Advanced AutoCAD
Course Design
2006-2007

Course Information
Organization: Eastern Arizona College
Division: ITE
Course Number: DRF 271
Title: Advanced AutoCAD
Credits: 3
Developed by: Dee Lauritzen, Tom Tomasky
Lecture/Lab Ratio: 1 hour lecture, 4 hours lab per week
Transfer Status: DEC (ICG) to ASU, CM230 to NAU, Elective to UofA
Activity Course: No
CIP Code: 15.1300
Assessment Mode: Pre/Post Test; 25 questions, 25 points
Semester Taught: Every Spring Semester
GE Category: None
Separate Lab: Yes
Awareness Course: No
Intensive Writing Course: No

Prerequisites
DRF 154

Educational Value
The course is designed for the student who wishes to be trained as a technician and who desires employment at the end of training.

Description
Course examines how to use advanced AutoCAD software capabilities. Students will focus on system customization including menu development and macro programming using AutoLisp. Advanced drawing techniques and drafting applications will also be included.

Textbooks
NA. None. Required
Supplies
None

Competencies and Performance Standards

1. Configure the AutoCAD software.
   Learning objectives
   What you will learn as you master the competency:
   a. Activate system installation, setup, and configuration.
   
   Performance Standards
   Competence will be demonstrated:
   o using the available drafting facilities and software.
   Criteria - Performance will be satisfactory when:
   o learner completes assigned activities.

2. Customize the standard AutoCAD menu system including toolbars.
   Learning objectives
   What you will learn as you master the competency:
   a. Use basic AutoCAD menu system, pulldown menus, and toolbars.
   b. Acquaint self with advanced AutoCAD system commands.
   
   Performance Standards
   Competence will be demonstrated:
   o using the available drafting facilities and software.
   Criteria - Performance will be satisfactory when:
   o learner completes assigned activities.

3. Develop simple AutoLisp macros to enhance system capabilities and provide shortcuts for command sequences.
   Learning objectives
   What you will learn as you master the competency:
   a. Acquaint self with AutoLisp programming package options.
   b. Use AutoLisp in macro development.

   Performance Standards
   Competence will be demonstrated:
   o using the available drafting facilities and software.
   Criteria - Performance will be satisfactory when:
   o learner completes assigned activities.
4. Develop custom line types, hatch patterns, symbols and pulldown menus.

Learning objectives
What you will learn as you master the competency:

a. Create custom line types.

b. Be able to create custom crosshatch patterns.

Performance Standards
Competence will be demonstrated:

- using the available drafting facilities and software.

Criteria - Performance will be satisfactory when:

- learner completes assigned activities.

5. Create Mechanical Part Assemblies

Learning objectives
What you will learn as you master the competency:

a. Acquaint self with hardware maintenance procedures.

Performance Standards
Competence will be demonstrated:

- using the available drafting facilities and software.

Criteria - Performance will be satisfactory when:

- learner completes assigned activities.

Types of Instruction
Classroom Presentation
Lab

Grading Information
Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100%</td>
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<tr>
<td>B</td>
<td>80-89%</td>
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<td>C</td>
<td>70-79%</td>
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<td>D</td>
<td>60-69%</td>
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<td>F</td>
<td>59% or lower</td>
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