

ENV-620

Environmental Economics for Engineers

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| Cursus | Sem. | Type |
|-----------------------------------|-------------|-------------|
| Civil & Environmental Engineering | | Opt. |

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|----------------------------|-----------|
| 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

canceled, replacement course ENV-610

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 Wednesdays 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
Sternier, T. and J. Coria (2012). Policy Instruments for Environmental and Natural Resource Management.
Washington, DC, USA, RFF Press / Routledge

Ressources en bibliothèque

- [Sternier and \(2012\). Policy Instruments for Environmental and Natural Resource Management](#)
- [Bontems and Rotillon \(2013\). L'Economie de l'Environnement](#)

Websites

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