Republic of Iraq

Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Apparatus

College: Shatt Al-Arab University
Department: Civil Engineering
Stage: 3th stage
Lecturer name: Ahmed Abdel Razzaq
Academic title: Ass. Lecturer

Course Weekly Outline

Name	Ahmed Abdel Razzaq Diwan					
E-mail address	ahmeol.2003@gmail.com					
Course name	Reinforced concrete designs-1					
Course objective	The course aims to provide the basic methods in the analysis and design of reinforced concrete structures.					
Course description	A- Cognitive objectives A1- Apply basic knowledge in understanding the tests of basic materials used in the formation of reinforced concrete. A2- Explain laboratory testing methods approved by international codes. A3- Apply analysis methods specific to beams, including the method of operational stresses in the analysis and design of beams. A4- Methods of analysis and design of beams with rectangular and special sections and methods of designing beams for shear as well as analysis and design of beams with one direction.					
References	Structural Concrete Theory and Design, By Nadim Hasson ,Akthem Aktham Al manseer,6th Edition 2015					
External sources						
Course assessment	**Home work**	**Quizzes**	**Report**	**Project**	**Mid-term exam**	**Final exam**
	10	**10**	**10**	**10**	**10**	**50**
General notes						

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Week No.	Theoretical	Aims
1	Introduction to building materials science.	A- Cognitive objectives A1- Apply basic knowledge in understanding the tests of basic materials used in the formation of reinforced concrete. A2- Explain laboratory testing methods approved by international codes. A3- Apply analysis methods specific to beams, including the method of operational stresses in the analysis and
2	General properties of building materials.	
3	General properties of building materials.	
4	Mechanical properties of engineering materials.	
5	Stress-strain curves of some materials.	
6	Agreement for some engineering materials.	
7	Creep and factors affecting it and its curve.	
8	Fatigue and finding a final result.	
9	Types of bricks, their types, classification and manufacture.	
10	Types of bricks, their types, classification and manufacture.	
11	Wood and its composition and preservation.	
12	Iron materials, their types, preparation and factors affecting them.	
13	The Holy Bible, its types and specifications.	
14	Types of gypsum and the most important gypsum products.	
15	Local women's bonding materials and their types.	