

# GEOTECHNICS I. SOIL MECHANICS

# 2021/22. 1. SEMESTER

ALAPADATOK			
<b>COURSE NAME</b>	Geotechnics I. Soil Mechanics		Geotechnika I.
<b>COURSE CODE(S)</b>	SGYMKOM2040ER		
<b>DEPARTMENT</b>	Óbuda University Ybl Miklós Faculty of Architecture and Civil Engineering, Institute of Civil Engineering		
<b>PROGRAMME, TRAINING</b>	Erasmus course		full time
<b>COURSE INSTRUCTOR</b> (Instructor managing the course)	Prof.Dr.Telekes Gábor	telekes.gabor@ybl.uni-obuda.hu	consulting hours: later
<b>INSTRUCTORS, LECTURERS</b>	Kaczvinszki-Szabó Vera	szabo.vera@ybl.uni-obuda.hu	consulting hours: later
<b>PRE-REQUIREMENT</b>	none		
<b>HOURS OF LECTURES (WEEKLY)</b>	2 hours (90 min.)		
<b>HOURS OF CLASSROOM PRACTICE/ LAB EXERCISE (WEEKLY)</b>	2 hours (90 min.)		
<b>FIELD AND TRAINING (WEEKLY)</b>	0 hours		
<b>ASSIGNMENT</b>	Midterm assignment.		
<b>CREDITS</b>	8 credits (ECTS)		
<b>AIM OF THE COURSE, BRIEF DESCRIPTION</b>	The aim of the course is to provide an overview of soil mechanics, the physical parameters of the different soil types, the laboratory tests and evaluation of the test results.		
<b>RECOMMENDED LITERATURE</b>	Craig's Soil Mechanics J. A. Knappett and R. F. Craig, Spon Press an imprint of Taylor & Francis London and New York ISBN: 978-0-203-86524-8 (ebk)		
<b>REQUIRED TECHNICAL APPLIANCES/ SOFTWARE</b>	The use of mobile phones is prohibited during the examinations. Contact: Neptun and E-mail. Education materials: According to E-learning Lessons: E-learning		

SCHEDULE OF THE SEMESTER				
WEEK	LECTURE	LECTURER	FORM OF PRACTICE	PROGRAM OF PRACTICE
1	Why is important for civil engineers to know something about soil and the different behaviour of different soil types (granular and cohesive soils)	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	introduction of different geological samples
2	Soil Mechanical borins and soil sampling	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	grain size distribution curve
3	Stresses in soils	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	cohesive soils identification
4	Basic soil physical parameters of soils	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
5	Unidirectional and three directional break test	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
6	Shear test	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
7	Oedometer test and Proctor test	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
8	Calculation practice	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
9	1st test	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
10	Water in soil and permeability	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
11	In situ tests	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
12	Case study	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	labor/e-learning	same as lecture
13	Summary	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera	lecture/e-learning	same as lecture
14	Final Test	Prof. Dr. Telekes Gábor and Kacsvinszki-Szabó Vera		

REQUIREMENTS FOR THE COMPLETION OF THE SEMESTER		
MID-SEMESTER TASKS AND TESTS		
Requirement	Description	Value (point, %, grade)
<b>PARTICIPATION AT LESSONS</b>	The practice lessons can be missed up to three times (see § 46 ETVSZ)	-
<b>IN CASE OF ABSENCE FROM LESSONS AND EXAMINATIONS</b>	Absence is considered to be justified with a medical certificate presented.	-
<b>Short description of the TASKS</b>	The students are able to make and understand Soil Mechanical Experties.	
<b>Pre-exam / exam</b>	At the end of the semester, final written test. If you failed or want a better mark you can try the oral part of the exam.	100%
<b>TOTAL</b>		1-5 grade

SEMESTER CLOSING REQUIREMENTS					
<b>CONDITIONS FOR OBTAINING A SIGNATURE</b>					
<b>SEMESTER GRADE</b>	0-59 Point	60-69	70-79	80-89	90-115
	1 - FAIL	2 - PASS	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT
<b>CONDITIONS FOR OBTAINING AN OFFERED GRADE</b>	24 out of the 40 points has to be reached in the test and at least 80 points together with the semester tasks.				
	80-89 Point			90-115 Point	
	4 - GOOD			5 - EXCELLENT	
<b>CONDITIONS FOR ADMISSION TO THE EXAM</b>	Only students who have already obtained a signature can take the exam. During the exam period, the student has to register for the exam in the Neptun. The test is a 60-minute written test with a total value of 40 points.				
<b>EXAM GRADE</b>	0-59 Point	60-69	70-79	80-89	90-115
	1 - FAIL	2 - PASS	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT