BCI C108: PLUMBING CODE

Item	Value
Curriculum Committee Approval Date	12/06/2024
Top Code	095720 - Construction Inspection
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

Course Description

Formerly: BCT C308. Plumbing code interpretation for inspectors and installers necessary for correct selection of material, sizing of pipe, and installation of conventional and Green Building Plumbing systems. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Inspect, test, analyze, and report on plumbing installations to ensure compliance with local and federal building code and ordinance regulations.

Course Objectives

- 1. Review and evaluate plans of plumbing installations for plumbing code compliance.
- 2. Assemble and perform calculations with all factors required for proper sizing of potable water, fuel gas, and sanitary waste/vent piping systems.
- 3. Assess code compliance of installed systems. Propose solutions for plumbing design deficiencies. Assist owners and installers in choosing code compliant options.
- 4. Assemble, organize, and explain code deficiencies to plumbing installers.
- 5. Define and explain nomenclature associated with the plumbing trade to owners and installers.
- 6. Recognize, select, and apply the different methods and materials called for in the plumbing code.
- 7. Locate, associate, and interpret plumbing code tables and sizing charts.

Lecture Content

Administration Intent of the Plumbing Code Work requiring permits Fees Definitions Specific to waste/vent systems Specific to water systems General definitions General Regulations Plans and specifications Workmanship Pipe protection Hangers Testing and inspections Health and safety Plumbing maintenance Plumbing Fixtures Materials and standards Unapproved fixtures Clearances Showers and shower valves Whirlpools and spas Water Heaters Definitions Types Combustion air Approved locations Protection Accessibility Venting and materials Water Distribution Requirements Cross-connection Backflow prevention Fixture requirements Lawn sprinklers Special equipment Materials Valves Pressure Inspection and testing Sizing Drainage Systems Materials Sizing Fixture equipment Connections Cleanouts Grade Sewers Indirect and Special Wastes Sizing of indirect waste piping Receptors Appliances Chemical waste Wet-vented systems Island venting Combination waste and vent systems Sanitary Venting Systems Requirements Materials Sizing Traps Where required Sizing and length Types prohibited Seals Grease interceptors Joints and Connections Types Where req uired Fuel Gas Piping Systems Definitions Plans Inspections Temporary usage Meter locations Approved materials Installations Valves and connectors L.P. Gas Sizing Appendices Engineered water systems Combination waste and vent systems Minimum plumbing fixtures Rainwater piping

Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)

Instructional Techniques

A variety of instructional techniques will be employed to encompass different student learning styles. These may include, but are not limited to, lecture, discussion, projects and small group activities. Instruction will be supplemented, where appropriate, by digital media presentations resources, guest speakers and field trips.

Reading Assignments

Required manuals, documents, license agreements and industry updates.

Writing Assignments

Weekly projects, plans, revisions, discussion topic responses that will demonstrate skills application through authentic projects.

Out-of-class Assignments

Read/View the required materials, conduct appropriate research, prepare documents/plans, complete and revise projects, and prepare for quizzes/exams.

Demonstration of Critical Thinking

Projects will be completed to demonstrate competencies in the workplace in relation to plumbing industry standards.

Required Writing, Problem Solving, Skills Demonstration

Written assignments, projects and/or skills demonstrations related to industry requirements.

Eligible Disciplines

Building codes and regulations (inspecting of construction, building codes,...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Other Resources

1. Current Edition Uniform Plumbing Code, International Association of Plumbing and Mechanical Officials 2. Coastline Library