Ephrata High School
Course Syllabus

CAD2 - Three-Dimensional Drafting
5901

I. Course Description

Students will learn advanced 3-D features of the AutoCAD program to improve their drafting skills using the 3-dimensional drafting program. Using the computer, students will be introduced to life like 3D drawings and development of 3-D shapes. Students will be able to create drawings that appear to be photographs of an object and be able to rotate the object to look at it from different sides.

II. Materials & Equipment

Software-AutoCAD 2007
Desktop Computer
Printer & Wide Format Printer
Text-AutoCAD And Its Applications
Text-Technical Drawing

III. Course Goals & Objectives

Students will:

1. Learn how to use the 3D features of the AutoCAD software
2. How to read and interpret technical drawings
3. Interpreting technical informational charts
4. Develop problem solving skills
5. Develop spatial visualization skills
6. Being able to convert one type of technical drawing into another type
7. Applying mathematics
8. Learning how to use measurements
9. Developing a sense of accuracy
10. Create 3D drawings of machine parts
11. Create 3D presentations drawings

IV. Course Topics (Summary Outline)

Topics covered in the course will be:

A. How to use the 3D features of the AutoCAD software
B. How to draw wireframe objects
C. How to draw surface models
D. How to draw in 3D solids
E. How to draw 3D machine parts
F. How to draw 3D threads
G. How to create 3D presentation prints

V. Assignments & Grading

-Assignments will consist of completing assigned drawings.
-Each completed drawing will have an assigned value and graded on accuracy.
-Grades will consist of total points of all assigned drawings.