FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Engineering & Technology

Architectural Design 1

Information :

Course Code :	ARC 211	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	SAMIR SADEK HOSNY	11
Assistant Lecturer	Sameh Ibrahiem Abdul Samie Ahmed Emam	10
Teaching Assistant	Mariam Maged Kamal Eldeen Mohamed Gomaa	

Area Of Study :

-Upon successful completion of the course, the student should be able to:

1. Develop design process awareness (including data gathering and analysis)
2. Share ideas and work in a team or a group
3. Develop drawing and representation techniques
4. Develop awareness of circulation systems, structures, lighting and form as applied to small scale buildings
5. Organize and articulate form and space that satisfy both functional and aesthetic requirements
6. Establish design and evaluation criteria
7. Test different design alternatives

Description :

The design process and its various aspects, Functional relations and circulation patterns, Qualitative and quantitative study of architectural spaces, Relationships between spaces and required openings, the effect of openings upon facades, Human / environmental / functional relations, Simple structures for small scale buildings, Simple design problem solving. Projects addressing different building types vary from one course to the other.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Demonstrate knowledge and understanding of scientific background (theories and history) of similar building types
2 -	Define design problems and illustrate in drawings and sketches possible solutions
3 -	Define the principles of building technologies, including the application of structures, construction methods, materials and environmental design in relation to human needs.
b.Intellectual Skills: :	
1 -	Analyze and solve design problems using models, drawings and diagrams
2 -	Conceptualize, investigate and develop the design of three dimensional objects and spaces
3 -	Create architectural designs that integrate social, aesthetic and technical requirements
4 -	Criticize and evaluate alternatives

5 -	Decide and chose among different design alternatives
c.Professional and Practical Skills: :	
1 -	-Identify data and requirements for designing a certain building type
2 -	Use appropriate graphic and modeling techniques for representation
3 -	Submit professional good looking complete drawings
d.General and Transferable Skills: :	
1 -	Communicate effectively with other people using visual, graphic, written and verbal means
2 -	Work in a self-directed manner
3 -	Work coherently and successfully as a part of a team in projects, assignments
4 -	Manage time and meet deadlines
5 -	Analyze problems and use innovative thinking in their solution
6 -	Use the Internet in searching for information about specific building types

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Projects data collection, site visits and data review	15	5	10
Research presentations	6	2	4
Five Design Sketches	18	_	18
Design Development and follow up	24	8	16
Final drawings, finishing and representation of projects	21	_	21

Teaching And Learning Methodologies :

Lectures
Design studios
Research assignments
Information collection from different sources
Site Visits and field trips
Class discussions, sessions and design critiques

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments	50.00		_
Attendance	5.00		_
Final Project	20.00		_
Final-term examination	20.00		_
Participation	5.00		_

Course Notes :

No course notes are required

Recommended books :

ÅRamsey, C.; Ray, J. & Hoke, Jr.: Architectural Graphic Standards, Tenth Edition, AIA. John Wiley & Sons Inc., 2000, NJ. USA
ÅChiara, J. & Time Saver Standards for Architectural Design
ÅArchitectural Magazines and Projects
ÅArchitecture: Form ï Space and Order. By Francis D.K. Ching

Periodicals :

ÅArchitecture
ÅArchitectural Record
ÅArchitectural Review
ÅArchitecture dâaujourdhui

Web Sites :

Åwww.architecturalrecord.com
Åwww.greatbuildings.com