



Course Specification

— (Bachelor)

Course Title: **Building Construction (2)**

Course Code: **ARCH121**

Program: **Architecture**

Department: **Architecture**

College: **Architecture and Planning**

Institution: **Qassim University**

1. Course Identification

Course general Description:

This course introduces building elements construction, and structural frames, connecting the knowledge about materials properties, and functional requirements, to understand, justify and modify construction assemblies. Including staircase design, interior finishes, external envelop system, steel frames, concrete frames, flooring systems, and construction joints.

Course Main Objective(s):

1. To introduce staircases terminology, standards, detailing and design.
2. To improve students' understanding of structural materials and assemblies.
3. To provide the students with the basic knowledge about finishing materials.
4. To develop students' skills to design finishing details according to functional requirements and materials properties.
5. To present building envelop system functional requirements and alternatives.

2. Course Learning Outcomes (CLOs)

Code	Course Learning Outcomes	Code of CLOs aligned with program
1.0		
1.1	Outline building structural and finishing materials properties and uses	K1
1.2	Define basic building elements including building envelops	K1
1.3	Define structural systems and structural frames	K1
2.0		
2.1	Modify building elements details to meet the requirements	S2
2.2	Design external envelop system based on functional requirements	S3
3.0		

3. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Ex1- Measure and draw a staircase within campus	2	5 %



No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
2.	Ex2- Stair types: draw one staircase structural type	3	5 %
3.	Ex3- Design a staircase solving specific problems	4	5 %
4.	Ex4- Draw details of a concrete structural frame	5	5 %
5.	Ex5-Model steel structural joints	7	5%
6.	Midterm Exam	8	10%
7.	Ex6- Draw basement details	9	5 %
8.	Assignment1: Finishing materials properties	10	5 %
9.	Ex8- Draw Precast concrete cladding details	10	5 %
10.	Ex9- Design building envelop system (wall section)	11	5%
11.	Final exam	13	40%

4. Learning Resources and Facilities

Essential References	Roy Chudley & Roger Greeno, (2014) Building construction handbook. 10th edition. Roy Chudley & Roger Greeno, (2016) Building construction technology. 5th edition.
Supportive References	Francis D. K. Ching, (2008) Building construction illustrated. 4th edition. Madan Mehta et al. (2009) Building construction principles, materials, and systems. Stephen Emmitt & Christopher Gorse, (2014) Barry's advanced construction of buildings. 3rd edition.
Electronic Materials	None
Other Learning Materials	None

