



B.E. International Program

Faculty of Economics, Thammasat University



Course Syllabus

EE476 Environmental Economics

Semester 1/2015 (August 17 - December 4, 2015)

Number of credits:	3 credits
Lecture Time:	Tuesday and Thursday, 12.30-14.00
Classroom:	Room#204 Faculty of Economics, Thammasat University Tha Prachan Campus
Instructor:	Nondh Nuchmorn Email: nondh@econ.tu.ac.th Office: Room 17 (60 th anniversary building) Office hour: Tue, Thu 14.00-16.30
Moodle enrolment key:	2245

Course Description:

Important environmental problems and related theories, the concepts of efficiency and cost-benefit analysis. The effectiveness of policies, measures, and tools to control and solve environmental problems. The estimation of effects of various economic development projects on environment. The concept of sustainable development, social welfare indicators that incorporate environmental impacts.

Prerequisites: EE311 (having completed either EE320 or EE325 is recommended)

Evaluation

Mid-term examination	35%
Final examination	35%
Individual presentation	10%
Group project	10%
Assignments	10%

Lecture Schedule

Date	Topics	Read
Tue, 18 th Aug	Course Overview	
Thu, 20 th Aug	Part 1 The Economy and the Environment - The Human-Environment Relationship - Pollutions: Emissions, Ambient Quality, and Damages - The Fundamental Balance and Carrying Capacity - Anthropocentrism, Biocentrism, Gaia, and Anthropocene - Sustainability	F Ch.2 K Ch.2 D&D Ch.2
Tue, 25 th Aug	Part 2 Economic Concepts as Analytical Tools - Public Bads - Externalities - Pollution Control: A General Model - Liability and Polluter-Pay-Principle (PPP) - Property Rights and the Coase Theorem	F Ch.4, 5, 10 K Ch.4, 5, 6 T&L Ch.14 D&D Ch.1, 6, 7, 8, 12
Thu, 27 th Aug		
Tue, 1 st Sep	Part 3 Analysis of Environmental Policies - Types of Policy Instruments - Criteria for Evaluating Environmental Policies	F Ch.9, 10 K Ch.2, 4, 8 D&D Ch.4
Thu, 3 rd Sep	3.1 Command-and-Control Strategies Environmental Standards	F Ch.11 K Ch.8 D&D Ch.9
Tue, 8 th Sep	3.2 Incentive-Based Strategies - Emission Taxes (Pigovian Fees) - Subsidies - Case of Imperfect Competition	F Ch.12 K Ch.7
Thu, 10 th Sep		
Tue, 15 th Sep	Transferrable Discharge Permits	F Ch.13 K Ch.9
Thu, 17 th Sep	3.3 Policy Combination - Regulation with Unknown Control Costs - Permits or Fees? - Stationary vs. Mobile Source Pollution	K Ch.10 T&L Ch.15, 17 D&D Ch.14
Tue, 22 nd Sep		
Thu, 24 th Sep	Part 4 Institutions of Environmental Policies - Political Economy Model of Regulation - Economic Analysis of Environmental Laws - Audits, Enforcement, and Moral Hazard - State and Local Environmental Issues	F Ch.17 K Ch.8, 11
Tue, 29 th Sep		
Thu, 1 st Oct		
Mid-term Exam: Thursday, 8 th October 2015, 12.30-14.00		

Date	Topics	Read
Tue, 13 th Oct	Part 5 Environmental Risks, Liability, and Insurance - Thinking about Risks - Environmental Insurance - Environmental Liability Bond	K Ch.12 T&L Ch.18 Sunstein (2002)
Thu, 15 th Oct		
Tue, 20 th Oct		
Thu, 22 nd Oct	Part 6 Economics of Green Product Development - Environmental Product Standards - Environmental Labelling - Subsidizing Innovation in Green Product Design	Kuhn (2005)
Tue, 27 th Oct		
Thu, 29 th Oct		
Tue, 3 rd Nov	Part 7 Environmental Evaluation - Benefit-Cost Analysis - Contingent Value Methods (CVM) - Hedonic Price Method - Defensive Expenditure - Travel Cost Method - Application on Payment for Ecosystem Service (PES)	K Ch.15-18 F Ch.7-8 T&L Ch.3, 4
Thu, 5 th Nov		
Tue, 10 th Nov		
Thu, 12 th Nov		
Tue, 17 th Nov	Part 8 International Environmental Issues - International Trade and Environment - Pollution Haven Hypothesis - Multilateral Environmental Agreements (MEAs)	K Ch.13 F Ch.19-21 T&L Ch.15, 20
Thu, 19 th Nov		
Tue, 24 th Nov		
Thu, 26 th Nov	Economics of Climate Change	Guest lecturer
Tue, 1 st Dec	Project Presentation	
Thu, 3 rd Dec		
Final Exam: Wednesday, 9th December 2015, 9.00-12.00		

Reading Materials

1. **Kolstad, Charls D. (2000). Environmental Economics. New York: Oxford University Press. [K]
2. *Field, Barry C.; and Martha K. Field (2002). Environmental Economics: An Introduction. Third Edition. New York: McGraw-Hill/Irwin. [F]
3. *Tietenberg, Tom (2003). Environmental and Natural Resource Economics. Sixth Edition. Pearson International Edition. New York: Addison Wesley. [T&L]
4. Sunstein, R. Cass (2002). Risk and Reason: Safety, Law, and the Environment. Cambridge University Press.
5. Kuhn, Michael (2005). The Greening of the Markets: Product Competition, Pollution, and Policy Making in a Duopoly. New Horizons in Environmental Economics Series. Edward Elgar Publishing, Inc.
6. Other assigned reading materials