AEC 923
Advanced Environmental and Resource Economics
Topics, Readings, and Scheduling


Other readings are provided on the CD for the course and most are available using the main library’s electronic resources

Presenters: Provide an outline of your presentation to Dr. Hoehn on the class meeting day prior to your presentation. Send the outline using an Acrobat pdf file sent by e-mail attachment. Ask for a reply from Dr. Hoehn to confirm his receipt of the file.

1. **Introduction to AEC 923**
   a. Course organization
      i. Syllabus
      ii. Readings
   b. People

2. **Environmental and Resource Economics (ERE)**
   a. Review of mathematical tools such as Fundamental Welfare Theorems, Kuhn-Tucker conditions, optimization, and dual functions. Introductory review of ERE concepts: property rights, externality, common property, open access resource, prisoner’s dilemma, non-rivalry, exclusion, Pareto efficiency, asymmetric information, moral hazard.
   b. Readings:

3. **Externalities: Pigouvian Taxes, Standards, and Efficiency I**
   a. Welfare theorems, Kuhn-Tucker conditions, optimization, Pigouvian taxes, emission standards, and quantity constraints
   b. Readings:
   c. Homework due: A written explanation of the economic meaning of the model on page 38. Explain the significance of the functions and variables. Explain in words the
meaning of the first order conditions on page 39. The discussion should be typed and
given a heading with the student’s name and date. Be prepared to discuss in class.

4. **Externalities: Pigouvian Taxes, Standards, and Efficiency II**

   a. **Readings:**
      
      Chapter 4 in: *The Theory of Environmental Policy*, second edition, Cambridge,
      UK: Cambridge University Press, pps. 36-56, especially pps. 36-39.
      Hanley, Nick, Jason F. Shogren, and Ben White, 1997, “Pollution Taxes for the
      Efficient Control of Pollution,” Chapter 4 in: *Environmental Economics in

   b. 10 minute in-class student presentations on the 6 propositions in Baumol and Oates, C.
      4.
      1. 2. 3.
      4. 5. 6.

5. **Pigouvian Taxes in Theory and Practice**

   Fullerton, Don, and Sarah E. West, 2002, “Can Taxes on Cars and on Gasoline Mimic an
   (JEEM)*, 43:135-157. (20 minutes presentation, 10 minutes discussion)
   minutes presentation, 10 minutes discussion)
   Oates, Wallace E., 1995, “Green Taxes: Can We Protect the Environment and Improve the
   Tax System at the Same Time?,” *Southern Economic Journal*, 61(4):915-923. (10
   minutes presentation, 5 minutes discussion)

6. **The Double Dividend and Tax Interaction Effects**

   Goodstein, Eban, 2003, “The Death of the Pigouvian Tax?: Policy Implications from the
   Abatement Policies Increase Welfare?: The Fundamental Role of Distorted Factor
   Markets, *JEEM*, 37:52-84. (20 pres; 10 disc)
   Bohringer, Christoph, Wolfgang Wiegard, Collin Starkweather, and Anna Ruocco, 2003, “Green
   Tax Reforms and Computational Economics”: A Do-it-yourself Approach,”

7. **Taxes versus Quantity Controls under Uncertainty**

   Instruments: Price or Quantity Controls?”, Chapter 5 in: *The Theory of Environmental

a. 10 minute in-class student presentations on the 6 propositions in Baumol and Oates, C. 4.
   1. 2. 3.
   4. 5. 6.

8. **Standards in Practice**


9. **Ronald Coase and Environmental Policy**


10 minute in-class student presentations on sections 2 and 3 of Coase:
   2. 3.
   5 minute in-class presentation of sections 4 to 10
   4. 5. 6.
   7. 8. 9.
   10.

10. **A Coasian Implication: Trading in Pollution Abatement**

a. Presentation of section 5.2 (pres 25; disc 10)
b. Presentation of section 5.3-5.4 (pres 25; disc 10)

11. **Tradeable Permits**

12. **Tradeable Permits and Transactions Costs**


13. **Environmental Liability: Models**


14. **Environmental Liability: empirical analysis**


15. **Public Goods and Private Provision**


16. **Ethics and Social Capital in Public Goods Supply**


17. **Midterm** (given sometime between October 25 and November 1 and between sections 14 and 18)

18. **Common Property: Scarcity and Property Rights I**


19. **Common Property: Scarcity and Property Rights II**


20. **Information Disclosure and Emissions Control**


Foulon, Jerome, Paul Lanoie, and Benoit Laplanche, 2002, “Incentives for Pollution Control: Regulation or Information?,” JEEM, 44:169-187. (15 pres; 5 disc)


21. **Information and Green Products**

Teisl, Mario F., Brian Roe, and Robert Hicks, “Can Eco-Labels Tune a Market?: Evidence from Dolphin-Safe Labeling,” *JEEM*, 43:339-359. (15 pres; 10 disc)

Kotchen, Matthew J., and Michael R. Moore, 2004a, “Private Provision of Environmental Public Goods: Household Participation in Green-Electricity Programs,” School of Natural Resources and the Environment, University of Michigan, Ann Arbor, MI. (15 pres; 10 disc)

Kotchen, Matthew J., and Michael R. Moore, 2004b, “Conservation Behavior: From Voluntary Restraint to a Voluntary Price Premium,” School of Natural Resources and the Environment, University of Michigan, Ann Arbor, MI. (15 pres; 10 disc)

22. **Information, Grades, and Credence Goods**

Reardon, Thomas, Jean-Marie Codron, Lawrence Busch, James Bingen, and Craig Harris, 2001, “Global Change in Agrifood Grades and Standards: Agribusiness Strategic Responses in Developing Countries,” *International Food and Agribusiness Marketing*, 2(3):421-435. (10 pres; 5 disc)


23. **Political Economy**


24. **The Porter Hypothesis, Technological Change, and the Kuznets Curve**


25. **Trade and Environmental Quality: What Do the Data Say?**


26. **Valuation Method in Action and in Theory: In action and Theory**


27. **Valuation: Surveys and Stated Preference Methods**

Brown, Thomas C., “Introduction to Stated Preference Methods,” Chapter 4 in Champ and Brown.

Boyle, Kevin J., “Contingent Valuation in Practice,” Chapter 5 in Champ and Brown.

28. **Valuation: Revealed Preference Methods**


29. **Valuation: Defensive Behavior, Damage Costs, and Benefit Transfer**
