SAN JUAN COLLEGE
Success Matters

DRFT-247-CONSTRUCTION PRACTICES & ESTIMATING 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Methodology and quantity calculations including excavation, foundations, concrete and masonry structures, steel, framing, flooring, drywall, roofing, insulations, and finish work.

Prerequisites: DRFT-248, MATH-160, MATH 180

Semester Offered: 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 construction practices used in residential and commercial construction.
2. Learn appropriate methods for calculating quantity of material required in residential construction.
3. Understand responsibilities of contractors and laborers in the construction phase of a structure.

4. Understand the basis of the costs of the various materials used in the construction industry.

Specific Learning Objectives

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

1. Demonstrate an understanding of the process of residential construction form concept to completion. (B,C,E,I,CC).
2. Perform material take-off and labor estimation for the following aspects of residential construction: (B,C,E,I,CC)
    a. Preliminary evaluation of the site
    b. Site clearing and grading
    c. Excavation
    d. Concrete and masonry structures
    e. Framing
    f. Finish carpentry
    g. Thermal and moisture protection
    h. Doors and windows
    i. Finishes
    j. HVAC and plumbing
    k. Electrical
    l. Overhead and profit