THREE RIVERS COMMUNITY COLLEGE
INTRO. TO CAD, CAD K106/7
Tuesday/Thursday 10:30 am
Room D-115

Professor: Professor Mark A. Comeau ▪ ARCHITECT, 860.215.9415, email MComeau@threerivers.edu
             Credits: 3, Hours: 3,   Pre-requisites: None
Grading   Visualization/Ortho-projection; Descriptive Geometry; CAD Commands/Execution;
Metrics: Drawing Assembly; Line Type/Accuracy; Viewport Management; Timeliness.

Course Objective: Intro. to AutoCAD is an industry-standard AutoDesk application course where students attain operational knowledge of the software while learning the methods and purposes of computer-aided drafting for conveying design intent while illustrating constructability of detail, the materials, assemblies, methods, and dimensionality used in various industries. Student learning outcomes are augmented through object observation, detail observation and a hands-on scaled detail building project.

Method: Lectures, Demonstration; Slide Lectures; Mock in-office Projects;
                        (*All projects will be accessed and submited via Blackboard.*)
Text (optional):   AutoCAD 2016, Leach (Schroff Development Corp.), **ISBN:** 9781585039524

CAD & the Digital Environment
Unit 1   Intro. to Industry Drawings
         Visualization & Sketch Techniques

Unit 2   File Management, Starting CAD
         Coordinate Systems, Home Software

Unit 3   Learning to Draw in CAD
         Basic Object Commands

Drafting & Editing
Unit 4   Line Conventions, Layers
         Creating & Modifying Objects

Unit 5   Construction Tools, Object Snaps
         Fills and Text

Unit 6   The Drawing Sheet, Arranging Objects
         Scaling and Viewport Management

Unit 7   Physical Plots
         Digital Transmission

Advanced Drafting
Unit 8   Polylines, Tracing
         XRef

Unit 9   Data Tables
         Creating Blocks/Exploding

Unit 10 Integrating Open-source Data
         Creating a Template

Exercises and Portfolio
Unit 10 Construction Drawing Project
         Creating a Typical Architectural Drawing

Unit 12 Fabrication Drawing Project
         Creating a Typical Manufacturing Drawing

Unit 13 Schematic Drawing Project
         Creating a Typical Electrical/Mechanical Schematic

Unit 14 Final Assessment
         Submittal of Final Portfolio of Projects

LEARNING OUTCOMES:
- ▪ Understand the role of industry graphical communication documents to illustrate assembly and constructability in the CAD environment;
- ▪ Effectively manage AutoCAD files in the digital environment;
- ▪ Effectively use AutoCAD Draw, Edit, and Modify commands;
- ▪ Demonstrate proficiency in the use of AutoCAD to create industry-typical products.

ACADEMIC PERFORMANCE

Lecture Period:
Students shall respect the classroom environment. Professors invest valuable time in lecture preparation to make the course content organized, interesting, and understandable and to make the learning environment collegial. Unless specifically directed by the professor, students shall refrain from sending email and instant messages, or from engaging in other activities (reading non-course materials, engaging in private conversations and so on), that disrespect the classroom environment and learning conditions for others.

Access to the Internet can be a valuable aid to the classroom learning environment. Students are encouraged to use laptops, smart phones, and other devices in order to explore concepts related to course discussions and topics. Students are discouraged from using technology in ways that distract from the learning community (e.g. Facebook, texting, work for other classes, etc.) and if found doing so, will be asked to leave the classroom for the day and will not get credit for attendance that class period.

Assessment:
Assessment of your mastery of the Courses learning objectives is administered through quizzes, exams, and essays. These are announced with ample preparation time and sometimes a study guide. Upon absence from a class in which an assessment is given, it is the student's responsibility to request, coordinate and schedule, a makeup date and time with the professor. Assessments not made up within one week from when initially given will result a three point reduction from the score earned, per class period lapse.

Online Learning Portfolio:
All students are required to maintain an online learning portfolio in Digication that uses the college template, in as much as it is pertinent and supported by outcome products of this course. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios.

Integrity:
Any and all exams, papers or reports submitted by you and that bears your name is presumed to be your own original work that has not previously been submitted for credit in another course unless you obtain prior written approval to do so from your professor.
In all of your assignments, including homework or drafts of papers, you may use words or ideas written by other individuals in publications, web sites, or other sources but only with proper attribution. "Proper attribution" means that you have fully identified the original source and extent of your use of the words or ideas of others that you reproduce in your work for this course, usually in the form of a footnote or parenthesis.
As a general rule, if you are citing from a published source or from a web site and the quotation is short (up to a sentence or two), place it in quotation marks; if you employ a longer passage from a publication or web site, please indent it and use single spacing. In both cases, be sure to cite the original source in a footnote or in parentheses. (See http://www.plagiarism.org/plag_article_how_do_I_cite_sources.html for more information on citing.)
If you are uncertain about the expectations for completing an assignment or taking a test or examination, be sure to seek clarification from your professor beforehand.
Finally, you should keep in mind that as a member of the Three Rivers Community College community, you are expected to demonstrate integrity in all of your academic endeavors and will be evaluated on your own merits.
Be proud of your academic accomplishments and help to protect and promote academic integrity. The consequences of cheating and academic dishonesty may include a formal discipline file, possible loss of financial scholarship or employment opportunities, and denial of admission to a four year college.