

SUST 2800 – Introduction to Sustainability
Fall 2015
M 4:30 – 5:20 pm
Williams Village North 166B

Instructor: Prof. Darin Toohey (toohey@colorado.edu), x5-0002; WVN 186

Website: D2L and <http://storm.colorado.edu/~toohey/SUST2800-F2015.html>

Office hours: M, 3-4 pm (tentative – will adjust after the first class period)

Book: We will be using the same textbook as SSIR 1010, and there will be close coordination for much of the semester, especially the first third of the class. Independent preparation in advance for class discussions is important, as we will be using complementary chapters from the book.

Global Environmental Politics: From Person to Planet; S. Nicholson and Paul Wapner, Paradigm Publishers, Boulder, CO, 2015.

<https://paradigm.presswarehouse.com/books/BookDetail.aspx?productID=393777>

Supplemental Resources

Exponential growth lecture, CU professor Al Bartlett

http://www.albartlett.org/presentations/arithmetric_population_energy.html

What is this course about? This course will explore the broad topic of sustainability across a range of scales: personal, residence hall, CU, community, global. There are divergent perspectives on how to define sustainability and what course sustainable development should take. We will look critically at a diverse arena of ideas, theories and practices around sustainability. We will examine these practices as part of larger socio-ecological systems and look at how they fit within visions for a more sustainable future. Some of the questions we will discuss are: What does it mean to “be sustainable?” Is there a single, clear-cut definition of sustainability? How do different approaches to sustainability depend on worldview and ideology? Is there evidence that citizens are becoming less sympathetic to environmental concerns even as environmental impacts are rising? What might be the explanation for the divergence between evidence and action? Is there a link between social justice and sustainability? What are the roles of structure (e.g. the economy and the built environment) and agency (i.e. free will) in developing sustainable practices? What is the role of urban populations in working towards a more sustainable world? How might individuals and society envision more a more sustainable future?

Course objectives and organization: Our main goal is to explore what it means to “be sustainable”, and the various ways that different cultures view sustainability. The course is designed to augment the material presented in SSIR 1010, so the courses are closely coordinated. SUST is not a substitute for SSIR 1010, and it is highly recommended to take both SUST 2800 and SSIR 1010 together for the best introduction to issues related to social innovation.

Specific Course Learning Objectives:

By the end of this course students will:

1. Understand how different ideological and disciplinary perspectives frame problems and solutions around sustainability.
2. Understand systems theory as a means to explain and think critically about environmental problems and sustainable futures.

3. Understand the roles of structure and agency in environmental and social problems as well as implementing sustainable practices.
4. Be aware of a variety of ideas, tools, and practices for governments, organizations, grassroots and individuals that promote sustainability.
5. Be able to think critically about arguments for sustainable practices and sustainable development.
6. Be self-reflective of your own perspectives and roles related to sustainability.
7. Be able to respond critically to readings on sustainability.
8. Be able to engage in thoughtful and respectful discourse around important topics

Class Format: This class will be heavily “flipped”, in that you will be expected to have read the background material PRIOR to each class period and you will be expected to come prepared to discuss the material. Preparation for classes will be assessed by occasional quizzes. Some will be administered before class on D2L. As you will discover in SUST 2800, there are no easy answers to big issues dealing with sustainability, and all perspectives are important. Although the class is not about opinions, per se, careful (defensible) analysis and interpretation of a problem from one’s own perspective is very important! We will be discussing how multiple factors play roles in how different people, populations, and groups develop various perspectives in our efforts to find sustainable solutions to problems.

Work and Grading:

Your grade in the course will be based on the cumulative number of points that you receive for the knowledge that you demonstrate through the various learning activities in the course, and your active participation in the interactive class discussions. Specific elements that are graded in the class are listed below. A detailed description of the expectations for each of these elements

- I. Written responses to reading assignments (20 pts each x 7 weeks = 140 pts)
- II. Leading class discussion of a reading assignment, with reflection = 50 pts
- III. Short assignment: ecological footprint, carbon emission, energy usage calculations and response = 30 pts
- IV. Participation: in-class discussions, quizzes = 40 pts
- V. Final exam: your written responses to essay questions; open book/open notes: 50 points

TOTAL points: 320

Your final grade will be based on the percentage of the available points that you earn.

