GHENT UNIVERSITY

Course Specifications

Valid in the academic year 2025-2026

Environmental Economics and Policy (FOOO752)

Course size *(nominal values; actual values may depend on programme)*

Credits 6.0 **Study time 180 h**

Course offerings and teaching methods in academic year 2025-2026

A (semester 2)	Dutch	Gent	lecture
			group work
B (semester 2)	Dutch	Gent	lecture

Lecturers in academic year 2025-2026

Bleys, Brent	EB21	lecturer-in-charge
Ovaere, Marten	EB21	co-lecturer

Offered in the following programmes in 2025-2026	crdts	offering
Master of Science in Teaching in Economics(main subject Business Economics)	6	A
Master of Science in Teaching in Science and Technology(main subject Chemistry)	4	B
Master of Science in Chemistry(main subject (Bio)Organic and Polymer Chemistry)	4	B
Master of Science in Business Economics (main subject Accountancy)	6	A
Master of Science in Business Economics (Double Degree)(main subject Accountancy)	6	A
Master of Science in Chemistry(main subject Analytical and Environmental Chemistry)	4	B
Master of Science in Business Economics (Double Degree)(main subject Corporate Finance)	6	A
Master of Science in Business Economics (main subject Corporate Finance)	6	A
Master of Science in Business Economics (Double Degree)(main subject Marketing)	6	A
Master of Science in Business Economics (main subject Marketing)	6	A
Master of Science in Chemistry(main subject Materials and Nano Chemistry)	4	B
Master of Science in Biochemistry and Biotechnology	4	B
Master of Science in Biology	6	A, B
Master of Science in Bioscience Engineering: Environmental Technology	4	B
Master of Science in Complementary Studies in Economics	6	A
Master of Science in Computer Science	4	B
Master of Science in Geology	4	B
Master of Science in Physics and Astronomy	4	B
Elective Set Economics	6	A

Teaching languages

Dutch

Keywords

environmental policy and instruments, economic valuation of environmental goods, environmental policy principles, market failure and government failure, ecological economics, sustainability

Position of the course

The course introduces an economic analysis of environmental problems and environmental policy. Its main building blocks include the undersupply of public goods, the theory of externalities and market failure versus government failure. With respect to policy analysis, the use of economic instruments in environmental policy (command-and-control, charges, systems of emissions trading and voluntary agreements) is assessed using a series of criteria. Next, we focus on different

approaches to estimate the costs and benefits of environmental policy and we look at different methods to determine the optimal level of policy interventions. Finally a number of additional topics will be discussed (e.g. ecological economics, pro-environmental behavior and behavioral models, transition management and scenarios) and integrated in the environmental economics framework.

Contents

1 Introduction: economics and the environment
2 Modelling environmental problems
  2.1 Introduction to microeconomics
  2.2 General model for environmental economics
3 Modelling environmental policy
  3.1 Criteria for environmental instruments
  3.2 Decentral instruments
  3.3 Central instruments
  3.4 Enforcement
4 Analysis of environmental policy
  4.1 Measuring benefits
  4.2 Measuring costs
  4.3 Decision methods
  4.4 Applications of Cost-Benefit Analysis
5 Additional topics: e.g. transition thinking and management, pro-environmental behavior, ecological economics, sustainable development

Initial competences

An introductory course of microeconomics (demand and supply, welfare analysis).

Final competences

1 Apply economic analysis on environmental problems - externalities and market failure.
2 Understand the problems with the supply of public goods and free-riding.
3 Understand the different decentralized and centralized tools for environmental policy-making.
4 Compare different instruments for environmental policy (effectiveness, efficiency, feasibility, political acceptability).
5 Understand the different methods to value the costs and benefits of environmental policy.
6 Understand the value of a social cost-benefit analysis.
7 Compare environmental economics to related fields (ecological economics, environmental psychology and transition management).

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Group work, Lecture

Extra information on the teaching methods

Ex cathedra teaching, for the additional topics we will have several group discussions.
Environmental economics and policy (4SP): no assignment

Study material

Type: Handbook

Name: Inleiding tot de milieueconomie
Indicative price: € 55
Optional: yes
Language : Dutch
Author : Proost & Rousseau
ISBN : 978-9-46344-195-7
Number of Pages : 465
Oldest Usable Edition : Older editions can all be used

Online Available : No
Available in the Library : Yes
Available through Student Association : Yes
Usability and Lifetime within the Course Unit : regularly
Usability and Lifetime within the Study Programme : one-time
Usability and Lifetime after the Study Programme : occasionally
Additional information: Handouts of the lectures will be available at Ufora. The course is structured according to the textbook “Inleiding tot de milieueconomie”, Proost & Rousseau, 2017. Additional material (papers, policy documents, ...) will be made available through Ufora.

References

- Inleiding tot de milieueconomie, S. Proost en S. Rousseau, 2017, Acco, ISBN: 9789463441957
- Milieu en milieubehoud, A. Verbruggen en S. Van Passel, 2016, Garant, ISBN: 9789044134704
- Environmental and Natural Resources Economics (9th Edition), T. Tietenberg and L. Lewis, 2011, Pearson Eduction, ISBN: 9780131392571

Course content-related study coaching

Hand-outs will be available through Ufora.

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment

Examination methods in case of periodic assessment during the second examination period

Written assessment

Examination methods in case of permanent assessment

Peer and/or self assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

Written exam (closed book).
Environmental economics and policy (4SP): no assignment

Calculation of the examination mark

Environmental economics and policy (4SP): end-of-term evaluation (100%).
Environmental economics and policy (6SP): end-of-term evaluation (66,7% of the final score) and permanent evaluation (33,3% of the final score). Students who did not participate in both evaluations (or scored below 8/20 for either component), cannot pass the course. If the weighted score would be 10 or above, the final score on the course will be reduced to 9/20.