

Faculty of Engineering & Technology

Graphic & Visual Skills 2

Information :

Course Code : ARC 232

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

| Title | Name | Office hours |
|--------------------|---------------------------------------|--------------|
| Lecturer | Amr Abdalla Salem Bagneid | 4 |
| Lecturer | Fahim Magued Fahim Iscandar | 5 |
| Assistant Lecturer | Sameh Ibrahiem Abdul Samie Ahmed Emam | |
| Assistant Lecturer | Sameh Ibrahiem Abdul Samie Ahmed Emam | |
| Teaching Assistant | Kamal Abdeleziz Ali Selim | 1 |
| Teaching Assistant | AYA TAREK IBRAHEM ABDELHADY AHMED | |
| Teaching Assistant | Salma Mohamed Eltohamy Elgendy | |
| Teaching Assistant | Kamal Abdeleziz Ali Selim | 1 |
| Teaching Assistant | Omar Magdy Ahmed Ibrahim Elbahrawy | |

Area Of Study :

The aims of this course are to train student to:

Visualize & Represent architectural forms based on scientific methods.

Represent architectural drawings by means of shades, shadows, and perspective shots..

Description :

The course examines the language of architectural form and deals with the techniques of analyzing and representing it by different means of rendering. The course includes lectures, problem solving and exercises.

Topics include:

Shade and Shadow: Fundamentals; shade of points, lines, planes, and volumes.

Exercises on shade and shadow of different architectural elements; arches, stairs, curves, etc.

Perspective: Fundamentals of perspective; plane of image, position of the observer, cone of vision, angles of vision, vanishing points (one point, two points), Architectural perspective. Shade and shadow in perspective.

Course outcomes :

a. Knowledge and Understanding: :

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| 1 - | a1. Differentiate between shade and shadow. |
| 2 - | a2. Examine the fundamentals of shadow (shadow of points, lines, planes and volumes) |
| 3 - | a3. Examine the fundamentals of perspective (picture plane, position of the observer, cone of vision and vanishing points) |

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|--|--|
| 4 - | a4. Differentiate between different types of perspective. |
| b. Intellectual Skills: : | |
| 1 - | b1. Apply shadow principles in exercises & architectural project |
| 2 - | b2. Select proper perspective type for buildings. |
| c. Professional and Practical Skills: : | |
| 1 - | c1. Draw accurately the architectural shade and shadow. |
| 2 - | c2. Draw accurately different perspective types for buildings. |
| 3 - | c3. Use freehand sketches to draw building perspectives. |
| d. General and Transferable Skills: : | |
| 1 - | d1. Communicate effectively with other people using visual, graphic, written and verbal means. |
| 2 - | d2. Manage time and meet deadlines. |

Course Topic And Contents :

| Topic | No. of hours | Lecture | Tutorial / Practical |
|--|--------------|---------|----------------------|
| Introduction to the main definition of SHADE & SHADOW & draw shadow of point. | 4 | 2 | 2 |
| SHADOWS OF LINES | 4 | 2 | 2 |
| SHADOWS OF PLANES (basic shapes: regular and irregular shapes intersectional planes). | 8 | 4 | 4 |
| SHADE & SHADOWS OF VOLUMES: Cube, cone, cylinder and pyramid in different ways. | 8 | 4 | 4 |
| ARCHITECTURAL APPLICATIONS: An application of shade and shadows on some architectural elements (i.e.: minarets, entrances, stairs, etc.) | 8 | 4 | 4 |
| INTRODUCTION TO PERSPECTIVE: How to use it in architecture (basic way to draw perspective) with isometric way. | 4 | 2 | 2 |
| DRAWING PERSPECTIVE WITH TWO VANISHING POINTS (ARCHITECTURAL APPLICATION). | 12 | 6 | 6 |
| INTERIOR PERSPECTIVE | 4 | 2 | 2 |
| PERSPECTIVE RENDERING (shade & shadow and reflection) | 4 | 2 | 2 |

Teaching And Learning Methodologies :

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| Lectures. |
| Class Work |

Course Assessment :

| Methods of assessment | Relative weight % | Week No | Assess What |
|-----------------------------|-------------------|---------|-------------|
| Assignments | 30.00 | | |
| Final exam : | 40.00 | | |
| In Class Quizzes | 20.00 | | |
| Performance & Participation | 10.00 | | |

Course Notes :

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Recommended books :

LEVINSON, Edward D. . Architectural Rendering Fundamentals . N.Y.: McGraw-Hill, 1983.

ÁIN, Mike W. . Architectural Rendering Techniques / A Color Reference . N.Y.: Wiley, 1985.

ÁMONTAGUE, John . Basic Perspective: A visual Approach . 3rd Ed. . N.Y.: Wiley, 1998.

ÁJDDIN, M. Saleh . Axonometric & Oblique Drawing: A 3-D Construction, Rendering, & Design Guide . N.Y.: McGraw-Hill, 1997.

Periodicals :

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Web Sites :

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