Course Description

This course, with the included lab, 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.

Course Detail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CRN** | **Cred** | **Title** | **Day** | **Time** | **Room** |
| 31177 | 3 | Basic CAD -- AUTOCAD | Tue/Thu | 12:11 pm – 12:41 pm | D115 |
| 33348 | 0 | LAB, Basic CAD -- AUTOCAD | Tue/Thu | 10:30 am – 12:10 pm | D115 |

Text

AutoCAD 2018 Instructor, James Leach, Shawna Lockhart, Eric Tilleson (ISBN: 978-1-63057-115-3)

BlackBoard

All students are required to monitor the Blackboard site for announcements, class material postings, and updates to the schedule. Grades will be posted on Blackboard.

Calculator Policy

A scientific or graphing calculator is allowed for all exams and homework. A computer may be used during the examination provided you have sufficient power and sit in such a way that your computer screen is visible by the instructor at all times.

Grading

Course grade will be based on assessment in the following areas:

* In-Class assignments (5%) – These will be very short exercises very similar to the material demonstrated during class that day. It must be turned in prior to departing class for the day.
* Tuesday to Thursday homework (20%) – This will be a quick assignment exercising the material presented on Tuesday. No late homework assignments will be accepted.
* Thursday to Sunday homework (30%) – This will be a more involved assignment exercising all material presented up to that point in class. No late homework assignments will be accepted.
* Three Tests (30%) – Proficiency with AutoCAD will be assessed through the completion of a complex assignment within a fixed amount of time.
* Project (15%)

An optional final exam will be administered on the last day of class. This exam will allow you to replace any test scores lower than the final exam score. If your final is lower than all tests, it will not change any of them. The optional final exam will be comprehensive of all the material presented throughout the semester. The option final will be difficult. It will comprise problems to test your advanced understanding of material (B level) and application of material to unique situations (A level).

Attendance

Students with a known conflict will make the instructor aware of such conflict prior to missing a class or lab. Accommodations will be made for students with a reasonable excuse (e.g., religious holidays, extra-curricular activities, and emergencies). If the instructor is not notified in advance, it will be treated as an absence. Please be sure to silence cell phones prior to class.

Expectations

Mastering the outcomes of this course requires constant practice. Our expectation is that you are spending 2-3 hours of reading and doing homework for this class for every “academic” hour we meet in class. We meet 5 “academic” hours per week, therefore you should expect to spend at least 10 - 15 hours per week on this class, outside of class meetings, every week!

Each class period will roughly flow as follows:

* Students enter and prepare their AutoCAD environment
* Short in-class discussion on matters from the previous class/assignment
* In-class demonstration of the new material
* In-class assignment to be completed prior to departure.
* While students are completing the in-class assignment, clarification on any of the homework can be addressed on an individual basis.

Course Outcomes

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

Plagiarism and Academic Honesty

At Three Rivers, we expect the highest standards of academic honesty. The Board of Trustees’ Proscribed Conduct Policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, and plagiarism.

Academic integrity is essential in all aspects of college coursework and learning. I have zero tolerance for academic dishonesty. Communication or collaboration of ANY sort is ABSOLUTEY PROHIBITED during any exam. Academic Misconduct is punishable in a number of ways, including a score of a zero on the assignment where the cheating took place, a grade of an F in the course and/or possible censure on your permanent record. All cases of academic dishonesty will be referred to the Academic Dean. Do not let yourself come under the suspicion of academic dishonesty.

IF IN DOUBT, ASK.

Professionalism and respect is demonstrated through a clear understanding of what is yours and what you learned from others. Be proud for your accomplishments; respect those of others.

Getting Help

* Tutoring and Academic Support Center
* Peer tutoring
* Extra help from the instructor (see schedule posted outside office C126 and by appointment)

Schedule

| **Week Of** | **Chapter(s)** | **Topics** |
| --- | --- | --- |
| 27 Aug | 1, 2, 3, 6, 7, 10 | * Course Overview – Expectations, Operations, Conduct
* Introduction to AutoCAD:
* Accessing AutoCAD
* Tour of the environment
* Setting up the environment
* File Management
* Views/Orthographic Projections
* Line types
* Extensions
* Snap
* Zoom/Pan
 |
| 3 Sep | 9 | * Modification Commands
 |
| 10 Sep | 11, 28, 29, 32 | * Layers
* Filters
* Dimensions

**Test #1** |
| 17 Sep | 3, 26 | * Circles
* Gradients
* Hatches
* Cross-Sectional View
 |
| 24 Sep | 13, 14 | * Paper Space
* Viewport Management
* Scaling
* Printer Scaling
* 25 Sep last day to choose audit
 |
| 1 Oct | 16, 31 | * Embedding Pictures
* Scaling
* Tracing
* Splines

**Test #2** |
| 8 Oct | 18 | * Text
* Tables
 |
| 15 Oct | 21 | * Creating/Exploding Blocks
 |
| 22 Oct | 12 | * Creating Templates
 |
| 29 Oct | 12 | * Creating Templates
 |
| 5 Nov |  | * Architectural Drawing
* 6 Nov last day to choose Pass/Fail
 |
| 12 Nov |  | * Manufacturing Drawing
 |
| 19 Nov |  | * **Test #3**
 |
| 26 Nov |  | * Electrical Drawing
 |
| 3 Dec |  | * Project Work
* 9 Dec last day to withdraw
 |
| 10 Dec |  | * Complete Project
* (Optional) **Final**
 |

Sexual misconduct clause:

“The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence.”

Title IX clause:

“Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient’s educational programs and activities.”

If any student experiences sexual misconduct or harassment, and/or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact Vicki Baker, the Diversity Officer and Title IX Coordinator: 860-215-9208 (vbaker@trcc.commnet.edu)

Accommodations

Students with learning disabilities should contact the Learning Specialist, Matt Liscum, at 860-215-9265 or via email at mliscum@trcc.commnet.edu as soon as possible to ensure timely accommodations. Students with physical disabilities should contact Elizabeth Willcox at 860-215-9289 or via email at ewillcox@trcc.commnet.edu to facilitate accommodations. All testing accommodations MUST be discussed with the instructor in a timely manner, that is, *at least* one to two class meetings **prior** to any scheduled test for which accommodations are needed.

Student Digication Portfolio

As a student you will maintain an online learning portfolio using a college-designed template in Digication. Through this electronic tool you will have the opportunity to monitor your own growth in college-wide learning. It may even help you determine a major that is best suited to you. You will be able to keep and maintain your learning portfolio after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. If your work is selected and reviewed for assessment purposes, it will remain anonymous and private. Digication provides a “place” where you will connect your learning from the classroom, college, and life in general. Sometimes when you review all of the work you have done and think about it, you end up learning something different and perhaps unexpected. Please review your course outlines to determine what assignments to upload into the TRCC Digication template and please post your own choices, as well. Have fun in learning!

MyCommNet Alert Notification System

MyCommNet is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. The system will also be used to deliver important information to students, faculty, and staff regarding weather-related class cancellations.  The system delivers both email messages, and text messages over cellular phones to those individuals who are registered.  To register, log on to your myCommnet account at <http://my.commnet.edu/> and follow the link to myCommnet Alert.

Class Cancellation

Except under rapidly changing conditions, information on the status of day classes will be available and published by 6:30 AM and by 3:00 PM for evening classes starting at 5:00 PM and later.

The College’s website will also have announcements regarding any delays, cancellations or closings. This information may be obtained by accessing the [www.threerivers.edu](http://www.trcc.commnet.edu/) home page.