



## Department of Economics Course Outline

<b>Course:</b>	Economics 487 Environmental Economics	<b>Term:</b> Winter 2014
<b>Time:</b>	TR 15:30 – 16:45	<b>Place:</b> SA 121
<b>Instructor:</b>	Pamela Campa	
<b>Office:</b>	SS 422	<b>Telephone:</b> 403 220-4628
<b>Office Hours:</b>	T 17:00-18:30 Please book a slot here: <a href="http://doodle.com/akhwg2z64hbz2bt6">http://doodle.com/akhwg2z64hbz2bt6</a>	<b>E-mail:</b> pcampa@ucalgary.ca

### Textbook(s):

Charles D. Kolstad, *Environmental Economics, 2nd edition*. (Oxford University Press, 2010).

The textbook is intended as the main reading for the course. Although in the outline I will refer to entire chapters of the textbook, sometimes you will be required to read only portions of each chapter, the selection of which will be made clear during the respective class. In addition, we will discuss in class research papers from the environmental literature. These papers are marked with one asterisk in the list below, which means that they are supplemental materials. You can be tested for the portion of these readings that is included in the lecture slides. The list may change throughout the term, in which case I will make an announcement. All the readings and the lectures slides will be available in PDF on Blackboard, unless otherwise noted.

At the end of each lecture I will also suggest one or more short readings (policy article, newspaper article, blog entry) that will normally show us a “real-world” application of concepts and notions that we have studied throughout the lecture. At the beginning of the following class, I will ask who is interested in presenting to all of us in April any of the readings assigned in the previous lecture. Before the final exam you will also submit a short essay that will accompany the presentation. If more groups are interested in presenting the same reading, we will toss a coin. Ideally by March 25<sup>th</sup> each of you will have selected a reading of interest.

### Book(s) on Reserve:

None

### What is this course about?

This course is about the impact of the economy on the environment, and how to regulate the economy so that economic and environmental goals are achieved. We start from the question:

how can we make group environmental decisions starting from individual preferences? Then we introduce the concept of market failure in production of desirable level of pollution or of protection of natural world. Market failures call for government intervention, which is not failures-free itself, and therefore we will examine policy-making problems such as how much environmental protection to target, what kind of intervention to use among different environmental policies etc. We draw heavily from microeconomic theory, and when we study research papers we will use basic econometrics (although knowledge of basic econometrics is by no mean required to succeed in the course).

## Course Outline

### *Introduction*

1. Environment and Economics

Kolstad, Chapter 1

2. Social Choice: How Much Environmental Protection?

Kolstad, Chapter 2

### *Section 1: Markets and Markets Failure*

3. Efficiency and Markets

Kolstad, Chapter 4

4. Market Failure: Public Goods, Public Bads, and Externalities

Kolstad, Chapter 5

5. Making Decisions About Environmental Programs

Kolstad, Chapter 6

\* M Greenstone, JA List, and C Syverson. 2012. The Effects of Environmental Regulation on the Competitiveness of U.S. Manufacturing, *MIT Department of Economics Working Paper No. 12-24*

\* Currie, Janet and Walker, Reed. 2011. Traffic Congestion and Infant Health: Evidence from E-ZPass. *American Economic Journal: Applied Economics*, 3(1): 65-90, 2011

6. Property Rights

Kolstad, Chapter 13

\* Fowlie, Meredith, Stephen P. Holland, and Erin T. Mansur (2012) What Do Emissions Markets Deliver and to Whom? Evidence from Southern California's NOx Trading

Program. *American Economic Review*, 10(2).

\* Costello, Christopher, Gaines, S. and Lynham, J (2008). Can catch shares prevent fisheries collapse? *Science*. 321: 1678-1681.

## **Section 2: Valuing the Environment**

### 7. Demand for Environmental Goods

Kolstad, Chapter 7

### 8. Hedonic Price Methods

Kolstad, Chapter 8

\* Bui, L. and C. Mayer (2003). Regulation and Capitalization of Environmental Amenities: Evidence from the Toxic Release Inventory in Massachusetts. *Review of Economics and Statistics* 85 (3).

\*Janet Currie, Lucas Davis, Michael Greenstone and Reed Walker (2013). Do Housing Prices Reflect Environmental Health Risks? Evidence from More than 1600 Toxic Plant Openings and Closings *NBER Working Paper No. 18700*.

\*Campa, Pamela (2013). Press and Toxic Leaks. Do Newspapers Reduce Toxic Emissions? *Mimeo University of Calgary*

### 9. Household Production

Kolstad, Chapter 9

### 10. Constructed Markets

Kolstad, Chapter 10

## **Section 3: Regulating Individuals and Firms**

### 11. Regulating Pollution

Kolstad, Chapter 11

### 12. Emission Prices and Fees

Kolstad, Chapter 12

13. Regulation with Unknown Control Costs  
Kolstad, Chapter 15

14. Audits, Enforcement, and Moral Hazard  
  
Kolstad, Chapter 16

15. Voluntary Actions and Agreements  
  
Kolstad, Chapter 17

\* Werner, Antweiler and Kathryn Harrison (2003). Toxic release inventories and green consumerism: empirical evidence from Canada. *Canadian Journal of Economics/Revue canadienne d'économie* Volume 36, Issue 2, pages 495–520.

