



SUBJECT DATASHEET

Risk Evaluation and Risk Management

BMEGT42V501

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

Risk Evaluation and Risk Management

ID (subject code)

BMEGT42V501

Type of subject

contact unit

Course types and lessons

<i>Type</i>	<i>Lessons</i>
Lecture	0
Practice	1
Laboratory	0

Type of assessment

exam grade

Number of credits

3

Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
Csigéné Dr. Nagypál Noémi	senior lecturer	csigene.noemi@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: **Regional and Environmental Economic Studies part-time programme, autumn start**

Subject Role: **Elective**

Recommended semester: **3**

Programme: **Regional and Environmental Economic Studies part-time programme, spring start**

Subject Role: **Elective**

Recommended semester: **4**

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: 580251/13/2023 registration number. Valid from: 29.03.2023.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to provide the description of environmental evaluation and its alternative methods, as well as the presentation of the sectoral application of environmental evaluation methods.

Academic results

Knowledge

1. know the theoretical background of environmental evaluation, including the concept of total economic value,
2. are familiar with cost-based and expressed preference methods and their sectoral application,
3. are familiar with environmental evaluation methods based on identified preferences and their sectoral application,
4. are familiar with CSR corporate practices,

Skills

1. are able to prepare environmental evaluation case studies using cost-based and stated preference methods,
2. are able to prepare environmental evaluation case studies using revealed preferences methods,
3. are able to identify CSR activities in corporate practice,
4. are able to communicate, present, orally and in writing in a professionally adequate manner;
5. are able to process and use domestic and international literature.

Attitude

1. are open to learn about the possibilities of applying environmental evaluation methods, to take them into account in decision-making,
2. are open to the practical application of sustainability principles,
3. endeavor to take their decisions taking into account technical, economic and social aspects;
4. cooperate with the lecturers and fellow students in expanding the knowledge and thinking together in solving the problems raised.

Independence and responsibility

1. prepare the practical task independently during the semester,
2. independently select and apply the relevant problem-solving and analytical methods in solving the analytical tasks belonging to their field.
3. feel responsible for achieving sustainable development.

Teaching methodology

Lectures, oral and written communication.

Materials supporting learning

- Dr. Szilávik János (szerk.): Környezetgazdaságtan. 3. fejezet. (Csigéné Nagypál Noémi) Budapesti Műszaki és Gazdaságtudományi Egyetem. Typotex Kiadó, Budapest, 2007.
- Marjainé dr. Szerényi Zsuzsanna (szerk.): A természetvédelemben alkalmazható közgazdasági értékelési módszerek. Környezetvédelmi és Vízügyi Minisztérium, Budapest, 2005.
- Előadásanyagok diásorai / ppt slides.
- American Journal of Agricultural Economics
- Ecological Economics
- Journal of Agricultural Resource Economics
- Journal of Economic Perspectives
- Journal of Environmental Economics and Management
- Journal of Environmental Planning and Management

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The two pillars of the evaluation of learning outcomes set out in point 2.2: 1. Presentation of a selected area important from a nature conservation/tourism point of view, the presentation of the elements of the total economic value and the most important ecosystem services

in the case of the selected area. 2. Analytical presentation of study(s) made using a selected environmental assessment method (e.g. conditional assessment, conditional choice, travel cost method, hedonic price method).

Performance assessment methods

A. Detailed description of performance evaluations during the instruction-period: 1. Formative assessment (practical task): a complex evaluation method of the subject's knowledge, ability, attitude, independence and responsibility-type competence elements, which takes the form of an individually or group-prepared practical task. The instructor determines the content, requirements, submission deadline and evaluation method of the practical assignment. B. During the examination period: Written exam

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

- Formative assesment: 50
- total: 50

Percentage of exam elements within the rating

- written exam: 50

Conditions for obtaining a signature, validity of the signature

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Issuing grades

Excellent	90
Very good	85-89
Good	70-84
Satisfactory	55-69
Pass	40-54
Fail	0-39

Retake and late completion

1) Formative assessments can be retaken or corrected free of charge for the first time during the retake-period. In the event of a correction, the new result always overwrites the old one. 2) If the student is unable to obtain a grade other than 'Fail' even with the replacement according to point 1), he/she may make a second attempt to successfully complete the course by paying the fee specified in the regulations.

Coursework required for the completion of the subject

Attending contact lessons	16
Preparing practical task	32
Preparing for exam	42
total	90

Approval and validity of subject requirements

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

In order to achieve the learning outcomes set out in 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 Purpose, types of environmental assessment, criticism of monetary environmental assessment.
- 2 Approaches to monetary environmental assessment and sustainability.
- 3 Concept and assessment of ecosystem services and natural capital.
- 4 Willingness to pay and accept, the total economic value.
- 5 The characteristics of public goods and "public evils", the role of externalities in environmental assessment, the social discount rate.
- 6 Grouping of environmental assessment methods.
- 7 Cost-based methods.
- 8 Characteristics of declared preference methods.
- 9 Method and types of travel expenses.
- 10 The hedonic price method.
- 11 General characteristics of the revealed preference methods.
- 12 The conditional evaluation.
- 13 Indirectly revealed preference methods.
- 14 Transfer of benefits and other alternative methods.
- 15 Connection points of environmental assessment and risk management.
- 16 Concept and types of risk.
- 17 Approaches to risk management, risk management from a social science point of view.

Additional lecturers

Szalmáné Dr. Csete Mária egyetemi docens / associate professor csete.maria@gtk.bme.hu

Approval and validity of subject requirements