

Al Albayt University
Faculty of Engineering
Department of civil Engineering

Course Title: Building Construction.

Course Code: 704211

Instructor: Eng. Safa S. Al-Olimat

Office Hours: S T 11:00-12:30

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REFERENCE: **Building Construction: Principles, Materials, & Systems (2nd Edition)**,

Diane Armpriest ~ Prentice Hall, 2012

Course Description:

Historical review of building systems development. Introduction to the Structural elements in buildings, Building materials with emphasis on local materials. Timber and form work. Provision of Joints in Structures.

Course Goal:

Develop a good feeling to the process of building construction.

Learning Outcomes:

After Successfully Completing this course students will be able to:

1. Recognize the function of each Structural member.
2. Recognize how the system gains its equilibrium and stability.
3. Develop a good feeling to the process of construction when completing more advance related topics
4. Read and understand structural plans and details.

Topics to be covered:

1. Introduction: construction building stages, types of building systems.
2. Earth work: Excavation and filling process.
3. Foundations: types and functions.
4. Columns: types and functions.
5. Beams: types and functions.
6. Slabs: Solid, hollow and waffle types ,transfer of load to supporting beams.
7. Walls: Structural Walls, Architecture Walls: types and functions.
8. Lintels: dimensions and requirement by building code.
9. Stairs: Types, dimensions and functions.
10. Masonry Work : building stones. Local terminology and methods of construction.
11. Timber and form work : Concrete vertical and lateral Pressure on Formwork.
12. Joints in Structures: requirements and functions.
13. Construction materials: concrete: preparing, mixing, handling, placing and compacting.
12. Reading Structural Plans and details of different members.

Methods of Instructions:

Class room lectures, discussion and field investigations.

Gradings:

- First Exam 25%
- Second Exam 25%
- Final Exam 50%

ATTENDANCE:

University rules will be strictly applied.