



Introductory Plumbing Part 1

Welcome to PP011: Introductory Plumbing Part 1!

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

Credits 1 credit hour

Prerequisites None

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: Introduction to Construction Technology	An overview of potential career paths and professional development available for students who formally develop skills and knowledge related to building construction. This lesson includes a summary of math and science concepts important to building professionals as well as applications of modern technologies to the construction workplace. The lesson concludes with an overview of general workplace safety practices and applications of personal protection equipment.
Lesson 2: Safety, Tools and Fixtures	Students will learn about standard safety practices required on construction-related job sites and specific safety practices required for plumbing applications. Lesson coverage instructs students on the identification and safe application of tools used by plumbers and the construction and application of plumbing components.
Lesson 3: The Technical Aspects of Plumbing	This lesson focuses on technical skills required to become a competent plumbing professional. Instruction is provided on basic math skills applied to plumbing practices, print reading and interpretation, and some basic scientific principles related to fluid and pressure.
Lesson 4: Preparing to Install Plumbing Systems	The practices required to safely prepare the job site for a plumbing installation. Students will learn how to safely lift and position materials, proper excavation techniques and the preparation required for soldering and brazing operations. This lesson also describes plumbing codes and their interpretation and application.

GRADING

The following point totals correspond to the following grades:

POINTS	GRADE
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: Introduction to Construction Technology	MC Quiz	25%
Lesson 2: Safety, Tools and Fixtures	MC Quiz	25%
Lesson 3: The Technical Aspects of Plumbing	MC Quiz	25%
Lesson 4: Preparing to Install Plumbing Systems	MC Quiz	25%

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.