ME 120: Introduction to AutoCAD (1 credit): Required Course

Course Description (2008-2010 Catalog):
Introduction to two-dimensional renderings with AUTOCAD, basic customization features such as menu modification and the addition of command aliases. Credits 1

Prerequisite Course:

Other Reference Material: N/A
Course Coordinator: Z.Y. Wang, Associate Professor

Course learning outcomes:

(a) To understand various parts of AutoCAD’s interface and comfortably draw basic 2D and 3D drawings, and rendering features.
(b) Understand use of tools like Object Snap, Layers etc that make drawing easier and faster.
(c) Familiarize Engineering Drawing (Auto CAD) from application perspective while working with project.

Relationship of Course to Mechanical Engineering Program Educational Outcomes:

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<th>Goal 1: Provide mechanical engineering graduates with technical capabilities.</th>
<th>Goal 2: Prepare the mechanical engineering graduates to have effective workplace skills.</th>
<th>Goal 3: Instilling a sense of responsibility as a professional member of society.</th>
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Topics Covered:
- Getting started with AutoCAD
- Modifying Commands
- Geometric Constructions
- Dimensioning
- Layouts and Plotting
- Text, Fields and Tables
- Object Grips, changing Properties of Objects
- Shape Description, Multiview Projection
- Section Views
- Auxiliary Views
- Analyzing 2D Drawings
- Blocks
- Attributes
- Solid Modeling Fundamentals, Editing Solids
Creating 2D Drawings from Solid Models
Rendering

Laboratory Projects: assigned weekly

Class/Laboratory Schedule: 7.00 – 9.45 P.M., Friday

Assessment of Student Progress toward Course Objectives
In-class assignments and homework are assigned weekly, and projects are given in the 10th week. All work are graded by instructor.

Class/Laboratory Schedule: MW 10:00-10:50 AM (Spring Semester)

Contribution of Course for meeting Professional Components:
(a) Mathematics and basic sciences: 0 credit
(b) Engineering Topics (Design/Science): 1 credit
(c) General Education: 0 credit
(d) Others: 0 credit

Prepared By: Date:
Z.Y. Wang October 2, 2009