

THREE RIVERS COMMUNITY COLLEGE
COURSE OUTLINE

Course Number/Title: CAD K107 Computer Aided Drafting Lab

Lecture 0 hrs

Laboratory 4 hrs

Credit 2 hrs

Contact 4 hrs

Course Description: This AutoCAD course teaches the student how to create 2D and 3D drawings using a current release of the software.

Method: The student received hands-on training on individual workstations.

Text: AutoCAD 2007, Tickoo

Prerequisites: None

Co-Requisites: CAD K106

COURSE TOPICS/CONTENT

	<u>HOURS</u>
1. Hardware Overview	.5
2. Menu Systems	1.5
3. Data Entry	2.0
4. Entities and Their Options	8.0
5. Prototype Drawings	4.0
6. Drawing Aids	1.0
7. Display Manipulations	1.0
8. Text	1.0
9. Editing; Grips	9.0
10. Inquiry	1.0
11. File Management	1.0
12. Basic Dimensioning Techniques	6.0
13. Multi-view Drawings	6.0
14. Sections; Hatching	2.0
15. Polyline Editing	1.0
16. Dimension Styles	3.0
17. Blocks and Reference Files	3.0
18. Attributes	3.0
19. Paper Space	2.0
20. User Coordinate System	4.0
TOTAL HOURS:	60

Date: February 13, 2008

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Program Coordinator: Robert Lantz

Department Chairperson: Tony Benoit

Measurable Objectives

The student will be able to:

1. Describe the computer hardware configuration and Format a diskette.
2. Input commands from the keyboard, the screen menu, and the pull-down means.
3. Locate points using rectangular and polar coordinate systems in both absolute and relative formats.
4. Draw parts using LINE, ARC, CIRCLE, POINT, POLYGON, PLINE, ELLIPSE, SOLID, and DONUT.
5. Set up ANSI standard prototype drawing sheets that include layers and line types.
6. Effectively utilize SNAP, GRID, and ORTHO settings in conjunction with OSNAP overrides.
7. Manipulate the display with PAN, VIEW, and ZOOM options.
8. Locate text on a drawing, change text fonts, and apply text styles.
9. Modify and construct with ERASE, CHANGE, MEASURE, DIVIDE, FILLET, CHAMFER, TRIM, MOVE, ALIGN, ROTATE, COPY, MIRROR, ARRAY, SCALE, SELECT, BREAK, EXTEND, OFFSET, and STRETCH using GRIPS where appropriate.
10. Extract entity information using AREA, ID, LIST, DBLIST, and DIST.
11. Copy, delete, rename, and unlock files and list directory information.
12. Dimension a drawing according to industry/ANSI standards.
13. Draw a part showing orthographic and auxiliary views.
14. Draw sectional views and graphical patterns.
15. Draw and edit polylines.
16. Establish dimension styles.
17. Create blocks, and insert blocks and XREFs.
18. Apply attributes to blocks, and extract attribute information.
19. Generate multi-view Paper Space plots.
20. Draw a wire-frame model using the User Coordinate System.