Environmental Economics II (B.Sc.)

Course level: B.Sc.
Course type: Lecture plus tutorials
Contact hours per week: 3 hrs. lecture course, 1 hr. tutorial (3/1 SWS)
ECTS: 6 credit points

Lecture course

Instructor: Prof. Timo Goeschl, Ph.D.
Office: Room #220, Bergheimer Str. 20
Office hours: Tuesdays, 17:00 – 18:00 (email/call the office for appointments: office@eco.uni-heidelberg.de or ☎ 54-8011)
Lecture Hours: Monday, 13.15 – 15:30
Classroom: Seminar Room #215 Bergheimer Str. 20

Tutorials

Tutor: Dr. Johannes Diederich
Email: Diederich@eco.uni-heidelberg.de
Office: Room #218, Bergheimer Str. 20
Office hours: Tuesdays, 11.00 to 12.00 (email for appointments)
Tutorial Hours: Tuesday, 14.30 – 16.00, fortnightly
Classroom: Seminar Room #215 Bergheimer Str. 20

Course Language: English

Comment

This course is the second installment in the environmental economics sequence at the AWI. While Environmental Economics I adopts primarily a normative, welfare-theoretic perspective, Environmental Economics II deals with some of the most fundamental questions at the interface between nature and society from a positive perspective.

Course content

Will economic growth make us collectively choke on our own pollution? Is international trade good or bad for the environment? What is the economic dimension of the irreversible loss of biological diversity on planet Earth? – Questions such as these are the material for the present course in positive environmental economics for undergraduates. It will examine a number of topics such as the economics of biological diversity, the economics of growth and the environment, the relationship between trade and the environment, the role of technological change and the environment, and issues of 'environmental justice". Students should be prepared to engage with a variety of methodologies (theoretical, numerical, empirical)

Course requirements

(1) Familiarity with intermediate micro- and macroeconomics and plus empirical methods
(2) Familiarity with the English language
(3) Willingness to prepare for classes

Examination

The assessment will be based on the performance in a 90 minute closed-book exam at the end of the course.

Literature

There is no dedicated textbook for this course. The course will rely exclusively on a series of readings listed below. These will be available for download from the Moodle website for this course.

Timetable
The following provides an indicative timetable for the course. Note the deviation from the normal schedule in **week 7**.

Week	Lecture Date	Topic	Tutorial
1	Oct. 12	Introduction to the course; logistical announcements	
2	Oct. 19	Growth and the Environment I	
3	Oct. 26	Growth and the Environment II	
4	Nov. 2	Trade and the Environment I	X
5	Nov. 9	Trade and the Environment II	
6	Nov. 16	Technological Change and the Environment I	X
7	Nov. **26**	Technological Change and the Environment II	
8	Nov.30	Global Environmental Problems I	X
9	Dec. 7	Global Environmental Problems II	
10	Dec. 14	Distributive Aspects of Environmental Policy and Environmental Justice I	X
11	Dec. 21	Distributive Aspects of Environmental Policy and Environmental Justice II	
12	Jan. 11	The Economics of Biodiversity I	X
13	Jan. 18	The Economics of Biodiversity II	
14	Jan. 25	The Economics of Biodiversity III	X
15	Feb. 1	**FINAL EXAM**	

Required readings

Weeks 2 and 3: Growth and the Environment

Carson, R. T. (2010). The environmental Kuznets curve: seeking empirical regularity and theoretical structure. *Review of Environmental Economics and Policy*, *4*(1), 3-23.

Brock, W. and M. S. Taylor (2010): The Green Solow Model. *Journal of Economic Growth* 15, 127-153.

Weeks 4 and 5: Trade and the Environment

Biggs, D., Courchamp, F., Martin, R., & Possingham, H. P. (2013). Legal trade of Africa's rhino horns. *Science*, *339*(6123), 1038-1039.

Karp, L. (2011): The Environment and Trade. *Annual Review of Resource Economics* 3, 397-417.

Weeks 6 and 7: Technological Change and the Environment

Stefan Ambec, Mark A. Cohen, Stewart Elgie, Paul Lanoie (2013): The Porter Hypothesis at 20: Can Environmental Regulation Enhance Innovation and Competitiveness? *Review of Environmental Economics and Policy* 7(1), 2-22.

Jaffe, A. B., Newell, R. G., & Stavins, R. N. (2005). A tale of two market failures: Technology and environmental policy. *Ecological Economics*, *54*(2), 164-174.

Weeks 8 and 9: Global Environmental Problems

Olmstead, S. M., & Stavins, R. N. (2012). Three key elements of a post-2012 international climate policy architecture. *Review of Environmental Economics and Policy*, *6*(1), 65-85.

Barrett, S. (2014). Solar Geoengineering's Brave New World: Thoughts on the Governance of an Unprecedented Technology. *Review of Environmental Economics and Policy*, *8*(2), 249-269.

Weeks 10 and 11: Distributive Aspects of Environmental Policy and Environmental Justice

Banzhaf, S. (2011): Environmental Justice. *Encyclopedia of Resource, Energy, and Environmental Economics*.

Fullerton, D. (2011): Six Distributional Effects of Environmental Policy. *Risk Analysis* 31(6), 923-929.

Weeks 12 to 14: The Economics of Biodiversity

Ando, A., Camm, J., Polasky, S., & Solow, A. (1998). Species distributions, land values, and efficient conservation. *Science 279*(5359), 2126-2128.

Metrick, A. and M. Weitzman (1998): Conflicts and Choices in Biodiversity Preservation. *Journal of Economic Perspectives* 12(3), 21-34.

Simpson, R.D., R. Sedjo, J. Reid (1996): Valuing Biodiversity for Use in Pharmaceutical Research. *Journal of Political Economy* 104(1), 163-185.