



**Faculty of Engineering – Assiut University
Bachelor Degree**

Civil Engineering Program

Dept. of Civil Engineering

Course specification

Design of concrete structures (2-A) C323

1. Course Aim	
Main Aim	The main aim of this course is to furnish the students with the basic understanding of mechanics and design of reinforced concrete to be able to design different shapes of frames, special reinforced concrete roof structures and flat slabs.
Sub-Aims	<ul style="list-style-type: none">▪ design reinforced concrete sections subjected to eccentric forces (compression or tension) using ultimate design method .▪ design different shapes of reinforced concrete frames and draw details of their reinforcement.▪ design different shapes of reinforced concrete frames as well as draw details of their reinforcement.▪ Draw details reinforcement of different reinforced concrete structures.

2. Course Content
Special roofs – Design of reinforced concrete sections subject to axial forces and bending moments – design of reinforced concert frames

3. Course Topics		
Topic	subject	week
1st topic	Introduction to concrete frames	1
2nd topic	Design of R.C sections subjected to axial force and bending moment.	2-4
3rd topic	Analysis, design and draw details of R.C frames.	5-10
4th topic	Design of short cantilever	11
5th topic	Design of R.C frames supports	12
6th topic	Design of Special roof (Flat slabs)	13,14

11.2 Grades Distribution

Assesment Methods		Percentage	
Final Exam		70%	
Oral Final Exam		-	
Semester Assessments*		30%	
Assessments	Written Exam	20%	30%

	Oral Exam	-
	Tutorial assessment	10%
	Project assessment	-
	Report assessment	-
	Quiz assessment	-
	Presentation assessment	-
	Laboratory test	-
Total		100%

11.2.1 Semester Assessments*

Semester Assessments	Percentage	Time
Written Exam	20%	Week No. 10
Tutorial assessment	10 %	Each week
Report assessment	--	
Quiz assessment	--	
Presentation assessment	--	
Total	30%	

4. List of References

Course notes	Lecture notes
Required books	Egyptian Code of Practice
Recommended books	
Periodicals, web sites.. etc.	