

## Tárgytematika / Course Description

### Geotechnics 3

EKNB\_SETA008

**Tárgyfelelős neve /**

**Teacher's name:** Koch Edina

**Félév / Semester:** 2022/23/2

**Beszámolási forma /**

**Assesment:** Folyamatos számonkérés

**Tárgy heti óraszám /**

**Teaching hours(week):** 2/1/0

**Tárgy féléves óraszám /**

**Teaching hours(sem.):** 0/0/0

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### OKTATÁS CÉLJA / AIM OF THE COURSE

Based on the knowledge of Geotechnics I. and II., additional geotechnical structures and technologies are introduced. The aim of the subject is to achieve general information related to geotechnical engineering field.

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### TANTÁRGY TARTALMA / DESCRIPTION

**Courses:**

1. Introduction
2. Massive retaining walls I.
3. Massive retaining walls II.
4. Flexible retaining walls III.
5. Function, types and characteristics of earth structures
6. Different dewatering systems
7. Types and application of geosynthetics
8. Aims, applications and methods of soil improvement technologies

9. Tunelling methods

10. Soil investigation

11. Student's presentation

12. Written exam

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## SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

### ***Homework assignments***

*HW1 Evaluation of a technical paper, presentation*

*HW2 Design of earthworks*

*HW3 Report on special geotechnical topics*

### ***ITV Final written exam***

Final exam will be offered through the Neptun system. Examination will be closed book/closed notes.

Two part exam

- Part I consists a 45 minute test of 30 questions
- Part II: Solve and discuss a practical construction/design problem. (e.g. design excavation support)

### ***Course Grade Evaluation***

**HW1 –10 points, HW2 – 20 points, HW3 – 10 points Presentation – 5 points, ITV – 55 point**

### ***Grades***

0 - 49 pont 1 unsatisfactory

50 - 61 pont 2 satisfactory

62 - 73 pont 3 fair

74 - 85 pont 4 good

86 - 100 pont 5 excellent

excellent means: attendance the courses (missing max. 2 classes), excellent homeworks, activity, exam test should be at least 85%,

good means: missing max. 4 classes, good homeworks, medium activity, exam test – min. 75%

fair means: missing max. 6 classes, medium activity, exam test – min. 65 %

satisfactory means: missing max. 8 classes, no activity, exam test – min. 50%

unsatisfactory: no attendance on the courses, no homeworks, exam test less than 50%

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## KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

John Woodward: *An Introduction to Geotechnical Processes*, CRC Press, 2005.

selected papers