

DRFT-201-INVESTIGATION IN CIVIL DRAFTING 1 CREDIT

SYLLABUS

CATALOG DESCRIPTION

An introduction to the various aspects of civil drafting and engineering technology. Students research related topics and present their finding.

Prerequisites: DRFT-115

Semester Offered: Fall

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 basic design criteria for a comprehensive civil-related project.
2. Learn drafting techniques related to civil engineering drawings.
3. Study the environment of a drafter employed in the civil area.

4. Prepare written reports and papers relating to a civil project.

Specific Learning Outcomes

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

1. Assist in the preliminary field survey of the proposed site. (L,T,C,I,A)
2. Research materials available related to specifications and building codes. (L,C,I)
3. Study maps of a site prepared on the AutoCAD system from the field data. (L,T,C,I)
4. Determine suitable plant and landscaping features that need to be included in the plans. (L,T,C,I)
5. Study drawing criteria of proposed sites for: (L,T,C,I)
 - a. Sidewalks and roadways
 - b. Sprinkler systems
 - c. Xeriscaping requirements/theme area
 - d. Stone or concrete work
 - e. Building or structure design
 - f. Draining requirements and structures
 - g. Lighting and utilities
 - h. Miscellaneous equipment – trash receptacles, benches, and rest room facilities
 - i. Handicapped access
 - j. Cost estimate