

# APPT 191: PLUMBING CODE APPLICATION, PLUMBING FIXTURES

## Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	5
Hours:	37 lecture, 86 laboratory per quarter (123 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 knowledge of code requirements for clean-outs.
- A student will be able to define the term "fixture unit".
- A student will be able to define the term "shall" as it pertains to the UPC.

## Description

This course provides students with a working knowledge of the plumbing code application and plumbing fixtures as it applies to the plumbing and pipe fitting industry. Students will apply safety practices as it relates to on-the-job training. This course is required to meet the certificate requirements to become journeyman plumber.

## Course Objectives

The student will be able to:

- Demonstrate applying plumbing code required in the plumbing industry.
- Demonstrate plumbing fixtures required in the plumbing industry.

## Course Content

- Plumbing code application
  - Basic plumbing code review
  - Formulas and tables
- Plumbing fixtures
  - Knowledge of fixtures
  - Installation of fixtures
  - Mechanics

## Lab Content

Students will work individually on applying math principles and concepts to the layout of piping systems in the lab:

- Utilize math and geometry for pipe measurements
- Use formulas for related math in the plumbing trades
- Utilize metric measurements
- Demonstrate instruments used for piping systems layout

## Special Facilities and/or Equipment

- Laboratory with overhead projector
- Calculator

## Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

- Written examination
- Hands-on demonstration
- Chapter quizzes
- Group and classroom participation
- Punctuality

## Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

- Discussion
- Laboratory
- Demonstration

## Representative Text(s) and Other Materials

United Association of Journeymen and Apprentices. [Plumbing Code Application and Plumbing Fixtures](#). 2020.

NOTE: This is the plumbing textbook used for this course. Although it may not be within 5 years of the required published date, it is the most current book used when teaching this course. We will adopt the next edition, as it is published.

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

- Readings from the textbook. Examples include:
  - Applying plumbing code for the plumbing trades (Chapters 1-4)
  - Application of geometry for the plumbing trades (Chapters 3-4)
  - Utilizing instrumentation for plumbing (Chapters 1-2)
- Writing assignments; examples include:
  - Using math calculations
  - Geometry of piping systems
  - Applying formulas for plumbing code in the pipe trades
  - Calculating metric measurements for piping system application

## Discipline(s)

Plumbing