# **SYLLABUS**

CAD K107 COMPUTER AIDED DRAFTING LAB

THREE RIVERS COMMUNITY COLLEGE NORWICH, CONNECTICUT 06360

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### **COURSE DESCRIPTION**

This laboratory accompanying Computer Aided Drafting utilizes software in an IBM-PC environment. Course must be taken concurrently with CAD 1200.

### **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 menus.
- 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 which include layers and linetypes.
- 6. Effectively utilize SNAP, GRID, and ORTHO settings in conjunction with the 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.
- 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 orthographics 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.

## METHOD OF EVALUATION

- 1. Student performance on weekly drawing assignments, and on drawing quizzes and examinations.
- 2. Unexcused absences from quizzes and exams will result in a score of 0 for that exam. Excused absences must be requested **in advance** of the in-class exam.

## LAB ASSIGNMENTS

<u>Lab</u> assignments must be submitted on or before the due date and time. Late assignments will be awarded a 0 for that assignment. Any disk submitted for grading that contains a virus will receive a 0 for that assignment. Any damaged disk submitted for grading will also receive a 0. Unexcused absences from lab assignments will also result in a score of 0 for that assignment. Excused absences must be requested in advance of the assignment deadline. Assignments will be graded on professionalism, accuracy, style, and completeness. Details of the lab assignments will be provided separately.

### MAKEUP POLICY

Students are required to make up missed drawing assignments and drawing quizzes and examinations resulting from excused absences. Arrangements are to be made on an individual basis with the instructor.

## ATTENDANCE POLICY

Students are expected to attend class regularly. No absences of any nature will be construed as relieving you from the responsibility for the completion of all work assigned by the instructor. Absences are discouraged because interaction with the instructor and classmates is an integral part of learning computer software applications. Unexcused absences from exams and quizzes will result in a score of 0 for that test.

### **EARLY WARNING POLICY**

Early intervention will be provided for students in academic difficulty. Tutoring services can be obtained through the Tutoring Center located in the Learning Resource Center at either campus. **The Registrar's Office will be notified in cases of prolonged absences**.

# **CELL PHONES AND PAGERS POLICY**

Students are notified that cellular phones and beepers are allowed in class or in the Learning Resource Center **only if they are turned off or turned to a silent mode**. Under no circumstances are phones to be answered in class. When there are extenuating circumstances that require that a student be available by phone or beeper, the student should speak to the instructor prior to class, so that together they can arrive at an agreement

# COLLEGE WITHDRAWAL POLICY

Students may withdraw, in writing at the Registrar's Office, for any reason until the end of the 10th week of classes. From the 11th week through the end of the 13th week, a student may withdraw with the signature of the instructor or advisor.

#### **DISABILITIES STATEMENT**

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Disabilities Counseling Services at 383-5240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that accommodations based upon disability cannot be provided until the instructor has received an accommodation letter from the Disabilities Counselor.

## REQUIRED MATERIALS

Shumaker, Terence M. and Madsen, David A. *AutoCAD and Its Applications Comprehensive 2006*. Illinois: The Goodheart-Wilcox Company, Inc., 2005. Storage Media: Floppy Diskette, Zip Disk, Jumpdrive.

## **COURSE EVALUATION**

Weekly drawing assignments and drawing examinations will be given as outlined above. Weekly drawings will make up 60 percent of the final grade and drawing examinations will make up 40 percent of the final grade.

The following table lists the academic grades used and their corresponding quality points.

GRADES	DEFINITION	<b>EQUIVALENT</b>	QUALITY POINTS
A	Excellent	94-100	4.0
A-		90-93	3.7
B+		87-89	3.3
В	Good	83-86	3.0
B-		80-82	2.7
C+		77-79	2.3
C	Satisfactory	73-76	2.0
C-		70-72	1.7
D+		67-69	1.3
D	Poor	63-66	1.0
F	Unsatisfactory		0.0

A student may request an irrevocable Audit status from the Registrar within the Add-Drop Period. Such status may be granted with written approval of the instructor. Audit status is considered a non-academic grade (No grade points).

## INSTRUCTOR CANCELLATION OF CLASSES

There may be instances when it will be necessary for the instructor to independently cancel classes such as for illness or personal inability to travel safely to the college. In these instances the instructor will attempt to notify students at least two hours in advance that classes will not be held. Notifications will be made by E-mail to the e-mail address provided by the student.

# POLICY ON ACADEMIC INTEGRITY

Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; clearly document the sources of the material you use from others; and act at all times with honor.

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# COURSE OUTLINE

CLASS	<u>Date</u>	<u>Objectives</u>	TEXT READING	LAB EXERCISE
1	1/25/2007	Commands and Menus	Chapter 1	
	-,,, -,	Working with Drawings	Chapter 2	
		Introduction to Drawing & Editing	Chapter 3	
2	2/1/2007	Layers, Properties, & Printing	Chapter 4	
		Drawing Basic Shapes	Chapter 5	
3	2/8/2007	Object Snap	Chapter 6	
		Inquiry Commands	Chapter 16	
4	2/15/2007	Basic Editing Commands	Chapter 12	
		Automatic Editing	Chapter 13	
5	2/22/2007	Placing Text on Drawings	Chapter 8	
		Working with Tables	Chapter 9	
		Drawing Display Options	Chapter 10	
6	3/1/2007	Basic Dimensioning Practices	Chapter 17	
		Editing Dimensions	Chapter 18	
7	3/8/2007	Dimensioning with Tolerances	Chapter 19	
		Geometric Dimensioning & Tolerancing	Chapter 20	
8	3/15/2007	MIDTERM EXAM		
9	3/29/2007	Layouts, Plotting, and Printing	Chapter 11	
		Introduction to Polylines	Chapter 14	
		Drawing and Editing Polylines	Chapter 15	
		Drawing Section Views	Chapter 21	
10	4/5/2007	Creating Symbols for Multiple Use	Chapter 22	
		Dynamic Blocks	Chapter 23	
11	4/12/2007	Assigning Attributes	Chapter 24	
		External References	Chapter 25	
		Sheet Sets	Chapter 26	
12	4/19/2007	Isometric Drawing	Chapter 27	
		Three Dimensional Drawing		
13	4/26/2007	Multiview Drawings	Chapter 7	
		Using Model Space Viewports		
14	5/3/2007	Advanced Topics, Script Files	Chapter 28	
15	5/10/2007	FINAL EXAM		

No class on 3/22/2007

If a class is cancelled for a reason other than a full college closing, students will be notified by email or by phone if a student does not have internet access to email. It is the student's responsibility to check email regularly.