# Economics of Environmental Issues (EC 332U–001) Syllabus Summer 2021

Location: Online via D2L, Course Availability: Jun 21, 2021- Aug 15, 2021 (8 weeks)

Instructor: Dr. Sudeshna Pal

Email: <u>sudeshna@pdx.edu</u> (Please do not communicate with me via D2L email) Office hour: Please email me. I will respond in 24-48hrs.

## Course Objective:

One of the most important issues that is keeping certain scientists, environmentalists, ecologists and economists busy these days is the concern about pollution, climate change and depletion of resources. This course will introduce you to different aspects of environmental issues and the role of economics in aiding policy makers in making the right choices addressing these issues. At the end of the course students will be aware of current environmental problems and develop skills to apply analytical methods and economic reasoning for policy recommendations.

#### **Resources:**

- 1. **Required Textbook**: *Markets and the Environment*, 2<sup>nd</sup> edition, Nathaniel O. Keohane and Sheila M. Olmstead.
- Environmental and Natural Resource Economics, 10<sup>th</sup> edition, Tom Tietenberg and Lynnes Lewis. Buying this book is optional. Copies of relevant chapters from the ninth edition will be available on D2L.
- 3. Additional Readings and Videos or Links to videos posted on D2L

#### Other Required Readings/Resources:

- 1. The Economist, Newspaper articles, Online Sources for current news on Environmental Policies.
- 2. Khan Academy and Paul Solman Videos: Short videos on core economic concepts and analytical methods.
- 3. www.epa.gov
- 4. TED Talks

**Class Homepage:** You must have access to D2L.

The Class Homepage is the primary means of communication and location of all course resources.

Please browse through the homepage and get acquainted with everything it has to offer. Below is a list of resources available on D2L.

- 1. Announcement related to the course
- 2. Instructor information

- Activities and Course Content Syllabus and learning modules for each week. Each module contains lecture slides, audio lectures, and links to quizzes and problem sets
- 4. Course Calendar (this would help you keep track of important dates)
- 5. Link to Library Resources
- 6. Link to Disability Resource Center
- 7. NY Times News Updates

#### Course Activities:

A weekly Quiz is due at the end of each week's lessons.

Quizzes are timed and you may get up to two attempts for each quiz. Quizzes would take about 30-45min. Two problem sets are given, Problem Set 1 is due at the end of week 4, and Problem Set 2 is due at the end of week 8.

Please start working on the problem sets as soon as you can and do not wait for last minute submission.

More information is provided below.

- Problem Sets (50% of total grade, each assignment counting for 25% of total grade):
  - TWO Problem Sets will be available on D2L word/pdf files. You would need to submit these as MSWord/pdf file and upload in the Assignments folder/link provided on D2L by the due date.
  - Problem Set 1 will cover materials from the Week1-4 and Problem Set 2 will cover materials from Weeks 5-8.
- Quizzes (50% of total grade, each quiz accounting for 6.25%): I will give eight weekly quizzes based on the week's lectures and readings. Please refer to the course schedule for Quiz dates. These will be multiple-choice questions available on D2L. You will get up to two attempts for each quiz and also require finishing it within a pre-determined time frame. The quizzes will be automatically graded.

I expect you to work independently on the Problem Sets as well as the Quizzes. If I find evidences of plagiarism or cheating, the quiz and/or the problem set will NOT be considered for grading, and you will end up with a zero on that quiz or problem set.

#### Make Up Policy:

I do not offer make-ups for quizzes or missed deadline for problem set submission.

#### Grading Policy:

Letter grades will be assigned ONLY at the end of the semester after the Final Exam according to the following scale:

90 – 100%: A; 85-89.9%: B+, 80-84.9%: B, 75-79.9%: B- ; 70 – 74.9%: C+, 65 – 69.9%: C, 60 – 64.9%: C- ; 55 – 59.9%: D, 54.9% or below: F.

## Final Grade Calculation:

Your final grade will depend on your overall performance in the course. Each course activity will count towards a certain proportion of the final score as mentioned under Course Activities section.

Below is an example of how you would calculate your final percentage in the course. **Example:** Student X gets the following scores in 8 Quizzes and 2 Problem Sets.

What is Student X's final percentage in the course? What letter grade does she earn?

Final percentage= (0.9+0.8+0.75+0.8+0.9+0.75+0.8+0.8)\*6.25+(0.88+0.8)\*25=82.6% Letter grade = B

### Portland State University Policies:

- Portland State University supports equal opportunity for all, regardless of age, color, disability, marital status, national origin, race, religion or creed, sex or gender, sexual or gender identity, sexual orientation, veteran status, or any other basis in law.
- Students with accommodations approved through the Disability Resource Center are responsible for contacting me prior to, or during, the first week of term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval should contact the DRC immediately.

| Week #<br>Start<br>Date | Topics   | Chapters/Readings  | Quizzes/Problem Sets<br>End of Week = Friday |
|-------------------------|--|--|--|
| Week 1:<br>Jun 21       | Economic Concepts and<br>Principles, Demand-<br>Supply, Problem Solving                      | Economic<br>Principles and<br>Demand Supply<br>(D2L)                   | Quiz 1 due by the end of week                |
| Week 2:<br>Jun 28       | Introduction to<br>Economics of<br>Environmental Issues,<br>Cost-Benefit, Problem<br>Solving | Smith Chap1<br>(D2L),<br>K&O Chap 1, 2,3,<br>Articles 1 and 2<br>(D2L) | Quiz 2 due by the end of<br>week             |
| Week 3:<br>Jul 5        | Externalities, Market<br>failures and Remedies,<br>Problem Solving                           | K&O Chap 4,5, 8<br>T&L p36 onwards,<br>other readings<br>posted        | Quiz 3 due by the end of week                |

#### Tentative Course Calendar:

| Week #<br>Start<br>Date | Topics  | Chapters/Readings   | Quizzes/Problem Sets<br>End of Week = Friday                             |
|-------------------------|---|---|--|
| Week 4:<br>Jul 12       | Market and non-market<br>based instruments,<br>Problem Set 1 posted   | K&O Chap 8, 9 (till<br>p127), T&L Chap<br>14 (selected<br>portions)   | Quiz 4 and Problem Set 1<br>due by the end of week<br>(Jul 16, 11.30 pm) |
| Week 5:<br>Jul 19       | Natural Resource<br>Economics, Resource<br>Taxonomy, Non-renewable<br>and Recyclable resource<br>management | K&O Chap 6,<br>T&L Chapters<br>posted on D2L  | Quiz 5 due by the end of week  |
| Week 6:<br>Jul 26       | Natural Resource<br>Economics Water, Land,<br>Forests, Fisheries<br>(contd.)                                | T&L Chap 9, 10,<br>11, 12 –selected<br>portions only<br>Articles on Water,<br>Land, Forests,<br>Fisheries (D2L) | Quiz 6 due by the end of<br>week   |
| Week 7:<br>Aug 2        | Environment and<br>Economic Growth –<br>Sustainability (contd.),  | K&O Chap 11<br>Sustainability<br>(D2L)  | Quiz 7 due by the end of week  |
| Week 8:<br>Aug 9        | Global Environmental<br>Issues<br>Problem Set 2 posted  | Field and Field<br>(chap 18, 19)<br>(D2L)   | Quiz 8 and Problem Set2<br>due by the end of week<br>(Aug 13, 11.30 pm)* |

Weekly quizzes are due on Fridays, 11.30pm, PST, unless otherwise noted. Please check due dates on D2L.

Note: I reserve the right to make any necessary changes to the syllabus. You will be informed of any such changes and a revised syllabus will be uploaded on D2L.