

Faculty of Engineering & Technology

Mechanical Engineering Drawing

Information :

Course Code : MAN 241

Level : Undergraduate

Course Hours : 2.00- Hours

Department : Department of Mechanical Engineering

Instructor Information :

Title	Name	Office hours
Associate Professor	Elsayed Mohamed Atta Elsayed	
Lecturer	Mostafa Mohamed Reda Salah Eldin Rashed	3
Lecturer	Mostafa Mohamed Reda Salah Eldin Rashed	3
Assistant Lecturer	Ahmed Yahia Abdelhamid Sayed Hassan	1
Teaching Assistant	Mariam Esmat Danial Doss	1
Teaching Assistant	Osama Mohamed Mahmoud Mohamed	3
Teaching Assistant	Muhanned Ashraf Kamer El dawla Ibrahim Salem	1
Teaching Assistant	Osama Mohamed Mahmoud Mohamed	3

Area Of Study :

The Main Goals of this course are:

- Understand the fundamental of engineering drawing using computer software.
- Identify various technical drawings with necessary views and dimensions using computer software.
- Recognize the rules of drawing engineering metal sections and details.
- Recognize the rules of different mechanical drawing and assembling parts

Description :

Computer-aided drafting, Mechanical details and assembly drawings, Working drawings, Geometrical tolerances, Welding symbols and details, Introduction to 3D modeling.

Course outcomes :

a.Knowledge and Understanding: :

1 -	Explain the fundamental of assembly drawings
2 -	Describe he various mechanical assembly drawings

b.Intellectual Skills: :

1 -	Develop skills in visualizing the various mechanical assembly drawings.
2 -	Create own design ideas expressed in mechanical assembly drawings

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to the fundamental of assembly drawing	4	1	3
Types of bolts and its represented drawing	8	2	6
Transmission shaft assembly	8	2	6
Bearing assembly (sliding bearing)	8	2	6
Valves assembly (non-return valves)	4	1	3
Valves assembly (Safety valves)	8	2	6
Power screw assembly (Screw Jack)	4	1	3
Coupling assembly (Rigid flange) and flexible	8	2	6
Machine vise assembly	8	2	6

Teaching And Learning Methodologies :

Interactive Lecturing

Problem solving

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
2 Mid Term Exams (2x15 marks)	30.00		Written Exam
Assignments (Design Sketches – Project-based work)	20.00		Reports follow up during tut. /lab work, & written exam.
Final-term examination	40.00	14	Written Exam
projects	10.00		Practical

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
Dobrovolsky, Machine elements, MIR Publisher Co. 2007.

Web Sites :

www.prenhall.com/giesecke