CONTENT STANDARD 1.0: INTRODUCTION TO THE PLUMBING PROFESSION

Performance Standard 1.1: Introduction to the Plumbing Profession

1.1.1   Describe Idaho Plumbing Code and Administrative Rules requirements.
1.1.2   Identify the basic principles on which plumbing is based.
1.1.3   Identify and maintain licensing, certification, and industry credentialing requirements.

CONTENT STANDARD 2.0: PLUMBING SAFETY

Performance Standard 2.1: Plumbing Safety

2.1.1   Identify common unsafe acts and conditions that cause accidents and how to handle these situations to make them safer.
2.1.2   Identify job site hazards – work specific to plumbers.
2.1.3   Complete First Aid and CPR Certification.
2.1.4   Use appropriate fire extinguishers and other safety devices.

CONTENT STANDARD 3.0: INTRODUCTION TO HAND TOOLS AND POWER TOOLS

Performance Standard 3.1: Hand Tools

3.1.1   Identify the types of hand tools used in the plumbing profession.
3.1.2   Demonstrate proper use and care of basic hand tools.
3.1.3   Identify the types of Personal Protective Equipment (PPE) required for hand tool use.

Performance Standard 3.2: Power Tools

3.2.1   Identify the types of power tools used in the plumbing profession.
3.2.2   Demonstrate proper use and care of basic power tools.
3.2.3   Identify the types of Personal Protective Equipment (PPE) required for power tool use.

CONTENT STANDARD 4.0: FITTINGS, PIPE, AND VALVES

Performance Standard 4.1: Fittings and Valves

4.1.1   Identify the proper fittings and/or valves for specific systems.
4.1.2   Apply the various fittings and valves by type, size, materials and application.

Performance Standard 4.2: Types of Pipe

4.2.1   Identify the common types of pipes.
4.2.2   Identify the proper pipes for specific systems.

CONTENT STANDARD 5.0: INDUSTRY MATH

Performance Standard 5.1: Basic Mathematics

5.1.1   Perform addition, subtraction, multiplication, and division calculations of whole numbers.
5.1.2   Perform addition, subtraction, multiplication, and division calculations of common fractions.
5.1.3   Perform addition, subtraction, multiplication, and division calculations of decimal fractions.
5.1.4   Perform ratio and proportion calculations.
5.1.5   Perform percent, percentage, and discount calculations.
5.1.6   Perform area calculations.
5.1.7   Perform volume calculations.
5.1.8   Solve basic equations.

5.1.9   Demonstrate the use of order of operations.

CONTENT STANDARD 6.0: THE UNIFORM PLUMBING CODE (UPC)

Performance Standard 6.1: The Uniform Plumbing Code (UPC)

6.1.1   Identify proper code terminology.

6.1.2   Identify general plumbing requirements for hanging and securing piping.

6.1.3   Identify plumbing fixtures.

6.1.4   Perform water heater sizing, combustion air calculations, vent sizing, and installation.

6.1.5   Perform water pipe sizing calculations.

6.1.6   Explain when and what type of backflow prevention devices, assemblies, and methods are required.

6.1.7   Perform drain and waste pipe sizing calculations.

6.1.8   Perform indirect waste installation and usage.

6.1.9   Describe venting systems (horizontal, vertical wet venting, etc.).

6.1.10 Identify proper use of traps and interceptors.

6.1.11 Perform proper storm drain sizing and calculations.

6.1.12 Perform fuel gas sizing calculations.

6.1.13 Identify proper fire-stop installation.

6.1.14 Identify the proper use of gray water, reclaimed water, and rainwater systems.

6.1.15 Utilize appendices and reference standards.

6.1.16 Apply IDAPA Plumbing rules and statutes (Title 54).

CONTENT STANDARD 7.0: CONSTRUCTION DOCUMENTS

Performance Standard 7.1: Isometric Drawings

7.1.1   Identify the various plumbing symbols and abbreviations.

7.1.2   Complete an isometric drawing with proper symbols.

7.1.3   Develop materials list based on isometric drawings.

CONTENT STANDARD 8.0: CUT AND JOIN PIPES

Performance Standard 8.1: Cut and Join Pipes

8.1.1   Join different types of pipes (including PVC, galvanized, steel, plastic, copper, and cast-iron pipes).

8.1.2   Measure, mark, and cut different types of pipes using various pipe cutters.

8.1.3   Thread a steel pipe with a power-driven vise stand or a pipe-threading machine.