Course Information Form (CIF)

Course Code: DRT 119

Course Title: Blueprint Reading and Technical Drawing

Department: Applied Sciences and Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 15.1301
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 3-0-3
Credit Hour Distribution:

Lecture: 3	Lab: 0	Clinical: 0	**Total: 3**

General Course Information

Catalog Description

Interpretation of working drawings to translate drawings into product. Includes technical sketching to communicate modifications. Dimensioned projections, sectional views, symbols, and schematics are used.

General Course Objectives

The student will develop an understanding of how the mechanical drawing system is used to communicate ideas within industry.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 059

Prerequisites

None

Methods of Evaluation

Students will be given a minimum of 4 objective exams, including 1 final exam, and 8 drawing exercises.

Instructional Materials and Additional Supplies

Print Reading for Industry, by Walter C. Brown, Current edition.

Course Content

General Learning Outcomes (GLOs)

- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Introduction: 1) Importance of prints, 2) Methods of production, 3) English and metric measuring instruments, 4) Lettering and sketching, 5) Math and geometry review	1. Describe how blueprints and computer generated drawings fit into the production process. English and metric measuring, lettering and sketching technique, and basic geometry will be learned or reviewed.	6	0	0
Print Reading Basics: 1) Linetypes, 2) Orthographic projection, 3) Types of views, 4) Types of drawings, 5) Dimensions and tolerance	1. Demonstrate the various graphic and numeric ways to communicate specifications on a print.	12	0	0
Written Communication on Prints: 1) Title block, 2) List of materials, 3) Drawing notes, 4) Drawing change system	1. Apply the various written ways to communicate specifications on a print.	6	0	0
Mechanical Specifications: 1) Threading; 2) Callouts; 3) Gears, splines, and serrations	1. Describe how mechanical components are standardized and the language used to communicate these specifications.	6	0	0
Geometric Dimensioning and Tolerancing: 1) Applications, 2) Symbols, 3) Feature control frame, 4) Location tolerance, 5) Form tolerance, 6) Profile tolerance, 7) Orientation tolerance, 8) Runout tolerance	1. Apply geometric dimensioning and tolerancing to blueprints and understand why this system of communication is becoming common in a modern industrial environment.	15	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	0	0