

APR 161 : PLUMBING MATERIALS AND FIXTURES

Transcript title

Plumbing Materials and Fixture

Credits

4

Grading mode

Standard letter grades

Total contact hours

80

Other hours

80

Prerequisites

APR 160.

Course Description

Covers relevant safety and code requirements. Introduces piping system components, connection methods, and installation techniques. Addresses proper selection and application of code-compliant fixtures and faucets. Explores math and science principles related to plumbing tasks. Teaches navigation of the tables in the Uniform Plumbing Code. Tailored for Oregon state-registered apprentices in the plumbing trade and provides an introduction to the types of pipes and fittings used in plumbing applications.

Course learning outcomes

1. Demonstrate knowledge of different types of pipe and fittings such as plastic, copper, cast-iron, and carbon steel.
2. Demonstrate how to measure, cut, join, and support various pipes and fittings according to manufacturer's instructions and applicable codes.
3. Select plumbing fixtures, water heaters, and hot water systems based on desired results and related code.
4. Use proper applications of code-approved fixtures and faucets in plumbing installations and apply different types of fixtures and faucets and the materials used in them per UPC requirements.
5. Demonstrate competence in using basic math concepts in on-the-job plumbing situations.
6. Identify tables located in the Uniform Plumbing Code (UPC).
7. Apply the principles of science to applications in plumbing.
8. Demonstrate a basic understanding of the codes, definitions and responsibilities, as defined by the UPC.

Content outline

1. Introduces various types of pipes and fittings used in plumbing applications.
2. Applicable safety and code requirements.
3. Piping system components and different connection and installation methods.
4. Proper use of code-approved fixtures and faucets in plumbing installations.

5. Math and science principles relevant to completing plumbing tasks.
6. Introduction to navigating tables in the Uniform Plumbing Code.

Required materials

Materials not required.