\* Hamilton, J. (2005). Regulation through Revelation: the Origin, Politics, and Impacts of the Toxics Release Inventory Program. Introduction. *Cambridge University Press*.

\*Heal, G. (2008). When Principles Pay: Corporate Social Responsibility and the Bottom Line. Chapters 1, 2, 12, 13. *Columbia Business School Publishing*

\*Campa, Pamela (2013). Press and Toxic Leaks. Do Newspapers Reduce Toxic Emissions? *Mimeo University of Calgary*

### **Grade Determination and Final Examination Details:**

First Midterm Examination: 20%

Second Midterm Examination: 20%

Two Home Assignments: 15%. Students may work on home assignments in pair.

Essay, Presentation and Class Participation: 15%. Students may work on presentation and essay in pair. The presentations will be given in the last two weeks of the course, and the essay will be submitted on April 15<sup>th</sup>. The presentation will be short (not more than 15 minutes each), and the essay should not exceed 5 pages. Ideally, the essay and the presentation will be based on but not limited to the reading that I assigned. You are invited and encouraged to do more research on the topic of the reading and to give a talk about it, as if you were giving a "Ted Talk"<sup>vi</sup>

Final Examination: 30%

Students who are unable to write the midterm because of an illness, family emergency or religious observance will have the midterm weight shifted to the final examination. Documentation **MUST** be provided. If there are other reasons not listed above that prevent you from taking the midterm exam please come and talk to me.

There will be a scheduled final examination, lasting 2 hours. Tests and exams will not involve multiple choice questions. Non-programmable calculators **WILL** be allowed during the writing of tests or final examinations.

Tests and final exams are marked on a numerical (percentage) basis, and then converted to letter grades. The course grade is then calculated using the weights indicated above. As a guide to determining standing, these letter grade equivalences will apply:

A+	95 – 100	B	73 – 76	C-	60 - 62
A	85 - 94	B-	70 – 72	D+	56 - 59
A-	80 - 84	C+	67 – 69	D	50 - 55
B+	77 - 79	C	63 – 66	F	0 - 49

All students must comply with the regulations published in the University Calendar concerning “Intellectual Honesty,” “Examinations,” etc.

### Miscellanea

#### DO’s and DON’Ts

- DO feel completely comfortable participating in class. There really is no such thing as a dumb question.
- DO feel free to disagree with me or students in class (in a respectful manner).
- Please DO NOT use your cell phones. It is distracting for everyone in class, including me.

#### First week

1. Please submit a short letter of introduction of yourself to me (one or two paragraphs will be enough). Include your official name and what you would like to be called, and any other information about yourself that you’d like to share with me. Print this and bring it to class.

2. Please make a name card, and bring it to next few classes.

#### Important Dates

January 9, 2014	First class meeting
February 6, 2014	Mid-term 1
March 6, 2014	Mid-term 2
March 13	Class moved to March 14. We will attend together LAWRENCE H. GOULDER’s Distinguished Lecture. Topics covered in the lecture will be material for exam or homework. Attendance is thus <b>STRONGLY</b> encouraged.
April 1-10	Class Presentations, Catch up, Review, Additional Topics TBA
April 10, 2014	Last day of classes
April 15, 2014	Essay submission

Students' Union Vice-President Academic:

Emily Macphail

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Students' Union Faculty Representative (Arts)

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Society of Undergraduates in Economics (S.U.E.):

[www.ucalgary.ca/sue](http://www.ucalgary.ca/sue)

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students succeed both academically and socially at the University of Calgary. Services include access to the exam bank, career partnerships with the Career Centre through hosting industry nights and information sessions, recognizing achievements in teaching, and organizing social events for members. They invite you to join by contacting [sue@ucalgary.ca](mailto:sue@ucalgary.ca).

#### *Faculty of Arts Program Advising and Student Information Resources*

- Have a question, but not sure where to start? The Faculty of Arts Program Information Centre (PIC) is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580 or email them at [artsads@ucalgary.ca](mailto:artsads@ucalgary.ca). You can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate> which has detailed information on common academic concerns.
- For program planning and advice, contact the Student Success Centre (formerly the Undergraduate programs Office) at 403-220-5881 or visit them on the 3<sup>rd</sup> Floor of the Taylor Family Digital Library.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Library Block.
- Online writing resources are available at <http://ucalgary.ca/ssc/writing-support/online-writing-resources>

Notes:

- It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 403-220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

- Students seeking reappraisal of a piece of graded term work should discuss their work with the instructor *within fifteen days* of work being returned to class.

Safewalk / Campus Security: 403-220-5333  
Emergency Assembly Point: Social Sciences Food Court  
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<sup>i</sup> If you don't know what a Ted Talk is, don't worry about it, we will watch one together in class, obviously on a topic related to Environmental Economics.