

**Three Rivers Community College**

Fall Semester 2013

**CAD 106 & 107**

**Computer Aided Drafting**

Lecture: Wednesday 5:30 pm – 6:20 pm

Lab: Wednesday 6:21 pm - 9:45 pm

**Dr. Michael Vincenti**

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(For prompt response contact me during my office hours at CCSU)

**Office Hours at CCSU:**

Monday: 1:30 pm – 3:00 pm

Wednesday: 1:30 pm – 3:00 pm

Thursday: 11:30 am – 1:30 pm

By Appointment

**Required Course Textbooks:**

*AutoCAD and its Applications Basics 2014, 21th Edition*

By Terence M. Shumaker, David A. Madsen & David P. Madsen

ISBN: 978-1-61960-446-9

**Required Flash Drive: Minimum 2 GB**

**Course Descriptions:**

**CAD\* K106 (formerly CAD K1200)**

1 CREDIT HOUR

COMPUTER-AIDED DRAFTING

Corequisite: CAD\* K107.

*This course exposes the student to the current means of generating graphic images with computers.*

*Topics covered include CAD\* 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.*

**CAD\* K107 (formerly CAD K1201)**

2 CREDIT HOURS

COMPUTER-AIDED DRAFTING LAB

Corequisite: CAD\* K106.

*This laboratory utilizes software in an IBM-PC environment. Topics given in the lecture will be learned through solving application problems on the computer.*

**Course Outcomes:****Upon completion of this course the student will:**

- Become proficient in the use of Computer Aided Drafting Software.
- Have a thorough knowledge and expertise in AutoCAD 2D drafting.
- Develop an understanding of basic AutoCAD 3D drafting.
- Demonstrate knowledge of drafting standards set forth by the American National Standards Institute (ANSI).
- Demonstrate knowledge of drafting standards set forth by the International Standards Organization (ISO).
- Develop a general understanding of standard drafting principles such as alphabet of lines, precedence of lines, dimensioning standards, and projection techniques.
- Be able to apply appropriate mathematical and scientific principles to solve problems utilizing a CAD program, particularly descriptive geometry.
- Demonstrate the ability to develop an engineering concept through detail and assembly drafting techniques to produce professionally finished engineering drawings suitable for use in industry.
- Be able to adapt the necessary skills required for an entry-level position in the discipline of drafting.
- Expand lifelong learning opportunities in the drafting area for those with previous experience in other fields.
- Demonstrate and apply skills necessary for visual thinking and graphic problem solving.
- Work cooperatively and productively in groups to solve problems.
- Be able to emulate industrial standards.
- Demonstrate working knowledge to translate engineering sketches into accurate scaled drawings.
- Be able to implement engineering change orders.
- Be able to select and demonstrate the appropriate characteristics of a particular material.
- Become efficient with the use of ISO 9000 standards as they relate to the Drafting and Design field.

**Submitting Assignments:**

Each of the assignments will be clearly described on a Weekly Assignment Sheet. I will give you very specific directions regarding how to name the files and where and how to submit each assignment.

**Please !!!** Use only the filename format that I request. I will be receiving over 200 assignment files from the class. I cannot be responsible for assignments that are lost because file name format was incorrect.

## Week Topic Outline:

Week #	Dates	Topic	Reading
1	8/28	Course Introduction TRCC Network Course Website and Google Accounts AutoCAD Interface Coordinate Systems Draw Commands	Chapter 1 Chapter 2 Chapter 3
2	9/4	Drawing and Editing Object Commands	Chapter 3 Chapter 4
3	9/11	Object Snaps Modifying Objects	Chapter 7 Chapter 11
4	9/18	Arranging and Patterning Objects <b>Quiz 1</b>	Chapter 12
5	9/25	Lines and Layers	Chapter 5
6	10/2	Template Drawings Text Styles Single-line and Multiline Text	Chapter 2 Chapter 9 Chapter 10
7	10/9	<b>Quiz 2</b> Open Lab - Catch-up	
8	10/16	Construction Tools and Multiview Drawings Term Project Introduction	Chapter 8
9	10/23	Dimension Standards and Styles Linear and Angular Dimensioning Tolerancing	Chapter 16 Chapter 17 Chapter 19
10	10/30	<b>Quiz 3</b> Open Lab - Project Work	
11	11/6	View Tools Inquiry Commands	Chapter 6 Chapter 15
12	11/13	Section Views	Chapter 23
13	11/20	Annotative Scale Open Lab for Term Project Work	Chapter 30
14	11/27	<b>Quiz 4</b>	
15	12/4	Open Lab for Term Project Work	
16	12/11	<b>Term Project Due</b>	

