APR 162 : PLUMBING BASIC WASTE WATER SYSTEMS

Transcript title
Plumbing Basic Wastewater Syst

Credits
2

Grading mode
Standard letter grades

Total contact hours
40

Other hours
40

Prerequisites
APR 161.

Course Description
Introduces DWV systems, explores the properties of water, guides selection of appropriate water pipe sizes, and explains fundamentals of backflow prevention. Covers hot water heaters, with practical troubleshooting exercises for both electric and gas models. Reviews the Uniform Plumbing Code, focusing on relevant articles to ensure compliance. Designed for Oregon state-registered apprentices in the plumbing trade.

Course learning outcomes
1. Explain DWV systems and how to remove waste safely and effectively.
2. Identify DWV piping materials.
3. Explain the characteristics of water.
4. Select proper water pipe sizing based on specification.
5. Select plumbing fixtures, water heaters, and hot water systems based on desired results and related code and explain how hot water heaters function.
6. Identify how system components work and apply drain and vent sizing, grade, and waste treatment.
7. Explain the major components of water distribution systems, their functions, and water sources and treatment methods.
8. Explain the characteristics and importance of backflow prevention.
9. Identify and apply articles in Uniform Plumbing Code.

Content outline
1. Introduction to DWV (Drain, Waste, and Vent) systems.
2. Exploration of water properties and characteristics.
3. Guidance on selecting appropriate water pipe sizes.
4. Explanation of backflow prevention principles.
5. Discussion of hot water heaters, including types and functionality.
6. Troubleshooting for both electric and gas water heaters.
7. Review of Uniform Plumbing Code compliance with reference to specific articles.

Required materials
Materials not required.