UPGRADE AUTOCAD SKILLS
CID 1150

Class Hours: 1.0  Credit Hours: 2.0
Laboratory Hours: 3.0  Date Revised: Summer 01

This course is not designed for transfer credit.

Catalog Course Description:

This course is designed to convert existing AutoCAD skills to the latest version. It will cover new and changed commands in order to enable a smooth transition.

Entry Level Standards:

None

Prerequisite:

CID 1100 or AutoCAD experience

Textbook(s) and Other Reference Materials Basic to the Course:

Reference:
Technical Drawing. Macmillan (Gieseake)
AutoCAD 101 Joan Davis (Kendall/Hunt Publishing)
Harnessing AutoCAD. Thomas A. Stellman, G.V. Krishnan, Robert A. Rhea (Delmar Pub.)
Customizing AutoCAD. Sham Tickoo (Delmar Pub.)

Supplies:
Zip disks (2 or more) or 3.5 Floppy disks (at least 10)

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intro “Navigating the Interface” ; Command Updates I—Objective Snaps, drawing precision enhanced display capabilities and layers Command Updates II—Linetypes, controlling objective properties, text styles, text commands, and plot enhancements Sharing your work with others—XREF manager, attaching images, compound documents and Internet features Overview, GUI basics, customizing GUI, command line editing, and creating new drawings Getting Started: GUI Basic, menus, command line, NEW and OPEN, saving drawings, drawing aids, and drawing setup</td>
</tr>
<tr>
<td>2</td>
<td>Getting Started: GUI Basic, menus, command line, NEW and OPEN, saving drawings, drawing aids, and drawing setup</td>
</tr>
</tbody>
</table>
Draw Commands:  Line, coordinate entry, OSNAP, circle, arc, polygon, pline, ellipse, and BHATCH

Display and Inquiry:  Basic, zoom, pan, view, slide, files, layer, linetypes, inquiry and area

Modify Drawings:  Basics, selection sets, grips, changing properties, trim, stretch, and scale

Construction Techniques:  Undo, move, offset, mirror, array, break, lengthen, fillet, chamfer, divide, and explode

Annotating Drawings:  Basics, associative, linear, dimension angles, radial, ordinate dimensioning, style, and labeling

Data Exchange and Output:  data exchange, block, insert, XREF, pot, and paperspace

II. Course Objectives*:
A.  Create and use prototype drawings.  II, V
B.  Exhibit knowledge of drawing commands to make professional quality drawings.  II, III
C.  Create and use symbols and blocks.  II, IV, V
D.  Exhibit a basic understanding of Windows environment; use other software and standards which may be required in a professional work environment.  II, V
E.  Use computer applications to communicate in professional environment.  VII
F.  Create and use of solid models in AutoCAD.  II, V, VI

*Roman numerals after course objectives reference goals of the CID program.

III. Instructional Processes*:

Students will:
1.  Use the "graphic primitives" of AutoCAD to produce any desired line, polyline, circle, arc, etc.  Numerical Literacy Outcome, Technological Literacy Outcome

2.  Visualize an object and determine the best approach to creating a three-dimensional model representing the object and create the desired complex shapes to create the above model.  Technological Literacy Outcome Problem Solving and Decision Making Outcome, Active Learning Strategies

3.  Create blocks of frequently used details and use these blocks to eliminate repetitive drawing.  Use reference files in producing a production drawing.  Transitional Strategy, Active Learning Strategies

4.  Use dimensioning tools to completely and properly dimension final drawings as well as use annotation tools to completely annotate final drawing.  Technological Literacy Outcome, Communication Outcome

5.  Use computer to produce reports as assigned.  Such reports will contain proper English, use complete sentences, and contain correct spelling.  Communication Outcome, Technological Literacy Outcome
*Strategies and outcomes listed after instructional processes reference Pellissippi State’s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1. Proficiently use new and changed commands in the new version of AutoCAD. A, B, C, F
2. Use created prototype drawings efficiently in typical work applications (title blocks, symbol libraries, blocks and attributes). A
3. Create blocks and wblocks to facilitate the increased speed of drawing production. A, B, C
4. Create mechanical parts and assembly drawings suitable for inclusion in a portfolio. A, B
5. Create 3D drawings. A, B
6. Modify the menus. C, E
7. Use other computer applications to communicate in a professional environment. D, E

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures:

The purpose of this class is to provide for adaptation of previous learned skills in AutoCAD to the new version. Drawings will be assigned to provide practical experience and develop ability to retain the knowledge provided in this class. Formal tests and quizzes will be given at the discretion of the instructor. Final grades will be calculated as follows:

- Assignments 80%
- Quizzes and Homework 20%

B. Laboratory Expectations:

N/A

C. Field Work:

N/A

D. Other Evaluation Methods:

N/A

E. Grading Scale:

- A  93-100
- B+ 92-86
- B  85-80
- C+ 79-75
- C  74-70
- D  69-65
- F  Below 64
VI. Policies:

A. Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.

B. Academic Dishonesty:

It is expected that students will work together to solve problems, however students are expected to do their own work unless specifically assigned otherwise. Sharing or copying others work is un-ethical and will be discounted. A pattern of un-ethical behavior will result in the student being expelled from the class. Copying software will be considered theft.