DRFT 2971

Division: Career and Technical Education
Department: Drafting Technology
Course: DRFT 2971
Title: Special Residential Architecture Projects
Catalog Description:

This is an advanced course in residential architecture layout and design using AutoCAD. Students, with approval, may design and layout residential architecture projects of their choice. Final details should be completed for the construction of the designed structure.

General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: .5; Lecture: 1; Lab: 2
Clock/Hour Requirements: 45
Offered for Non-Credit: No
Credit/Clock Comments: This is a variable credit course (0.5-2:0-1:2-6).
Prerequisites: DRFT 1310 and DRFT 2100

Corequisites: None

Justification:

This course is approved by the program advisory committee and corresponds to UVSC course DT 2790 and SLCC course ARCH 2990.

Student Learning Outcomes:

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

- understand advanced residential architecture design and layout techniques
- apply advanced AutoCAD techniques in completing design and bill of materials
- understand advanced principles for completion of residential design, cost estimation, and coordination of plans for construction
- apply architectural rendering in the completion of residential drawings
- apply advanced design in designing a complete set of plans for final construction of an approved project.

Content:

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

following areas:

- advanced residential design and layout
- application of cost estimating in residential design
- application of AutoCAD in design and listing of important construction information
- residential rendering techniques
- coordination of designs and layouts for project construction
- completion of residential layouts for final construction.

General Education Outcomes:

4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media.

Students will research information (i.e. styles, layouts, mechanical parts, connectors, fasteners, etc.) through the Internet, written manuals, journals, and other publications. This information is used to complete projects and assignments throughout the program.

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.

8) Apply ethical reasoning to a variety of contexts.

The client-designer relationship requires an understanding of ethical behaviors in design and consultation. Draftsmen often work in teams where the individuals are each required to fulfill responsibilities under the direction of a team leader. This experience is modeled throughout the program.

9) Respond with informed sensitivity to an artistic work or experience.

In both mechanical and architectural drafting, the final product must be presented to the client. At this point in the process, students must recognize quality artistic efforts in order to be able to produce their own final presentation drawings.

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:

- The knowledge and skills acquired in this course will be demonstrated by successful application in positions in the residential architectural industry.

Representative Text and/or Supplies:

- *Architecture - Residential Drawing and Design*, current edition, Goodheart-Wilcox, Inc.

Optimum Class Size: 12
Maximum Class Size: 20

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)