

# FENG 123 : Plumbing Basics and Repair

**Credits:** 2

**Class Hours:** 1 lecture and 2 lecture/lab

**Recommended:** "C" or higher or concurrent enrollment in CARP 120B.

**Description:** This course provides an overview of the plumbing systems and the materials, tools, and techniques used in the repair and maintenance of the fixtures and appliances found in a building. Included are safety precautions, tool selection, and an introduction to the codes that apply to a plumbing system.

**Semester Offered:** Spring

**Course Student Learning Outcomes (CSLOs):**

1. Describe the three systems that comprise the plumbing system in a typical building.
2. Demonstrate the ability to describe a supply system and its components.
3. Demonstrate the ability to describe the waste and vent systems and their components.
4. Demonstrate the ability to select and use the proper tools for a given task in the supply system.
5. Demonstrate the ability to select and use the proper tools for a given task in the waste or vent systems.
6. Demonstrate the proper selection and installation of the materials for a supply system.
7. Demonstrate the proper selection and installation of the materials for a waste or vent system.
8. Describe the fixtures and appliances found in a typical plumbing system.
9. Demonstrate the ability to determine the type of valve assembly and the repair techniques for a given assignment.
10. Demonstrate the ability to repair and replace various components of a water closet and toilet.
11. Describe the sequence used to replace a hot water heater.
12. Demonstrate the ability to perform basic troubleshooting techniques on a plumbing system.