

DRFT-150-COMPUTER-AIDED DRAFTING (CAD) 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Instruction in the use of computer-aided drafting workstations to produce drawings in two-dimensional format, using the basic draw and edit commands.

Prerequisites: None

Semester Offered: Fall, Spring

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Develop a solid understanding of the commands in the AutoCAD software necessary to produce 2D technical drawings in accordance with ANSI standards.
2. Understand the concept of prototype templates in the creation of new drawings.

3. Understand the processes of printing drawings at various scales.
4. Understand issues involved in managing drawings, blocks, layers and files.
5. Understand the different styles of dimensioning and tolerancing used on drawings.

Specific Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Employ absolute, relative, polar, polar tracking and direct distance keyboard entry methods in the construction of accurate technical drawings. (B,C,E,I,CC)
2. Use drawing aids and controls in the production of technical drawings. (B,C,E,I,CC)
3. Apply a prototype template with proper ANSI compliant settings, layers, dimension styles, line types and line weights to the production of new drawings. (B,C,E,I,CC)
4. Demonstrate competency in the use of draw and modify commands in the production of technical drawings in a two dimensional format. (B,C,E,I,CC)
5. Properly set up, annotate, dimension and print multiview, multiscale drawings using model space and paper space as appropriate. (B,C,E,I,CC)
6. Incorporate the use of blocks, libraries of symbols and attributes as appropriate in the production of technical drawings. (B,C,E,I,CC)
7. Perform appropriate file and disk management techniques. (B,C,E,I,CC)
8. Create and use drawing borders and title blocks. (B,E,I,CC)