



### ENVIRONMENTAL ECONOMICS

<b>Enrollment year</b>	2021/2022
<b>Academic year</b>	2021/2022
<b>Regulations</b>	DM270
<b>Academic discipline</b>	SECS-P/03 (FINANCE)
<b>Department</b>	DEPARTMENT OF CIVIL ENGINEERING AND ARCHITECTURE
<b>Course</b>	CIVIL AND ENVIRONMENTAL ENGINEERING
<b>Curriculum</b>	PERCORSO COMUNE
<b>Year of study</b>	1°
<b>Period</b>	2nd semester (07/03/2022 - 17/06/2022)
<b>ECTS</b>	6
<b>Lesson hours</b>	45 lesson hours
<b>Language</b>	Italian
<b>Activity type</b>	WRITTEN TEST
<b>Teacher</b>	ANGHINELLI STEFANIA (titolare) - 3 ECTS BOZZANO MONICA - 3 ECTS
<b>Prerequisites</b>	Basic knowledge of analytical geometry and differential calculus.
<b>Learning outcomes</b>	The course aims to introduce students to economic reasoning, to transmit the knowledge of the fundamental concepts of microeconomics and then to analyze the application of these concepts in environmental economics. At the end of the course students will have to be able to understand how the fundamental tools of environmental policies work: administrative standards, taxes, subsidies, pollution rights markets, and assessment of environmental assets.
<b>Course contents</b>	A) Microeconomics How economists think. Supply and demand. The rational choice of the consumer. Individual demand and aggregate demand. Production theory. Production costs. Perfect competition. The monopoly. Eq. General and efficiency of the markets.

B) Environmental economics

Environment and economic system. Economic functions of the environment. Social efficiency and environmental preservation. Minimization of social costs and efficient allocation of resources. Intertemporal efficiency. Environmental costs such as externalities. The Coase theorem and its limitations. Taxes on polluting emissions. Environmental taxes and minimization of social costs. Taxes and standards with imperfect information. Subsidies for emission reductions. The effectiveness criterion with respect to costs and the effects of a tax on emissions. The market for pollution rights. The value of the environment: evaluation of environmental assets. Direct methods and indirect methods of economic evaluation of environmental assets.

**Teaching methods**

Frontal lessons, exercises, discussion of cases.

**Reccomended or required readings**

- Mankiw-Taylor, "Principi di microeconomia", Zanichelli (chapters 1-3, 5-7, 10, 11, 13, 14);

- Musu "Introduzione all'economia dell'ambiente", Il Mulino, Bologna, (chapters 1, 2 e 3).

Teaching materials used by the teacher and other additional materials will be made available during the lessons on the e-learning website.

Any changes in the program will be communicated in details by the lecturers in the beginning of the course.

**Assessment methods**

Written test.

The exam questions include a series of multiple choice and/or true/false questions and open-ended questions, structured in several points. The latter may consist in terminological definitions, short synthetic essays, as well as the resolution of simple exercises and economic problems.

**Further information**

Office hours:

Bozzano: for simple and fast questions, at the end of the lessons during the first term; for longer issues, by appointment, also on-line.

Anghinelli, by appointment.

**Sustainable development goals - Agenda 2030**

[\\$ibl legenda sviluppo sostenibile](#)