



Wayne County Community College District

COURSE SYLLABUS

CAD 101 Fundamentals of Computer Aided Drafting

CREDIT HOURS: 4.0

CONTACT HOURS: 60.00

COURSE DESCRIPTION:

This is an introductory computer aided drawing and design course. As an elementary course, it will provide the student with an overview of drawings produced with the use of the computer. Students will explore software capability by generating various configurations and develop operational skills to include among others: input of graphic commands, editing, filing, imaging, rotating and copying, plotting and printing for drawings. Auto CAD software will be used in this class.

PREREQUISITES: NONE

EXPECTED OUTCOMES:

Upon completion of this course, students will demonstrate competency in:

The following skills will be performed in 2D and/or 3D as appropriate:

1. CREATE
 - Create new drawing
 - Perform drawing set-up
 - Construct geometric figures (e.g., lines, splines, circles and arcs)
 - Create text using appropriate style and size to annotate drawings
2. Use and control accuracy enhancement tools (e.g., entity positioning methods such as snap and XYZ).
 - Identify, create, store and use appropriate symbols/libraries.
 - Create orthographic view of objects and intersecting solids.
3. EDIT
 - Utilize geometry editing commands (e.g., trimming, extending, scaling)
 - Utilize non-geometric editing commands (e.g., text, drawing format)
4. MANIPULATE
 - Control coordinates and display scale
 - Control entity properties (e.g., color, line type)
 - Use viewing commands (e.g., dynamic rotation, zooming, panning)
 - Use display commands (e.g., hidden line removal, shading)
 - Use standard parts and/ or symbol libraries
 - Plot drawings on media using correct layout and scale
 - Use layering techniques
 - Use grouping techniques
 - Minimize file size
5. ANALYZE
 - Use query commands to interrogate database (e.g., entity characteristics distance, area, status)
6. DIMENSIONING: Use associate dimensioning correctly.

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E