



Department of Economics Course Outline

		Term:	Winter 2012
Course:	Economics 677 [Seminar in Economics of the Environment]	Section:	01
Time:	TR 09:30 – 10:45	Place:	SS 423
Instructor:	Dr. Elizabeth A. Wilman		
Office:	SS 545	Telephone:	403-220-6108
Office Hours:	TR 11:00 – 12:00	E-mail:	ewilman@ucalgary.ca

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

Book(s) on Reserve:

Kolstad, C. 2011. *Environmental Economics*. New York: Oxford University Press.

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

Other Materials: Journal articles will be accessible via purl's in Blackboard.

Course Outline:

- Welfare Economics: Jan. 10-17
- PMMC, chapter 5
 - Kolstad, chapters 3,4,5,6 and 13.
 - Weitzman, M.L. 1998. Why the Far Distant Future Should be Discounted at the Lowest Possible Rate. *Journal of Environmental Economics and Management* 36 (3): 201-208
 - Weitzman, M.L. 2001. Gamma Discounting. *American Economic Review* 91 (1): 260-271
 - Groom, B., C. Hepburn, P. Koundouri and D. Pearce. 2005 Declining Discount Rates, the Long and Short of It. *Environmental and Resource Economics* 32(4): 445-493.
- Pollution Control Targets and Instruments: Jan. 19-Feb.2
- PMMC chapter 6 and 7
 - Kolstad chapters 11,12 and 14.
 - Hung, M-F. and D. Shaw .2005. A Trading Ratio System for Trading Water Pollution Discharge Permits. *Journal of Environmental Economics and Management* 49(1): 83-102.

Pollution Control with Imperfect Information: Feb 7-16

- a) PMMC chapter 8
- b) Kolstad chapters 15 and 16
- c) Segerson, K. 1988. Uncertainty and Incentives for Nonpoint Pollution Control. *Journal of Environmental Economics and Management* 15(1): 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 System. *American Economic Review* 90(2): 238-242.
- f) Reeson, A.F., L.C. Rodriguez, S.M. Whitten. K. Williams, K. Nolles, J Windle and J. Rolphe. 2011. Adapting Auctions for the Provision of Ecosystem Services at the Landscape Level. *Ecological Economics* 70(9): 1621-1627.
- g) Cason, T. L. Gangadharan and C. Duke. 2003. A Laboratory Study of Auctions for Reducing Non-Point Source Pollution. *Journal of Environmental Economics and Management* 46(3): 446-471.

Stock Pollutants: Dynamics: Mar 6-13

- a) PMMC chapter 16
- b) Conrad and Clark chapters 1 and 4
- c) Smith, V.L. 1977. Control Theory Applied to Natural and Environmental Resources: An Exposition. *Journal of Environmental Economics and Management*. 4(1): 1-24.
- d) Conrad, J.M. and L.J. Olson. 1992. The Economics of a Stock Pollutant: Aldicarb on Long Island. *Environmental and Resource Economics* 2(3): 245-258.

Renewable Resources: Time and Space: Mar 15-22.

- a) PMMC chapter 17
- b) Conrad and Clark chapter 3
- c) Conrad, J.M. 2005. Open Access and Extinction of the Passenger Pigeon in North America. *Natural Resource Modeling*. 18(4): 419-428.
- d) Sanchiro, J.N. and J.E. Wilen. 2001. A Bioeconomic Model of Marine Reserve Creation. *Journal of Environmental Economics and Management*. 42(3): 257-276
- e) Epanchin-Niell, R.S. and J.E. Wilen. 2011. Optimal Control of Spatial-Dynamic Processes: The Case of Biological Invasions," *Journal of Environmental Economics and Management*. In Press.
- f) van Kooten, G.C., C.S. Binkley and G. Delcourt. 1995. The Effect of Carbon Taxes and Subsidies on the Optimal Forest Rotation Age and Supply of Carbon Services. *American Journal of Agricultural Economics*. 77(2): 365-74.
- g) Wilman, E. A. 2011. Carbon Sequestration in Agricultural Soils. *Journal of Agricultural and Resource Economics*. 36(1): 121-138.

ONE OF THE FOLLOWING TOPICS: March 22-April3.

Economy Wide Models, Tax Interaction Effects and Double Dividends

- a) PMMC chapter 9
- b) Kolstad chapter 14
- c) West, S.E. and R.E. Williams III. 2007. Optimal Taxation and Cross-Price Effects on Labour Supply: Estimates of the Optimal Gasoline Tax, "*Journal of Public Economics* 91 (3-4): 593-617.
- d) Carbone, J. and V.K. Smith. 2008. Evaluating Policy Interventions with General Equilibrium Externalities. *Journal of Public Economics*. 92(5-6): 1254-1274.

International Environmental Problems:

- a) PMMC chapter 10
- b) Kolstad chapter 19
- c) Barrett, S.1994. "Self-Enforcing International Environmental Agreements," *Oxford Economic Papers*. 46:874-894.
- d) Gatti, J.R., T. Goeschl, B. Groom B. and H. Egli. 2011. The Biodiversity Bargaining Problem. *Environmental and Resource Economics*. 48(4): 609-628.

Non-market Valuation.

- a) PMMC chapter 12
- b) Kolstad chapter 7,8, 9 and 10.
- c) Adamowicz, W. P. Boxall, M. Williams and J. Louviere. 1998. Stated Preference Approaches for Measuring Passive Use Values: Choice Experiments and Contingent Valuation. *American Journal of Agricultural Economics* 80(1):64–75.
- d) Adamowicz, W., J. Louviere and M. Williams.1994. Combining Revealed and Stated Preference Methods for Valuing Environmental Amenities. *Journal of Environmental Economics and Management*. 26(2): 271–292.
- e) Du, X. and R. Mendelsohn. 2011. Estimating the Value of the Reduction in Air Pollution during then Beijing Olympics. *Environment and Development Economics*. 16(06): 735-749.
- f) Buschena, D.E., T.L. Anderson and J.L. Leonard. 2001. *Journal of Environmental Economics and Management*. 41(1): 33-43.
- g) Akram, A., and S. Olmstead. 201. The Value of Household Water Quality in Lahore, Pakistan, *Environment and Development Economics*. 49(2): 173-198.

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. You will be expected to do an in class presentation of your paper sometime between April 5-15 inclusive.

The date for the midterm will be March 1st .

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

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
Emergency Assembly Location – Professional Faculties Food Court

EAW/mi
2011-12-19