

Faculty of Engineering & Technology

Architectural Design 2

Information :

Course Code : ARC 212

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	SAMIR SADEK HOSNY	7
Lecturer	DINA EID SAID KHATER	2
Lecturer	Haitham Mohamed Abdellatif El Sayed	2
Assistant Lecturer	Aya Osama Ahmed Kamal Aly	1
Assistant Lecturer	Sameh Ibrahim Abdul Samie Ahmed Emam	1
Assistant Lecturer	Nouran Ashraf Ali Abdeltawab	
Assistant Lecturer	MOHAMED MAHMOUD SAYED MAHMOUD SALEH	4
Teaching Assistant	AYA TAREK IBRAHEM ABDELHADY AHMED	

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 functional limitations.
2. Train student to defend and criticize ideas verbally and graphically.
3. Train student to think critically.

Description :

The main concern and focus of this course will be about the "Problem Solving" design process. The design process will be approached as a method of finding solutions for functional, environmental, and structural needs and problems. This will be as important as the need for generating creative and innovative ideas as the creative thinking methods should be well rooted in the prerequisite "Architectural Design (1)" course. The student will address various issues such as functional relations, 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, and similar issues. The course projects may be such as: a Celebrity Residence, Chalet, Youth Hostel, an Exploration Center, a Kindergarten, Kids' Arts Center, Children's Library/Museum and similar projects.

Course outcomes :

a. Knowledge and Understanding: :

1 -	Define the theoretical bases upon which a private residence is designed.
2 -	Define different site constrains.
3 -	Explain what is meant by design problem.

b. Intellectual Skills: :

1 -	Apply analytical thinking methods to define design problems.
2 -	Apply creative thinking methods to propose different design alternatives.
3 -	Analyze site constrains and limitations.
4 -	Appraise spatial forms and their aesthetic values.

c. Professional and Practical Skills: :

1 -	Design architectural projects in light of spatial, aesthetic, and functional requirements.
2 -	Apply creative concepts and methods to develop his/her design.
3 -	Create 2D & 3D sketches to express and develop his/her design.
4 -	Use proper presentation techniques to represent his/her design proposal.

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.
5 -	
6 -	

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Research Data Review (Group Work), Types of Residential Villas AND One day sketch "Space Design Critique"	3	2	1
Final Research Submission and Group Discussion (Group Work)	3	3	0
Individual work: Concept with keywords, Detailed Program, Relationship Matrix, Bubble Diagram, Site analysis, and Site Zoning	3	0	3
Residential Design Project: Start and Orientation AND One day sketch "Personal residence Space Design"	3	2	1
Pin-up and Group Discussion: Volumetric Zoning, Schematic Plans, Concept with keywords, Detailed Program, Relationship Matrix, Bubble Diagram, Site analysis, and Site Zoning	4	4	0
Individual work: Project Development	5	0	5
1st Sketch Design: Work at Studio then submittal Volumetric Zoning, Schematic Plans, Concept with keywords, Detailed Program, Relationship Matrix, Bubble Diagram, Site analysis, and Site Zoning	3	0	3
General Criticism + Project Development	3	3	0
Individual work: Schematic Elevations, Schematic Sections, Layout, Plans, Concept with keywords, Detailed Program, Relationship Matrix, Bubble Diagram, Site analysis, and Site Zoning with keywords, Detailed Program, Relationship Matrix, Bubble Diagram, Site analysis, and Site Zoning	3	0	3
Pin-up and Group Discussion: Elevations, Sections, Layout, Concept with keywords, Site analysis, and Site Zoning	4	4	0

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Individual work: Project Development	5	0	5
2nd Sketch Design: Work at Studio then submittal Elevations, Sections, Layout, Concept with keywords, Detailed Program, Relationship Site analysis, and Site Zoning	3	0	3
General Criticism + Project Development	3	0	3
Individual work: Project Development	3	0	3
Pin-up and Group Discussion	3	3	0
3rd Sketch Design: Work at Studio then submittal + Orientation	3	0	3
Individual work: Project Development	6	0	6
One day sketch design: External Design Project	3	0	3
General Criticism	3	3	0
Project developing	6	0	6
General Criticism	3	3	0
Project Finishing	12	0	12
Project Submittal	3	0	3

Teaching And Learning Methodologies :

Lectures.

One to One Discussion

Public Group Discussion

Search for Data (Self-study)

Research Presentation

Sketch Designs

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
1st , 2nd and 3rd sketch design	15.00		–
Final exam	40.00		–
Group Research	5.00		–
One day External Sketch Design	10.00		–
Participation	10.00		
Preliminary Submission of Final Project	5.00		–
Submission of Final Project	15.00		

Course Notes :

No course notes are required

Recommended books :

- o Neufert, E.: Architects Data; The Handbook of Building Types, Third Edition, Blackwell Publishing, 2002, The Alden Group Ltd., Oxford & Northampton, metric edition.
- o Ramsey, C.; Ray, J. & Hoke, Jr.: Architectural Graphic Standards, Tenth Edition - metric, AIA. John Wiley & Sons Inc., 2000, NJ. USA
- o Chiara, J.: Time Saver Standards for Architectural Design, Most recent metric version
- o Francis D.K. Ching: Architecture: Form, Space and Order.
- o Architectural Magazines and Projects

Periodicals :

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

Web Sites :

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