OREGON STATE UNIVERSITY
Department of Applied Economics

AEC 448/548: Advanced Topics in Environmental and Resource Economics
Fall 2016, 3 credits

Instructor of Record:  Susan Capalbo
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Prereqs: AEC 311, AEC 351 and AEC 352 or permission of the instructor

Course Description
The focus of this class is to provide undergraduate students with an opportunity to read and analyze a few selected classic and more contemporary papers and findings in environmental and resource economics methods and to explore applications to important areas such as: climate change and water scarcity. Some of these topics and associate readings are familiar since they are referenced in intermediate applied economics and environmental economics textbooks and some are new, but address issues of concern to this economists. The intent is to provide students with an appreciation for the structure and development of key concepts and frameworks that underlie economic approaches to environmental and resource issues and the application to policy and regulations. Students will be given an opportunity to explore current state and federal regulations and pending legislation.

Catalog Description
Explores advanced applications of environmental and resource economics to selected policy and management concerns in the PNW and globally. Attention will be directed to the methodological underpinnings of environmental and resource policies and instruments using case studies on real world management issues.

Objectives
• To enable students to think critically and analyze topics within environmental and resource economics.
• To better understand how “things got the way they are” and how do economists think about options and tradeoffs in a broader context.
• To provide students with exposure to some of the classic and contemporary research in environmental and resource economics and policy.
• To allow students to take leadership role in directing class discussions and summarizing the key points of an assigned reading.
Learning Outcomes

448/548 Students completing this class successfully will be:

- Familiar with advanced topics in environmental and resource economics.
- Able to analyze in depth selected well-known papers in the field of environmental and resource economics, present the author(s) viewpoint and offer insights on its applicability to current issues.
- Able to use key economic concepts to understand, discuss, and critically analyze contemporary resource issues such as climate change and water conservation.
- Understand how the agricultural and forestry sectors may be impacted by critical environmental issues and resource scarcity including climate change, and the role of these sectors in mitigation and adaptation opportunities.

In addition, students registered for 548, will successfully be:

- Able to explore economic concepts and thinking beyond the textbook format, and to utilize readings from journals and other professional outlets as a means of obtaining information and knowledge for applied policy analysis.
- Explain the welfare – economic rationale for government policies for the provision of public growth and services, including ecosystem services.

Course Format and Assessment

Students will be actively engaged in summarizing the highlights of the each of the assigned readings, and preparing answers to the questions posed for each reading. Each student will be the lead (or co-lead depending upon how many students are in the class) for a specific paper, and will provide a 20 minute overview of the paper/reading. Presentations will occur during weeks 2, 5, 7 and 9. Assignments for presentation will be made the first week of class. Final paper/project is due during finals week. Information on the final paper/project will be provided in class.

Students taking the class for 500 level credit will be expected to have a more in depth final paper addressing other methods and welfare impact AND produce an accompanying communication piece, such as U-tube, Ted Talk or Voice-over PowerPoint.

Students are expected to read all assigned material and prepare to discuss this material in class. No unexcused absences from class.
Grades for students enrolled in 448 are based on 60 points as follows:
  Participation in class discussions: 20 points
  Class attendance: 10 points
  Individual presentation and summary of the key points for an assigned reading: 10 points
  Final paper/project: 20 points

Grades for students enrolled in 548 are based on 80 points as follows:
  Participation in class discussions: 20 points
  Class attendance: 10 points
  Individual presentation and summary of the key points for an assigned reading: 10 points
  Final paper/project: 20 points
  Communication: 20 points

Points will be converted to percentages and grades assigned on the following basis:

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<tr>
<th>Percentage Range</th>
<th>Grade</th>
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<tr>
<td>100-95%</td>
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<td>94-90%</td>
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<td>89-85%</td>
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<td>84-80%</td>
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<td>79-75%</td>
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<td>below 50%</td>
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NOTE: READINGS SUBJECT TO CHANGE TO MEET STUDENT INTEREST AND CURRENT ISSUES IN THE PNW.

Week 1 and 2: Benefit – Cost Analysis and Economic Principles

- Turvey, Ralph. On divergences between Social Cost and Private Cost. from Economica (August 1963)

Week 3 and 4: Global Externalities and Common Property Resources

**Week 5 and 6: Non-Market Valuation**


**Week 7: Ecosystem Services**


**Week 8 and 9: Climate Change Policy and Carbon Pricing**

- National Climate Assessment: [http://www.globalchange.gov/nca3-downloads-materials](http://www.globalchange.gov/nca3-downloads-materials)
- Climate change and food security: [http://ccafs.cgiar.org](http://ccafs.cgiar.org)

**Week 10: Sustainability Conservation and Scarcity Pricing for Water**

**Academic Honesty:**
If you violate academic honesty in this course, you will receive an F on the work in question and/or in the class. “Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student’s own efforts or the efforts of another.” Violations include: Cheating, Fabrication, Assisting, Tampering, and Plagiarism. The full OSU Statement of Expectations for Student Conduct is available at: [http://oregonstate.edu/studentconduct/offenses-0](http://oregonstate.edu/studentconduct/offenses-0)

**Statement Regarding Students with Disabilities:**
Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 737-4098