

Course Code: CIT 114

Course Title: Plumbing

Department: Applied Sciences and Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 46.0401

Repeatability: 0

Credit Hours

Catalog Notation: 2-2-3

Credit Hour Distribution:

Lecture: 2

Lab: 2

Clinical: 0

Total: 3

General Course Information

Catalog Description

Demonstration and hands-on training in installation of plumbing pipe, fixtures, and fittings; interpreting plumbing drawings and selection of proper materials.

General Course Objectives

Demonstration and hands-on training in the installation of plumbing pipe, fixtures, and fittings. Interpreting plumbing drawings and selection of proper materials.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 059

Prerequisites

None

Methods of Evaluation

6-10 lab skill assessments and a final examination.

Instructional Materials and Additional Supplies

Plumbing Design & Installation, Ripka. Copyright: 2012. Publisher: Atp. Edition: 4th. ISBN: 9780826906427

Safety Eyewear Anti-Fog 4Vcj3

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Basic Plumbing Tools	1. Identify the basic plumbing tools and their uses, along with tool safety and maintenance.	2	1	0
Pipes, Fittings, and Basic Terminology	1. Identify the most commonly used materials and terms used by plumbers.	2	2	0
Reading Plumbing Drawings	1. Communicate the ideas and systems portrayed by plumbing drawings.	2	2	0
Joining Pipe and Fittings	1. Use special tools and materials needed to join PVC, copper, PEX pipe, and fittings.	5	8	0
Faucets and Valves	1. Identify the operation and installation of common types of faucets and valves.	4	5	0
Water Heaters	1. Explain the operations necessary to install and repair residential and small commercial water heaters.	3	4	0
Fixtures	1. Identify the basic types of fixtures and understand the basic principles of their installation, operation, and servicing.	4	4	0
Potable Water Supply Systems	1. Demonstrate proper installation methods for installing potable water supply piping. 2. Select appropriate materials for potable water supply piping.	3	2	0
Sewage Disposal	1. Explain concepts, construction, and operation of private sewage disposal systems.	2	0	0
Drain, Waste, and Vent Systems	1. Demonstrate proper installation methods for installing drain/waste/vent piping. 2. Select appropriate materials for drain/waste/vent piping.	3	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	30	0