

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					
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Course name	Reinforced concrete designs-2					
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 analysis and design of two-way reinforced concrete slabs. A2- Analyze and design different reinforced concrete columns with central and eccentric loading. A3- Apply methods for calculating the overlap distances of reinforcing steel and the span distance inside concrete beams when cutting a number of reinforcing bars.					
References	Structural Concrete Theory and Design, By Nadim Hasson ,Akthem Aktham Al manseer,6 th Edition 2015					
External sources						
Course assessment	Home work	Quizzes	Report	Project	Mid-term exam	Final exam
	10	10	10	10	10	50
General notes						



Course Weekly Outline

Week No.	Theoretical	Aims
1	Introduction to building materials science.	A- Cognitive objectives A1- Apply basic knowledge in understanding the analysis and design of two-way reinforced concrete slabs. A2- Analyze and design different reinforced concrete columns with central and eccentric loading. A3- Apply methods for calculating the overlap distances of reinforcing steel and the span distance inside concrete beams when cutting a number of reinforcing bars.
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.	