

Instructor: Mike Hubka
Office: Bld. 105
Office Hours: Posted
Phone: 331-5270 E-mail: hubka@nwscc.edu

Credit hours: 3 **Contact:** 4 Hrs. **Lecture:** 2 hrs. **Lab:** 3 Hrs.

Program/Degree: Drafting and Design Technology / Associate in Applied Science Degree

Description: This course provides an introduction to basic Computer-Aided Design and Drafting (CAD) functions and techniques, using "hands-on" applications. Topics include terminology, hardware, basic DOS and Windows functions, file manipulation, and basic CAD software applications in producing softcopy and hardcopy. Upon completion, students should be able to identify and select CAD hardware, employ basic DOS and Windows functions, handle basic text and drawing files, and produce acceptable hardcopy on a CAD system.

Prerequisites: None

Text: AutoCAD and its Applications Basics - Release 2002
Terence M. Shumaker/David A. Madsen
Goodheart/Wilcox Publishers

Supplies: Two 3.5 - 1.44 Mb floppy disks or a 100 Mb Zip Disk

Course Rationale: Drafting, the universal graphic language is dramatically changing at all levels of business communications by the implementation of computers. The computer has become the primary tool of the drafting industry and computer aided design is one of the most important tasks a drafting student must master. A general knowledge and use of computer operating system as well as Computer Aided Drafting are skills that must be obtained in order to be successful in this field. To meet these needs, this course presents to the student drafter::

1. An introduction to operating systems and systems configuration.
2. Entry level drafters exposure and exposure to AutoCAD Release 14
3. Preparation of the student for advanced CAD applications

Course Objectives:

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

1. Discuss the function of a personal computer disk operating system.
2. Use the Explorer and my Computer to create directories, copying, moving, deleting and displaying file information.
3. Operate and care for a CAD workstation from power on through program installation, use and data management.
4. Be able to prepare mechanical drawings by use of lines, arcs, circles and shapes.
5. Learn basic text and editing commands.

Assignment Schedule

Week	Topic	Assignments
1 1/14-16	Computer history Hardware Basics	As Assigned By Instructor
2 1/21-23	Getting Started with Windows 2000 Running Applications Managing Files	As Assigned By Instructor
3 1/28-30	Quiz 1 on Windows 2000 Chapter 1 – Starting AutoCAD Wizards The AutoCAD graphics window	As Assigned By Instructor
4 2/4-6	Chapter 1 - Planning your AutoCAD Drawing Start a New Drawing Using Dialog Boxes Getting Help	As Assigned By Instructor
5 2/11-13	Chapter 2– Starting and setting up drawings	As Assigned By Instructor
6 2/18-20	Chapter 3– Intro to drawings Snap, Grid, Ortho Commands Saving your drawing Intro to lines	As Assigned By Instructor
7 2/25-27	Chapter 4- Intro to Layers Intro to printing and Plotting	As Assigned By Instructor
8 3/4-6	Quiz 2 Lab Work	As Assigned By Instructor
9 3/11-13	Chapter 5 Drawing Basic Shapes – Circles, Arcs, Rectangles	As Assigned By Instructor
10 3/18-20	Chapter 6- Object Snap Drawing Points Multi View Drawings	

Assignment Schedule

Week	Topic	Assignments
11 3/25-27	Spring Break	As Assigned By Instructor
12 4/8-10	Chapter 8 -Text Styles Drawing Text Editing Text	As Assigned By Instructor
13 4/15-17	QUIZ 3 - Chapter 8 Text Properties Command	As Assigned By Instructor
14 4/22-24	Chapter 9 Display Options View Ports Model Space/Paper Space	
15 4/29-5/1	Chapter 10 Plotting	
16 5/6	Review	
17	Final	

Grading Policy:

Quiz's 3@ 100 points	300
Lab Projects	300
Final Exam	250
Daily Assignments, Attitude & Participation	150
Total	1000

NOTE: Northwest-Shoals Community College's policy regarding academic honesty will be **strictly enforced!** As a common courtesy to the instructor, you should attend classes promptly at specified starting times. If you are going to be absent, for any reason, you should contact the instructor as soon as possible. Make-up test and assignments shall be given on an individual basis and only with a proper excuse. At no time may a student miss more than 20% of class meetings, doing so may result in a "F"

It is **"your"** responsibility to contact the instructor for make-up test and missed assignments. If you are absent for a test or assignment, because of a proper excuse, you must take the test or make up the assignment, at the next regularly scheduled class meeting. **If you refuse to do this, you will receive a "0" as the grade for that particular test or assignment.** Completing laboratory assignments is an integral part of your training. **All students must satisfactorily complete at least 75% of all daily lab assignments to receive a passing grade in this course.** The exact number of assignments for the course shall depend on the abilities of the entire class as a whole, and shall be determined by the end of the semester.

AMERICANS WITH DISABILITIES ACT (ADA)

It is the policy of Northwest-Shoals Community College to comply with the Americans with Disabilities Act (ADA). Any student covered under this act needing and desiring reasonable accommodations for this class should notify the instructor during the first week of class.

