



# METHODS OF ENVIRONMENTAL ASSESSMENT

Environmental Engineer MSc mesterszak

2022/23 I. félév

TANTÁRGYI KOMMUNIKÁCIÓS DOSSZIÉ

**Miskolci Egyetem**  
**Műszaki Földtudományi Kar**  
**Környezetgazdálkodási Intézet**

## **Tartalomjegyzék**

1. Tantárgyleírás, tárgyjegyző, óraszám, kreditérték
2. Tantárgytematika (óraóra lebontva)
3. Önálló feladatok kiírása

## 1. Tantárgyleírás, tárgyjegyző, óraszám, kreditérték

<b>Course Title: Methods of environmental assessment</b>	<b>Credits: 2</b>																		
Type of course: compulsory																			
Type (lec. / sem. / lab. / consult.) and Number of Contact Hours per Week: <b>2 sem.</b>																			
<b>The degree of theoretical or <u>practical</u> nature of the course, " course's character "13: 65 (kredit%)</b>																			
<p><b>Type of Assessment</b> (exam. / pr. mark. / other): <b>pr. mark</b>  Students will be assessed with using the following elements.</p> <table> <tr> <td>Attendance:</td> <td>15 %</td> </tr> <tr> <td>Individual reports</td> <td>85 %</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </table> <p>Grading scale:</p> <table> <thead> <tr> <th>% value</th> <th>Grade</th> </tr> </thead> <tbody> <tr> <td>90 -100%</td> <td>5 (excellent)</td> </tr> <tr> <td>80 – 89%</td> <td>4 (good)</td> </tr> <tr> <td>70 - 79%</td> <td>3 (satisfactory)</td> </tr> <tr> <td>60 - 69%</td> <td>2 (pass)</td> </tr> <tr> <td>0 - 59%</td> <td>1 (failed)</td> </tr> </tbody> </table>		Attendance:	15 %	Individual reports	85 %	Total	100%	% value	Grade	90 -100%	5 (excellent)	80 – 89%	4 (good)	70 - 79%	3 (satisfactory)	60 - 69%	2 (pass)	0 - 59%	1 (failed)
Attendance:	15 %																		
Individual reports	85 %																		
Total	100%																		
% value	Grade																		
90 -100%	5 (excellent)																		
80 – 89%	4 (good)																		
70 - 79%	3 (satisfactory)																		
60 - 69%	2 (pass)																		
0 - 59%	1 (failed)																		
Position in Curriculum (which semester): <b>3<sup>rd</sup></b>																			
Pre-requisites ( <i>if any</i> ): -																			
<b>Course Description:</b>																			
<p>Students awareness of the environmental assessment procedures, the methods can be used to make the study.</p> <p><b>The short curriculum of the subject:</b>  The history of environmental impact assessment. The legal regulation of the environmental impact assessment. Environmental assessment, environmental impact assessment, uniform environmental permit. The qualification of environmental test activities can be combined with the functionality and connectivity of the procedures. The phases of environmental testing, the method of the official method. The preliminary environmental study. The detailed requirements for environmental compatibility studies. Acting factors stakeholders, impact processes, the spread effects. The effect areas, control areas. The main aspects of recruitment procedures and environmental standards. In the effectiveness test methods and procedures. Impact Assessment. Monitoring. The impact assessment public of the hearing, public hearing. Analysis of practical examples. Preparation of an impact test, study management, presentation, public discussions.  Practical work: self-made solutions of simple case-study problems.</p>																			
The 3-5 most important compulsory, or recommended <b>literature</b> (textbook, book) <b>resources:</b>																			
<ul style="list-style-type: none"> <li>• Charles H. Eccleston: Environmental Impact Assessment: A Guide to Best Professional Practices. CRC Press, 2011</li> <li>• David P. Lawrence: Environmental Impact Assessment, Practical solutions to recurrent problems, Wiley-Interscience 2004.</li> <li>• John Glasson: Methods of Environmental Impact Assessment. Routledge, 2009.</li> <li>• M. Schmidt, J. Glasson, L. Emmelin, H. Helbron: Standards and Thresholds for Impact Assessment Springer, 2008.</li> <li>• EU directives</li> </ul>																			

**Competencies to evolve (see Appendix 1):**

T1, T2, K3, K7, K9, A5, A6, A7, F1, F2, F4, F5, F6

**Responsible Instructor** (*name, position, scientific degree*):

**Balázs Zákányi Dr., assistant professor**

**Other Faculty Member(s) Involved in Teaching**, if any (*name, position, scientific degree*):

## 2. TANTÁRGYTEMATIKA (ÓRÁRA LEBONTVA)

### Methods of environmental assessment (online – Google Classroom)

Tantárgytematika (ÜTEMTERV)

Aktuális tanév őszi félév

Environmental engineering MSc, 3. félév, törzs tárgy

Week	Date	Course
1.	6 <sup>th</sup> 09, 2022	<b>Introduction, requirements</b>
2.	13 <sup>th</sup> 09, 2022	Environmental impact assessment, first assignment
3.	20 <sup>th</sup> 09, 2022	Preparing for the first homework (work at home)
4.	27 <sup>th</sup> 09, 2022	Preparing for the first homework (work at home)
5.	4 <sup>th</sup> 10, 2022	Deadline of the first homework
6.	11 <sup>th</sup> 10, 2022	Water protection
7.	18 <sup>th</sup> 10, 2022	Air protection (modeling)
8.	25 <sup>th</sup> 10, 2022	Waste management
9.	1 <sup>st</sup> 11, 2022	National day (educational break)
10.	8 <sup>th</sup> 11, 2022	Noise and vibration protection (calculation example), second assignment
11.	15 <sup>th</sup> 11, 2022	Preparing for the second homework (work at home)
12.	22 <sup>th</sup> 11, 2022	Preparing for the second homework (work at home)
13.	29 <sup>th</sup> 11, 2022	Preparing for the second homework (work at home)
14.	6 <sup>th</sup> 12, 2022	Deadline of the second homework

### 3) ÖNNÁLÓ FELADATOK KIÍRÁSA

#### 1<sup>st</sup> assignment

- ▶ Make a power point presentation (10-12 slides) about the regulation of environmental protection in Your country. (People from the same country can work together, but both of them have to show the presentation) Pay special attention to environmental impact assessment, touching the following topics:
  - ▶ What kind of legal environmental protection regulation is valid in Your country?
  - ▶ Is in Your country any regulation about environmental impact assessment? If yes, since when? Make a historical overview!
  - ▶ Nowadays what kind of regulation is valid about environmental impact assessment?
  - ▶ Is the documentation available for everyone?
  - ▶ Mention some examples, about environmental impact assessment practice in Your country!
- ▶ Deadline: 5<sup>th</sup> 10, 2021

## 2<sup>nd</sup> Assignment

- ▶ Make Environmental Impact Assessment for the given activity. Calculate the environmental load with special attention of the following environmental impacts:
  - air contamination
  - noise contamination
- ▶ Calculate the impact distance, and the quantity of the impact. Does the activity make harmful impact to it's environment?
- ▶ Calculate the quantity of sewage water generated by this activity, considering the number of employees.
- ▶ For the calculations, use the Hatástávolság software, and the calculation examples, that You have heard on the lessons.

Deadline: 7<sup>th</sup> 12, 2021