



DRFT 2120

Division: Career and Technical Education

Department: Drafting Technology

Course: DRFT 2120

Title: Bidding, Estimating, and Specifications

Catalog Description:

This course will include competitive bidding, material take-offs, labor cost estimates, sub-contractor bids, equipment costs, specifications, codes, zoning, and inspections. Architectural office practices are put into application.

General Education Requirements: N/A

Semesters Offered: TBA

Credit/Time Requirement: Credit: 4; Lecture: 3; Lab: 3

Clock/Hour Requirements: 90

Offered for Non-Credit: No

Prerequisites: DRFT 2100 or DRFT 2150

Corequisites: None

Justification:

This course is approved by the program advisory committee and corresponds to SLCC course ARCH 2460 and SLCC course ARCH 2470.

Student Learning Outcomes:

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

- define the terminology and procedures used in estimating a structure
- explain what is involved in developing an estimate of building costs
- generate a typical materials list for a simple structure
- estimate the cost of a residential structure using the square foot or cubic foot method
- explain the purpose of material and tradework specifications
- list the sources of specification guides
- recognize the format followed by typical contract specification sheets
- use a Description of Materials form.

Content:

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

- purpose of specifications
- specification formats

- preliminary estimates
- actual estimates
- zoning and codes.

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.

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.

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:

- The knowledge and skills acquired in this course will be demonstrated in subsequent courses.

Representative Text and/or Supplies:

- *Architectural Residential Drawing and Design*, current edition, Goodheart-Wilcox Company, 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)