

SOIL MECHANICS I

1	Course Title:	SOIL MECHANICS I
2	Course Code:	INTZ205
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr.Gör. ENGİN KALAY
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	Öğr. Gör. Engin KALAY enginkalay@uludag.edu.tr 02247112781-61758
17	Website:	
18	Objective of the Course:	Student can determine to engineering characteristics of the soil with using soil mechanical laboratory equipments.
19	Contribution of the Course to Professional Development:	The student will be able to work in soil mechanics laboratories as he will graduate with knowledge of ground sampling, soil laboratory and field tests, interpretation of test results, structure-ground interaction, soil improvement. Will be able to inspect and perform soil field tests.
20	Learning Outcomes:	
	1	Define to soil
	2	Define to material of soil experiment
	3	Take to sample from the soil.
	4	Determine to physical properties of samples taken.
	5	Do to experiment for physical properties of samples taken.
	6	Define to soil-water relationship
	7	Establish to consistency limits according to soil-water relationship
	8	Classify to soil according to grain diameter
	9	Use to experimental equipments and device easily.
	10	Make report to the results of experiments.
21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	The general structure of soils in terms of environmental geotechnics.	Observationof soils
2	Inspection pits	Open pit inspection
3	Sampling methods from the ground	Minutes editing
4	The water content, surface inspection minutes	Minutes editing

5	Wet sieve analysis	Arrange of sieves
6	Fine-grained soils relative density (specific gravity)	Determine to Fine-grained soils
7	Medium-grained soils relative density (specific gravity)	Determine to Medium-grained soils
8	Repeating courses and midterm exam	
9	Natural unit weight (sand cone method)	Sand Cone Experiment
10	Particle size distribution of fine-grained soils (hydrometer method)	Hidrometer Experiment
11	Liquid limit test with Casagrande device.	Casagrande Experiment
12	Liquid limit test with Cone penetration device	Liquid Experiment
13	Plastic Limit Experiment	Plastic Limit Experiment
14	Shrinkage limit Experiment	Shrinkage limit Experiment

22	Textbooks, References and/or Other Materials:	
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23	Assesment	
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	25.00
Quiz	0	0.00
Home work-project	1	15.00
Final Exam	1	60.00

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Contribution of Final Exam to Success Grade	60.00		
Practicals/Labs	14	2.00	28.00
Total	100.00		
Self study and preperation	0	0.00	0.00
Homeworks	1	6.00	6.00
Projects	0	0.00	0.00

24	ECTS / WORK LOAD TABLE		
	Field Studies	8	1.00
	Midterm exams	1	10.00
	Others	0	0.00
	Final Exams	1	10.00
	Total Work Load		90.00
	Total work load/ 30 hr		3.00
	ECTS Credit of the Course		3.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	3	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0

ÖK5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK9	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
ÖK10	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			