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:

A. Demonstrate applying plumbing code required in the plumbing industry.

B. Demonstrate plumbing fixtures required in the plumbing industry.

Course Content

- A. Plumbing code application
- 1. Basic plumbing code review
- 2. Formulas and tables
- B. Plumbing fixtures
- 1. Knowledge of fixtures
- 2. Installation of fixtures
- 3. Mechanics

Lab Content

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

Special Facilities and/or Equipment

- A. Laboratory with overhead projector
- B. 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. <u>Plumbing Code</u> <u>Application and Plumbing Fixtures</u>. 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

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

Discipline(s)

Plumbing

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