Course Information

Course Description:

This course is designed to introduce the student to the use of the computer as a tool to generate 2-D drawings. Students will gain knowledge in basic concepts, terminology and techniques necessary for CAD applications. Topics include: user interface, file management, drawing setup, create and modify commands, annotation, drawing organization, coordinate system and input/output data.

Course Objectives:

The primary goal of this course is to provide the training in computer aided drafting software to produce technical drawings. Students will gain a basic understanding of the operating system’s user interface, learn to manage drawing files, setup a drawing, and use create and modify commands to construct the drawing. You will learn how to add text, dimensions, and plot or print your drawing. After completing this course, you will be able to:

- Understand the operating system's user interface
- Understand the CAD system's file management commands
- Understand the units-of-measure used by the CAD system
- Demonstrate knowledge of Cartesian coordinate system
- Use standard predefined prototype or template files
- Create, edit, and modify basic 2-D geometry
- Understand AutoCAD's layering system
- Perform geometric constructions with CAD
- Annotate geometry
- Add dimensions
- Apply hatch patterns
- Plot CAD drawings

Prerequisites and Corequisites:

Basic Drawing Techniques is a prerequisite or corequisite, unless you are a practicing professional seeking the CAD Technician Certificate.

Course Topics:

The following is a list of topics that you will cover:

Module 1 Getting Started 24 hours
Module 2    Creating Layers    18 hours
Module 3    Annotating a Drawing    14 hours
Module 4    Construct and Edit Geometry    30 hours
Module 5    Hatch Patterns    18 hours
Module 6    Dimensioning the Drawing    18 hours
Module 7    Plotting Geometric Drawings    12 hours

Specific Course Requirements:

You will need to be motivated and self directed with the ability to follow a calendar time-line of due dates. You must communicate with the instructor a minimum of 2 times per week. Plan to devote 8-10 hours per week to this class due to the amount of material to cover. Students are responsible for notifying the instructor in case of medical emergencies and/or technical problems.

Textbooks, Supplementary Materials, Hardware and Software Requirements

Required Materials:

Please visit the RODP Virtual Bookstore for information concerning required textbooks for this course. The web address is http://rodp.bkstr.com/.

Supplementary Materials:

- Access to a printer.
- Additional web-based resources will be listed in the Course Links section.

Hardware Requirements:

Please visit the RODP Website for a listing of hardware requirements.

Specific hardware requirements for AutoCAD® can be found at the Autodesk website:

http://usa.autodesk.com/adsk/servlet/pc/index?siteID=123112&id=13784795

Software Requirements:

AutoCAD® is required for this course. A free downloadable version will be available to you from the Autodesk Education Community once you begin the course.

You will need Microsoft PowerPoint Viewer for viewing course material which can be obtained free at:
Instructor Information

Please see the separate page inside the course to find instructor contact information as well as a statement of virtual office hours and other communication information.

Assessments and Grading

Testing Procedures:

Exams for this course will be taken within the Desire2Learn system. You will take a theory and skill exam at the end of each module presented. Skill exams in the form of CAD drawings will be submitted via the Dropbox within the course. Exams are designed to reinforce key concepts from the material presented and are timed. Late exams will be reduced one letter grade.

Grading Procedures:

Your grade will be based on Skill (50%), Theory (25%), and Participation (25%).

- The Skills grade is the average of assigned drawings and drawing exams. This will be 50% of your grade. There are 7 module skill exams.
- The Theory grade will account for 25% of your grade. This score is the average of the theory exams. There are 7 module theory exams.
- The Participation grade will be based on your involvement in the discussion board, weekly email communication with the instructor, and completing work on time. This will also be 25% of your score.

Grading Scale:

The grading scale for this course is as follows:

A = 93-100  B = 85-92  C = 84-77

A score of 77 or better must be achieved to receive full credit for this course.

Assignments and Participation

Assignments and Projects:

Assignments and projects for this course are listed within the course module. All due dates are posted on the Calendar within the course. An additional document of module due dates is available for you to download to your system.

Class Participation:
You are expected to communicate with your instructor on a regular basis and check the course frequently for announcements. You are expected to participate in all interactive aspects of the course. For example, communicating with other students via emails and discussion board exchanges. You must actively participate in threaded discussion events.

**Punctuality:**

You are encouraged to work at your own pace, However, there are specific completion dates posted on the course calendar. Students are permitted to work ahead of the posted timeline. Late work will be reduced one letter grade. If you have technical or medical emergencies contact the instructor as soon as possible.

**Course Ground Rules**

Assignments will be presented as noted in the course Calendar. You will have until the due date on the calendar to complete each assignment. You are expected to communicate with other students in threaded discussions, learn how to navigate in D2L, and stay aware of course announcements. You should use your assigned D2L email addresses for all communication. You should address any technical problems immediately. You should observe course etiquette at all times. Plagiarism, cheating, and other forms of academic dishonesty are prohibited. For further clarification see the [RODP Statement of Academic Honesty](#).

**Guidelines for Communication**

**Email:**

- Always include a subject line.
- Remember that without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
- Use standard fonts.
- Do not send large attachments without permission.
- Special formatting such as centering, audio messages, tables, html, etc. should be avoided unless necessary to complete an assignment or other communication.
- Respect the privacy of other class members.

**Discussion Groups:**

- Review the discussion threads thoroughly before entering the discussion. Be a lurker, and then a discussant.
- Try to maintain threads by using the "Reply" button rather than starting a new topic.
• Do not make insulting or inflammatory statements to other members of the discussion group. Be respectful of other's ideas.
• Be patient and read the comments of other group members thoroughly before entering your remarks.
• Be cooperative with group leaders in completing assigned tasks.
• Be positive and constructive in group discussions.
• Respond in a thoughtful and timely manner.

Chat:

Chat rooms may be available in some courses for student communication but will not be a required part of the course. If you utilize the chat tool, please keep the following in mind:

• Introduce yourself to the other learners in the chat room.
• Be polite. Choose your words carefully. Do not use derogatory statements.
• Be constructive in your comments and suggestions.

Web Resources:

Web links will be posted and updated throughout the class. An email or announcement will be made when a new link is available to students. Please review the Disclaimer of Offsite Content within D2L for more information.

Library

The Tennessee Virtual Library is available to all students enrolled in the Regents Online Degree Program. Links to library materials (such as electronic journals, databases, interlibrary loans, digital reserves, dictionaries, encyclopedias, maps, and librarian support) and Internet resources needed by learners to complete online assignments and as background reading must be included in all courses.

Students with Disabilities

Qualified students with disabilities will be provided reasonable and necessary academic accommodations if determined eligible by the appropriate disability services staff at their home institution. Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility for specific accommodations from the disability services staff at the home institution. It is the student's responsibility to initiate contact with their home institution's disability services staff and to follow the established procedures for having the accommodation notice sent to the instructor.

Syllabus Changes
The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

**Student Support**

**Student Services:**

For questions regarding registration or course enrollment, please contact your [RODP Campus Contact](#).

For questions and issues related to the Regents Online Campus Collaborative or the Tennessee Board of Regents, please contact the RODP Helpdesk at 1-888-223-0023.

**Technical Support:**

For assistance with the Desire2Learn system or other technical issues, please contact the Student Technical Support Helpdesk at 1-866-550-7637. The staff is available 24/7 to assist you.