Faculty of Engineering & Technology

Graphics 2

Information :

Course Code :	GRA 142	**Level :**	Undergraduate	**Course Hours :**	2.00- Hours

Department : Faculty of Engineering & Technology

Instructor Information :

Title	Name	Office hours
Lecturer	Mostafa Mohamed Reda Salah Eldin Rashed	2
Assistant Lecturer	Noura Khedr Abdul raheem Ahmed	
Teaching Assistant	Ahmed Salah Rashad Ahmed Abdelhakk	

Area Of Study :

The main aim of this second 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- Apply graphical communication skills to visualize and construct orthographic projection and isometric of solid models.
2- Know and understand the concept of sectional views.
3- Practice assembly drawing for some mechanical parts.

Description :

Development, Sectioning, drawing and joining of steel Frames, Fasteners, Assembly drawing of some mechanical parts, Computer applications, Introduction to civil and architectural drawing.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Construct standard orthographic projections and isometrics of engineering solid models.
2 -	- Know the concept of sectional views and cutting planes
3 -	- Know the basics of steel sections drawing.
4 -	- Practice the basics of assembly drawing.
b.Intellectual Skills: :	
1 -	- Deal with engineering graphics
2 -	- Think imaginary and creatively.
c.Professional and Practical Skills: :	
1 -	To gain skills in constructing orthographic projections and isometrics for solid models.
2 -	- To gain skills in applying the sectioning rules.
3 -	To gain skills in constructing of assembly drawing and steel sections.

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

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Theory of orthographic projection "Third view "	4	1	3
Isometric	4	1	3
Construction of both the third view and isometric.	4	1	3
Construction of both the third view and isometric.	4	1	3
Sectional views	4	1	3
1st Exam	4	1	3
Sectional views.	4	1	3
Sectional views.	4	1	3
Fasteners	4	1	3
Assembly drawing	4	1	3
2nd Exam	4	1	3
Assembly drawing	4	1	3
Application in civil engineering drawings	4	1	3
Steel structures	4	1	3
Steel structures	4	1	3
Final Exam	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	Second examination
6th week evaluation	25.00	6	First examination
Final-term examination	40.00	16	Final-term examination
Semester performance	10.00	1	- Oral discussion to asses the ability of following the lecture.

Course Notes :

Course and instructor notes.

Recommended books :

ÅEarle, J.H., " ENGINEERING DESIGN GRAPHICS"
Pearson PrenticeÞHall, 11th edition, 2004.

ÅBertoline, 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