 4- Reading Facilitation and OCF Presentation Oving Toward Solutions/Sustainable Energy Project identification, continued Behavior change/ Sustainability timeline,

		Elevator Presentation • DUE Sunday, 11/26 at 11:59 PM Written Proposal FINAL • DUE Tuesday, 12/5 at 11:59 PM
Wed. 10/11	 Efficiency vs. Conservation The UW Conservation & Efficiency Revolving Fund Project brainstorm 	 READ: UW CERF Webpage (+ Charter and RFP subpages) The Economist (2015) Invisible Fuel RMI/Rumsey (2015) Solar Efficiency
Fri. 10/13	■ Discussion ■ Group 5- Reading Facilitation and OCF Presentation	 READ: CFSL Free Your (Eco)Mind, pp. 121-123 On Gratitude, pp. 124-125 To Live or Notpp. 125-126 Living Greenpp. 131-132 Call to Action pp. 133-134 BROWSE: OCF Chapter 5: Food Security: Sustaining the Potential
Week 8- M	oving Toward Solutions/Sustainable Energy	
Mon. 10/16	Proposal workshopParticipation reflection	DUE: "Midterm" 1-page project proposal summary, Sunday, 10/15 at 11:59 PM
		BRING TWO HARD COPIES OF 1 PAGE PROJECT PROPOSAL TO CLASS!
Wed. 10/18	 Renewable energy- Benefits, challenges, policy, and economics Guest Speaker: Prof. Andy Arnette, Decision Sciences 	
Fri. 10/20	 Discussion Group 6- Reading Facilitation and OCF Presentation 	 READ: CFSL 12 Featurespp.73-74 The Shareable Futurepp. 75-77 Inside Ithaca's Ecovillage, pp. 77-78 Stapletonp. 79

		 Little Town/Las Cruces pp. 95- 97 BROWSE: OCF Chapter 6: Species and Ecosystems: Resources for Development
Week 9- Su	istainable Design	
Mon. 10/23	 Kendall House Tour and Green Buildings Guest Speaker: Nicole Korfanta, Director of the Ruckelshaus Institute 	BROWSE: Kendall House Scorecard and website Meet at the Kendall House Conference Room 002
Wed. 10/25	Midterm participation assessmentBehavior change	
Fri. 10/27	■ Discussion ■ Group 7- Reading Facilitation and OCF Presentation	 READ: CFSL The Rich Get Richerpp. 41-42 Detroit Speech, p. 105 What Isn't/GDP, pp. 106-109 Off the Pedestal pp. 112-114 The Problem pp. 115-117 BROWSE: OCF Chapter 7: Energy: Choices for Environment and Development
Week 10- F	Food Systems and Waste	
Mon. 10/30	 Finish behavior change Mid-semester course evaluations- Maggie Borque 	
Wed. 11/1	Conventional agriculture and its sustainability challenges	
Fri. 11/3	 Discussion Group 8- Reading Facilitation and OCF Presentation 	 READ: CFSL What's Eating America? pp. 53-55 Beyond 'Free' or 'Fair' pp. 56-58 A Meat Eater's Guide pp. 59-60

		 The Pringles Problem pp. 64-65 BROWSE: OCF Chapter 8: Industry: Producing More with Less
Week 11- Fo	ood Systems and Social Sustainability	
Mon. 11/6	 "The End of Sustainability" and resilience perspectives Guest Speaker: Melinda Benson, Dean of the Haub School of Environment and Natural Resources 	READ: Benson, Melinda Harm, and Robin Kundis Craig. 2014. "The End of Sustainability." <i>Society</i> & Natural Resources, 27(7): 777-782.
Wed. 11/8	Waste: recycling and role organics and composting	
Fri. 11/10	■ Discussion ■ Group 9- Reading Facilitation and OCF Presentation	 READ: CFSL Landscape for Life, p. 50 Stalking the Vegetannual, pp. 61-63 A Look/Tips/The Need pp. 66-69 Excerpt from a Seat pp. 69-70 BROWSE: OCF Chapter 9: The Urban Challenge
Week 12- M	loving Toward Solutions	
Mon. 11/13	Proposal Draft Workshop	 DUE: Full Written Proposal DRAFT Sunday, 11/12 at 11:59 PM to the course site TWO PRINTED COPIES IN CLASS ON MONDAY 11/13
Wed. 11/15	 Sustainable and community food systems Sustainability minor- food systems track Guest Speaker: Professor Christine Porter, Community and Public Health 	
Fri. 11/17	 Discussion Group 10- Reading Facilitation and OCF Presentation 	READ:

	Fight Consumerism p. 109
	 Paychecks/Iphone pp. 110-111
	• True Price pp. 111-112
	 Saving the Earth pp. 117-118
	BROWSE:
	• OCF
	Chapter 10: Managing the Commons

Week 13- THANKSGIVING NO CLASS including Monday, 11/20. ENJOY!

Work on Presentations!

DUE: Elevator Presentation, Sunday, 11/26 at 11:59 PM to the course site

Week 14- Project Proposal Presentations- 11/27, 11/29, 12/1

DUE: Written Proposal FINAL Tuesday, 12/5 at 11:59 PM

Week 15+ - Moving Toward Solutions and Wrap Up

Mon. 12/4	 TBD Finish presentations, as necessary 	ASSIGN: Final- Defining Sustainability, Envisioning the Future Post-Paper (Takehome) • DUE Friday, 12/15 at 10:00 AM
Wed. 12/6	What is the social pillar of sustainability?	
Fri. 12/8	 Discussion Group 11- Reading Facilitation and OCF Presentation 	READ: Back to Our Common Future BROWSE: OCF Chapter 12: Towards Common Action: Proposals for Institutional and Legal Change
Mon. 12/11	Final Reflection	

FINAL: Defining Sustainability, Envisioning the Future Post-Paper (Take-home)

• DUE: Friday, December 15 at 10:00 AM