

FACULTY OF ENGINEERING
2nd Year 2nd Semester

IM 286-MATERIALS OF CONSTRUCTION				FACULTY OF ENGINEERING					
Semester	Methods of Education						Credits		
	Lecture	Recit.	Lab.	Project/ Field Study	Homework	Other	Total	Credit	ECTS Credit
2	42	14	28	-	14	84	182	4	7.0
Language	English								
Compulsory / Elective	Compulsory								
Prerequisites	None								
Course Contents	Physical and mechanical properties of binders materials, lime, cement, puzzolane. Aggregates for concrete. Concrete mix design. Production of concrete. Properties of concrete in fresh and hardened state. Heat process. Structural steel and properties. Other alloys used in structures. Natural stones, ceramics, glasses, polymers, wood.								
Course Objectives	Teaching the basic construction materials								
Learning Outcomes and Competences	Being aware of the uses of construction materials, pros and cons								
Textbook and /or Reference	Introduction to Materials Science For Engineers, James, F. Shackelford, Prentice Hall, Fifth Edition, 2000. Materials Science and Engineering, An Introduction, William, D. Callister, Jr., Wiley & Sons, Inc., Fifth Edition, 2000.								
Assessment Criteria							If any, mark as (x)	Percentage (%)	
	Midterm Exams						X	50	
	Quizzes						-	-	
	Homeworks						-	-	
	Projects						-	-	
	Term Paper						-	-	
	Laboratory Work						-	-	
	Other						-	-	
Final Exam						X	50		
Instructors	Prof. Dr. Abdussamet ARSLAN								
Week	Subject								
1	Physical and mechanical properties of binder materials								
2	Lime, cement, puzzolane.								
3	Aggregates for concrete								
4	Concrete mix design								
5	Midterm exam -1								
6	Production of concrete								
7	Properties of concrete in fresh and hardened state								
8	Heat process								
9	Structural steel and properties								
10	Other alloys used in structures								
11	Midterm exam -2								
12	Natural stones								
13	Ceramics, glasses, polymers								
14	Woods								