

Department of Civil Engineering			
Construction Materials Lab. (61206)			
Total Credits	1		
major compulsory			
Prerequisites	P1 : Construction Materials (61205) P11Synch. : Construction Materials (61205)		
Course Contents			
Laboratory application of various experiments related to construction materials.			
Intended Learning Outcomes (ILO's)		Student Outcomes (SO's)	Contribution
1	Ability to perform engineering testing on concrete.	B	20 %
2	Ability to perform engineering testing on aggregates.	B	20 %
3	Ability to perform engineering testing on tiles, blocks.	B	10 %
4	Create attractive ability to use techniques and skills in the practical manner.	K	40 %
5	Ability to identify the compliance of building materials to local and international specifications.	J	10 %
Textbook and/ or References			
Hijjawi, S; Abu Nemeah, M; Abu-Zant, H. Construction Materials (Laboratory Manual), An-Najah National University, 2013.			
Assessment Criteria		Percent (%)	
Mid. Term Exam		20 %	
Laboratory Work		40 %	
Final Exam		40 %	
Course Plan			
Week	Topic		
1	Introduction to building materials Lab Tests and Preparation of Report		
2	Sieve analysis of fine and coarse aggregate		
3	Specific Gravity and absorption of coarse aggregate		
4	Los Angeles Abrasion test		
5	Slump test		
6	Air content of freshly mixed concrete by pressure method		
7	Making and curing concrete specimens		
8	Capping cylindrical concrete specimens		
9	Compressive strength of cylindrical and cubical concrete specimens		
10	Schmidt Hammer test		
11	Core test		
12	Cement tiles testing		
13	Concrete blocks testing		
15	Sand equivalent test		
16	Final exam		