Fall 9-1-2018

ECNS 433.01: Economics of the Environment

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ECNS 433: ECONOMICS OF THE ENVIRONMENT
Fall 2018 Syllabus

Logistics

- Time: Tuesday, Thursday; 11am – 12.20pm
- Classroom: Liberal Arts 103A
- Instructor: Katrina Mullan
  - Email: katrina.mullan@umontana.edu
  - Phone: (406) 243-4655
  - Office hours: Tuesday, 2-3pm; Thursday, 12.45-1.45pm; or by appointment
  - Liberal Arts Building, Rm 412
- Teaching Assistant: Cassandra Sevigny
  - Email: cassandra.sevigny@umontana.edu
  - Office hours: Monday, 1-2.30pm; Wednesday, 1.30-2.30pm; Friday, 11am-12.30pm
  - Liberal Arts Building, Rm 410
- Required textbook: Callan, S. J. and Thomas, J. M. (2013) *Environmental Economics and Management: Theory, Policy and Applications*, 6th Edition. Southwestern-Cengage.
- Course website: I will post assignments, readings and any additional information on the class Moodle page. Announcements will be emailed via Moodle. Please ensure that you regularly check both the Moodle page and the email account associated with it.

Course Description and Learning Outcomes

Environmental economics seeks to analyze the interaction between human activity and the environment using the tools of economics. In this course, we will use economic theory to understand:

1) why environmental problems occur;
2) the extent to which they should be prevented;
3) how different policy mechanisms can be used to prevent them.

We will also look at how environmental economists quantify the values of environmental goods and services that are not bought or sold in markets. The environmental issues we will study will include air and water pollution, climate change, ecosystem conservation, deforestation, and how environmental quality relates to economic development.

Students who successfully complete this course will understand:

- how decisions about environmental protection are made
- how environmental problems result from market failures
- how trade-offs between environmental protection and economic activity can be evaluated
- the key methods used to assign monetary values to non-market goods and services
- the effectiveness and efficiency of alternative policy responses to environmental problems, including air and water pollution, climate change, and ecosystem degradation, in theory and in practice
- how economic development affects, and is affected by, environmental quality
- how to write about economics for different audiences and purposes
- how to find and synthesize information from different theoretical and empirical sources to construct an argument

Class assignments

- Homework assignments consisting of short-answer questions.
- Written summaries and in-class discussion of journal articles.
- Policy memos that concisely describe the economic theory and evidence relating to a policy question, and make recommendations for a course of action.
- Individual presentation of a news item on an environmental issue, and group presentations of a policy case study.
- A midterm, held during class time on **October 18th**, and a final exam at **10.10am-12.10pm** on **Monday December 10th**, both consisting of multiple choice and short answer questions.

Students taking the graduate increment will independently select a topic and identify appropriate sources for the second policy memo.

Detailed guidelines for each assignment will be posted on the course Moodle page. Late assignments will be penalized.

Participation grades will be based on attendance and on participation in class discussions, writing workshops and in-class exercises.

Grading

Assignment	Percent of Grade
Homework	20%
Policy Memos	25%
Policy case study, news item and article summaries	15%
Participation	5%
Exams	35%

Academic Conduct

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University (for more details on Student Conduct Code, go to: http://life.umt.edu/VPSA/student_conduct.php). Students are expected to do their own work in their own words, without seeking inappropriate assistance in preparing for or completing exams or assignments. I require that you will work to uphold high standards of integrity.

Students with Disabilities

Whenever possible, and in accordance with civil rights laws, The University of Montana will attempt to provide reasonable modifications to students with disabilities who request and require them. Please feel free to set up a time with me to discuss any modifications that may be necessary for this course. For more information, visit the Disability Services for Students website at http://www.umt.edu/disability.

Outline Schedule

Week	*Begins*	*Tentative topics (we may go faster or slower)*	*Readings for the topic*
1	Aug 27	Role of economics	Ch. 1
2	Sep 3	Economic efficiency: review	Ch. 2 and Sexton and Sexton (2014)
3	Sep 10	Modeling market failure	Ch. 3
4	Sep 17	Command-and-control approach	Ch. 4 and Gallego et al. (2013)
5	Sep 24	Command-and-control approach / Market-based approach	Ch. 4 / Ch. 5
6	Oct 1 (no class Oct 2nd)	Market-based approach	Ch. 5 and Walls (2016)
7	Oct 8	Instrument choice	Ch. 15&16
8	Oct 15	Instrument choice – application to water pollution **Midterm – Oct 18**	Ch. 15&16 and Olmstead (2010)
9	Oct 22	Valuing environmental benefits and costs	Ch. 7&8
10	Oct 29	Valuing environmental benefits and costs	Ch. 7&8 and Kling et al. (2012)
11	Nov 5	Environmental decision making	Ch. 9
12	Nov 12	Global air quality and climate change	Ch. 13 and Hsiang et al (2017)
13	Nov 19 (no class Nov 22rd)	Ecosystem services	Ferraro et al. (2012) and Arriagada et al. (2012)
14	Nov 26	Ecosystem services	Ferretti-Gallon and Busch (2014) and Alix-Garcia et al. (2013)
15	Dec 3	Environment and development	Ch. 20, Stern (2004), and Brunnschweiler and Bulte (2008)
16	Dec 10	Wrap up and review **Final Exam – Dec 10 (10.10am-12.10pm)**	