ENV-620

Environmental Economics for Engineers

Thalmann Philippe, Vielle Marc, Vöhringer Frank

Cursus	Sem.	Type
Civil & Environmental Engineering		Opt.

Language of teaching	English
Credits	2
Session	
Exam	Written
Workload	60h
Hours	**29**
Courses	24
Exercises	3
TP	2
Number of positions	

Frequency

Every 2 years

Remark

Next time: Spring 2022, Min. 5 persons

Summary

Economic analysis (supply, demand, prices, elasticities), applied to environmental issues: externalities, instruments of environmental regulation (voluntary approaches, incentive taxes, emissions markets), assessment of economic impacts and valuation of natural resources, cost-benefit analysis.

Content

Introduction to economics: supply, demand, markets and prices (3 periods, PT)
Environmental goods and environmental policy (6 p, MV)
Emissions trading (3 p, FV)
Economic decision making, in particular cost-benefit analysis (3 p, PT)
Assessment of economic impacts and valuation of natural resources (6 p, PT)
Decisions under uncertainty, economics of innovation (3 p, FV)
Environmental policy-making (3 p, PT)

Note

It will be organised in half-days on Thursday mornings during the spring semester.
It will only be given for a minimum of 5 students.

Keywords

Environmental economics, environmental policy, cost-benefit analysis

Learning Outcomes

By the end of the course, the student must be able to:

- to understand the basic mechanisms of markets
- to explain the differences between the main types of instruments of environmental policy
- to explain the workings of these instruments

Resources

Bibliography

Bontems, P. and G. Rotillon (2013). L'Economie de l'Environnement, La Découverte
Sterner, T. and J. Coria (2012). Policy Instruments for Environmental and Natural Resource Management. Washington, DC, USA, RFF Press / Routledge

Ressources en bibliothèque

- Bontems and Rotillon (2013). L'Economie de l'Environnement
- Sterner and (2012). Policy Instruments for Environmental and Natural Resource Management

Websites

- http://leure.epfl.ch/education