FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Engineering & Technology

Reinforced Concrete 1

Information :

Course Code :	SCM 315	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Professor	Tarek Kamal Hassan Mohamed	6
Professor	Ahmed Farouk Mohamed Hassan Deifalla	4
Professor	Ahmed Farouk Mohamed Hassan Deifalla	4
Assistant Lecturer	Mahmoud Mohamed Abdullah Abdulally	
Assistant Lecturer	Dina Yehia Zakaria Ewais	2
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	12
Assistant Lecturer	Dina Yehia Zakaria Ewais	2
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	12

Area Of Study :

Upon successful completion of this course, the student should be able to:
- Understand the basic concepts and main principles
- Calculate the values of the essential terms
- Design and draw neat details
- Apply Codes provisions

Regarding floor system& loads limit state load distribution beams in bending beams in shear & torsion bond & reinforcement details beam deflection

Description :

Methods of design, Codes, Structural systems, Load distribution, Design using limit states method, Section subjected to bending moments, Section subjected to shear and torsion, Reinforced details for beams, Limit state of deflection.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Describe the main concept of floor system& loads
2 -	Define the main terms of limit state
b.Intellectual Skills: :	
1 -	Calculate the values of floor system& loads
2 -	Calculate the values of limit state
3 -	Analyze the system of load distribution
4 -	Design the elements of beams in bending

5 -	Design the elements of beams in shear & torsion
6 -	Calculate the values of bond & reinforcement details
7 -	Design the elements of beam deflection
c.Professional and Practical Skills: :	
1 -	Prepare technical reports for floor system& loads
2 -	Apply Code provisions regarding beams in bending
3 -	Apply Code provisions regarding beams in shear & torsion
4 -	Proceed test steps of the bond & reinforcement details
d.General and Transferable Skills: :	
1 -	Work under stress

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
floor system& loads	10	6	4
limit state	10	6	4
load distribution	10	6	4
beams in bending	15	9	6
beams in shear & torsion	10	6	4
bond & reinforcement details	10	6	0
beam deflection	5	3	2
Revision	5	3	2

Teaching And Learning Methodologies :

Interactive Lec.
Discussion
Problem Solving
Project
Report / Present.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00		
Lab Exper.	10.00		
Mid- Exam I, II	30.00		
Project	10.00		
Quizzes / Assig.	5.00		
Report / Present.	5.00		

Course Notes :
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Recommended books :
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Periodicals :
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Web Sites :
Moodle