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

Phone: 860-832-1838 Office Hours at CCSU:

E-mail: <u>mvincenti@trcc.commnet.edu</u> Monday: 1:30 pm – 3:00 pm (For prompt response contact me during my office hours at CCSU) 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 By Terence M. Shumaker, David A. Madsen & David

Edition 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 Quiz 1	Chapter 12
5	9/25	Lines and Layers	Chapter 5
6	10/2	Template Drawings Text Styles Single-Ilne and Multiline Text	Chapter 2 Chapter 9 Chapter 10
7	10/9	Quiz 2 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	Quiz 3 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	Quiz 4	
15	12/4	Open Lab for Term Project Work	
16	12/11	Term Project Due	

Grading Policy:

Lecture: Tests = 90% Lab: Tests = 45%

Lab assignments = 30%

Attendance = 10% Final Project = 15%

Attendance = 10%

Note:

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.

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.