

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
Lecturer	Mohamed Hussien Bayomy Ahmed	6
Lecturer	Maha Fathy Abdallah Elsangary	2
Lecturer	Mostafa Mohamed Reda Salah Eldin Rashed	1
Lecturer	Mohamed Hussien Bayomy Ahmed	6
Assistant Lecturer	Ahmed Amr Kadry Ahmed Shaheen	
Assistant Lecturer	Mostafa Sayed Abd El Wahed Hassan Madina	3
Assistant Lecturer	Noura Khedr Abdul raheem Ahmed	
Teaching Assistant	Ahmed Salah Rashad Ahmed Abdelhakk	
Teaching Assistant	Mahmoud Mohamed Khalaf Ahmed	2
Teaching Assistant	Eman Mohamed Hammad Ahmed	6
Teaching Assistant	Ahmed Mohamed Abdelnaby Ali Shafay	2
Teaching Assistant	Ahmed Abdelfattah Abdelaziz Abdelfattah	
Teaching Assistant	Mahmoud Mohamed Khalaf Ahmed	2
Teaching Assistant	Ahmed Salah Rashad Ahmed Abdelhakk	
Teaching Assistant	Ahmed Taher Abdelhamed Mohamed Yousef	

Area Of Study :

The aim of this course in engineering graphics is to develop in the engineering student the ability to visualize and practice the techniques of graphical communications. On successful completion of this course the student will be able to:

- 1- Know and apply drawing Standards
- 2- Understand the fundamentals of engineering drawing and shape description
- 3- Understand the proper sketching techniques to visualize three dimensional objects and two dimensional surfaces.
- 4- Apply drafting techniques to present solid bodies and their orthographic projection.
- 5- Use conventional dimensioning techniques to describe size and shape of engineering drawing.

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 -	The various drawing techniques of isometry and projections.
2 -	Know and apply sketching technique to describe solid objects
3 -	The fundamentals of engineering drawing.

b.Intellectual Skills: :

1 -	Think imaginary and creatively.
2 -	Deal with engineering graphics.

c.Professional and Practical Skills: :

1 -	To enlarge students imagination capability in understanding mechanical
2 -	To gain skills in defining type of drawing and orthographic projection.

d.General and Transferable Skills: :

1 -	Develop skills related to creative thinking, imagination, oral and
2 -	Gain the principle of quality of learning.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Lettering and kinds of lines	4	1	3
Geometrical constructions	4	1	3
Geometrical constructions	4	1	3
Geometrical constructions	4	1	3
Pictorial drawing	4	1	3
Pictorial drawing	4	1	3
1st Exam			
Orthographic projection of engineering bodies	4	1	3
Projection	4	1	3
Dimensioning	4	1	3
2nd Exam	4	1	3
Projection and dimensioning	4	1	3
Projection	4	1	3
Projection	4	1	3
Revision	4	1	3

Teaching And Learning Methodologies :

Lectures
Practical sections
Assignments and homework.
Working models

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
11th week evaluation	25.00	11	Writing examinations to asses information delivered by the course
6th week evaluation	25.00	6	Writing examinations to asses information delivered by the course
Final-term examination	40.00		Writing examinations to asses information delivered by the course
Semester performance	10.00	1	Oral discussion to asses the ability of following the lecture.

Course Notes :

Course and instructor notes

Recommended books :

Earle, J.H., " ENGINEERING DESIGN GRAPHICS"
Pearson Prentice Hall, 11th edition, 2004.

Bertoline, G.R., and Wiebe, E.N. " FUNDAMENTALS OF GRAPHIGS COMMUNICATION" Mc Graw- Hill, 5th ed., 2007

Periodicals :

www.prenhall.com/giesecke

Web Sites :

www.prenhall.com/giesecke