FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Engineering & Technology

Building Construction & Materials 4

Information :

Course Code :	ARC 342	**Level :**	Undergraduate	**Course Hours :**	4.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	DINA EID SAID KHATER	4
Lecturer	DINA EID SAID KHATER	4
Assistant Lecturer	Kamal Abdeleziz Ali Selim	1
Teaching Assistant	Heba Mohamed Abdullah Ahmed Ghuneim	

Area Of Study :

Upon successful completion of the course, the student should be able to:
1. Be introduced to contemporary construction techniques/methods, internal construction and internal finishes.
2. Develop a coverage concerning working drawings through more detailed large scale drawings.
3. Develop the proper methods of the preparation and production of architectural working drawings.
4. Share ideas and work in a team or a group.

Description :

Contemporary construction techniques/methods, Architectural/building works (partitions, curtain walls, panels), Finishing materials (bricks, timber, metals, plastics, and synthetics), Finishes (plaster, cladding, suspended ceilings, etc.) expansion and settlement joints, Admixtures, Thermal and damp proofing.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Sort the structure and construction systems and techniques.
2 -	Recognize current building materials and construction techniques and trends for the future of the building industry.
3 -	Demonstrate knowledge and understanding of theories of building details.
b.Intellectual Skills: :	
1 -	Understand the basic principles of working drawings.
2 -	Understand the more detailed drawings of the buildings parts.
c.Professional and Practical Skills: :	
1 -	Submit professional complete full detailed working drawings.
2 -	Use appropriate graphic and modeling techniques for representation.
d.General and Transferable Skills: :	
1 -	Communicate effectively with other people using visual, graphic, written and verbal means.

2 -	Work in a self-directed manner.
3 -	Work coherently and successfully as a part of a team in projects, assignments and research work.
4 -	Manage time and meet deadlines.
5 -	Analyze problems and use innovative thinking in their solution.
6 -	Use the Internet in searching for data and information about different building details.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
1. Introduction	6	2	4
2. Domestic floors and finishes	6	2	4
3. Partitions	6	2	4
4. Plasters and plastering	6	2	4
5. Dry lining techniques	6	2	4
6. Reinforced concrete suspended floors	6	2	4
7. First Midterm Exam	6	2	4
8. Raised access floors - Suspended ceilings	6	2	4
9. Paints and painting	6	2	4
10. Structural glazing - Curtain walling	6	2	4
11. Second Midterm Exam	6	2	4
12. Concrete claddings	6	2	4
13. Damp-proof courses and membranes	6	2	4
14. Thermal insulation	6	2	4
15. Final Exam	6	2	4

Teaching And Learning Methodologies :

Lectures.

Drawing exercises in the Design studios.

Research assignments.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments	30.00		
Attendance	5.00		
Final Exam	20.00		
Participation	5.00		
Project	20.00		
Two Midterm Exams	20.00		

Course Notes :

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Recommended books :

ÅBarry, R., The Construction of Buildings (Vol.1 and 3), Blackwell Science Ltd.,1999.
ÅAllen, E., & Iano, J. (2004). Fundamentals of Building Construction: Materials and Methods. Hoboken, N.J.: Wiley.
ÅArchitectural Magazines and Projects.

Periodicals :

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Web Sites :

www.sweetscatscatalogue.com