DRFT 2600

Division: Career and Technical Education
Department: Drafting Technology
Course: DRFT 2600
Title: Advanced Computer-Aided Drafting-- Using AutoCAD
Catalog Description:

This course introduces students to methods of producing 3-dimensional drawings. It also includes design of menus, fonts, renderings, bill of materials and other specialized applications of AutoCAD used by builders, architects, engineers and designers.

General Education Requirements: N/A
Semesters Offered: Spring
Credit/Time Requirement: Credit: 2; Lecture: 2; Lab: 0
Clock/Hour Requirements: 0
Offered for Non-Credit: No
Prerequisites: DRFT 2020 or equivalent

Corequisites: N/A

Justification:

This course is designed as a continuation of DRFT 2020 and for the student who needs to enhance his/her CAD skills with 3-dimensional applications for use in building construction, architecture, building design, engineering, and related disciplines.

Student Learning Outcomes:

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

- understand terminology used in computer aided drafting to include 3-dimensional concepts
- learn the menu options and how they are used to make or edit 3-dimensional and isometric drawings by completing several basic architectural or similar 3D drawings
- understand how modeling is used in the construction industry as a design tool by creating a variety of solid modeling 3-D drawings
- design and create customized menus and slide shows.

Content:

Course objectives will be accomplished by providing students with learning experiences in the following subject areas:

- Introduction to 3-D Computer-aided Drafting: Applications, Concepts and Principles
    - Adding 3-D Entities, Modifying Objects and Groups
- Understanding the Create Environment

        - Identifying surfaces that describe 3-D drawings
        - 3D Drawing and Modeling
    - Solid Modeling and Rendering
    - Special CAD Functions, Menus and Slide Shows.

General Education Outcomes:

Applied Education Outcomes:

1) Students will acquire entry-level skills specific to and appropriate for employment in their chosen field of study. Students will enhance their basic AutoCAD skills through practice in design of three dimensional objects including solid modeling. Rendering and shading of 3-D objects is part of entry level skills learned.

Key Performance Indicators:

Outcome assessment will be an evaluation of:

- performance on drawing projects (70%)
- faculty developed tests from the objectives of the course (30%).

Percentages are approximate.

Representative Text and/or Supplies:

- Wohlers, Terry. T., *Applying AutoCAD,* current edition, New York: Glenco-McGraw Hill.

Optimum Class Size: 0
Maximum Class Size: 0

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)