#### **Environmental Sustainability**

Course Number: UNST 224C-003 (Online)

CRN: 44062

Instructor: Meenakshi Rao Email: <a href="mailto:mrao@pdx.edu">mrao@pdx.edu</a>

Online hours: 10:30 – 11:30 am Thurs, or by apt.

TA: Rachel Calmer Email: <a href="mailto:rcalmer@pdx.edu">rcalmer@pdx.edu</a>

## **Course Overview**

We will begin our study of sustainability with a quick overview of life on Earth, and use this as a basis to examine the concept of sustainability: What does it mean to be sustainable? Does it apply to all of life on Earth or just *Homo sapiens sapiens*? To what extent is sustainability a social construct? Do we have the social institutions to develop a common vision of a sustainable future?

We will next examine how our current economic system leads to cost externalities and the implications this has for sustainability. We will use the IPAT equation, a simple, conceptual model, to examine the impact of resource consumption.

In the weeks following, we will look at four resources that are key to the survival of life on this planet (energy, air, food/agriculture and water), and examine them using our definition of sustainability, the IPAT equation, and our knowledge of externalities. Finally, we will brainstorm for ways in which we can make our resource consumption more sustainable — as individuals, as cities, as nations, and as a planet.

This class is structured as six learning modules. Each of these six modules is designed to help you develop the key ideas and concepts of sustainability and to develop the framework needed to engage in the global conversation that is taking place on sustainability today.

In this class, you will continue to hone your critical thinking and ability to communicate clearly by working on assignments that require well-researched, well-reasoned, and concise critiques on various aspects of sustainability. Class work will include weekly quizzes and discussion topics, weekly homework assignments that help you characterize your personal resource consumption, a mid-term report on how you can better meet your personal sustainability goals, and a final assignment in which you (as part of a group) develop or critique a sustainability plan for a city or developing nation.

# **Learning Outcomes**

- 1. Understand the different aspects of sustainability and develop your own working definition of sustainability;
- 2. Chart your own resource consumption and develop a personal sustainability plan;
- 3. Research and present information on the consumption and sustainability of the use of energy, air, food and water at the individual, city and national level;

- 4. Research and present ways of sustainably using energy, air, food, and water at the individual, city and national levels;
- 5. Develop critical thinking and communications skills to both evaluate and communicate multiple aspects of sustainability arguments.

# Readings

The course will make use of readings, videos, and other media from our library and online, as well as a free online textbook, available here (it is probably best that you download the pdf version to ensure access):

https://www.earth.illinois.edu/students/sustainability\_text/

# **Expectations**

All students are expected to comply with the PSU code of conduct.

Please see the ESM online class module. Each student is expected to adhere to the policies in this syllabus in addition to the general ESM policies regarding online courses. Assessment is in direct accordance with these policies; any potential discrepancy should be brought to the attention of the instructor immediately.

In the first week of class, please familiarize yourself with all portions of this course including the course syllabus, course schedule, module structure, discussion boards, discussion board etiquette, assignment dropboxes, and grading rubrics.

Be prepared to spend about 12 hours per week on this course, and to visit the course website at least 2-3 times each week.

As this is an online course, there are no required in person meetings. However the course is not self-paced – you are expected to cover the readings and other study material for each module within the time allocated for that module, typically a week. It is also expected that you will complete quizzes, submit discussion responses, and assignments by the specified date and time. All assignments (including quizzes and discussion posts) are due by 11:59 pm on the due date – unless a different time is explicitly given in the assignment. Late work on assignments, quizzes and reply posts will be severely discounted (35% per day – no credit if more than three days late; feedback on late work will be at the discretion of TA). Late posts on the (graded) primary discussion board will not be accepted, as that may not leave enough time for others to respond to your post.

# **Module/Class Structure**

The modules will follow the general format outlined below:

# 1. Modules

Each Module will span 1 week. Modules will typically start Monday morning, and all work for that module is expected to be completed by midnight of the following Sunday. Study materials, including any narrated slideshows, discussion questions (in both the general & graded discussion boards), and assignments will be available by 9:00 am Monday of the week the module starts. Quizzes will be available latest by Thurs 9:00 am.

#### 2. Primary discussion posts

Primary posts to the graded discussion prompts are due by 11:59 pm Thursday.

Note that there will be at least two discussion boards, one for the graded portion of the discussion, and one general discussion forum for sharing and learning.

## 3. Responses to primary discussion posts

Your response to at least one graded discussion prompt is due by 11:59 pm Sunday. You will be given the name of one student whose primary discussion post you must critique. You are encouraged to read all the discussion postings by your peers and to constructively critique as many as you can.

#### 4. Quizzes

Each module will have a quiz, which must be completed by 11:59 pm Sunday following the Monday the module started. Typically, you will have only one chance to complete the quiz.

#### 5. Assignments

Each module will have an assignment, also due by 11:59 pm Sunday following the Monday the module started. Typically, the assignment will be at least somewhat related to the discussion prompts, and the expectation is that you will use the information from the narrated slides, study materials, and both discussion boards (general and graded) in completing your assignment.

#### 6. Mid-term assignment

There will be a mid-term assignment, due in the 7<sup>th</sup> week of the class. The mid-term assignment will build on the weekly assignments through week 6.

## 7. Final assignment

The final assignment will be a group project, and will have three deliverables: a group narrated presentation due by the Monday of week 10, and an individual paper (on the group project) due in week 11 (finals week), and a review/critique of the other group projects presentations.

## 8. Turning in assignments

When turning in assignments, please use the following naming convention: save and name your file(s) to turn in using your last name and the title of the assignment in the file name (for example, if your name is Smith and you're turning in the first draft of the final essay, you might name your file Smithfinaldraft1.doc). For group assignments, use the group number in place of last name (for example, group04FinalPresentaion.ppt).

Please make sure to upload your assignments to the correct dropbox – there will be a dropbox for each weekly assignment, mid-term and final project.

### **Course Schedule**

Please review the course schedule here: Schedule.html

## Miscellaneous

When emailing either the instructor or the TA, always include your last name and a clue about your purpose in the subject line (for example, if you were writing with a question about an assignment, you might write, "Smith week 5 assignment question" in the subject line).

You must save your documents as Word docx, Word doc, or RTF (rich text format). If you are using any other word processing software, I and your peers may not be able to open your documents.

If you have a learning or physical disability, please contact the Disability resource Center for approval to request accommodation.

# **Grading**

50 pts Quizzes (5 best of six, 10 each)

50 pts Discussion primary + responses (5 best of 6, 10 each)

50 pts Weekly assignments (5 best of six, 10 each)

50 pts Mid-term

50 pts Group presentation

50 pts Final paper

30 pts Extra credit possible (total) for participation in general & graded group discussions

·	
Points	Grade
93.50 to 100	A
90.00 to 93.49	A-
86.50 to 89.99	B+
83.50 to 86.49	В
80.00 to 83.49	B-
76.50 to 79.99	C+
73.50 to 76.49	С
70.00 to 73.49	C-
66.50 to 69.99	D+
63.50 to 66.49	D
60.00 to 63.49	D-
0.00 to 59.99	F