

Faculty of Engineering & Technology

Mechanical Engineering Drawing

Information :

Course Code : MAN 241 **Level :** Undergraduate **Course Hours :** 2.00- Hours

Department : Department of Petroleum Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Mostafa Mohamed Reda Salah Eldin Rashed	9
Teaching Assistant	Raouf Mahmoud Mourad Naguib	

Area Of Study :

The Main Goals of this course are:
 - Understanding the fundamental of engineering drawing using computer software.
 - Identifying various technical drawings with necessary views and dimensions using computer software.
 - Recognizing the rules of drawing engineering metal sections and details.
 - Recognizing 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 the 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

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
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
Assignments, Participation , Quizze	20.00		
Final Exam	40.00		
Midterm	30.00		
Project.	10.00		

Recommended books :

Thomas, E.F., %Fundamentals of Engineering Drawing+McGraw-Hill, 2004Á Á Thomas, E.F. and Vierck, C.J., %Engineering Drawing and Graphic Technology+McGraw-Hill, 2001Á Á Hart, K.R., %Engineering Drawing+The English Universities Press Ltd, 2003Á
Recommended Readings: Á Dobrovolsky, Machine elements, MIR Publisher Co. 2007