SUBJECT DATASHEET

Environmental Economics

BMEGT42M410

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Environmental Economics

ID (subject code)	BMEGT42M410

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
3

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Bartus Gábor	senior lecturer	bartus.gabor@gtk.bme.hu

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

Subject website
https://edu.gtk.bme.hu/course/search.php?search=42A001

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: 580005/7/2022. Valid from: 26.01.2022.

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 econo-mics.
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 sig-nificant way.
3. follow and interpret international economic processes, as well as changes in the relevant, related policies and leg-islation 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 applica-tion 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, in-dependent and cooperative tasks and responsibilities. They strive to develop their knowledge and working relati-onships.
3. are open to the changes of the wider economic and social environment of the given job, work organization, enterpri-se, 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 susta-inability 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. Oral and written communication, use of IT, optional individual and group assignments and planning.

Materials supporting learning

- Tankönyvek, jegyzetek, letölthető anyagok:
- 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)
- Textbooks, notes, downloadable materials:
- Gábor Bartus - Ákos Szalai: Environment, Law, Economics, 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

A 2.2. Assessment of learning outcomes set out in 1. on the basis of the acts for the summative assessment of the competencies acquired during the semester (2 summative assessments).

Performance assessment methods

Detailed description of performance evaluations performed during the semester: Summarizing academic performance evaluation: a complex,
written way of evaluating the knowledge and ability type competence elements of the subject in the form of a test. The test focuses on the assessment of the acquired knowledge and its application. The part of the curriculum on which the assessment is based is determined
by the lecturer of the subject, the available working time is 45 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	85–92
Good	70–85
Satisfactory	55–70
Pass	40–55
Fail	< 40

Retake and late completion

The two summary assessments can be retaken. For the first time in the last week of the semester, the summary academic performance evaluations can be replaced and improved free of charge. In case of correction, the new result overwrites the old one in all cases. If the student is not able to obtain a grade different from the insufficient one with the replacement according to the first point, he / she can make a second attempt at the successful performance for the second time, in addition to paying the fee specified in the

Coursework required for the completion of the subject

Attending contact lessons	14x2=28
Preparing for contact lessons	24
Preparing for summative assessments	2x19=38
Preparing for exam	0
Total	90

Approval and validity of subject requirements

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

Subject includes the topics detailed in the course syllabus to ensure learning outcomes listed under 2.2. to be achieved. The schedule of topics in the course curriculum in each semester may be affected by the calendar and other constraints.

1 The relationship between society and its environment. The allocations and processes scrutinised by environmental economics.

2 The macroeconomic endogenous causes of pollution: (1) growth, (2) making choices due to scarcity, (3) the problem of measurement.

3 The microeconomic endogenous causes of pollution: (4) externalities, (5) common goods and free goods, (6) discounting

4 Pollution as a market failure: Pigovian and Coasian approaches to pollution control

5 General overview of environmental regulatory tools – Coasian approaches

6 Pigovian tools of environmental regulations: direct regulations and indirect regulations/economic incentives

7 Comparing direct and indirect/economic means of environmental regulations – aspects of choosing the appropriate regulatory tool.

8 Optimal use of natural resources: cost-benefit analyses in environmental economics, evaluation of non-market costs and benefits. The valuation of natural capital.

9 The economics of natural resource use. Renewable and non-renewable resources.

Additional lecturers

Dr. Bartus Gábor	egyetemi adjunktus – senior lecturer	bartus.gabor@gtk.bme.hu
Dr. Kósi Kálmán György	címzetes egyetemi tanár - honorary professor	kosi.kalman@gtk.bme.hu

Approval and validity of subject requirements