



SUBJECT DATASHEET

Sectorial Sustainability Studies

BMEGT42M111

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

Sectorial Sustainability Studies

ID (subject code)

BMEGT42M111

Type of subject

contact unit

Course types and lessons

<i>Type</i>	<i>Lessons</i>
Lecture	4
Practice	0
Laboratory	0

Type of assessment

mid-term
grade

Number of credits

5

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; angol - ENG

Curricular role of the subject, recommended number of terms

Programme: **Master of Regional and Environmental Economic Studies**
Subject Role: **Compulsory**
Recommended semester: **3**

Programme: **Master of Science Program in Regional and Environmental Economic Studies**
Subject Role: **Compulsory**
Recommended semester: **3**

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 provide knowledge to students about the possibilities of integrating sustainability aspects in some economic sectors. The aim is to acquaint students with the methods of sustainability analysis of current policies and the results of the analyses. During the course, the environmental evaluation methods and their sectoral applications are presented in an overview.

Academic results

Knowledge

1. The student knows the corporate practice of CSR and its defining policy documents;
2. knows the sectoral characteristics that determine domestic and EU transport policy and the main strategic ideas and vehicle technology guidelines for the future development of transport, as well as the defining policy documents;
3. knows the defining indicators of the formation and development of cities and the main strategic directions for the future development of the urban environment, as well as its defining policy documents;
4. knows the environmental-economic-social problems of rural areas and the main strategic concepts of sustainable rural development, as well as the defining policy documents;
5. knows the market characteristics of hydrogen as an alternative energy source, the advantages and disadvantages of its application, as well as the defining policy documents;
6. knows the interpretation possibilities of sustainability and domestic and international examples of sustainability strategies;
7. knows the defining indicators of integrated water management and the main strategic directions of its future development, as well as its defining policy documents.

Skills

1. The student is able to analyze the role of CSR activities in corporate practice.
2. The student is capable of sustainability analysis of transport policy, infrastructure development or vehicle technology strategic documents;
3. of outlining urban development opportunities and sustainability analysis of documents defining the future development of cities;
4. The student is able to identify rural development problems and the sustainability analysis of related strategic documents.
5. The student is capable of sustainability analysis of documents defining the energy policy and strategy, including the application possibilities of alternative energy sources.
6. The student is able to communicate and present in a professionally adequate manner orally and in writing;
7. to process and use domestic and international literature.

Attitude

1. The student is open to learning about the application possibilities of CSR methods, to their increased consideration in decision-making,
2. to the practical application of sustainability principles,
3. strives to examine various sectoral policies and strategies with a comprehensive systemic approach;
4. cooperates with the instructors and fellow students in the expansion of knowledge and joint thinking in solving the problems raised.

Independence and responsibility

1. During the semester, the student prepares the practical assignment independently,
2. independently selects and applies the relevant problem-solving and analytical methods when solving analytical tasks in their field of expertise.
3. The student feels responsible for the realization of sustainable development.
4. The student feels responsible for the increased consideration of environmental and social aspects in the preparation of sector-level decisions.

Teaching methodology

In the framework of the lectures, the sectoral processes, characteristics, environmental evaluation and sustainability analysis methods will be shown in the form of presentations. In addition, students independently prepare their project work, in which they examine a chosen sector or environmental evaluation method based on given content elements.

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.
- Princz-Jakovics Tibor: A fenntarthatóság erősítése a vidéki közlekedési rendszerek fejlesztésében. Doktori értekezés, BME, Budapest, 2008
- Illés Iván: Regionális gazdaságtan - területfejlesztés: 6. fejezet, Vidékfejlesztés (pp. 119-137), Typotex Kiadó, Budapest, 2008
- Kengyel Ákos (szerk.): Az Európai Unió közös politikái: 7. fejezet, Közös Agrárpolitika, írta: Halmai Péter (pp. 247-269), Akadémiai Kiadó, Budapest, 2010
- 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 learning outcomes stated in point 2.2 are evaluated on the basis of two summative assessments (mid-term exams) and one formative assessment (homework assignment).

Performance assessment methods

A. Detailed description of performance evaluations during the study period: 1. 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. In order to successfully complete

the mid-term exams, it is necessary to use the acquired knowledge to correctly interpret the concepts and to know the application areas of sustainability analysis methods (including environmental assessment). The part of the curriculum on which the evaluation is based represents the topics covered in the lectures before the mid-term exams. 2. Formative assessment: a complex evaluation method of the subject's knowledge, ability, attitude, and independence and responsibility competence elements, which takes the form of individually prepared homework assignment or preparation and presentation of a presentation. Content and requirements of the homework or presentation: Preparation

of a sustainability analysis in relation to one of the topics presented in the course.

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

- 1st summative assessment: 35
- 2nd summative assessment: 35
- formative assessment: 30
- Total: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

-

Issuing grades

Excellent	91
Very good	85–90
Good	76–84
Satisfactory	63–75
Pass	50–62
Fail	0–49

Retake and late completion

1) Pursuant to the current CoS, each summative assessment can be retaken, repeated or completed late. 2) The summative assessments can be retaken, repeated or completed late for the first time during the late completion period free of charge. In the event of a retake, the more favourable outcome gets taken into account. 3) If the student is unable to obtain a grade other than 'Fail' even with the retake, repeat and late completion possibilities according to point 1), they may make a second attempt to successfully complete the course after paying the fee specified in the regulations. 4) Pursuant to the current CoS, in the case of a formative assessment, if the assignment was submitted on time, it is possible to repeat or retake it before the end of the late completion period, if the original task has already been accepted by the instructor. 5) The formative assessment can be submitted late, subject to payment of the special procedure fee specified in the regulations. The latest date for late submission is the last day of the late completion period.

Coursework required for the completion of the subject

participation in contact lessons	56
homework preparation	74
preparation for summative assessments	20
total	150

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 course's purpose, theme, and system of requirements. Sectoral policies of sustainability
- 2 The policy of corporate application of CSR
- 3 Sustainability interpretation possibilities, concepts, practical problems
- 4 Domestic and international examples of sustainability strategies
- 5 Examination of alternative vehicle technologies
- 6 Sustainable rural development policy
- 7 Integrated water management
- 8 Smart cities
- 9 Sustainability analysis of current domestic and EU transport policy
- 10 Policy background of the hydrogen economy

Additional lecturers

Dr. Princz-Jakovics Tibor egyetemi adjunktus / senior lecturer princz-jakovics.tibor@gtk.bme.hu

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

Dr. Szabó Mariann egyetemi adjunktus / senior lecturer szabo.mariann@gtk.bme.hu

Dr. Ijjas Flóra egyetemi adjunktus / senior lecturer ijjas.flora@gtk.bme.hu

Approval and validity of subject requirements