



SUBJECT DATASHEET

ENVIRONMENTAL MANAGEMENT SYSTEMS

BMEGT42A003

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

ENVIRONMENTAL MANAGEMENT SYSTEMS

ID (subject code)

BMEGT42A003

Type of subject

contact unit

Course types and lessons

<i>Type</i>	<i>Lessons</i>
Lecture	3
Practice	0
Laboratory	0

Type of assessment

félévközi
érdemjegy/mid-term
grade

Number of credits

3

Subject Coordinator

Name *Position* *Contact details*

Dr. Zilahy Gyula professor zilahy.gyula@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

angol - ENG

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 before 2017, it will be re-checked on September 2021.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

Upon successful completion of the course, participants will: The course introduces global environmental trends, international processes and main actors in light of the concept of sustainable development. It introduces corporate strategies towards the environment and the basic concepts and techniques of environmental management taking both a theoretical and a practical perspective. Students will develop an understanding of the nature of the relationships between the business and the ecological spheres and the role businesses can play in solving sustainability problems. They will gain an understanding of the basic techniques of environmental management, concepts and tools. The course introduces the concepts, indicators and tools of environmental protection, and environmental management systems (EMS) at enterprises and other organizations. EMS topics include the assessment of environmental aspects and impacts, environmental audits, reporting, environmental performance evaluation and life cycle assessment.

Academic results

Knowledge

1. Understands the most important environmental problems of our age
2. Understands the role of corporations in the creation and solution of environmental problems
3. Understands the determining factors of corporate environmental strategies
4. Understands the tools available to companies to tackle environmental issues
5. Understands the principles of EMS, its tools and methods of implementation

Skills

1. Able to understand the environmental and social aspects of company operations
2. Able to assess the environmental strategy of corporations
3. Able to analyse the environmental performance of companies'
4. Able to use environmental management tools

Attitude

1. Open to novel information technology and business solutions
2. Sensitive to social and environmental issues
3. Collects information regarding novel solutions and is able to critically assess them
4. Strives to take environmental and social aspects into account when making decisions

Independence and responsibility

1. Perceives the environmental and social responsibility of business leaders
2. Recognises those technological and organisational solutions, which provide economic, environmental and social benefits at the same time; is able to assess the limitations of different solutions
3. Is able to distinguish between private and social aspects and can harmonise them

Teaching methodology

Theoretical lectures supported with practical exercises and case studies. Analysis of case studies (in the topic of environmental management and business sustainability) in groups in class.

Materials supporting learning

- Cikkek és a vállalati környezeti menedzsmentet illusztráló egyéb anyagok (pl. vállalati jelentések)
- Articles and other reading material (e.g. company environmental reports) illustrating company practice

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The evaluation of learning outcomes defined under section 2.2 will be based on tests during the semester and an assignment to be prepared in teams of 3-4 students.

Performance assessment methods

1. complex assessment of knowledge and skills through written tests two times during the semester. 2. Partial assessment of knowledge, skills, attitude, self-reliance and responsibility of students through an assignment to be prepared in teams. Essay of 15-20 pages + presentation.

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

- midterm test: 30%
- final test: 30%
- team assignment: 40%
- total: 100%

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

Issuing grades

Excellent	90–100
Very good	80–89
Good	70–79
Satisfactory	60–69
Pass	50–59
Fail	0–49

Retake and late completion

1) tests to be written during the semester can be retaken at the end of the term without a fee. Later results always override previous ones. 2) partial assessment (essay) can be amended once during the term, but can not be substituted.

Coursework required for the completion of the subject

contact classes	14*3=42
preparation for classes during the term	14
preparation for written test	2*10=20
preparation of assignment	14
total	90

Approval and validity of subject requirements

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III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

A 2.2. pontban megfogalmazott tanulási eredmények eléréséhez a tantárgy a következő tematikai blok-kokból áll.

- 1 Introduction to environmental issues
- 2 Global and local environmental and social issues and their possible solution. Participation of the business sector
- 3 The role of corporations in implementing Sustainable Development. Introduction to environmental management
- 4 Környezeti kockázatok és vállalati környezeti stratégia/Environmental risks and corporate environmental strategy
- 5 The different approaches to environmental protection: end-of-pipe, preventive and industrial ecology solutions. The life cycle approach
- 6 Environmental conflicts and their solution
- 7 Environmental aspects and impacts. Environmental performance evaluation.
- 8 EMS: principles, implementation and auditing; elements of an EMS
- 9 Corporate sustainability communication; eco-marketing
- 10 Beyond compliance: the concept and implementation of CSR
- 11 Environmental innovation; sustainable business models
- 12 Sustainable lifestyles and consumption

Additional lecturers

Approval and validity of subject requirements

Part I-III of the Subject Form is to be approved by the Head of Department of Environmental Economics named under 1.8.