

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 | Dalia Anis Mekhaimer Abd Elhady | 3 |
| Lecturer | Dina Maarouf Ahmed Mohamed Dief Allah | 4 |
| Lecturer | Dalia Anis Mekhaimer Abd Elhady | 3 |
| Assistant Lecturer | Sameh Ibrahiem Abdul Samie Ahmed Emam | |
| Assistant Lecturer | Basma Mouhamed Nagib Ebraheem | 2 |
| Assistant Lecturer | MOHAMED MAHMOUD SAYED MAHMOUD SALEH | 1 |
| 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: :

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| 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: :

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| 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: :

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| 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: :

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| 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 :

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| Lectures |
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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
- o www.greatbuildings.com