>93% A	87-90% B+	77-80% C+	67-70% D+	<60% F
90-93% A-	83-87% B	73-77% C	63-67% D	
	80-83% B-	70-73% C-	60-63% D-	

Teaching Philosophy

I value a lively and respectful dialogue in my classrooms. I view myself as a lifelong learner, and I expect to learn as much from you as I hope you will learn from each other and from me in this course. Therefore, I would prefer if you were to think of me as a facilitator of learning, rather than a conveyor of knowledge. The other instructors and I believe that learning occurs when we are building on and sharing our experiences, knowledge, and perspectives. In order to learn about the world we need to understand our own biases as well as the perspectives and situations of other students and readings in this class. This class takes a critical approach to sustainability through the development of critical reading thinking. Student interests and needs are very important. If

you have a question or are interested in some aspect of the course content, we may shift the dialogue to focus on your question or interest. At the same time, I would like all students to be open to and respectful of other students' experiences and perspectives, but most importantly to be critically reflective of your own perspectives and opinions. No two people will agree on everything. But we can all agree to be open to the perspectives of others. This only serves to deepen our understanding of complex issues, ideas, and ways of thinking about the world and sustainability. Most of all, I like to have fun learning. When I am the only one participating in a discussion, it becomes very boring!

Late policy:

Missed reading responses and quizzes may not be made up. Assignments should be turned in on time. Hand written assignments will not be accepted. Points will be deducted from your score for each day your assignment is late. If you know ahead of time you will have difficulty meeting a deadline please come and talk with me before you miss a deadline.

Classroom Conduct:

The classroom is a learning environment dedicated to the exchange of ideas. Part of your job is to be respectful of and contribute to the communal learning environment. Please refrain from any activities that may be distracting to others including:

- No laptops (except discussion facilitators). it in your bag or off the table.
- Turn your cell phones off and keep them stowed away somewhere other than the table or in your hand. If you absolutely must receive a phone call leave your cell phone on vibrate. Please leave the room quietly to take a call.
- No texting or using other distracting electronic devices. Please keep these stowed away.
- Private conversations should take place outside of class time.
- Pack up your stuff only when class is over.
- If you need to leave early or come in late, please do so quietly and infrequently

Expectations:

Come to class: It is not possible to pass this class if you don't attend regularly. This is because the class is based on discussions and interactions with your classmates and tying the material into that presented in SSIR 1010. SUST 2800 is independent from SSIR 1010, but the two courses are very complementary, so it is likely that your engagement in SUST 2800 will enhance your experience and performance in SSIR 1010.

Prepare for class: It is not practical to cover every detail of the phenomena we will study in time allotted for class. Our 'lectures' will emphasize the difficult material. Material you will read/view before class will cover many of the basics.

Ask questions: Classes will be interactive and discussion oriented. Please come prepared to participate and contribute to discussions in a thoughtful, respectful, and critical manner but remember that civility and cooperation are essential elements in the classroom. This means encouraging one another during discussions and working together on problems.. Please participate,

Approximate Weekly Schedule – Will be updated during first half of course

Week	Topic / Reading to Be Discussed	Text
1	Defining sustainability, development, the Anthropocene. In-class “group” activity	13-16
2 (R1)	Start selecting <i>Discussion Facilitation</i> (DF) groups. Sign up for DF dates Chapter 4 - Global Warming’s Terrifying New Math Chapter 6 - Where has all the water gone?	39-47 58-67
3	Sustainability in WVN – LEED features Introduction to LUCID energy metering system WVN Lucid Energy Metering – Competition	
4 (R2) (DF1)	Chapter 9 – A Finite Earth The Limits to Growth – Al Bartlett’s Exponential Function and Population	87-96
5 (R3) (DF2)	Chapter 25 - Environmental Colonialism Chapter 26 - Environmental Racism and the Environmental Justice Movement	233-237 238-245
6 (Alt 1)	Guest Speaker – Sustainable Development	
7 (R4) (DF3)	Chapter 12 - Rio Declaration on Environment and Development Chapter 13 - Brief History of Environmental Cooperation	117-120 121-136
8 (R5)	Personal energy consumption, footprint, and carbon footprint discussion	
9 (R5) (DF4)	Chapter 14 - What’s Wrong with Climate Politics Chapter 15 - State Sovereignty Endangers the Planet	137-143 144-149
10 (Alt 2)	Guest Speaker – International Politics	
11 (R6) (DF5)	Chapter 17 - Environmental Economics 101 Chapter 18 - Capitalism versus Climate	164-172 173-182
12 (R7) (DF6)	Chapter 20 - Forcing Cultural Change Chapter 21 - The Wrong Kind of Green	192-201 202-208
13	Guest Speaker – The Human Dimension	
14 (R7) (Alt 3)		
15	Discussion: Toward a Sustainable Future	
TBA	XX December 2015	Final Exam

