



PLAP 1217 SYLLABUS

Course Number Course Name	PLAP 1217 Plumbing Apprenticeship III
Credit Value (Breakdown of theory and lab credits)	5 (1 Theory and 4 Lab)
Catalog Course Description	This course will emphasize the skills needed to properly interpret building prints and the ability to draw isometric sketches in the field to be pre-fabricated in a shop environment. Areas covered include basic drawing tools, measuring tools and lettering; graphic symbols for pipes, fittings and valves; interpretations of technical diagrams; interpretation of isometric drawings; and drawing three view, plan view and elevation view representations. Students will also explore various pipe materials and wall thicknesses as they apply to specific field applications, as well as the numerous valves and fitting used to joint these materials. Areas covered include pipe, pipe fittings, flanges and gaskets; methods of joining pipe; understanding the functions of valves; internal components of valves; pipe hangers, supports, anchors, guides and fasteners. Finally, students will also learn about the many types of plastic piping, uses and limitations as well as the numerous glues and primers used to join them. Plastic piping advantages and disadvantages will be covered as well as the characteristics of them. Prerequisites: None
Student Learning Outcomes/Objectives /Competencies of the Course	Student Learning Outcomes: <ul style="list-style-type: none"> • Demonstrate proper use of an architect’s scale. • Identify graphic symbols for various pipes, valves and fittings. • Interpret technical diagrams correctly of various piping schemes for installation. • Prepare isometric drawings based on assigned schemes. • Drawing Interpretation and Plan Reading • Identify pipes of different materials and their key usages and limitations. • Perform proper joining methods to industry standards. • Identify pipes of different materials based on color coding and specifications. • Demonstrate knowledge of plastic pipe advantages and disadvantages. • Identify fittings and proper orientation. • Identify proper glues and primers based on given material and conditions. • Identify differences in supports and hangers for plastic piping as opposed to other materials. • Obtain UA Solvent Welding Certification • Identify various valves and describe their intended purposes. • Describe major components of the most commonly used valves. • Identify common supports, hangers and anchors. • Identify proper tables used to find industry minimum standards for spacing of horizontal and vertical supports.

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College-Wide Student Learning Outcomes	<i>College Wide Student Learning Outcomes:</i> <i>Communication</i> <i>Critical Thought</i>
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