

Faculty of Engineering & Technology

History & Theories of Architecture 2

Information :

Course Code : ARC 222

Level : Undergraduate

Course Hours : 2.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Rania Badawy Shokry Abd El Rahman	1
Assistant Lecturer	Basma Mouhamed Nagib Ebraheem	1
Assistant Lecturer	ASMAA GAMAL ABDELFATTAH ELSAYED HASSAN	

Area Of Study :

The main aims of the course are to build the student's knowledge regarding:

- "Edward de Bono" creative thinking methods and techniques.
- The architectural design process.
- The architectural space definers and functional manipulation.
- The anthropometric data and its relation to the space design.

Description :

The course focuses on the methods of creative thinking based on writings of "Edward De Bono". In addition, student will learn about the relation between form and space and how to define a space. Also, student will learn about circulation spaces and their characteristics.

Course outcomes :

a.Knowledge and Understanding: :

1 -	List some of the creative thinking methods.
2 -	Define the golden ratio and how it affects architecture buildings.
3 -	Define the relation between human dimensions and functional spaces needs.
4 -	Define the design process
5 -	Define the different types of space definers.
6 -	Point out space characteristics according to its definers and openings
7 -	Differentiate between functional and circulation spaces.

b.Intellectual Skills: :

1 -	Think creatively based on de Bono's systematic methods.
2 -	Use critical methods to analyze architectural spaces.

c.Professional and Practical Skills: :

1 -	Use appropriate graphic techniques to point out spaces characteristics.
-----	---

d.General and Transferable Skills: :

1 -	Search for information and adopt life-long self-learning.
2 -	Refer to relevant literatures

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Design Process: What Is Creativity	1	1	
Design Process: Creative Thinking; Lateral Thinking: Challenge	1	1	
Design Process: Creative Thinking; Lateral Thinking: Alternatives	1	1	
Design Process: Creative Thinking; Lateral Thinking: Provocation	2	2	
Design Process: Data Gathering; Who do we design for? (Human Dimensions)	2	2	
Design Process: Problem Definition and data analysis & synthesis	2	2	
Design Process: Data Gathering; What are the building type requirements? (Circulation)	3	3	
Space Definition	3	3	

Teaching And Learning Methodologies :

Lecture
Research

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final exam :	40.00		
Homework assignments	15.00		
In Class Quizzes	15.00		
Mid-term examinations	30.00		
Participation	10.00		

Books :

Book	Author	Publisher
Architecture: Form, Space, and Order	Francis D. K. Ching	Wiley

Recommended books :

- a) Crosbie, Wattson: Time Saver Standards for Architectural Design Data. 1997
 b) De Bono, E., Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas, HarperCollins, 1995

