Three Rivers Community College

Spring Semester 2011

CAD 106 & 107

Computer Aided Drafting
Lecture and Lab

Lecture: Monday 5:30 - 6:20
Lab -> Monday 6:21 - 9:45

Professor: Dr. Michael Vincenti

Contacting Me: Phone: 860-832-1838
E-mail: vincenti@ccsu.edu
(For prompt response contact me during my office hours at CCSU)

Office Hours at CCSU:

M: 12:00noon - 1:30pm
W: 12:00noon - 1:30pm
R: 11:00am - 1:30pm

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 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.

Required Textbook: AutoCAD and its Applications Basics 2012, 19th Edition
By Terence M. Shumaker, David A. Madsen & David P. Madsen
ISBN**:** 978-1-60525-561-3

Required Flash Drive: Minimum 2 GB flash drive

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 file name 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.

Grading Policy:

Lecture: Tests = 75%
PowerPoint Portfolio = 15%
Attendance = 10%

Lab: Tests = 45%
Lab assignments = 30%
Final Project = 15%
Attendance = 10%

Notes:

- ***There are no make-up tests. I will drop the lowest test grade. If you miss a test, that is the grade that I will drop. If you miss more than one test some of your test scores will be zeros! Doctors notes will be considered.***
- ***All assignments submitted up to one (1) week late will receive a maximum grade of a seventy-five (75).***
- ***All assignments submitted more than one (1) week late will receive a maximum grade of a fifty (50).***
- ***Please also note that copying of lab exercises will not be tolerated. I will deduct 10% points from both the supplier's and the copier's final lab grade for each lab assignment that has been copied.***

Course Calendar:

Week #	***Date***	***Topic***	***Reading (Schumaker & Madsen)***
1	8/29	Class Canceled	
2	9/5	No Class - Labor Day	
3	9/12	Course Introduction TRCC Network Windows Basics Starting AutoCAD AutoCAD Menu Structure Getting Started Tutorial	Chapter 1
4	9/19	Coordinate Systems Draw Commands Printing Drawings	Chapter 3 Chapter 6
5	9/26	More Draw Commands	Chapter 4
6	10/3	Still More Draw Commands Basic Editing Commands	Chapter 5 Chapter 12
7	10/10	More Editing Commands Layers	Chapter 13 Chapter 5
8	10/17	Template Drawings & ANSI Sheets Object Snaps	Chapter 2 Chapter 7
9	10/24	View Tools Inquiry Commands	Chapter 6 Chapter 16
10	10/31	PowerPoint Portfolios	
11	11/7	Basic Dimensioning More Dimensioning	Chapter 18 Chapter 19
12	11/14	Editing Dimensions Dimension Styles	Chapter 20 Chapter 17
13	11/21	Construction Tools Multiview Drawings	Chapter 8
14	11/28	Blocks Symbol Libraries Dynamic Blocks	Chapter 24 Chapter 26
15	12/5	Sectional Drawings More Sectional Drawing	Chapter 23
16	12/12	Open Lab Parametric Drawing ***Final Project Due*** ***PowerPoint Portfolio Due***	Chapter 22

Student Disabilities Policy:

Students with a documented disability can be provided supportive service and accommodations to assist them with their academic objectives. Services are strictly confidential. Disability services may include individualized accommodations, advising, advocacy, counseling, technical assistant and referral information.

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 it is Three Rivers Community College policy 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.

Academic Integrity Policy:

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