

COCONINO COMMUNITY COLLEGE

COURSE OUTLINE

Prepared by: Pattie Odgers
Revised by Daniel Bingham
Revised by: Daniel Bingham
Revised by: Monica Baker
Revised by: Joe Costion
Revised by: Dave Bowman
Status: Permanent

May 27, 1992
October 6, 1997
March 5, 1998
December 2, 1998
February 19, 2003
January 31, 2014
2014-9999

A. Identification:

1. Subject Area: Drafting (DFT)
2. Course Number: 150
3. Course Title: AutoCAD 2D
4. Credit Hours: 3
5. Course Description: This course will enable students to utilize computer aided drafting (CAD) in a 2D medium. Prerequisite: DFT 110 or Consent of Instructor. *Course is available to Dual Enrollment Students Only. Two lecture. Two lab.

B. Course Goals:

The student will be able to operate a computer aided design software, such as AutoCAD, and explain the features, limitations, and considerations associated with the commands and characters.

C. Course Outcomes: Students will:

1. list the advantages of computer aided drafting over traditional drafting techniques;
2. identify the hardware components in a CAD workstation and describe the purpose of each;
3. describe how to load the AutoCAD program, name a drawing, and select menu items;
4. identify coordinates on the X and Y axis; identify three types of coordinate inputs by drawing simple shapes;
5. demonstrate the procedures required to add and edit entities to the drawing editor;
6. load and save an existing drawings to and from a disk and hard drive;
7. create scaled drawings made up of basic AutoCAD entities;
8. apply AutoCAD's TEXT commands to working drawings;
9. demonstrate screen manipulation and viewing;
10. apply the plot/print capabilities in an AutoCAD drawings; apply AutoCAD's OSNAP option;
11. describe the advantages/disadvantages in utilizing a prototype drawing;
12. use inquiry commands to list properties, location, and size of objects;
13. list and describe the use of editing commands;
14. partially or completely remove objects in a given drawing;
15. move, copy, or produce mirror images of selected objects in a given drawing;
16. change the properties of selected objects;
17. alter the size/shape of given objects in a drawing;
18. manipulate individual layers and their associated properties;
19. adjust the scale of lines displayed in a drawing;
20. manipulate AutoCAD's Dimensioning menu by modifying, editing, and placing dimensions appropriately;
21. and dimension arcs, circles, and angles on AutoCAD drawing.

D. Course Content will include:

1. CAD basics;
2. becoming a keyboard artist;
3. basic drawing commands and practices;
4. setting drawing parameters;
5. maneuvering system editing commands;
6. the power of layers control;
7. dimensioning the finished product;
8. AutoCAD file maintenance;

9. placing notes and specifications;
10. from display to paper;
11. calculating information on screen;
12. blocking and inserting entities;
13. attributes;
14. dressing up your drawing;
15. and have lines and solid objects.