

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
Lecturer	BOTHAINA SAMIH ISMAIL ABOELKHIER BADR	1
Lecturer	Haitham Mohamed Abdellatif El Sayed	7
Assistant Lecturer	Sameh Ibrahim Abdul Samie Ahmed Emam	10
Teaching Assistant	Salma Mohamed Eltohamy Elgendy	1
Teaching Assistant	Omar Magdy Ahmed Ibrahim Elbahrawy	1
Teaching Assistant	AYA TAREK IBRAHEM ABDELHADY AHMED	1
Teaching Assistant	Salma Mohamed Eltohamy Elgendy	1

Area Of Study :

The main aims of this course are to:

1. Build student's awareness of the creative design process.
2. Train student to express ideas verbally and graphically.
3. Train student to think creatively.

Description :

The main concern and focus of this course will be about the "Creative Thinking" design process. The design process will focus mainly on methods of generating creative ideas considering simple functional needs, simple structures for small scale buildings, simple design problem solving. The course projects may be such as: a pavilion in a public garden, a bus station, a sightseeing kiosk, a small or medium span exhibition hall, and similar ones.

Course outcomes :

a. Knowledge and Understanding: :

- | | |
|-----|---|
| 1 - | Define the theoretical bases upon which small scale Pavilions and exhibition halls are designed |
| 2 - | Define the design process as a particular set of sequential operations. |
| 3 - | Define what is meant by design problem. |
| 4 - | Define different architectural rendering techniques |

b. Intellectual Skills: :

- | | |
|-----|---|
| 1 - | Use analytical thinking methods to define design problems. |
| 2 - | Use creative thinking methods to propose different design alternatives. |

3 -	Evaluate design alternatives.
c. Professional and Practical Skills: :	
1 -	Design architectural projects in light of spatial and aesthetic requirements
2 -	Apply creative concepts and methods to develop his/her design.
3 -	Create diagramming and conceptual 2D & 3D sketches to express and develop his/her design.
4 -	Use proper presentation techniques to represent his/her final design proposal
5 -	Build simple physical study models.
d. General and Transferable Skills: :	
1 -	Express his/her ideas by visual, graphic, written and verbal means
2 -	Discuss and defending his/her ideas.
3 -	Manage time and meet deadlines.
4 -	Search for relevant information.

Course Topic And Contents :			
Topic	No. of hours	Lecture	Tutorial / Practical
First Project Orientation Lecture. Nth dimension experience. Group work project 1 How to form a team and how to work cooperatively 4th dimension experience. Group work project How to form a team and how to work cooperatively How to form a team and how to work cooperatively Project concept discussion, small group discussion	4	4	0
Project concept discussion, small group discussion	2	0	2
Architecture Drafting	0	3	9
How to present your research outputs	3	1	2
Research Presentation	3	1	2
design sketches (1&2)	0	0	3
Pin up & group discussion + design development	3	2	1
2nd Project orientation Lec. ,How to define and prepare research items, project problem investigation.	3	0	3
Research data review and final submission	4	1	3
Third project orientation lecture	6	4	2
Pin up & group discussion + design development	6	3	3
1st sketch design: concept + keywords (individual work). Pin up & group discussion + design development + lecture. sketch Design)	6	2	4
Design development: plans + section + elevation + 3d view	3	1	2
2nd sketch design: plans + section + elevation or 3d view , Pin up & group discussion + design development + lecture.	5	2	3

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Design development	3	1	2
3rd sketch design: plans + section + elevation + 3d view	3	0	3
Pin up & group discussion + design development + lecture	4	2	2
Design development	2	0	2
Project finishing	9	0	9
Final submission of second project	3	0	3

Teaching And Learning Methodologies :

Lectures
One to One Discussion
Small Groups Discussion
Public Group Discussion
Physical Maquette
Search for Data (Self-study)
Research Presentation
Sketch Designs

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final exam	40.00		–
Participation "Submission of 3rd Project"	10.00		
Sketch Design (1) & One-day Esquisse	10.00		
Sketch Design (1): Model + Concept	5.00		
Sketch Design (2) & External Esquisse	10.00		
Sketch Design (3) & One-day Esquisse	10.00		
Submission of 2nd Project	5.00		
Submission of Drafting Project	5.00		
Submission of Nth Dimension Project	5.00		

Course Notes :

No course notes are required

Recommended books :

Neufert, E.: Architects Data; The Handbook of Building Types, Third Edition, Blackwell Publishing, 2002, The Alden Group Ltd., Oxford & Northampton, metric edition.
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,

Periodicals :

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

Web Sites :

www.architecturalrecord.com
o www.greatbuildings.com