

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	9
Lecturer	Dina Maarouf Ahmed Mohamed Dief Allah	
Lecturer	Haitham Mohamed Abdellatif El Sayed	4
Assistant Lecturer	MOHAMED MAHMOUD SAYED MAHMOUD SALEH	
Teaching Assistant	Mazen Nabil Abdellatif Shehata	1
Teaching Assistant	Sameh Ibrahiem Abdul Samie Ahmed Emam	8
Teaching Assistant	AYA TAREK IBRAHEM ABDELHADY AHMED	
Teaching Assistant	Omar Magdy Ahmed Ibrahim Elbahrawy	
Teaching Assistant	Ahmed Mohamed Gamal Eldin Hassan Abdallah Ashmawy	1

Area Of Study :

- Upon successful completion of the course, the student should be able to:
1. Develop design process awareness (including data gathering & analysis).
 2. Share ideas and work in a team or a group.
 3. Develop drawing and representation techniques.
 4. Organize and articulate form and space that satisfy both functional and aesthetic requirements.
 5. Establish design and evaluation criteria.
 6. Test different design alternatives.
 7. Decide upon the most satisfactory solution.

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 -	a1. Defining the theoretical bases upon which small scale Pavilions and exhibition halls are designed.
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2 -	a2. Defining the design process as a particular set of sequential operations
3 -	a3. Define what is meant by design problem
4 -	a4. Distinguishing different architectural rendering techniques.
b. Intellectual Skills :	
1 -	b1. Using analytical thinking methods to define design problems.
2 -	b2. Using creative thinking methods to propose different design alternatives.
3 -	b3. Evaluating design alternatives.
c. Professional and Practical Skills :	
1 -	c1. Designing architectural projects in light of spatial and aesthetic requirements.
2 -	c2. Apply creative concepts and methods to develop his/her design.
3 -	c3. Creating diagramming and conceptual 2D & 3D sketches to express and develop his/her design.
4 -	c4. Using proper presentation techniques to represent his/her final design proposal.
5 -	c5. Build simple physical study models.
d. General and Transferable Skills :	
1 -	d1. Expressing his/her ideas by visual, graphic, written and verbal means
2 -	d2. Discuss and defend his/her ideas.
3 -	d3. Managing time and meet deadlines.
4 -	d4. Search for relevant information.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
-Design Process: Creative Thinking; Lateral Thinking: Alternatives -Design Process: Creative Thinking; Lateral Thinking: Provocation Design Process: Creative Thinking; Lateral Thinking: Alternatives Design Process: Creative Thinking; Lateral Thinking: Provocation Design Process: Creative Thinking; Lateral Thinking: Alternatives Design Process: Creative Thinking; Lateral Thinking: Provocation Design Process: Creative Thinking; Lateral Thinking: Alternatives Design Process: Creative Thinking; Lateral Thinking: Provocation Design Process: Creative Thinking; Lateral Thinking: Alternatives Design Process: Creative Thinking; Lateral Thinking: Provocation Design Process: Creative Thinking; Lateral Thinking: Alternatives Design Process: Creative Thinking; Lateral Thinking: Provocation Design Process: Creative Thinking; Lateral Thinking: Alternatives. Design Process: Creative Thinking; Lateral Thinking: Provocation.	6	2	4
-First Project Orientation Lecture. Functioned landscape volume. How to define and prepare research items, project problem investigation. -How to present your research outputs. Research data review.	6	4	2
-Research Presentation. - 1st sketch design: model: concept + keywords (individual work)	6	0	6
-Design Process: What Is Creativity and How to generate a design concept. -Design Process: Creative Thinking; Lateral Thinking: Challenge	6	4	2

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
-Pin up & group discussion + design development. - 2nd sketch design: model: concept + keywords (individual work).	6	0	6
-Pin up & group discussion + design development. -Final submission of 1st project and evaluation.	6	0	6
-Second Project orientation lecture. -Research data review (group work).	6	4	2
- Research final submission (group work). - 1st sketch design: concept + keywords (individual work).	6	0	6
- Pin up & group discussion + design development + lecture. - Design development: plans + section + elevation + 3d view.	6	0	6
- 2nd sketch design: plans + section + elevation or 3d view. - Pin up & group discussion + design development + lecture.	6	0	6
- Design development. - 3rd sketch design: plans + section + elevation + 3d view.	6	0	6
-Pin up & group discussion + design development + lecture. -Design development.	6	0	6
- Project finishing. - Final submission of second project.	6	0	6
-Third Project orientation lecture. -Third Project submittal (One day sketch Design).	6	3	3

Teaching And Learning Methodologies :

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

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments	15.00		a1 a2 a3 a4 b1 b2 b3 c1 c2 c3 c4 d1 d3
Final exam	40.00		_c2 a1 a3 b2 c1 c3 c4 d1 d3
Oral presentations	10.00		a1 a2 a3 b1 b2 b3 d1 d2 d3
Physical Model	10.00		c5
Research Document	10.00		a1 a3 b1 b3 d1 d2 d3 d4
Sketch Designs	15.00		a1 a2 a3 a4 b1 b2 b3 c1 c2 c3 c4 d1 d3

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.
- Architectural Magazines and Projects

Periodicals :

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

Web Sites :

- www.architecturalrecord.com
- www.greatbuildings.com