PLUMBER APPRENTICESHIP COURSE SUMMARIES

COURSE PLA3406: HAND AND POWER TOOLS

Students demonstrate maintenance and use of hand tools and power tools to safely complete various plumbing jobs.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3411: WELDED PIPE AND FITTINGS

Students identify and describe welded pipe and fittings.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3416: PLASTIC PIPE AND TUBES

Students identify, describe, and demonstrate the construction of plastic pipe and tubes.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3421: THREADED AND GROOVED PIPE

Students develop an understanding of threaded and grooved pipe.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3426: TUBES, TUBING, AND VALVES

Students develop an understanding of tubes, tubing systems, and valves.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3431: INSTALL AND TEST PIPING SYSTEMS

Students develop an understanding of pressure testing and pumps and install hangers,

supports, and fasteners.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3436: WELDING SAFETY AND FABRICATION

Students develop an understanding of welding equipment and the basics of welding.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3441: BRACKET AND SPOOL FABRICATION

Students fabricate a bracket project and a spool project to demonstrate an understanding of

how to weld.

Prerequisite: PLA3436: Welding Safety and Fabrication

COURSE PLA3446: BRAZING AND SOLDERING

Students develop and demonstrate an understanding of brazing and soldering metal alloys.

Prerequisite: PLA3436: Welding Safety and Fabrication

COURSE PLA3451: SKETCHING AND DRAWING

Students develop an understanding of drafting and the use of single-line drawings. Students demonstrate orthographic drawing and isometric single-line drawing.

Prerequisite: PLA3900: Apprenticeship Safety

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COURSE PLA3456: INTERPRETING DRAWINGS

Students interpret architectural drawings and mechanical drawings used in the plumbing trade.

Prerequisite: PLA3451: Sketching and Drawing

COURSE PLA3461: PLUMBING CALCULATIONS

Students identify and demonstrate basic mathematic calculations used in the plumbing trade.

Prerequisite: PLA3900: Apprenticeship Safety

COURSE PLA3466: PIPING OFFSETS AND DENSITY

Students describe and demonstrate piping offset and density calculations used in the plumbing

Prerequisite: PLA3461: Plumbing Calculations

COURSE PLA3471: PRINCIPLES OF PRESSURE, ATMOSPHERE, AND ELECTRICITY

Students understand and apply the principles of pressure, atmosphere, and electricity used in the plumbing trade. Students calculate pressures and perform electrical calculations.

Prerequisite: PLA3466: Piping Offsets and Density

COURSE PLA3480: PLA PRACTICUM A

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Prerequisite: None

COURSE PLA3485: PLA PRACTICUM B

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Prerequisite: None

COURSE PLA3490: PLA PRACTICUM C

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Prerequisite: None

COURSE PLA3495: PLA PRACTICUM D

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Prerequisite: None

COURSE PLA3900: APPRENTICESHIP SAFETY

Students develop the knowledge and skills required to maintain a personal health and safety plan; identify the steps for obtaining a journeyperson certificate; and describe how to apply legislation, regulations, and practices of the industry. Students also learn to use the codes and standards that are applied in the pipe trades.

Prerequisite: None