

IM 263 GEOLOGY FOR CIVIL ENGINEERS		CIVIL ENGINEERING	
Semester	Credit Structure		
	Lecture	Recitation	Laboratory
3	3	0	0
Language	Turkish		
Compulsory / Elective	Compulsory		
Prerequisites	-		
Catalog Description	Structure of the Earth. Elements, minerals and rocks of the Earth's crust. Igneous, metamorphic and sedimentary rocks. Geological material used in construction. Geological external processes and geological structure. Weathering. Earthquake geology. Hydrogeology. Landslide geology. Foundation geology. Dams geology. Tunnel geology. Site investigation. Geology and planning.		
Course Objectives	To provide general understanding of general geology, rocks, minerals and mapping, and applications required for foundation design and soil mechanics.		
Course Outcomes	Skills for understanding of general geology and geological mapping, and applications.		
Textbook and /or References	1) Ünsal, N., İnşaat Mühendisleri için Jeoloji, G.Ü.M.M.F., 2001		
Assessment Criteria		Quantity	Percentage
	Midterm Exams	2	50
	Quizzes	-	-
	Homeworks	-	-
	Projects	-	-
	Term Paper	-	-
	Laboratory Work	-	-
	Other	-	-
	Final Exam	1	50
Course Category by Content (%)	Mathematics and Basic Sciences	30	
	Engineering Science	50	
	Engineering Design	20	
	Social Sciences	-	
Instructors	Prof. Dr. Nail ÜNSAL		

COURSE PLAN	
Week	Topics
1	General Geology
2	External Dynamics
3	Geological mapping and applications
4	Internal Dynamics
5	Earthquakes
6	Crystal Systems and applications
7	Magmatism
8	Minerals and applications
9	Rocks and applications
10	Minerals in rock formations
11	Metamorphism
12	Precipatatory Rocks
13	Geological Ages

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				