



Introductory Plumbing Part 2

Welcome to PP012: Introductory Plumbing Part 2!

Please read the information in this syllabus before proceeding to the course materials.

Credits 1 credit hour

Prerequisites PP011

INSTRUCTIONAL TEAM

Our Academic Advisors are also available to help you when you need it. They are trained to provide answers to your questions about the course or program.

Phone: 1-800-224-7234

Hours: 8:30AM – 8:30PM (Eastern Standard Time), Monday-Friday

MAIL

James Madison High School
6625 The Corners Parkway, Suite 500
Norcross, GA 30092

TEXTBOOK

Blankenbaker, E (2015) *Modern Plumbing* (8th ed.). Tinley Park, IL: The Goodheart-Wilcox Company, Inc.

COURSE DESCRIPTION

The Plumbing program provides students with a basic understanding of the materials, tools and processes used by plumbing professionals to complete residential and light-commercial plumbing assignments. Students learn safe-work practices, hand and power tool identification and operation, as well as the common fixtures and components used to assemble water and waste systems. The program also provides instruction on the design and installation of standard plumbing systems, plumbing applications to HVAC systems and specialty systems for recreation and irrigation.

LEARNING OBJECTIVES

After completing the Plumbing program, students will be able to

- Describe the basic materials and tools used for standard residential plumbing projects and describe how they are applied as part of the construction and home-repair process.
- Outline the basic concepts and rules of construction safety and list the types of personal protective equipment used by construction technicians to stay safe on the job site.
- Perform the essential math, print-reading functions, and interpretation of plumbing codes required to execute standard plumbing services.
- Describe the components and assembly techniques required for the construction of standard piping and water supply systems.
- Describe the application and installation of standard plumbing fixtures and water-based appliances.
- Outline the plumbing systems required for related building systems such as HVAC, pools, and irrigation systems.



- Describe the career opportunities available in the plumbing profession and identify the key work characteristics of successful plumbers.

LESSONS	TOPICS
Lesson 1: Plumbing System Components and Water Treatment	Lesson coverage includes the key components that are used to create the plumbing system. Students will learn about applications and installations from water supply and treatment, through fixtures, piping and fittings, valves, meters, and water heaters.
Lesson 2: Designing and Installing Plumbing Systems	Students will learn about common configurations of water supply, waste and venting systems used in residential construction and the installation practices used for the application of the designed system.
Lesson 3: Supporting Pipe and Installing Water Supply Piping and Fixtures	This lesson provides instruction on the proper support of the completed piping system and the connection and testing of the water supply. Students will also learn to safely install and test standard plumbing fixtures.
Lesson 4: Sewer, HVAC, Recreational, and Irrigation Systems	The applications of plumbing materials and installation practices for septic and storm-water removal as well as systems used for pools, spas, and hot-tubs. This lesson concludes with an overview of the piping and fixtures used for lawn sprinklers and simple irrigation systems.
Lesson 5: Remodeling and Repairing Plumbing Systems	Student preparation covers the unique applications of plumbing skills to repair and remodeling assignments versus new installations. Specific topics are included for repair of water supply systems as well as waste, drains, and venting applications.
Lesson 6: Professional Plumbing and Plumbing History	This final lesson provides an overview of the opportunities available for trained technicians in the plumbing industry. Students will learn about the history of plumbing, professional organizations and formal training and apprenticeship programs.

GRADING

The following point totals correspond to the following grades:

POINTS	GRADE
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100-90	A
89-80	B
79-70	C
65-69	D
Below 65	F

James Madison High School allows 2 attempts on exams. If a student is not satisfied with his/her



score on the 1st attempt, an exam may be resubmitted. The 2nd attempt is not required as long as the final course average is above 65%. The higher of the 2 attempts will be the score that counts towards the final average.

Exams are timed and once you begin an exam, the timer runs continuously, even if you leave the course. Refer to the exam instructions for the time limit (in most cases 3 hours), but the time limit cannot be spread over multiple days.

GRADE WEIGHT

TOPIC	ACTIVITY	PERCENTAGE
Lesson 1: Plumbing System Components and Water Treatment	MC Quiz	14%
Lesson 2: Designing and Installing Plumbing Systems	MC Quiz	14%
Lesson 3: Supporting Pipe and Installing Water Supply Piping and Fixtures	MC Quiz	14%
Lesson 4: Sewer, HVAC, Recreational, and Irrigation Systems	MC Quiz	14%
Lesson 5: Remodeling and Repairing Plumbing Systems	MC Quiz	14%
Lesson 6: Professional Plumbing and Plumbing History	MC Quiz	14%
Final Exam	MC Quiz	16%

ACADEMIC AND COURSE POLICIES

Please see the Academic Policies section in the James Madison High School Catalog for information on Course policies, including the Exam/Assignment Retake Policy, Grading Policy, Academic Honesty Policy, and Student Conduct Policy.