



# **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

<i>Type</i>	<i>Lessons</i>
Lecture	2
Practice	0
Laboratory	0

### Type of assessment

mid-term  
grade

### Number of credits

2

### Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
-------------	-----------------	------------------------

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

Programme: **Elective subjects**

Subject Role: **Elective**

Recommended semester: **0**

---

### 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: 580884/8/2023 registration number. Valid from: 29.11.2023.

## 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. knowledge of the basic concepts, theories, national economy and international contexts 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. explore and analyze the facts and basic relations concerning the interactions of economic and environmental systems using the learned theories and methods, to formulate independent conclusions and critical remarks,
2. prepare decision-making proposals for technical-economic alternatives that include environmental issues in a significant way.
3. follow and interpret international economic processes, as well as changes in the relevant, related policies and legislation of the environmental field, and their effects. These are taken into account in their analyzes, proposals and decisions.
4. apply the techniques of solving environmental and economic problems, the problem solving methods, their application conditions and limitations.
5. work with other disciplines.

#### Attitude

1. demonstrate problem-sensitive, proactive behavior in order to ensure quality work, they are initiators.
2. susceptible to the reception of new information, new professional knowledge and methodologies, open to new, independent and cooperative tasks and responsibilities. They strive to develop their knowledge and working relationships.
3. are open to the changes of the wider economic and social environment of the given job, work organization, enterprise, they strive to follow and understand the changes.
4. are inclusive for views of others, on sectoral, national and European values (including social, ecological and sustainability aspects).

#### Independence and responsibility

1. take responsibility for analyzes, conclusions and decisions.
2. take responsibility for compliance with professional, legal, ethical standards and rules related to work and conduct.

### 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](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: 1. summative assessments of the competencies acquired during the semester (2 mid-term exams).

#### Performance assessment methods

A. 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

-

#### 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
participation 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: 06.11.2023.

# 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 bartus.gabor@gtk.bme.hu

### Approval and validity of subject requirements