

SYLLABUS

CAD K107 COMPUTER AIDED DRAFTING LAB

CRN 30915 SECTION T4A

**MONDAYS-WEDNESDAYS 8:31-10:10 AM 8/26/11-12/20/11
ROOM E116**

**THREE RIVERS COMMUNITY COLLEGE
NORWICH, CONNECTICUT 06360**

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FALL 2011

COURSE DESCRIPTION

This laboratory accompanying CAD 106 Computer Aided Drafting utilizes AutoCAD software in a PC environment. Topics given in the lecture will be learned through solving application problems on the computer.

LEARNING OUTCOMES AND OBJECTIVES

The student will be able to

1. Use the graphical user interface and access commands using the application menu, ribbon, keyboard, toolbar buttons, and pull-down menus.
2. Draw from coordinate locations using absolute, relative rectangular, and relative polar Cartesian coordinate systems.
3. Set up drawing environments by specifying drawing units and drawing limits.
4. Use the commands and their options for drawing basic objects: line, circle, arc, ellipse, polyline, regular polygon, rectangle, and donut.
5. Use the commands and their options for editing drawing entities: ERASE, UNDO, FILLET, CHAMFER, TRIM, EXTEND, STRETCH, SCALE, MOVE, COPY, ROTATE, MIRROR.
6. Set up the ANSI standard drawing sheets for formats, line types, line weights, and character sizes.
7. Integrate layers, colors, line types, scales, and formats in setting up prototype drawings.
8. Effectively use a variety of selection options and edit command options.
9. Effectively use drawing aids including object snap, display options, and UCS options.
10. Use the text justification options, special characters, and apply text styles in drawings.
11. Extract drawing information using a variety of commands.
12. Effectively organize drawings and manage files in the Windows environment.
13. Use established standards for dimensioning in both inch and metric units in drawings.
14. Assign values to dimension variables.
15. Incorporate a variety of dimension styles.
16. Draw the orthographic views of an object.
17. Create blocks in drawings.
18. Assign modes, build attributes, and extract attribute information from a drawing.
19. Draw section views of an object.
20. Use plotting layouts and floating viewports in paper space.

REQUIRED TEXTBOOK AND MATERIALS

Textbook: Shumaker, Terence M., Madsen, David A. and Madsen, David P. *AutoCAD and Its Applications Basic 2012*. Illinois: Goodheart-Willcox Company, Inc., 2012. Storage Media: Flash Drive.

METHODS OF EVALUATION

Drawing Quizzes and Examinations. Quizzes and exams will be open book/notes and will cover assigned drawing skills from lab drawings, readings, and material discussed in class. Unexcused absences from quizzes and exams will result in a score of 0 for that quiz or exam. Excused absences must be requested in advance of the quiz or exam. Students are required to make up missed quizzes, lab assignments, and examinations resulting from excused absences. Arrangements are to be made up on an individual basis with the instructor.

Lab Drawing Homework and Projects: Homework and project assignments will be announced in class. Lab Drawing Homework assignments are due on the next scheduled class date and projects are due on the project's designated due date. Assignments will be graded on professionalism, accuracy, style, and completeness. Lab Drawing Homework and project assignments not submitted by the due date will result in a score of 0.

GRADING, ATTENDANCE, AND CLASSROOM POLICIES

COURSE GRADE

Lab drawing assignments and drawing examinations will be given as discussed above. Lab drawing homework and projects will make up 60 percent of the final grade and drawing quizzes and 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	EQUIVALENT	QUALITY POINTS
A	Excellent	94-100	4.0
A-		90-93	3.7
B+		87-89	3.3
B		83-86	3.0
B-	Good	80-82	2.7
C+		77-79	2.3
C		73-76	2.0
C-		70-72	1.7
D+	Satisfactory	67-69	1.3
D		63-66	1.0
F			0.0

A student may request an irrevocable Audit status from the Registrar within the Add-Drop Period. Audit status is considered a non-academic grade.