Early Guidance for Assignments:

Short Assignments:

1. Energy Consumption Evaluation

Using data from the LUCID metering system in WVN, estimate your energy consumption in the residence hall. Clearly state assumptions, cite data, and show calculations. This evaluation should be 1-2 pages. Include with your write-up. (5 pts)

2. Ecological Footprint Quiz

You will need to have completed an ecological footprint quiz (really a survey) and submit your results to me by Monday, October 5th by 4:30 pm. The quiz will take less than 15 minutes. To take the quiz go to the link on D2L. (5 pts)

3. Carbon Emissions Calculator

You will need to complete an online quiz and submit your results to me by Monday, October 12, 4:30 pm. The quiz will take less than 15 minutes. To take the quiz go to the link on D2L. (5 pt)

Write up your response to the results from your energy consumption, ecological footprint, and carbon emissions calculations. Your write-up should be 400 to 500 words long. Are you surprised by the results? Are they about average high, or low for a typical U.S. resident? (include citations) Are you satisfied with these numbers? What strategies might you try in the future to reduce your impacts? [you can re-run the calculators with these scenarios and see the impacts] 10 points.

Reading Responses:

For the weeks noted on the syllabus, you will need to write a 400-500 word response to the assigned readings. The response write-ups are due prior to the in-class discussion of those readings. Your task is not to write summaries of the readings. Instead I would like to you reflect critically on the readings. A critical reading is not looking negatively at the text, rather a critical reading seeks to understand both at what the author is saying (the content or the 'facts' they are giving) also and to understand why and how the author is writing. A critical reading is not accepting the text at face value. In each of your responses you should reflect on three of the following elements: the author's style, argument, theoretical framework, methods, assumptions, perspective, imagery, use of examples, and/or tone.

In order to read critically you also need to be aware of your own bias and perspective. When we read something it is difficult not to color what the author is saying with our own 'baggage' so to speak. Your task is to go beyond your own perspective and analyze the text on its own merit. You should also address at least one of the following questions in each written response: Does the reading make you think differently about the topic? Are there areas of the reading you didn't understand? What are the similarities and differences between the readings for the week or readings from earlier in the semester?

To receive full points your response should:

1. Include a one sentence summary of the author's main point or purpose for writing the article or book chapter,
2. Demonstrate that you have read the material closely and critically by incorporating correct and contextualized content from the reading, as well as including a few short and well-integrated quotes to support your statements,
3. Equally discuss each reading,
4. Focus on the author and their work not on your experience and perspective (although you may focus on a part of the reading that you find most interesting or problematic),
5. Your responses stay within the expected word count.

Your responses should be submitted to the course D2L digital drop box BEFORE the in-class discussion of the reading.

In-class Discussions, Quizzes and In-Class Assignments:

You are expected to actively participate in the class discussions. This involves sharing your ideas, and respectfully responding to the ideas of others. There will sometimes be unplanned and unannounced quizzes and in-class assignments at various points during the quarter. These will be graded similarly to the assignments. Quizzes and assignments may ask questions about course content including readings, lectures, and discussions. The quizzes will be a way to gauge your understanding of the material as well as your contribution to the course. For example, if a significant fraction of students are misunderstanding a concept, we will spend more time on that concept. You may not make up any missed in-class discussions, quizzes or assignments. However, the lowest score will be dropped (this includes a missing score).

