Zarqa University

Faculty of Engineering Technology
Department: Architecture Engineering

Course title: Building Construction (1)
(0908262)

Prerequisite: Architectural Drawing 0908000
Instructor:
Lecture's time:
Semester:

Office Hours:

Course description:
This course aims at understanding the construction works stages that include site preparation, soil testing, and excavation works. It studies the types of forces that affect the structural elements, the building materials (stone, brick, concrete, wood and metal), the types of foundations, the structural systems, and the structural elements (columns, beams, roofing , flooring, and walls).

Aims of the course:

1. To introduce students to different types of buildings according to different needs.
2. To provide students with means to plan and start the building construction process properly.
3. To upgrade students abilities to choose the best materials for construction and Structural system.
4. To unable student's cognitive and imaginative thinking to communicate his information to workers using improved drawing skills.

Intended Learning Outcomes (ILOs):

1. **Knowledge skills: with ability to** Define construction work, different types of buildings.
2. **understanding skills: with ability to** understand of the Structural system.
3. **Analysis skills: with ability to** Analysis Structural system to the elements by using technical drawing.
4. **Application skills : with ability to** apply building construction process, apply Structural system according to types of buildings.

Course structures:

Week	C. Hrs	ILOs	Topics	Teaching Procedure	Assessment methods
1st week 24-26 February - 2019			- Introduction to the Building construction. - Site investigation & soil - Site preparation - Excavations and fill		
2nd week 3-5 March - 2019		1+2		Theory lectures (data show)	Quizes
3rd week 10-12 March - 2019					

4th week 17-19 March - 2019		1+2+3	- Foundation Systems	- Theory lectures (data show)+ Videos will be during the one hours - (Applications) technical drawing will be during the two hours lab. - Students are requested to produce technical drawings of the building elements - Site visits.	- Exercises tests
5th week 24-26 March - 2019		2+3			
6th- week 31 March – 2 April - 2019		2+3	- Walls systems - Floor Systems - Roof systems (slabs)		**First Exam 26/3/2018**
7th week 7-9 April - 2019					HWs + Exercises tests
8th week 14-16 April - 2019		2+3			
21-23 April - 2019 9th week					
10th week 28-30 April - 2019					
5-7 May - 2019			- Special Construction		**Second Exam**
12th 13th week 12-21 May - 2019		1+2+4	- Stair cases		- Submit project (Structural drawing)
			- Materials of construction Concrete, Steel, Stones, wood		
14th week 26-28 May - 2019					
15th week	**Final Exam**				**Final Exam**
16th week					

References:

- Ching, F. D.K, ***Building Construction***, Van Nostrand Reinhold Illustrated
- **الواضح في إنشاء المباني**/ فرانسيس د.ك تشنج، ترجمة سليم الفقيه- عمان: الجامعة الأردنية، 2004

- **"Building Construction",** Zuhair M. Saco & Artin Levon, Baghdad university press, Baghdad, Iraq,1986.

Assessment Methods:

Methods	Grade	Date
First Exam	15%	**25/3/2019**
Second Exam	15%	
Quizzes	20%	
drawings during the lab		
HWs -Exercises		
Model for a structural element		
Final Exam	50%	