

IM 364 SOIL MECHANICS II		CIVIL ENGINEERING	
Semester	Credit Structure		
	Lecture	Recitation	Laboratory
6	3	0	1
Language	English		
Compulsory / Elective	Compulsory		
Prerequisites	IM 361 Soil Mechanics I		
Catalog Description	Shear strength of soils. Lateral earth pressure theories. Slope stability; short and long-term analysis. Bearing capacity of soils with reference to shallow foundations.		
Course Objectives	To provide a clear explanation of the fundamental principles of soil mechanics.		
Course Outcomes	Having a knowledge of practical application in Geotechnical engineering.		
Textbook and /or References	R.F. Craig, Soil Mechanics, ELBS, England, 1990		
Assessment Criteria		Quantity	Percentage
	Midterm Exams	2	60
	Quizzes	-	
	Homeworks	-	
	Projects	-	
	Term Paper	-	
	Laboratory Work	-	
	Other	-	
	Final Exam	1	40
Course Category by Content (%)	Mathematics and Basic Sciences	25	
	Engineering Science	50	
	Engineering Design	25	
	Social Sciences	-	
Instructors	Yrd. Doç. Dr. Sami Oğuzhan Akbaş, Öğr. Gör. Dr. Ünsal Soygür		

COURSE PLAN	
Week	Topics
1	Shear strength of soils
2	Shear strength of soils
3	Shear strength of soils
4	Shear strength of soils
5	Lateral earth pressure theories
6	Lateral earth pressure theories
7	Lateral earth pressure theories
8	Slope stability; short and long-term analysis
9	Slope stability; short and long-term analysis
10	Slope stability; short and long-term analysis
11	Slope stability; short and long-term analysis
12	Bearing capacity of soils with reference to shallow foundations
13	Bearing capacity of soils with reference to shallow foundations
14	Bearing capacity of soils with reference to shallow foundations

RELATIONSHIP BETWEEN THE COURSE AND DEPARTMENT CURRICULUM				
	Program Outcomes	1	2	3
1	An ability to apply knowledge of mathematics, science, and engineering		X	
2	An ability to design and conduct experiments, as well as to analyze and interpret data		X	
3	An ability to design a system, component, or process to meet desired needs		X	
4	An ability to function on multi-disciplinary teams		X	
5	An ability to identify, formulate, and solve engineering problems		X	
6	An understanding of professional and ethical responsibility			X
7	An ability for effective written and oral communication in Turkish and English			X
8	The broad education necessary to understand the impact of engineering solutions in a global and societal context			X
9	A recognition of the need for, and ability to engage in life-long learning			X
10	A knowledge of contemporary issues		X	
11	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice		X	
Contribution of the course : 1:None 2:Partially 3:Completely				