

SYLLABUS

CAD K106 COMPUTER AIDED DRAFTING

CRN 10266 SECTION T2

MONDAYS-WEDNESDAYS 9:55 – 10:20 AM 1/22/2015 – 5/20/2015
ROOM E116

THREE RIVERS COMMUNITY COLLEGE
NORWICH, CONNECTICUT 06360

CAROL P. MAKARA, INSTRUCTOR

SPRING 2015

COURSE DESCRIPTION

This course exposes the student to the current means of generating graphic images with computers. Topics covered include computer-aided drafting overview, computer terminology, hardware descriptions and requirements, file manipulation and management, 2D and 3D geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail, and assembly drawings.

LEARNING OUTCOMES AND OBJECTIVES

The student will be able to

1. Define and discuss computer-aided design and drafting.
2. Specify coordinate locations using absolute, relative rectangular, and relative polar systems.
3. Explain how to establish drawing workspace environments.
4. Identify the commands and their options for drawing basic objects: line, circle, arc, ellipse, polyline, regular polygon, rectangle, and donut.
5. Describe the commands and their options for editing drawing entities: ERASE, UNDO, FILLET, CHAMFER, TRIM, EXTEND, STRETCH, SCALE, MOVE, COPY, ROTATE, MIRROR.
6. Cite the ANSI standards for formats, line types, line weights, and character sizes.
7. Discuss the integration of layers, colors, line types, scales, and formats in setting up prototype drawings.
8. Describe the variety of selection options and interpret the edit command options.
9. Explain the use of drawing aids including object snap, display options, and UCS options.
10. Explain text justification options, the use of special characters, and the implementation of text styles.
11. Interpret drawing information extracted with various commands.
12. Explain how to effectively organize drawings and manage files in the Windows environment.
13. Describe how to put into practice the established standards for dimensioning in both inch and metric units.
14. Explain how to assign values to dimension variables and incorporate a variety of dimension styles.
15. Conceptualize and sketch the orthographic views of an object.
16. Describe the value of using blocks.
17. Describe how to assign modes, build attributes, and extract attribute information from a drawing.
18. Describe plotting layouts and floating viewports in paper space.
19. Use effective electronic communication in an academic environment.

REQUIRED TEXTBOOK AND MATERIALS

Textbook: Shumaker, Terence M., Madsen, David A. and Madsen, David P. *AutoCAD and Its Applications Basic 2015*. Illinois: Goodheart-Willcox Company, Inc., 2015. Removable Storage Device: memory stick, aka travel drive, USB drive, etc.

METHODS OF EVALUATION

Quizzes and Exams: Quizzes and exams will be closed book/notes and will cover assigned 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 on an individual basis with the instructor.

Homework and Projects: Homework and project assignments will be announced in class. Homework assignments and projects are due on the designated due dates. Assignments submitted after the due date but before the cutoff date will lose 10% of the score. Homework and project assignments not submitted by the cutoff date will result in a score of 0.

No assignments will be accepted after the cutoff date.

GRADING, ATTENDANCE, AND CLASSROOM POLICIES

COURSE GRADE

Homework, Quizzes, Examinations, and Projects will be given as discussed above. Homework, Quizzes, and Projects will make up 30 percent of the final grade and examinations will make up 70 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	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. 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. It is the student's responsibility to check *Blackboard* regularly.

ACADEMIC INTEGRITY

Students are expected to do their own work in this class. Working together to better understand the material is acceptable. Submitting duplicate work is not acceptable and will adversely affect the assignment grade. Example violations include but are not limited to:

- Copying a file or any portion of a file from another student
- Sharing or allowing another student to copy your files or any portion of a file
- Duplicating or distributing copies of licenses for software programs and/or services

MYCOMMNET ALERT

MyCommNet Alert is a notification system that delivers critical information to students, faculty and staff of the Connecticut Community Colleges in the event of an emergency. The system delivers emergency messages through text messaging over cellular phones. Emergencies may include campus-related immediate health or safety situations and may also include weather-related college delays or closings. All students are encouraged to sign up for myCommNet Alert. Instructions for enrolling in myCommNet Alert and additional details are available at: [MyCommNet Alert](#).

STUDENT EMAIL

The Connecticut Community Colleges issue student email addresses to all students. The College-issued student email will be the official mode of communication with students on administrative matters. Students may look up their email address in myCommNet. Directions are available at: [Student Email Guide](#).

DISABILITIES STATEMENT

If you are a student with a disability and believe you will need support services and/or accommodations for this class, please contact the Disabilities Support Services at TRCC. Please note that the instructor cannot provide accommodations based upon disability until the instructor has received an accommodation letter from the Disabilities Counselor. Accommodations take effect when the instructor receives the paperwork from a student- accommodations cannot be provided retroactively.

DIGICATION STATEMENT

All students are required to maintain an online learning portfolio using a TRCC designed template. Through this electronic tool, students can see their own growth in college-wide learning. The student can keep and continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select random works to improve the college experience for all. No names will be attached to the assessment work; it will remain private and anonymous for college improvement purposes.

COURSE CALENDAR

CLASS	DATES	TOPICS	TEXT READING
1	1/26/15 1/28/15	Introduction to AutoCAD Drawings and Templates	Chapter 1 Chapter 2
2	2/2/15 2/4/15	Introduction to Drawing & Editing	Chapter 3
3	2/9/15 2/11/15	Basic Object Commands	Chapter 4
4	No Monday Class 2/18/15	Line Standards and Layers View Tools and Basic Plotting	Chapter 5 Chapter 6
5	2/23/15 2/25/15	Object Snaps Obtaining Drawing Information	Chapter 7 Chapter 15
6	3/2/15 3/4/15	Modifying Objects Arranging and Patterning Objects More Editing Tools	Chapter 11 Chapter 12 Chapter 13, 14
7	3/9/15 3/11/15	Text Styles and Multiline Text More Text Tools Tables	Chapter 9 Chapter 10 Chapter 21
8	3/23/15 3/25/15	MIDTERM EXAM	
9	3/30/15 4/1/15	Linear and Angular Dimensioning Dimensioning Features	Chapter 17 Chapter 18
10	4/6/15 4/8/15	Dimensioning Standards and Styles Dimensioning with Tolerances Editing Dimensions	Chapter 16 Chapter 19 Chapter 20
11	4/13/15 4/15/15	Section Views and Graphic Patterns	Chapter 23
12	4/20/15 4/22/15	Standard Blocks Introduction to Dynamic Blocks	Chapter 24 Chapter 26
13	4/27/15 4/29/15	Block Attributes	Chapter 25
14	5/4/15 5/6/15	Multiview Drawings Plotting Layouts Parametric Drawing	Chapter 8 Chapter 28, 29 Chapter 22
15	5/11/15 5/13/15	FINAL EXAM	

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