

**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	Fahim Maged Fahim Iscandar	3
Assistant Lecturer	ETHAR ESSAM MAHMOUD ALY ELSHINAWY	1
Assistant Lecturer	Wessam Mohamed Badawy Bakhaty	
Teaching Assistant	Sofia Ayad Eskander Dawoud	1
Teaching Assistant	Aya Osama Ahmed Kamal Aly	
Teaching Assistant	Zeinab Soliman Mohamed Galal Soliman	

**Area Of Study :**

By the end of this course, the student will be able to:

- Develop the abilities for visualization & representation based on scientific methods.
- Apply shade and shadow in architectural representation.
- Draw perspectives for architectural projects.

**Description :**

Architectural presentation, Shade and shadows of a dot, a line, a surface, and a volume, Shade and shadow of buildings in plans, elevations, perspectives and layouts. Architectural perspective, one and two vanishing point perspectives, computer simulated perspectives.

**Course outcomes :**

**a.Knowledge and Understanding: :**

1 -	Understand and compare between shade and shadow.
2 -	Understand the fundamentals of shadow (shadow of points, lines, planes, and volumes).
3 -	Understand the fundamentals of perspective (plane of image, position of the observer, cone of vision, angles of vision, vanishing points).

**b.Intellectual Skills: :**

1 -	Compare between the different perspective views.
2 -	Apply shadow principles in architectural projects.

**c.Professional and Practical Skills: :**

1 -	Draw accurately the architectural shade and shadow.
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2 -	Draw accurately different perspective views for buildings
3 -	Observe and describe through photography choosing best angles for shots.
<b>d.General and Transferable Skills: :</b>	
1 -	Develop the ability to work in groups.
2 -	Develop drawing and presentation skills.
3 -	Share ideas and communicate with others.

**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
1. Shadow of Points	6	2	4
2. Shadow of Points and Lines	6	2	4
3. Shadow of Planes – Squares	6	2	4
4. Shadow of Planes on Broken and Curved Planes	6	2	4
5. Shadow of Planes – Circles	6	2	4
6. Quiz # 1	6	2	4
7. Shade & Shadow of 3D Objects – Pyramids and Cuboids	6	2	4
8. Shade & Shadow of 3D Objects – Cylinders	6	2	4
10. Shade & Shadow of 3D Objects – Cuboids, Chimneys and Cylinders	6	2	4
11. Quiz # 2	6	2	4
12. Shade & Shadow of 3D Objects – Cylinders and Cones	6	2	4
13. Architectural Applications – Stairs	6	2	4
14. Architectural Applications – Arches, Niches and Columns	6	2	4
15. First Midterm Exam	6	2	4
16. Architectural Applications – Oculus, Minarets, Pilasters and Balconies	6	2	4
17. Two Vanishing Points – Bird’s Eye, Ant’s Eye and Exterior Views	6	2	4
18. Two Vanishing Points Perspective (Pyramids)	6	2	4
19. Two Vanishing Points Perspective (Cylinders)	6	2	4
20. Second Midterm Exam	6	2	4
21. Two Vanishing Points Perspective (Sloped Roofs)	6	2	4
22. Two Vanishing Points Perspective (Links & Cables)	6	2	4
23. One Vanishing Point Perspective (Interior)	6	2	4
24. Final Exam	6	2	4

**Teaching And Learning Methodologies :**

Lectures.  
Design studios.

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Attendance	5.00		
Final Exam	20.00		
Participation	5.00		
Perspective Assignments	25.00		
Sciagraphy Assignments	25.00		
Two Midterm Exams	20.00		

**Course Notes :**

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**Recommended books :**

- Shafie, Z. H. (1997). الظل والظللال. Giza: Faculty of Engineering, Cairo University.
- Shafie, Z. H. (1997). المنظور الهندسي. Giza: Faculty of Engineering, Cairo University.
- D'Amelio, J. (2004). Perspective Drawing Handbook. New York: Dover Publications.
- Norling, E. R. (1999). Perspective Made Easy. New York: Dover Publications.
- Architectural Magazines and Projects.

**Periodicals :**

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**Web Sites :**

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