

# Department of Economics Course Outline

**Term:** Winter 2009

**Course:** Economics 677 **Section:** 01

[Seminar in Economics of the

Environment]

**Time:** MW 09:30 – 10:45 **Place:** SS 403 (subject to change)

**Instructor:** Dr. Elizabeth A. Wilman

**Office:** SS 545 **Telephone.:** 403-220-6108

Office MW 12:30 – 13:30 or by E-mail: eawilman@ucalgary.ca

**Hours:** appointment

**Textbook(s):** 

None

#### **Book(s) on Reserve:**

Perman, R., Y. Ma, J. McGilvray & M. Common. (PMMC). *Natural Resource and Environmental Economics*. Harlow: Pearson Education Limited, 2003.

Kolstad, C. Environmental Economics. New York: Oxford University Press, 2000.

Dasgupta, P. & G. Heal. *Exhaustible Resources and Economic Theory*, Cambridge University Press, 1979.

Neumayer, Eric. Weak versus Strong Sustainability: Exploring the Limits of Two Opposing Paradigms. Edward Elgar, 2003 second revised edition.

Weitzman, M. *Income Capital and the Maximum Principle*. Cambridge: Harvard University Press, 2003.

Conrad, J.M. and C.W. Clark. *Natural Resource Economics: Notes and Problems*. Cambridge University Press. 1987.

Bowes, M.D. and J.V. Krutilla. Multiple-Use Management: The Economics of Public Forest Lands. Resources for the Future.1989.

Clark, C.W. *Mathematical Bioeconomics*. John Wiley and Sons, Inc. 1976.

## **Course Outline:**

- 1) Welfare Economics: Jan. 12-21
  - a) PMMC chapter 3,4, 5
  - b) Kolstad chapters 3,4,5,6.
- 2) Pollution Control Targets and Instruments: Jan. 26-Feb.9
  - a) PMMC chapter 6 and 7
  - b) Kolstad chapters 7, 8, 9
- 3) Pollution Control with Imperfect Information.: Feb 11-25
  - a) PMMC chapter 8
  - b) Kolstad chapters 9 and 10
  - c) Segerson, K. 1988. "Uncertainty and Incentives for Nonpoint Pollution." Control, "Journal of Environmental Economics and Management. 15: 87-98.
  - d) Fullerton, D., and T. Kinnaman. 1995 "Garbage, Recycling, and Illicit Burning or Dumping." *Journal of Environmental Economics and Management*, 29(1): 78-91.
  - e) Fullerton, D., and A Wolverton, 2000. "Two Generalizations of a Deposit-Refund Systems," *American Economic Review* 90(2): 238-242.
  - f) Pindyk, R.S. 2007. "Uncertainty in Environmental Economics," *Review of Environmental Economics and Policy*. 1(1): 45-65
- 4) Stock Pollutants and Dynamics: Mar 4-16
  - a) PMMC chapter 16
  - b) Smith, V.L. 1977. "Control Theory Applied to Natural and Environmental Resources: An Exposition." *Journal of Environmental Economics and Management*. 4(1): 1-24.
  - c) Conrad, J.M. and L.J. Olson. 1992. "The Economics of a Stock Pollutant: Aldicarb on Long Island." *Environmental and Resource Economics* 2: 245-258.
- 5) Economy Wide Models, Tax Interaction Effects and Double Dividends: Mar. 18-25
  - a) PMMC chapter 9
  - b) Kolstad chapter 14
  - c) Additional readings to be determined.
- 6) International Environmental Problems: Mar. 30-April 6
  - a) PMMC chapter 10
  - a) Barrett, S.1994. "Self-Enforcing International Environmental Agreements," *Oxford Economic Papers*. 46:874-894.
- 7) Renewable Resources: April 8-15.
  - a) PMMC Ch 17 and 18
  - b) G.C. van Kooten, C.S. Binkley and G. Delacourt. 1995. Effect of Carbon Taxes and Subsidies on Optimal Forest Rotation Age and Supply of Carbon Services. *American Journal of Agricultural Economics*. 77(2): 365-374. .../3

- c) Robert Mendelsohn. 1994. Property Rights and Tropical Deforestation. *Oxford Economic Papers*. 46: 750-756.
- d) Timothy Swanson. 1994. The Economics of Extinction Revisited and Revised: A generalized Framework for the Analysis of the Problems of Endangered Species and Biodiversity Losses. *Oxford Economic Papers* 46: 800-821.

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

Three Assignments: 30% (10% each)

One Midterm Exam: 20%
One Term Paper: 25%
Final Exam: 25%

Details regarding the term paper will be made available during the first two weeks of class.

The date for the midterm will be announced by the beginning of February.

Tests and final exams are marked on a numerical (percentage) basis, 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 generally apply:

A+ 98 - 100	B 80 - 84	C- 60 - 64
A 95 - 97	B- 75 - 79	D+ 55 - 59
A- 90 - 94	C+ 70 - 74	D 50 - 54
B+ 85 - 89	C 65 - 69	F < 50

If, for some reason, the distribution of grades determined using the aforementioned conversion chart appears to be abnormal the instructor reserves the right to change the grade conversion chart if the instructor, *at the instructor's discretion*, feels it is necessary to more fairly represent student achievement.

A passing grade on any particular component of the course is not required for a student to pass the course as a whole.

Non-programmable calculators WILL be allowed during the writing of tests or final examinations.

There will be a Registrar scheduled final examination, lasting 2 hours.

Tests and exams WILL NOT involve multiple choice questions.

## **Notes:**

- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) should discuss their work with the Instructor *within fifteen days* of the work being returned to the class.
- 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 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.

Safewalk / Campus Security: 220-5333

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EAW/mi 2008-12-22