

## Faculty of Engineering & Technology

### Architectural Design 3

#### Information :

**Course Code :** ARC 311

**Level :** Undergraduate

**Course Hours :** 4.00- Hours

**Department :** Department of Architectural Engineering

#### Instructor Information :

Title	Name	Office hours
Lecturer	DINA MAAROUF AHMED MOHAMED DIEFALLAH	5
Assistant Lecturer	SOFIA AYAD ESKANDER DAWOUD	1

#### Area Of Study :

The main aims of this course are to:

1. Enhance student's awareness of creative design process within a set of moderate site limitations.
2. Train student to evaluate and compare between different solutions.
3. Encourage student to spell out thoughts and ideas.

#### Description :

The main concern and focus of this course will be about the "Environmental/Site Considerations" affecting the design decisions. The course will address urban projects to introduce urban spaces and landscape design. The course will also emphasize the importance of the setting: environmental and physical factors in the design process, introduction and experimentation with current trends and concepts through studio and design assignments. Course projects may be such as: Hostel, Youth Camp, Touristic Village, Gated Residential Communities, and other similar ones.

#### Course outcomes :

##### **a.Knowledge and Understanding: :**

1 -	Explain architectural design and planning as process and product.
2 -	Analyze climatic considerations and natural environment in design
3 -	Recognize design problems, reporting clients needs & requirements.
4 -	Gather relevant information.

##### **b.Intellectual Skills: :**

1 -	Critically Analyze different case studies and design alternatives achieving results.
2 -	Develop solution of an architectural problem incorporating different user and site considerations
3 -	Develop forms in two and three dimensions engaging images of places and time with innovation and creativity.
4 -	Develop project alternatives and evaluate their expected performance.
5 -	Consider appropriate materials, structural systems and construction elements in the design process.

**c. Professional and Practical Skills: :**

1 -	Use knowledge and understating of mathematics, science, art, information technology, design and engineering concepts to design and plan buildings and to solve problems.
2 -	Develop drawings representing project using different expression techniques to visualize ideas verbally and graphically, either manually or digitally.
3 -	Develop innovative and appropriate solutions for an architectural and urban problem.
4 -	Encourage students to think creatively and imagine their projects
5 -	Consider design alternative solutions, design changes, and differences in styles, opinions and evaluations based on others values, culture and experiences
6 -	Develop a project for FUE community, a hostel for FUE students and staff.

**d. General and Transferable Skills: :**

1 -	Present information effectively.
2 -	Communicate ideas commendably.
3 -	Manage design and presentation tasks
4 -	Review literature and information.
5 -	Develop project according to schedule of requirements and submissions.
6 -	Refer to relevant literature.

**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction	8	8	0
Develop awareness of site considerations and urban design needs as applied to medium scale projects	26	8	18
Express ideas with self-confidence and manage teamwork	12	6	6
Enhance design process practice	10	0	10
Organize and articulate form and urban space that satisfy functional, environmental, and aesthetic requirements	26	4	22
Establish design and evaluation criteria	8	0	8
Test different design alternatives	8	0	8
Decide upon the most satisfying solution	8	0	8

**Teaching And Learning Methodologies :**

Lectures
Project
Physical Model
Research
Group Discussion

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What

Final exam	40.00		
Participation	10.00		
Submission of Final Project	20.00		
Year's work:	30.00		

**Course Notes :**

No course notes are required.

**Recommended books :**

Ramsey, C.; Ray, J. & Hoke, Jr.:  
Architectural Graphic Standards, Tenth Edition - metric, AIA. John Wiley & Sons  
Inc., 2000, NJ. USA  
Chiara, J.:  
Time Saver Standards for Architectural Design,  
Most recent metric version  
Francis D.K. Ching:  
Architecture: Form, Space and Order.

**Periodicals :**

Architecture  
o Architectural Record  
o Architectural Review  
o Architecture d'aujourd'hui

**Web Sites :**

o [www.architecturalrecord.com](http://www.architecturalrecord.com)  
o [www.greatbuildings.com](http://www.greatbuildings.com)