

York University
Faculty of Liberal Arts & Professional Studies
Department of Economics
Environmental Economics AP/ECON 3340
Fall 2022

Instructor: Dr. Andrea Podhorsky

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Course Webpage: <http://eclass.yorku.ca>

Virtual Office Hours: Fridays 12:00 pm – 1:15 pm

(Please sign up on eClass to schedule a 15-minute appointment on Zoom.)

Lecture Time and Location: Mondays, 4:00 pm to 7:00 pm; Location: CLH J

Course Description:

Undue environmental degradation occurs because there are no markets for many environmental goods and services. The objective of this course is to explore this market failure at an advanced level and to discuss and illustrate various policy tools in a variety of applications. The course examines such broad topics as public goods, externalities, limits on information and the potential usefulness of policy tools such as property rights, taxes and subsidies, cost-benefit analysis, and the provision of information.

Prerequisites: AP/ECON 1000 3.00 and AP/ECON 1010 3.00 or equivalents.

Required Course Materials:

Environmental Economics, by Charles D. Kolstad, 2nd Edition

Evaluation:

Test 1 (Topics 1, 2, 3)	40%	October 3
Test 2 (Topics 4, 5, 6, 7, 8)	40%	November 14
Class Presentation and Participation	20%	

This course will utilize the required course textbook in addition to numerous academic articles that are accessible to an undergraduate economics audience. We will engage in a “Flipped” Classroom Model where, during the semester, groups of students will be responsible for presenting papers and for responding to other students’ presentations. Class sessions will entail collaborative and active learning strategies including problem-solving and structured classroom discussions. Papers will be randomly assigned to the students by the professor and the assignments will be posted on eClass. The initial group presentation must be approximately 25 minutes long and must identify and directly address the main issues posed in the assigned article. Presentation responses should be about 5 minutes long and should add significant value to the initial presentation. Presentation and response guidelines will be posted on eClass.

Grading Policy:

- There is no final exam in this course.
- If a student misses a test, there will be no make-up test. The weight of the missed test will be transferred to the other test only for medical reasons. The student must provide the instructor with an attending physician's statement within one week of the missed exam.
- If a student misses both tests or fails to give their assigned article presentation for medical reasons, the student must provide the instructor with an attending physician's statement within one week of the missed obligation(s) and will complete an original term paper on a topic covered by the course that is assigned by the professor. The length and requirements of the term paper will be determined by the professor according to how much of the course work has not been completed.
- Final course grades may be adjusted to conform to Program or Faculty grades.

Topics and Schedule:**Topic 1 (Sept. 12)**

The Environment and Economics (Kolstad Chapter 1); Normative and Positive Economic Analysis (Kolstad Chapter 2)

Topic 2 (Sept. 19)

Social Choice: How Much Environmental Protection? (Kolstad Chapter 3); Efficiency and Markets (Kolstad Chapter 4)

Topic 3 (Sept. 26)

Market Failure: Public Goods, Public Bads, and Externalities (Kolstad Chapter 5)

Topic 4 (Oct. 3)

Making Decisions about Environmental Programs (Kolstad Chapter 6); **Test 1**

Nordhaus, W.D. (2007). "A Review of the Stern Review on the Economics of Climate Change." *Journal of Economic Literature* 45:686-702.

<http://piketty.pse.ens.fr/files/Nordhaus2007b.pdf>

Oct. 10 – Reading Week**Topic 5 (Oct. 17)**

Regulating Pollution (Kolstad Chapter 11); Emission Prices and Fees (Kolstad Chapter 12)

Topic 6 (Oct. 24)

Property Rights (Kolstad Ch 13); Regulation Over Space and Time (Kolstad Ch 14)

Topic 7 (Oct. 31)

Regulation with Unknown Control Costs (Kolstad Ch 15); Audits, Enforcement and Moral Hazard (Kolstad Ch 16)

Topic 8 (Nov. 7)

Voluntary Actions and Agreements (Kolstad Ch 17); Managing Risk and Uncertainty (Kolstad Ch 18)

Nov. 14

Presentations (Articles 1 – 2); **Test 2**

Nov. 21

Presentations (Articles 3 – 8)

Nov. 28

Presentations (Articles 9 – 14)

Dec. 5

Presentations (Articles 15 – 20)

Articles:

