

# DRFT-260-ADVANCED AUTOCAD 4 CREDITS

# **SYLLABUS**

## CATALOG DESCRIPTION

A continuation of Computer-Aided Drafting. Topics in 3D modeling, customizing the CAD user interface and advanced drawing layout techniques are studied in depth.

Prerequisites: DRFT-150

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. Understand the concepts of wireframe, surface modeling and solid modeling in 3D space.
- 2. Examine the AutoCAD menu structure and the concepts of customizing menus and toolbars.
- 3. Understand image importing and exporting between various software.

4. Examine Object Linking and Embedding.

## **Specific Learning Objectives**

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

- 1. Use symbols and blocks to make a custom library and menu. (B,C,E,I,CC).
- 2. Use filters, user coordinate systems, viewpoints and advanced commands to construct and edit 3D wireframe, surface and solid models. (B,C,E,I,CC)
- 3. Assemble multi-view, multi-scale plots using paper space, model space and layout tabs. (B,C,E,I,CC)
- 4. Create custom menus, toolbars and macros. (B,C,E,I,CC)
- 5. Produce a portfolio slide show and compose the accompanying script file. (B,C,E,I,CC)
- 6. Incorporate differing methods of importing and exporting raster and vector images. (B,C,E,I,CC)
- 7. Employ OLE in drawings. (B,C,E,I,CC)