

Zarqa University



**Prerequisite:** 0908321

**Instructor:**

**Faculty of Engineering**

**Department: Architecture**

**Course title:** Architectural Design (4)

0908322

**Lecture's time :**

**Semester :**

**Office Hours:**

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### **Course description:**

This course aims at finding comprehensive architectural solutions by designing a mixed-use building with a floor area that varies from 3000m<sup>2</sup> to 5000m<sup>2</sup>, studying its main components, understanding its functions, and integrating them with the surrounding urban environment. Applying the sustainability standards and meet the needs of users by studying the visual, functional, social and economic aspects.

### **Aims of the course:**

The study of this subject will continue further with-greater emphasis on contextual, human and functional aspects involved more complex design situations. The main objective is to understand effect of user, climate, topography and services on the buildings, to understand relationship between form and function of buildings. The design process to deal with the following goals:

- Functional organization and analysis of activities with respect to site; its topography and urban context.
- Applying the related regulations, building byelaws and standard codes.
- Applying a proper concept and design methodology which respect the human factor in architecture; with emphasis on participatory design principles.
- Using a suitable structural system
- Develop a creative concept and form to suit the purpose of building.

### **Intended Learning Outcomes (ILOs):**

The student should be able to create and demonstrate their architectural design project which includes a different interrelated problems to be solved according to different levels of learning.

- Knowledge and understanding

The students are expected to recognize the function of building services like drainage, water supply and electricity. The student should have a proper knowledge to select and use a suitable structural system.

- Cognitive skills (thinking and analysis).

This course improves the student's skills and ability to apply, analyze and compose solutions to different types of problems simultaneously.

They should be also able to organize activities with respect to site analysis which take the topography and urban context into consideration.

They are expected to be able to apply the related regulations, building byelaws and standard codes.

Also, to be able to apply a proper concept and design methodology which respect the human factor in architecture.

Basically the student should be able to develop a creative concept and form to suit the purpose of building.

- Communication skills (personal and academic).

The student will be trained to use the architectural vocabulary which enables him/her to work with other architects. The practice of creative architectural design strengthens the student confidence and leadership skills. The Masterpiece of architecture can never be created without the designer's strong desire, persistence, practice, knowledge, time management, decision making, problem solving, and innovative skills.

- Transferable Skills.

The student's recognizing and practicing of the organization of space and form in third dimension is considered as basic knowledge in architectural design that helps the student to succeed in future practice of architectural design.

## Course structures:

Week	C. Hrs	ILOs	Topics	Teaching Procedure	Assessment methods
Week 1			<ul style="list-style-type: none"> <li>Syllabus</li> </ul>		
Week 2	4		<ul style="list-style-type: none"> <li>Introduction to Architectural Design4 ( Cultural Center in Ajloun)</li> </ul>		
	4				
Week 3	4		<ul style="list-style-type: none"> <li>Beginning of the Project</li> <li>Criteria of Architectural Design (Standards).</li> </ul>		
	4				
Week 4	4		<ul style="list-style-type: none"> <li>Review Case Studies.</li> </ul>		
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Week 5	4		<ul style="list-style-type: none"> <li>Review Site Analysis +Site Visit</li> </ul>		
	4				
Week 6	4		<ul style="list-style-type: none"> <li>Final Submission of “Cases Study and Site Analysis+ Program”</li> </ul>		Evaluation 15%
	4		<ul style="list-style-type: none"> <li>Beginning to Design Concept</li> </ul>		
Week 7	4		<ul style="list-style-type: none"> <li>Concept Development</li> </ul>		Evaluation 5%
	4		<ul style="list-style-type: none"> <li>Concept Final Submission</li> </ul>		
Week 8	4		<ul style="list-style-type: none"> <li>Developed the Concept to one line plan</li> </ul>		
	4				
Week 9	4		<ul style="list-style-type: none"> <li>Sketch Design on 21/4</li> <li>Plans and site Development</li> </ul>	First Exam : Sketch Design	Evaluation 10%
	4				
Week 10	4		<ul style="list-style-type: none"> <li>Evaluation: Plans And Site plan on 30/4</li> </ul>		Evaluation 10%
	4				
Week 11	4		<ul style="list-style-type: none"> <li>Beginning to design elevations and sections</li> </ul>		
	4				
Week 12	4		<ul style="list-style-type: none"> <li>Developed elevations and Sections</li> </ul>		Evaluation 5%
	4		<ul style="list-style-type: none"> <li>Evaluations : elevations and Sections</li> </ul>		
Week 13	4		<ul style="list-style-type: none"> <li>Sketch design</li> <li>Pre-Final Submission on 21/05</li> </ul>		Evaluation 10%
	4				Evaluation 15%
Week 14	4		<ul style="list-style-type: none"> <li>Developed the Final Drawing</li> </ul>		
	4				

	30/05	4		• Final Project Submission		Evaluation 30%
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**References:**

• Books

1. Ching, f. D. K., Architecture, form, space and order, John Wiley and Sons, Canada. (3rd edition).
2. Baker, Geoffrey H (1993). Design Strategies in Architecture and Approach to the Analyses of Form, New York Van Nostrand Reinhold.
3. Laseau, P., (1989). Graphic Thinking for Architects and Designers. New York Van Nostrand Reinhold.
4. Danby, M., (1963). Grammar of Architectural Design, Oxford University Press, London.
5. Time-Saver Standards
6. Time saver Building Types

**Assessment Methods:**

Methods	Grade	Date
Project Submission	80%	To be determine through the course
2 Sketch design	20%	To be determine through the course

