CAD 101: Computer-Aided Drafting I 3 credits

Section 001 CRN 21215 meets Monday/Wednesday 8:30 a.m. to 11:30 a.m. in room 1107

****additional lab time is required****

Instructor: Delia Ochoa
Office: 1111 .
Office hours: Tuesday & Thursday 9:00 a.m. to 11:30 a.m.
Primary email address: delia.ochoa@rrcc.edu
Phone number: (303) 914-6572

Start-End Dates: 08/19/2013 to 10/07/2013

FINAL EXAM: Wednesday October 2nd at 8:30 a.m.

***** Please have your cell phones in silent during class time *****

IMPORTANT! Computers are set to Engineering Graphics specs and there will be no changes in this configuration

COURSE DESCRIPTION:

Serves all emphasis areas of engineering graphics. This course uses a combination of lecture, lab and hands-on exercises to introduce the student to the AutoCAD software. Includes fundamentals of layout, construction and dimensioning techniques as applied to two-dimensional drawings; systems and database management; and production of computer-generated drawings to ASME, AIA and other applicable specifications. One hour lecture/discussion and two hours lab a day. An additional two lab hours per week, minimum, is expected from the student.

COURSE OBJECTIVES: Upon successful completion of the course the learner should be able to:

1. recognize and utilize the AutoCAD interface,
2. define and use the basic and editing commands in AutoCAD,
3. identify, define and demonstrate good file management techniques,
4. demonstrate the creation of orthographic projection,
5. understand and use dimensioning practices to ASME Y14.5 spec,
6. execute geometric construction techniques,
7. understand and manipulate the use of Model Space / Paper Space,
8. demonstrate the proper setup for a Layout,
9. assign scales to drawing files,
10. apply annotative properties to text, dimensions,
11. utilize and apply annotation scales to files,
12. prepare file drawings for plotting,
13. plot a file to full scale

REQUIRED MATERIALS:

AutoCAD and Its Applications Comprehensive 2014 21st Edition by Terence M. Shumaker/David A. Madsen/David P. Madsen/Jeffrey A. Launch ISBN 978-1-61960-448-3

Recommended book: Engineering Graphics Essentials 4th Edition, by Kristie Plantenberg
SDC Publisher

Three-ring binder to organize handouts; flash drive to save files, and keep a personal folder in your workstation at school.

Academic Dishonesty

A student who submits the work of another student as her/his own or deliberately fails to properly credit words or ideas borrowed from another source is guilty of plagiarism. A student who uses notes without permission, takes an exam for another student, copies answers from another student's exam, copies drawings in any manner, or engages in any other

similar conduct aimed at making false representation with respect to a student's academic performance is guilty of cheating.

Appropriate Use of Electronic Information Resources

Users shall be responsible for messages they transmit through the Internet and shall obey the acceptable use policies of the Internet and any rules of discussion forums in which they participate. Fraudulent, harassing, or obscene messages and/or materials as defined by contemporary court decisions are not to be sent or stored.

ATTENDANCE:

Attendance will be taken every class period. Each student is allowed **2** absences over the duration of the course. **An absence, even for a good reason is an absence.** Production is crucial. Students who are late for more than 30 min, and/or leave 30 min before the end of class will be considered absent. If you miss 10% of the total number of class sessions, then you must expect to get a 10% lower grade. LECTURES will be held every day. Lab will follow. **Check the room schedule for open lab hours.** You may use the lab and complete your assignments, but there will be no instructor in the lab. Please make sure you leave the workstation available to students taking classes at night.

EVALUATION:

The points from all assignments, quizzes, participation and attendance, and the final exams will accumulate until the end of the course. A letter grade will be assigned on the basis of the Grading Policy below.

Attendance and participation: 100 points

To earn participation points your must come to class prepared, and participate in classroom lectures. Should you miss a class; participation points for that class period cannot be made up. There are **14** class sessions. Please note that if you are 30 minutes late, or more to class, or leave 30 min early, or more, you will have no points for attendance/participation that day.

Quizzes: 100 points

A total of 10 quizzes will be given during this class. Quizzes will be taken online through Desire to Learn (D2L). Each quiz is timed 10 minutes. Students will be able to see their points immediately reflected in the grade book in D2L once you submit your quiz. Quizzes are related to chapters of the textbook. Notes and book can be used during the quiz, but remember that you have a time limit to complete the quiz.

Note: if you do not Hit Submit, the quiz will not be submitted; therefore no points will be added to your gradebook.

Assignments: 500 points

Assignments are usually worth 25 points. However, more points might be assigned on selected assignments. If you have a computer at home, and the software, you can complete your assignments outside of class time. **Students may need to put in extra lab time to complete required assignments.**

STUDENTS are responsible for saving all their assignments on their workstation for instructor review at the end of the course.

To download the student version of the software, go to http://students.autodesk.com/

Exam: 300 points

Final Exam is divided in two sections: written and performance.

Grading Scale:

A =1000-900 B = 899-800 C = 799-700 D = 699-600 F = 599 & below

Students must regularly meet with their instructor to assess progress and/or problems in achieving their goals.

NO MAKE-UP TESTS: **NO** make-up Test will be given, either **early or late**. The final test is required. If a test is not taken it will count as "zero" in the course grade calculations.

TENTATIVE COURSE OUTLINE:

I reserve the right to change the course outline at anytime. Any changes will be announced in class. You are responsible for making note of the adjustments. The instructor will assign problems during class meeting times.

Each student is responsible for reading the assigned book material before each class lecture.

Entire chapters should be read unless otherwise indicated by the instructor. The following is a list of lecture topics. Reading assignments are specified on a separate file.

Chapter 1-Introduction to AutoCAD	Lab Work as Assigned
Chapter 2-Drawings and Templates	Lab Work as Assigned
Chapter 3-Introduction to Drawing and Editing	Lab Work as Assigned
Chapter 4-Basic Object Commands	Lab Work as Assigned
Chapter 6-View Tools and Basic Plotting	Lab Work as Assigned
Chapter 7-Object Snap and AutoTrack	Lab Work as Assigned
Chapter 8-Construction Tools and Multiview Drawings	Lab Work as Assigned
Chapter 11-Modifying Objects	Lab Work as Assigned
Chapter 12-Arranging and Pattering Objects	Lab Work as Assigned
Chapter 13-Grips, Properties, and Additional Selection Techniques	Lab Work as Assigned
Chapter 16-Dimension Standards and Styles	Lab Work as Assigned
Chapter 17-Linear and Angular Dimensioning	Lab Work as Assigned
Chapter 18-Dimensioning Features and Alternate Practices	Lab Work as Assigned
Chapter 20-Editing Dimensions	Lab Work as Assigned

FINAL EXAM: Wednesday – October 2nd at 8:30 a.m.

For information on College Closure due to inclement weather please call the college at (303) 914-6555. Class cancellations due to instructor absence will be posted on the classroom door.

RRCC Syllabus Disability Statement

ADAAA (Americans with Disabilities Act Amendments Act of 2008) and Section 504 of the Rehabilitation Act of 1973: Red Rocks Community College is committed to access for students with disabilities. If you are a student with a disability and need assistance or are interested in requesting accommodations, please contact the Office of Disability Services (ODS). Faculty is not obligated to provide accommodations without proper notification by the ODS. Students may contact the ODS staff by telephone or email to make an intake appointment at 303-914-6733 or ods@rrcc.edu. The ODS is located in Suite 1182 at the Lakewood campus. More information is available at www.rrcc.edu/disabilityservices.

NOTE: This syllabus is being presented as a contract.