MASUDEM
MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT

COURSE OUTLINE

Name of course	**ENVIRONMENTAL ECONOMICS AND POLICY**		
Lector		e-mail:	
Seminar Instructor		e-mail:	
Week 1	**Topic 1 – Introduction to Environmental Economics**	Lecture, hours	Seminar, hours
	• Understanding the relationship between the economy and the environment • The roles of markets and externalities • Fundamental concepts: scarcity, opportunity cost, marginalism	**SWU** 3	-
Week 2	**Topic 2 – *Market Failures and the Environment***	Lecture, hours	Seminar, hours
	• Exploration of market failures: public goods, externalities, information asymmetry • The tragedy of the commons and its implications • Historical case studies highlighting market failures	**SWU** 2	1
Week 3	**Topic 3 – *Economic Valuation of Environmental Resources***	Lecture, hours	Seminar, hours
	• Introduction to non-market valuation techniques • Contingent valuation, hedonic pricing, and travel-cost methods • Challenges and criticisms of valuation techniques	**SWU** 2	1
Week 4	**Topic 4 – *Cost – Benefit Analysis in Environmental Decision Making***	Lecture, hours	Seminar, hours
	• Principles of cost – benefit analysis • Integrating environmental considerations • Real – world applications and case studies	**SWU** 2	1
Week 5	**Topic 5 – *Non – Renewable Resources: Economics and Policy***	Lecture, hours	Seminar, hours
	• Economic principles governing non-renewable resources • Hotellling's Rule, scarcity, and exploration • Policy implications for fossil fuels, minerals, and other non – renewables	2	1
Week 6	**Topic 6 – Economics of Renewable Resources**	Lecture, hours	Seminar, hours
	• Dynamics of renewable resources: fisheries, forests, freshwater • Concept of Maximum Sustainable Yield • Policies for sustainable management	3	
Week 7	**Topic 7 – Climate Change Economics**	Lecture, hours	Seminar, hours
	• Economic theories around climate change • Cost inaction VS. Cost of mitigation • Market – based solutions: carbon pricing, cap – and – trade	2	1

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	• Current discussion and contrast views of climate change		
Week 8	**Examination**	Lecture, hours	Seminar, hours
	• Midterm (Implementation Proposal Report)		3
Week 9	**Topic 8 –** ***Environmental Policy Instruments, Justice and Equity***	Lecture, hours	Seminar, hours
	• Command – and – control VS. Market – based instruments, taxes, subsidies, and tradeable permits • Analysis of policy efficiency and effectiveness • Distributional effects of environmental policies with case studies on environmental justice challenges	2	1
Week 10	**Topic 9 – International Environmental Agreements**	Lecture, hours	Seminar, hours
	• Challenges in international environmental cooperation • Case studies: Kyoto Protocol, Paris Agreement, Montreal Protocol • Role of international organizations: UNEP, IPCC and their controversial impact	2	1
Week 11	**Topic 10 –** ***Economics of Biodiversity and Conservation***	Lecture, hours	Seminar, hours
	• Valuing biodiversity: instrumental vs. intrinsic values • Cost – effectiveness of conservation strategies • Case studies on global conservation initiatives	2	1
Week 12	**Topic 11 –** ***Behavioral Economics and the Environment***	Lecture, hours	Seminar, hours
	• Understanding human behavior and biases • Nudge theory and its application to environmental issues • Case studies: single – use plastics, water conservation	2	1
Week 13	**Topic 12 –** ***Sustainability and Development: Integrating Economics, Environment, and Society***	Lecture, hours	Seminar, hours
	• The Environmental Kuznets Curve hypothesis • Sustainable development goals and their economic implications and role of decision – making • Strategies for achieving a balance between economic growth, environmental protection, and social equity	2	1

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Week 14	**Examination**	Lecture, hours	Seminar, hours
	• Final (Completed Report)		3

RECOMMENDED SOURCES

Compulsory literature:

1. Callan, Scott J. and Thomas, Janet M. 2007. Environmental Economics and Management: Theory, Policy, and Applications. Thomson South-Western. (CC)
2. Field, Barry C. and Field, Martha K. 2006. Environmental Economics: An Introduction. 4th Ed. McGraw-Hill. (FF)
3. Turner, Pearce, and Bateman. 1994. Environmental Economics: An Elementary Introduction. Harvester Wheatsheaf. (TB)
4. Wagner, Gernot, and Martin Weitzman. Climate Shock. Princeton University Press, February 22, 2015.
5. Henderson, Rebecca, Gulati, Ranjay, and Michael Tushman. Leading Sustainable Change: An Organizational Perspective. Oxford University Press, January 29, 2015.
6. Jorgenson, Dale W., Richard J. Goettle, Mun S. Ho, and Peter J. Wilcoxen. "Double Dividend: Environmental Taxes and Fiscal Reform in the United States." Cambridge, Massachusetts: MIT Press. November 2013.

Suggested reading:

1. Janet M. Thomas and Scott J. Callan (2010) "Environmental Economics: Applications, Policy, and Theory". South-Western Cengage Learning: USA.
2. Tom Tietenberg and Lynne Lewis (2018) "Environmental and Natural Resource Economics". Routledge: USA.
3. Barry C. Field and Martha K. Field (2009) "Environmental Economics: An Introduction" McGraw-Hill
4. Stavins, Robert N. Economics of Climate Change and Environmental Policy: Selected Papers of Robert N. Stavins, 2000-2011. Northampton, Massachusetts: Edward Elgar Publishing, Inc. 2013.
5. Stavins, Robert N. Economics of the Environment. New York: W.W. Norton. January 2012.
6. Henderson, Rebecca, and Richard G. Newell, eds. Accelerating Energy Innovation: Insights from Multiple Sectors. University of Chicago Press for National Bureau of Economic Research, 2011.

Selected internet sources:

1. Environmental attitudes among Europeans: the moderating effects of volunteering and sports club membership
Authors Christoph BührenPamela Wicker
Content type:Research ArticlePublished: 23 July 2023
https://link.springer.com/article/10.1007/s10018-023-00373-1
2. Tsiarapas, A., Mallios, Z. Estimating the long-term impact of market power on the welfare gains from groundwater markets. *Environ Econ Policy Stud* 25, 377–406 (2023). https://doi.org/10.1007/s10018-023-00368-y
3. akita, A., Zhang, D. Environmental policies with variable pollution intensity in a differentiated oligopoly. *Environ Econ Policy Stud* 25, 269–283 (2023). https://doi.org/10.1007/s10018-022-00358-6
4. Aldy, Joseph E., and Robert N. Stavins, eds. Post-Kyoto International Climate Policy: Implementing Architectures for Agreement. Cambridge, UK: Cambridge University Press, 2010. https://www.tandfonline.com/doi/abs/10.1080/19390459.2011.604555
5. Robert N. Stavins, and Joseph E. Aldy, eds. (2009). Post-Kyoto International Climate Policy: Summary for Policymakers. Cambridge, UK: Cambridge University Press. September 2009. https://www.belfercenter.org/publication/post-kyoto-international-climate-policy-summary-policymakers
6. Aldy, Joseph, and Robert N. Stavins, eds. (2007). Architectures for Agreement Addressing Global Climate Change in the Post-Kyoto World. UK: Cambridge University Press. https://www.belfercenter.org/publication/architectures-agreement-addressing-global-climate-change-post-kyoto-world

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ASSESSMENT CRITERIA	
Assignment / Workshop	Maximum 25 points
Midterm (Implementation Proposal Report)	Maximum 35 points
Final (Completed Report)	Maximum 40 points

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