



Philadelphia University
Mechanical Engineering Department
Faculty of Engineering
First Semester 2010/2011

Course Syllabus	
Course Title	Engineering Drawing
Course Number	(620121
Course Level	1 th year
Prerequisites	-
Text Book	Engineering design graphic,by:earle,james10th edition

Course Description:

This course is an introduction to the students about the basic and standard for drawing technique, including MANUAL and Auto-Cad drawing. The drawing technique is emphasized in how to draw an object graphically, and projection point from surface and arch lines, and projection drawing from different point of view. Besides that, the students is given the requirements technical drawing the engineering objects such as construction of building structure, watering, highway etc.

Course Objectives:

Upon completion of this course the student should be able to understand the following:

- Recognize design and drafting as tool that allow graphical representation of ideas.
- Define common terms used in the drafting profession.
- Define the role of descriptive geometry in solving problems.

week	<i>AUTO-Cad drawing</i>	<i>Manual drawing</i>
1	<i>AUTO-Cad introduction</i>	<i>Course introduction</i>
2	<i>Setting screen, parameter, grid, snap, unit, text</i>	<i>Lettering, use of instruments, scales and Fluid Properties</i>
3	<i>Draw command, point, line, arc. . . etc</i>	<i>Types of lines</i>
4	<i>Draw and edit commands ,ellipse, polygon, dount. . . etc</i>	<i>Basic geometry construction</i>
5	<i>Object snap, inquiry</i>	<i>Tangent</i>
6	<i>First exam</i>	<i>First examination+</i>
7	<i>Modify command1 (fillet, chamfer, array . . .etc</i>	<i>Conical sections</i>
8	<i>Modify command 2(mirror ,offset, break,) Viewing commands</i>	<i>Introduction to projection</i>
9	<i>Layers, Blocks</i>	<i>Points, lines, and</i>



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		<i>planes</i>
10	<i>Object properties Hatch command</i>	<i>Orthographic projection</i>
11	<i>Pline,Pedit</i>	<i>Visibility of lines, slope of lines</i>
12	<i>Second exam</i>	<i>Second examination + Energy Equations</i>
13	<i>Dimensions variables</i>	<i>Point view ,edge view</i>
14	<i>Dimensions g style</i>	<i>True size of plane ,dihedral angle</i>
15	<i>Plotting</i>	<i>Sections(full, half, offset)</i>
16	<i>Dimensioning</i>	<i>Dimensioning</i>
17	<i>Isometric,UCS command</i>	<i>Isometric drawing</i>

Assessment Instruments

Evaluation of students' performance (final grade) will be based on the following three categories:

- **Exams.** Two in-class exams will be given. Each will cover about 6-weeks of lectures
- **Final Exam:** The final exam will cover all the class material.

Allocation of Marks	
Exam I	20%
Exam II	20%
Homework, Quizes	10%
Final Exam	50%

Other class work will include:

- **Quizzes.** Two 10-minute quizzes will be given to the students throughout the semester. These quizzes will cover material discussed during the previous week of lectures. The quizzes will be used as bonus points (added to the exams' grades) to help the students with their grade.
- **Homework.** Three homework will be assigned to the students (one before each exam). The homework will not be graded nor collected by the instructor. However, students are encouraged to do the homework and discuss their results with the instructor in order to better understand the course and be prepared for the exams.

References

1. G.F.Pearce,,"engineering graphics and descriptive geometryin 3-D",McGraw-hill.,1980.
2. Thomas E.French,Charles J.Vierck,Ropert J.Foster" ENGINEERING DRAWING AND GRAPHIC TECNOLOGY "13th ,McGraw-hill.



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3. James A. Leach," Your AutCAD 2000 Instructor",McGraw-hill.