Advanced AutoCAD

EDDT1100 001

Course Description

Advanced skills using AutoCAD. Includes: introduction to detail and assembly drawings, advanced geometric construction, isometric drawing, auxiliary views, advanced dimensioning, dynamic blocks with attributes, and AutoCAD 3D Modeling. It is recommended students complete EDDT 1040 prior to taking this course.

Semester(s): Fall & Spring

Course Student Learning Outcomes

- The student will demonstrate an understanding of developing, utilizing and customizing drawing templates and profiles to increase drawing efficiency, including: model-space and paper-space layouts for various applications as well as scale factors for models, viewport details, and plotting.
- The student will demonstrate continued improvement in the use of AutoCAD drawing, modification, and reproduction commands as well as appropriate application of these functions for efficiency.
- The student will demonstrate proficiency and knowledge of dimensioning standards and setups for different styles of dimensioning applications, including: a. The use and specifications for tolerance dimensions, standard, limit, and deviation b. Geometric dimensioning and tolerancing blocks c. Customized dimension styles
- The student will demonstrate an understanding of precision fits and proper views including section views as well as formats and standards for detail drawings.
- The student will demonstrate an understanding of assembly drawings from detail parts according to proper format and standards.

- The student will demonstrate proficiency in descriptive geometry, construction techniques and CAD drawing aids utilized in mechanical drawings; including auxiliary projection, tangencies, polygonal shapes, isometric drawings, and sectioning.
- The student will demonstrate an understanding of the creation and use of blocks and block libraries including: block editing tools, addition of attributes, creation and use of dynamic blocks, and data extraction.
- The student will use the following 3D modeling applications to produce industry standard drawings including: a. The use of primitives to and modification tools to build solid models b. Assembly commands - union, subtract, and intersection c. Revolved construction from polygonal shapes d. Solid construction using extrusion e. UCS manipulation f. Converting 3D models to 2D drawing setup using 2D drawing layout space and dimensioning g. Surface modeling and rendering
- The student will demonstrate an understanding of imputing data from a legal description of a property into a CAD drawing.

Brief Description of Assignments/Exams

Homework: Most of the work can be completed in class. There are 4 CAD labs at the college which students can use to complete their work. Students can also download the software on their personal computer to do work at home.

CAD Assignments: CAD assignments will be graded and recorded in canvas. Assignments will be graded with the instructor to fully understand corrections that need to be made.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
9/30	WHEEL SUPPORT	Assignment	50
10/16	QUICK ACTING HOLD DOWN CLAMP	Assignment	50

Grading Scale

Course Evaluation:

Grading of the course will be based on mastery of the performance objectives and determined according to accuracy, appearance, adherence to drafting standards, and completion of both the assignments and the final exam. The final grade will be based on the following percentages:

100% - 95% A 82% - 79% B- 65% - 62% D+

94% - 90% A- 78% - 75% C+ 61% - 58% D

89% - 87% B+ 74% - 70% C 57% - 54% D-

86% - 83% B 69% - 66% C- 53% - E

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: https://slcc.instructure.com/courses/530981/pages/institutional-

syllabus. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar