Course Objectives/Course Outline
Spokane Community College

Course Title:       Engineering Graphics/CAD 2
Prefix and Course Number:   CAD 124

Course Learning Outcomes:

By the end of this course, a student should be able to:

− Apply 2-dimensional CAD to create industry drawings
− Apply basic dimensioning techniques and standards
− Demonstrate awareness and application of professionalism and career goals in the engineering industry
− Draw all types of section and auxiliary views
− Draw and sketch pictorial views
− Print and plot CAD drawings to various scales and printers and plotters
− Print and plot CAD files in a Layout format

Course Outline

I. Application of CAD Drafting in Industry Standard Drawings
   A. Templates, paper sizes and environment settings for Mechanical, Architectural, Structural, Metric drawings, etc.
   B. Applications using Model Space and Paper Space
   C. Setting up, scaling and then plotting CAD drawings to various scales and printers/plotters

II. Dimensioning Standards and Methods
   A. Lines and Symbols
   B. Dimensioning Systems
   C. Placement

III. Design for Success – Student Success Skills
   A. Professionalism in the Workplace
   B. Develop Career and Job Search Goals

IV. Section Views and Revolution
   A. Cutting Planes
   B. Sectioning Lines/Material Format
   C. Revolved Views for True Size and Shape

V. Auxiliary and Removed Views
   A. Viewing Plane and Viewing Plane Lines
   B. ANSI Standards for Auxiliary and Removed Views
   C. Production of Proper Auxiliary Views from Orthographic Projections

VI. Pictorial drawings/ sketches
   A. Isometric, Oblique, Perspectives

VII. Specialized Drafting Functions
   A. Architecture
   B. Civil/ Structural
   C. Mechanical
   D. Electronics