SUBJECT DATASHEET

Environmental Economics

BMEGT42A001

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Environmental Economics

ID (subject code)	BMEGT42A001

Type of subject
contact unit

Course types and lessons

Type	*Lessons*
Lecture	2
Practice	0
Laboratory	0

Type of assessment
mid-term grade

Number of credits
2

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Princz-Jakovics Tibor	senior lecturer	princz-jakovics.tibor@gtk.bme.hu

Educational organisational unit for the subject
Department of Environmental Economics and Sustainability

Subject website
https://edu.gtk.bme.hu

Language of the subject
magyar - HU

Curricular role of the subject, recommended number of terms

Direct prerequisites

Strong	None
Weak	None
Parallel	None
Exclusion	None

Validity of the Subject Description
Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 580439/11/2024 registration number. Valid from: 29.05.2024.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to acquaint students with the theoretical and practical application of environmental economics, sustainability, and the European Union and Hungarian system of environmental regulation policy.

Academic results

Knowledge

1. The student has knowledge of the basic concepts, theories, national economic and international connections of environmental economics;
2. the typical sustainability and macro-level environmental indicators;
3. the possibilities and main principles of environmental regulation related to their special field of interest.

Skills

1. By applying the learned theories and methods, the student is able to explore and analyze the facts and fundamental relationships regarding the interactions of economic and environmental systems, formulate independent conclusions and critical comments;
2. follows and interprets international economic processes, as well as changes in relevant and related policies and legislation in the environmental field, and their effects. He takes these into account during his analyses, proposals and decisions;
3. can apply techniques for solving environmental-economic problems, problem solving methods, taking into account their application conditions and limitations.
4. Is able to cooperate with representatives of other fields of expertise.

Attitude

1. The student is receptive to receiving new information, new professional knowledge and methodologies, and is open to taking on new tasks and responsibilities that require cooperation and independence. The student strives to develop his knowledge and working relationships.
2. Accepts the opinions of others, as well as sectoral, national and European values (including social, ecological and sustainability aspects).

Independence and responsibility

1. Assumes responsibility for compliance with professional, legal, ethical standards and rules related to work and conduct.
2. The student is able to independently search and pre-process literature sources necessary to answer environmental questions related to their work.

Teaching methodology

Lectures, written and oral communication, use of IT tools and techniques.

Materials supporting learning

- Bartus Gábor – Szalai Ákos: Környezet, jog, gazdaságtan, Pázmány Press, Budapest, 2014
- (https://jak.ppke.hu/uploads/collection/205/file/Bartus-Szalai_Kornyezet_Jog_Gazdasagtan_2014_final.pdf)

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The evaluation of learning outcomes stated in point 2.2 is based on: summative assessments of the competencies acquired during the semester (2 mid-term exams).

Performance assessment methods

Detailed description of performance evaluations during the study period: Summative assessment: a complex, written evaluation of the knowledge and ability-type competence elements of the subject in the form of two mid-term exams. The mid-term exams focus on the assessment
of acquired knowledge and its application. The course material on which the evaluations are based on is determined by the lecturer of the subject, the available working time is 25 minutes.

Percentage of performance assessments, conducted during the study period, within the rating

- **1st summative assessment**: 50
- **2nd summative assessment**: 50
- **Total**: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

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Issuing grades

Excellent	92
Very good	85–91
Good	70–84
Satisfactory	55-69
Pass	40-54
Fail	0-39

Retake and late completion

1) Pursuant to the current CoS, the summative assessment can be retaken, repeated or completed late. 2) The summative assessment can be retaken, repeated or completed late for the first time during the late completion period free of charge. In the event of a repeat, the new result always overwrites the old one. 3) If the student is unable to obtain a grade other than 'Fail' even with the replacement according to point 2), they may make a second attempt to successfully complete the course after paying the fee specified in the re

Coursework required for the completion of the subject

participation in contact lessons	28
preparation for summative assessment	20
preparation for contact lessons	12
total	60

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 06.05.2024.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

In order to achieve the learning outcomes set out at point 2.2, the subject consists of the following thematic blocks. In the syllabi of the courses announced in each semester, these topics are scheduled according to the calendar and other conditions.

1 The subject and methods of environmental economics.

2 Global ecological-economic relations: ecological foundation. Basic relationships in environmental economics. Approaches to the relationship between the economy and nature. Ecological economics.

3 Growth, development and environmental protection. The limit of production possibilities and sustainability. Strong and weak sustainability. Theories on the relationship between growth and environmental quality. The environmental Kuznets curve. The concept of sustainable development.

4 Sustainability strategies, climate policy.

5 Problems of measuring economic performance. Environmental aspects of accounting for national economic performance. Sustainability indicators, new types of indicators.

6 External economic impact, public goods, discounting. The optimal level of environmental pollution - theories of Pigou and Coase.

7 The pollution chain model, the development of environmental damage. Types of environmental policies. Basic principles of environmental regulation and aspects of the choice of regulatory tools.

8 Basic principles of modern environmental policy. Environmental regulation based on the Coase theorem. Allocation of ownership rights and liability rules.

9 Environmental regulation based on Pigou's theorem: principles and types of direct regulations. Market for pollution rights.

10 Environmental regulation based on Pigou's theorem: principles and types of economic incentives.

11 Types of natural resources, the concept of natural capital, its entire economic value concept. Methods for valuation of natural capital. Optimum level of utilization of natural resources.

Additional lecturers

Dr. Bartus Gábor egyetemi adjunktus / senior lecturer bartus.gabor@gtk.bme.hu

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