

## Faculty of Engineering & Technology

### Graphics 1

**Information :**

**Course Code :** GRA 141

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

**Department :** Faculty of Engineering & Technology

**Instructor Information :**

Title	Name	Office hours
Teaching Assistant	Hussein Osama Mohamed Saad El Nesr	

**Area Of Study :**

**Description :**

Techniques and skills of engineering drawing, Normal and auxiliary projections. Solid geometry. Intersections between planes and solids.

**Course outcomes :**

**a.Knowledge and Understanding: :**

- 1 - Define the fundamentals of engineering drawing.
- 2 - Identify sketching technique to describe solid objects.
- 3 - Explain the various drawing techniques of isometry and projections.
- 4 - Estimate the third view from 2 given views.

**b.Intellectual Skills: :**

- 1 - Apply engineering graphics techniques.
- 2 - Apply imagination and creativity

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

- 1 - Gain skills in defining types of drawing and orthographic projection.
- 2 - Create engineering parts using mechanical drawing.

**d.General and Transferable Skills: :**

- 1 - Work in stressful environment and within constraints through assignments and course project.
- 2 - Effectively manage tasks, times and resources.

**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Lettering and kinds of lines	8	2	6
Geometrical constructions	8	2	6
Pictorial drawing	4	1	3
Isometric drawing	8	2	6
Projection	20	8	12
Missing View	12	3	9

**Teaching And Learning Methodologies :**

Interactive Lecture

Discussion

Problem-based Learning

Experiential Learning

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Assignment	20.00		
Final-Exam	40.00		
Mid-Exam I	15.00		
Mid-Exam II	15.00		
Participation	10.00		

**Course Notes :**

**Recommended books :**

**Periodicals :**

**Web Sites :**