

**DRFT-110**-Technical Drafting I 3 Credits

**SYLLABUS**

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| CATALOG DESCRIPTION |
| A study of the techniques of drafting and the preparation of drawings using traditional drafting methods and CAD. |
| Prerequisites: | MATH-050 or appropriate Math Accuplacer score |
| Semester Offered: | Fall, 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 single-view, multi-view and pictorial sketching and drawing.
2. Learn the proper usage of common drafting equipment.
3. Examine graphical solutions to layout problems by using geometric construction.
4. Learn techniques for producing a properly scaled, annotated and dimensioned multi-view drawing in accordance with ANSI Y14.5 standards.

 **General Learning Outcomes**

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

1. Demonstrate sketching techniques used for creating straight lines, inclined lines, angles, arcs, circles and curved lines. (B,C,I,CC)
2. Produce single-view sketches and pictorial sketches. (B,C,I,CC)
3. Properly use the common pieces of drafting equipment. (C,CC)
4. Employ the two types of scales in constructing drawings. (E,I,CC)
5. Apply basic geometric construction techniques for solving problems. (C,E)
6. Employ proper lettering form and format. (E,I)
7. Use proper procedure and techniques in producing multi-view drawings. (B,C,E,I,CC)
8. Apply proper dimensioning in accordance with ANSI standards. (B,C,E,I,CC)