**Elgin Community College**

**Course Outline**

**CAD 0101 Introduction To Engineering Design**

**Contact Info:**

**Chris Sikora**

**847-214-7049**

**Prerequisite: None**

**Description:**

**This course is an introduction to engineering and design. Topics included are: sketching, orthographic projection, descriptive geometry, dimensioning, section views, auxiliary views, primary and secondary views, threads, fasteners, and production drawings. All problems will be solved using CAD software. 4 Credit Hours**

**Textbooks Required**

**Giesecke. Engineering Graphics (w/CD ROM) . 8 Edition. Prentice Hall , 0 ISBN: 9780138147358**

**Supplementary Materials Required**

**Zip Disks or Memory Sticks, as specified by the instructor**

**Course Outline**

**1. Measuring and Alphabet of Lines**

**2. Sketching**

**3. Basic AutoCAD Commands**

**4. Geometric Constructions**

**5. View Projection Theory**

**6. Orthographic Projection**

**7. Dimensioning**

**8. Section Drawings**

**9. Auxiliary Views**

**10. Descriptive Geometry**

**Course Content Outcomes**

**Identify job functions related to the drafting profession.**

**Develop competencies based on the related job functions.**

**Communicate technical information through drawings.**

**Develop individual discipline and a sense of responsibility and pride.**

**Measures of Student Performance**

**Students will be required to compile a portfolio of their semester work. This portfolio will be evaluated periodically during the semester for quality, completeness, and presentation.**

**A performance examination will be required for mid-term and at the end of the semester. These examinations will verify students' knowledge, ability, and skills using the necessary equipment/tools within the course.**

This course meets the agreed upon terminal objectives for the Computer Numerical Control Operator Program.

“This workforce solution was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timelines, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright holder.”