Course Information Form (CIF)

Course Code: PFT 212

Course Title: Advanced Drawing, Prints, and Specifications

Department: Applied Sciences and Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 46.0503
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 1-6-3
Credit Hour Distribution:

Lecture: 1	Lab: 6	Clinical: 0	**Total: 3**

General Course Information

Catalog Description

Reading and interpretation of blueprints, building specifications, schematics, and technical and isometric drawings. Interpretation of building plans. Pipe sizing and installation of materials.

General Course Objectives

Students will be able to read and interpret blueprints, building specifications, schematics, and technical and isometric drawings.

Minimum Placement Levels

English	Reading	Math
None	None	None

Prerequisites

Admission into the Plumbers and Pipefitters Apprenticeship program

Methods of Evaluation

The minimum evaluation methods include 3 written and 3 practical exams.

Instructional Materials and Additional Supplies

Drawing Interpretation and Plan Reading, International Pipe Trades Joint Training Committee, 2002.

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Building Specifications: a) Language and Terms; b) General and Supplementary Conditions; c) Specifications as Applicable to Drawings; and d) Sections - 1. General, 2. Architectural, 3. Mechanical, 4. Plumbing, and 5. Electrical	1. Define common terms used in building specifications. 2. Apply building specifications to blueprints and drawings. 3. Read and interpret mechanical and electrical blueprints.	4	30	0
Interpretation of Technical Drawings: a) Plan View, b) Symbols and Section Drawings, c) Schematics, and d) Exploded	1. Read, interpret, and draw technical drawings. 2. Interpret plumbing and mechanical symbols. 3. Distinguish between section, schematic, and exploded drawings. 4. Locate section drawings in a set of blueprints.	4	24	0
Interpretation of Building Plans: a) Plans with Specifications, b) Piping Installation, c) Architectural, and d) Structural and Mechanical	1. Size pipe according to building specifications.	4	18	0
Interpretation of Isometric Drawing: a) Basic Facts and Practices, b) Relations of Isometric Views, c) Non-isometric Lines, d) Isometric Circles and Tanks, and e) Piping Drawings	1. Install materials according to isometric drawing. 2. Distinguish between isometric and non-isometric lines.	3	18	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
15	90	0