1. Portney, P. (2000), "Environmental Problems and Policy", *Journal of Economic Perspectives*, 14: 199-206
2. Dasgupta, P. (1990), "The Environment as a Commodity", *Oxford Review of Economic Policy*, 6(1): 51-67.
3. Kolstad, C.D. (1987), "Uniformity vs. Differentiation in Regulating Externalities", *Journal of Environmental Economics and Management*, 14(4): 386-99.
4. Blackman, A., Li, Z., and A.A. Liu (2018), "Efficacy of Command-and-Control and Market-Based Environmental Regulation in Developing Countries", *Annual Review of Resource Economics*, 10: 381-404.
5. Duggan, J. and J. Roberts (2002), "Implementing the Efficient Allocation of Pollution", *American Economic Review*, 92(4): 1070-8.
6. Böhringer, C. and A. Lange (2005), "Economic Implications of Alternative Allocation Schemes for Emission Allowances", *Scandinavian Journal of Economics*, 107(3): 563-81.
7. Alberini, A. and K. Segerson (2002), "Assessing Voluntary Programs to Improve Environmental Quality", *Environmental and Resource Economics*, 22: 157- 84.
8. Arora, S. and T.N. Cason (1995), "An Experiment in Voluntary Environmental Regulation: Participation in EPA's 33/50 Program", *Journal of Environmental Economics and Management*, 28(3): 271- 86.

9. Antweiler, W. and K. Harrison (2007), "Canada's Voluntary ARET Program: Limited Success despite Industry Co-sponsorship", *Journal of Policy Analysis and Management*, 26(4): 755-773.
10. Segerson, K. and T.J. Miceli (1998), "Voluntary Environmental Agreements: Good or Bad News for Environmental Protection?", *Journal of Environmental Economics and Management*, 36(2): 109- 30.
11. Barriau, P. and B. Sinclair-Desgagné (2006), "On Precautionary Policies", *Management Science*, 52(8): 1145-54.
12. Barrett, S. (2006), "Kyoto and Beyond: Alternative Approaches to Global Warming", *American Economic Review*, 96(2): 22-5.
13. Candel-Sanchez, F. (2006), "The Externalities Problem of Transboundary and Persistent Pollution", *Journal of Environmental Economics and Management*, 52(1): 517–26.
14. Nordhaus, W. (2006), "After Kyoto: Alternative Mechanisms to Control Global Warming", *American Economic Review, Papers and Proceedings*, 96(2): 31-4.
15. Millner, A. (2013). "On Welfare Frameworks and Catastrophic Risk." *Journal of Environmental Economics and Management* 65:310-325.
16. Pindyck, R.S. (2013). "Climate Change Policy: What Do the Models Tell Us?" *Journal of Economic Literature* 51(3): 860-872.
17. Millner, Antony, and Heal, Geoffrey, "Uncertainty and decision making in climate change economics", *Review of Environmental Economics and Policy*, Vol. 8 (1), pp 120:137, 2014.
18. Stern, N., Stiglitz, J. in collaboration with C. Taylor (2022). "The economics of immense risk, urgent action and radical change: towards new approaches to the economics of climate change" *Journal of Economic Methodology*
<https://www.tandfonline.com/doi/epub/10.1080/1350178X.2022.2040740?needAccess=true>
19. Banzhaf, Ma, and Timmins (2019). "Environmental Justice: The Economics of Race, Place, and Pollution," *Journal of Economic Perspectives*.
20. Mendelsohn, Dinar and Williams (2006). "The distributional impact of climate change on rich and poor countries," *Environment and Development Economics*.

Important Course Information for Students:

All students must read and acknowledge the [LA&PS Course Policies](#) as they regard: Intellectual property notice, Accessibility, Policies related to Zoom meetings, Student conduct and Academic integrity.

In addition, all students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage <https://secretariat.info.yorku.ca/files/CourseInformationForStudentsAugust2012-.pdf> regarding the Senate Policy on Academic Honesty and the Academic Integrity Website; Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities; Student Conduct Standards and Religious Observance Accommodation.

Course Add/Drop Deadlines:

Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 20
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 4
Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 11
Course Withdrawal Period (withdraw from a course and receive a grade of “W” on transcript – see note below)	Nov. 13 – Dec. 7

Policy and Guidelines on Withdrawn from Course:

<https://secretariat-policies.info.yorku.ca/policies/withdrawn-from-course-w-policy-and-guidelines/>