

APPT 164: DRAWING I FOR THE PLUMBING TRADE

Foothill College Course Outline of Record

Heading	Value
Units:	4.5
Hours:	30 lecture, 72 laboratory per quarter (102 total per quarter)
Prerequisite:	Per California Code of Regulations, this course is limited to students admitted to the Plumbing & Pipefitting Apprenticeship Program.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	None
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

Student Learning Outcomes

- A student will be able to demonstrate and classify drainage systems.
- A student will be able to apply piping and plumbing fixture supports.
- A student will be able to layout piping systems.
- A student will be able to demonstrate and classify piping layouts.

Description

Third-year course of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of plumbing and piping layouts, drainage systems, piping and fixture supports as it applies to mechanical drawings.

Course Objectives

The student will be able to:

- Recognize and classify piping layouts
- Recognize and classify drainage systems
- Recognize and classify piping and fixture support

Course Content

- Conceptual Drawings of Piping Layouts
 - Elevation views of piping systems
- Conceptual Drawings of Drainage Systems
 - Isometric plans
 - Classes of drainage systems
- Conceptual Drawings of Pipe Fixtures
 - Creating blueprints with structural fixtures

Lab Content

Students will work individually on Computer-Aided Design (CAD) stations performing basic layouts of a plumbing system for 3-D and Isometric drawings:

- Drawing Techniques
- Line quality
- Drawing Proportion
- Labeling & Sizing of Piping Systems

E. Drawing File Management

Special Facilities and/or Equipment

- Laboratory with drawing tables
- Drawing utensils

Method(s) of Evaluation

- Written examination
- Hands-on demonstration
- Chapter Quizzes
- Group and Classroom participation
- Punctuality

Method(s) of Instruction

- Lecture
- Discussion
- Laboratory
- Demonstration

Representative Text(s) and Other Materials

United Association of Journeymen and Apprentices. [Drawing Interpretation and Plan Reading](#). Washington, D.C.: International Pipe Trades Joint Training Committee, Inc., 2015.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

A. Readings from textbook

- The application of Isometric Drawings
- The application of 3-D Drawings

B. Students complete writing assignments on elevation, isometric and plan views

- An Isometric drawing of a PRV Station is turned in as part of the final exam

Discipline(s)

Plumbing