# ATPL-1070: PIPE FITTINGS, VALVES, AND SUPPORTS

## **Cuyahoga Community College**

Viewing: ATPL-1070: Pipe Fittings, Valves, and Supports

**Board of Trustees:** 

2012-06-28

**Academic Term:** 

Spring 2019

**Subject Code** 

ATPL - Applied Ind Tech - Plumbers

**Course Number:** 

1070

Title:

Pipe Fittings, Valves, and Supports

#### **Catalog Description:**

Identifies the pipe, pipe fittings, valves and supports that are used in the plumbing trade and discusses the fabrication and installation methods that are required for proper and safe installations.

#### Credit Hour(s):

2

#### Lecture Hour(s):

2

## Requisites

### **Prerequisite and Corequisite**

Departmental approval: admission to Plumbers' apprenticeship program.

## **Outcomes**

### Course Outcome(s):

1. Identify the components of plumbing systems.

## Course Outcome(s):

2. Install the various pipe components that are required for proper installations.

#### Methods of Evaluation:

- 1. Homework
- 2. Quizzes
- 3. Tests
- 4. Participation

#### **Course Content Outline:**

- 1. Component identification
  - a. Pipe
    - i. Cast iron
    - ii. Polyvinyl chloride (PVC)
    - iii. Copper
    - iv. Steel
  - b. Fittings

- 2
- i. Bends and two-way fittings
- ii. Branch fittings
- iii. Flanges and gaskets
- c. Valves
  - i. Check
  - ii. Gate
  - iii. Pressure relief
- 2. Installation
  - a. Pipe and pipe connection
    - i. Mechanical
    - ii. Welded
    - iii. Chemical
    - iv. Threaded
  - b. Suspension systems
    - i. Hangers
    - ii. Pipe bedding
    - iii. Fasteners
  - c. Shop exercises
  - d. Safety considerations

Resources

Graces, W.V. The Pipefitters Blue Book. Revised. Webster, Tx., 2011.

Frankland, Thomas. Pipe Fitter's and Pipe Welder's Handbook. Revised. New York: McGraw-Hill, 2005.

State of Ohio. 2007 Ohio Plumbing Code. Country Club Hills, IL: International Code Council, 2007.

#### **Resources Other**

- 1. Pipe, Fittings, Valves, Supports and Fasteners, 1<sup>st</sup> Edition International Pipe Trades Joint Training Committee
- 2. OSHA Standards for Construction 29 CFR 1926 Current edition

Top of page Key: 615