Al-Hussein Bin Talal University   **Faculty of Engineering**

Department of Mechanical Engineering.

Course Syllabus

Course title: Machine Drawing	**Course No. /Code:** 0507232
Course pre-requisite: : 0507231	**Course teaching language:** English
Course level: Second year	**Credit hours:** 1hour

Course Description:

Mechanical engineering drawing conventions and abbreviations, various systems of size description, including precision dimensioning, fastening elements, standard organization and preparation of engineering drawings, assembly and detailed drawings, design applications.

Course objectives:

1. To draw the development of surfaces for sheet metal working applications..

2. To understand the representation of materials used in machine drawing.

3. To draw the machine elements including keys, couplings, cotters, riveted, bolted and welded joints.

4. To construct an assembly drawing using part drawings of machine components.

5. To represent tolerances and the levels of surface finish of machine elements.

Learning outcomes (understanding, knowledge and practical skills):

Upon completing this course, the student is expected to be able to:

1. Development of Surfaces: Draw the development of surfaces for Prisms, Cylinders, Pyramids and Cones.
2. Representation of elements of machine drawing: Engineering Materials, Surface finishes, tolerences, sectional views, Screw threads.
3. Component Drawings: Bolts and Nuts, Locking devices, Keys and Cotter joints, Knuckle Joint, Revitted joints, Shaft Couplings, Bearings and Pipe joints.
4. Assembly Drawing Practice: Draw the assembly drawings of Stuffing Box, Pedestal Bearing using the component drawings.
5. Machine Drawing practice using AutoCAD.

Textbook & references:

Book title	Author (s)	Publisher	Edition
Machine drawing.	Narayana, K. L.	New Age International	3rd
Engineering Design Graphics: AutoCAD	Earle, James H., and Denise Olsen	Addison-Wesley Longman	11th

Assessment Methods:

Assessment no.	Assessment Method	Week Due	Allocated Mark
1	Class works	-	10
2	Mid exam	10th week	30
3	Home works	-	10
4	Final exam	17th week	50