ATTENDANCE

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. Class instruction provides an opportunity for you to observe, comprehend, work on in-class assignments, ask questions, and participate in discussions.

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 or verbally at the Registrar's Office, for any reason until the 14th week of classes.

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 Announcement on *Blackboard Vista*. It is the student's responsibility to check *Blackboard* regularly.

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.

DISABILITIES STATEMENT

If you have a question regarding a disability that may affect your progress in this course, please contact one of the college's Disability Service Providers as soon as possible. Chris Scarborough (860-892-5751/Room A-119) generally works with students who have Learning Disabilities, Attention Deficit Disorder, or Asperger's Syndrome (Chris's position is part-time). Kathleen Gray (860-885-2328/Room A-119) generally works with students who have physical, visual, hearing, medical, mobility, or psychiatric disabilities.

Please note that an instructor cannot provide disability accommodations until a student provides the necessary paperwork from the college's Office of Disability Services to the instructor. Also, accommodations take effect when the instructor receives the paperwork from a student- accommodations cannot be provided retroactively.

COURSE CALENDAR

CLASS	DATES	TOPICS	TEXT READING	LAB EXERCISE
1	8/29/11 8/31/11	Introduction to AutoCAD Drawings and Templates	Chapter 1 Chapter 2	TUTORIAL, H2-1, H2-2, H2-3
2	No Monday Class 9/07/11	Introduction to Drawing & Editing	Chapter 3	P3-10, H3-1, H3-2, H3-3, H3-4
3	9/12/11 9/14/11	Basic Object Tools	Chapter 4	P4-1, P4-2, H4-1, H4-2, H4-3
4	9/19/11 9/21/11	Line Standards and Layers View Tools and Basic Plotting	Chapter 5 Chapter 6	PROJECT-1 PORTFOLIO
5	9/26/11 9/28/11	Object Snaps Obtaining Drawing Information	Chapter 7 Chapter 15	P7-1, H7-1, H7-2, H7-3
6	10/03/11 10/05/11	Basic Object Editing Tools Arranging and Patterning Objects More Editing Tools	Chapter 11 Chapter 12 Chapter 13, 14	P12-6, P12-7, H12-1 QUIZ 1
7	10/10/11 10/12/11	Text Styles and Multiline Text More Text Tools Tables	Chapter 9 Chapter 10 Chapter 21	P10-1 P10-2 H10-1 H10-2
8	10/17/11 10/19/11	MIDTERM DRAWING EXAM		
9	10/24/11 10/26/11	Linear and Angular Dimensioning Dimensioning Features	Chapter 17 Chapter 18	P17-9, H17-1, H17-2, H17-3, H17-4
10	10/31/11 11/2/11	Dimensioning Standards and Styles Dimensioning with Tolerances Editing Dimensions	Chapter 16 Chapter 19 Chapter 20	H16-1, H17-1
11	11/07/11 11/09/11	Section Views and Graphic Patterns	Chapter 23	ANSI TEMPLATES, H23-1,2,3,4
12	11/14/11 11/16/11	Standard Blocks Introduction to Dynamic Blocks	Chapter 24 Chapter 26	PROJECT-2
13	11/21/11 No Wednesday Class	Block Attributes	Chapter 25	H25-1, H25-2, H25-3, QUIZ 2
14	11/28/11 11/30/11	Multiview Drawings Plotting Layouts Parametric Drawing	Chapter 8 Chapter 28, 29 Chapter 22	H8-1, H29-1, H29-2
15	12/05/11 12/07/11	External References Sheet Sets	Chapter 31 Chapter 32	H31-1
16	12/12/11 12/14/11	FINAL DRAWING EXAM		

DISCLAIMER: THE INSTRUCTOR RESERVES THE RIGHT TO REVISE INFORMATION CONTAINED IN THIS SYLLABUS. CHANGES, IF ANY, WILL BE ANNOUNCED IN CLASS.