DRFT 1030

Division: Career and Technical Education
Department: Drafting Technology
Course: DRFT 1030
Title: Pictorial/Presentation Drawing
Catalog Description:

Various types of pictorial drawings are used extensively in catalogs, sales literature, and technical work to supplement and amplify multiview drawings. Students will study the basic principles used in axonometric projections and perspective or central projection drawings.

General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 3; Lecture: 2; Lab: 3
Clock/Hour Requirements: 75
Offered for Non-Credit: No
Prerequisites: DRFT 1010 or concurrent enrollment

Corequisites: None

Justification:

This course is approved by the program advisory committee and corresponds to Dixie course DRAF 2410 and SLCC course ARCH 2150.

Student Learning Outcomes:

Upon successful completion of this course, students will be able to:

- describe the differences between multiview projection, axonometric projection, oblique projection, and perspective
- sketch examples of an isometric cube, a dimetric cube, and a trimetric cube
- list the advantages of axonometric projection, oblique projection, and perspective
- create an isometric drawing given a multiview drawing
- draw inclined and oblique surfaces in isometric
- draw angles, ellipses, and irregular curves in isometric
- describe how an oblique projection is created
- list the advantages of oblique projection
- draw cavalier and cabinet oblique drawings
- identify a drawing created using perspective projection
- describe three types of perspective
- create a drawing using multiview perspective
- measure distances in perspective projection.

Content:

Course objectives will be achieved by providing students with instructional and hands-on experiences in the following areas:

- four types of projection
- distinguishing features of axonometric projections, including isometric projections, dimetric projection, and trimetric projection
- advantage of 3D Computer Aided Drafting (CAD)
- application of oblique projections
- distinguishing features of oblique projections
- use of sectioning in isometric and oblique projections
- dimension techniques used in isometric and oblique projections
- three types of perspectives
- distinguishing features of the one-point perspective, two-point perspective, and the three-point perspective
- use of computer graphics for perspective drawings.

General Education Outcomes:

2) Write clearly, informatively, and persuasively.
Students are required to complete descriptive term-sheets which provide information about the vocabulary and terminology used in this specific area. The descriptions are reviewed, graded, and returned to students for improvement.

5) Apply a cultural and historical awareness to a variety of phenomena.
Students must understand the historical aspects of architectural styles and the methods utilized in the drafting field. This historical perspective is addressed in lecture and students are required to identify styles through exams and projects.

6) Apply computational skills to a variety of contexts.
The field of drafting requires the combination of basic math, geometry, and algebra skills. Students will utilize these skills when producing drawings, cost estimates, and material lists.

Key Performance Indicators:

In class:

- Students will demonstrate mastery of course competencies by completing assignments/projects, tests, and quizzes. Assignments/projects are worth 75%, tests are worth 15%, and quizzes are worth 10% of the final grade.

Following class:

- Students will have the basic skills required to succeed in more advanced architectural and Auto CAD classes.

Representative Text and/or Supplies:

- Giesecke, Mitchell, and Spencer, *Technical Drawing*, current edition, Prentice Hall, Inc.

Optimum Class Size: 12
Maximum Class Size: 15

Signatures:

I hereby submit this course syllabus:

Craig Conder, ,

I hereby find this course consistent with the goals and resources of the Drafting Technology Department:

Craig Conder, , , Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)