University of Colorado Boulder

Econ 8535 Environmental Economics I Spring 2022

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Lectures: Monday and Wednesday, 11:15-12:30 Econ 5

Office hours: Wednesday 1:00-4:00 (and as need be – just ask!)

Course Description: This course provides a Ph.D. level survey of environmental economics. We will examine the literature and methods used in analyzing environmental and related resource economics problems from an economic perspective. As this is the first course in a two-course sequence, the focus will be primarily on theoretical concepts and a broad overview of key ideas, with empirical methods covered in the second course.

Course Organization: This course will be a mix of lecture and discussion. There will be six major units, and you will be expected to write four 8-10 page papers on units of your choice. For one of the units that you choose to write on, you will be required to lead discussion for one class. The paper and presentation are discussed in more detail below.

Textbooks: There are no required textbooks, but there are two "standards" in environmental and resource economics that are worth acquiring

Environmental: William J. Baumol and Wallace E. Oates, *The Theory of Environmental Policy*, 2nd edition (Cambridge University Press, 1988).

Resource:

In addition, Robert N. Stavins, *Economics of the Environment: Selected Readings*, 6th Ed, 2012, is an excellent collection of important articles in environmental economics.

For a more intuitive treatment of many of the topics we'll discuss, you should also consider: Nick Hanley, Jason F. Shogren, and Ben White; *Environmental Economics: In Theory and Practice*, 2nd Ed, 2007

The reading list, drawn primarily from academic journals, will be provided in a separate document. Readings should be available electronically. Students are expected to have read all materials prior to class and

Grading:

Papers and Presentation 60% Assignments 20% Class Participation 20%

Papers and Presentation: You will be required to write four papers, each roughly 8-10 pages in length. They should be professional (organized and typo-free) and include a complete list of citations. You should view the paper as a literature review/analysis on a relatively narrow topic within each unit – that is to say that you should focus on a specific topic within each unit, rather than review the entire unit. The reading list should be viewed as a "gateway" to the literature, and I expect a majority of citations to be papers that you find on your own. For the presentation, I expect you to be able to lead the class discussion based on your paper for that unit (e.g. prepare slides). The presentation will counted as "equivalent" to a paper, and I will take your top four scores (out of the four papers plus presentation) in computing your grade.

Assignments: There will be four assignments that will enhance your abilities to develop economic models. As opposed to typical "problem sets," the assignments will be modeling exercises where the emphasis will be on developing simple economic models of economic phenomena based on environmental and resource topics that I provide. Think of it as a "flipped" problem

- B. Double-dividend and second-best policy
- V. Resource Economics (Week 11-12)
 - A. Non-renewable Resources
 - B. Renewable Resources
 - C. Property Rights and Institutions
- VI. Additional Topics (Week 13-15)
 - A. Waste and recycling
 - B. Uncertainty, dynamics and discounting
 - C. Transboundary pollution and international agreements

mask-related accommodation, please follow the steps in the "Accommodation for Disabilities" statement on this syllabus. In addition, vaccinated instructional faculty who are engaged in an indoor instructional activity and are separated by at least 6 feet from the nearest person are exempt from wearing masks if they so choose.

If you feel ill and think you might have COVID-19, if you have tested positive for COVID-19, or if you are unvaccinated or partially vaccinated and have been in close contact with someone who has COVID-19, you should stay home and follow the further guidance of the <u>Public Health Office</u> (contacttracing@colorado.edu). If you are fully

faculty member. Additional information regarding the Honor Code academic integrity policy can be found on the <u>Honor Code website</u>.