Student Facilitation:

Each student is required to present a summary and overview of the readings and facilitate a small group discussion of the readings one week during the semester. Three students will sign up for a facilitation group. The facilitation group will need to work together to design a presentation of the readings (about 10 minutes long) and develop a set of discussion questions. Your discussion questions should be submitted to me by Friday at noon before the Monday class so that I can give you feedback. On the day of the facilitation the facilitation group will first give their presentation to the entire class. Following the presentation each member of the group will facilitate a discussion based on one of the facilitation questions. To create small discussion groups we will divide up the class based on how many facilitators there are. So, if there are three facilitators there will be three discussion groups. At the end of the small group discussion period, facilitators should be prepared to give a summary or highlights of what their group talked about. After class is over, the final step is to reflect on your experience by writing a 1-2 page reflection on what and how you did.

Presentation: Facilitators will design a 10-12 minute introduction to the discussion session by presenting summaries of the readings, including a short (1-2 minutes) 'ice breaker'. The ice breaker may be in the form of a very short video, an image, a quote, or

may take some other form your group deems appropriate and relevant to the topic(s). The quality of your presentation will be worth 10 points.

Discussion Questions: Your group of facilitators needs to develop discussion questions collectively. This means that you are not just dividing the work. Rather, you should all do the readings ahead of time and meet to develop questions and/or each develop questions for all the readings individually and then share, revise, delete or merge the questions as a group. Why should you develop questions collectively? Three main reasons are: 1. That you will learn the material better if you discuss the content and the questions as a group. 2. If you have had a role in creating the discussion questions, you will have more insight into the questions and which will make you a better facilitator. 3. To practice working and coming to consensus decisions within a group or team. What should discussion questions look like? Discussion questions should be open ended (no right answer or yes/no answer), be based on the readings, and encourage and facilitate critical thinking. A question and discussion that encourages critical thinking reflects on the ideas/concepts/theories/arguments by examining the evidence and arguments carefully. You will be facilitating a discussion of a topic and not looking for an answer per se. Rather, you will be exploring an idea/concept/theory/problem in greater detail together based on your shared knowledge. Your group should be ready to e-mail discussion questions to me at least 48 hours before class in order to receive feedback from me. I will try to respond with feedback at least 24 hours before class. The day of your facilitation you will need to bring printed copies of your questions for each of your team members, the instructor. After your brief presentation, you will have about 35-40 minutes to lead the discussion. The quality of your discussion questions will be graded for 10 points. The quality with which you facilitate the discussion will be worth 10 points.

Reflection Paper: After your discussion session, each facilitator needs to write a reflection paper on your experience. You should reflect on your part of the group process, your role in creating the discussion questions and your role as a facilitator. I want you to reflect on what you did well, what you could improve on, and what were your strengths and weaknesses. The reflection paper should be turned into me a week after your facilitation. I will grade your facilitation after you turn in your reflection paper. The reflection paper should be 300 to 400 words long. 20 points.

Expectations: Each facilitator will be evaluated individually. To get full credit for facilitating you need to:

1. Participate fully in designing and presenting on the readings.
2. Participate fully in designing the discussion questions.
3. Demonstrate that you have read the readings closely and you have worked to understand more difficult concepts or content of the readings through discussions with your co-facilitators and or through extra readings if necessary.
4. Attempt to implement at least three facilitation strategies we will discuss in class.
5. Facilitate a discussion of the readings for the entire discussion period ~40 minutes.
6. Write a thoughtful reflection paper that meets the expectations as discussed above.

Disability/Medical

If you qualify for accommodations because of a disability, please provide a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and Illnesses guidelines under Quick Links at Disability Services website and discuss your needs with me.

Religious Observances

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please see me if you expect to miss any classes based on religious views, especially if that absence will fall on a date for one of the exams, so that we can work out alternative arrangements.

See full details at http://www.colorado.edu/policies/fac_relig.html

Behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

Discrimination and Harassment

The University of Colorado Boulder (CU-Boulder) is committed to maintaining a positive learning, working, and living environment. The University of Colorado does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. For more information on this policy, see: <http://hr.colorado.edu/dh/> .

Honor Code

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. For more information see: <http://www.colorado.edu/policies/honor.html> and at <http://honorcode.colorado.edu>