

Plumbing Maintenance and Repair (PFPB 1321: Spring 2026)

CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

None

COURSE DESCRIPTION

Instruction in the practices and procedures employed by a plumber including public relations.
(From WECM)

COURSE OBJECTIVES

- Apply general principles of public relations.
- Identify and repair various types of DWV and water supply systems
- Identify various types of plumbing fixtures
- Repair various types of plumbing fixtures
- Identify various types of Fuel Gas Distribution systems
- Repair various types of Fuel Gas Distribution Systems

INSTRUCTOR CONTACT INFORMATION

Instructor: Henry LaRocca

Email: hlarocca@lit.edu

Office Phone: (409) 245-8758 Cell: (409) 998-0528

Office Location: Advanced Learning Technology Center

Office Hours: 8 a.m. -9 a.m. (Monday, Tuesday, Wednesday, Thursday, and Friday)
3:30 p.m. – 5 p.m. (Monday, Tuesday, Wednesday, and Thursday)

REQUIRED TEXTBOOK AND MATERIALS – This is an Online Book

Book: MindTap for PHCC Educational Foundation/Moore's Advanced Plumbing

Publisher: Cengage

ISBN: 9798214117126



**LAMAR INSTITUTE
OF TECHNOLOGY**

Approved: Initials/date

Materials/Tools

1. LIT T-Shirts
2. PPE equipment: Safety Glasses/Leather Gloves/Safety Shoes
3. 25 ft. minimum Steel Tape Measure
4. **Basic Tools from Plumbing Tool List**
 - 3"-3 ring notebook and notebook paper 1
 - 25 ft. min. steel tape/6 ft. plumbers folder ruler 1 each
 - Safety glasses 1
 - Leather gloves 1 pair
 - Safety Shoes 1 pair
 - Calculated Industries Calculator 1
 - Required PFPB Shirt 2 minimum
 - Screwdriver, flat tip, 6 inch 1
 - Screwdriver 10 inch 1
 - Screwdriver Phillips #2 tip, 6 inch 1
 - Adjustable Wrenches – 6 inch and 12 inch 1 each
 - Pipe wrench – 14 inch 1
 - Pliers – Needlenose pliers, 7 inch 1
 - Pliers – Adjustable or ARC joint 1
 - Hammer – ball peen, 16 ounce 1
 - Hacksaw, adjustable angle 1
 - Hacksaw 18 TPI B=blades 3-5

ATTENDANCE POLICY

- I. Students are allowed to miss two days without penalty; each additional day will result in the student's grade being dropped by a letter grade.
 - Example:
 - 2 days absent = If student has an A average no penalty
 - 3 days absent = A drops to a B
 - 4 days absent = B drops to a C
 - 5 days absent = C drops to a D (student must retake class)
 - 6 days absent = D drops to a F (student must retake class)
- II. Absences are counted for unexcused, excused and coming to class late.
- III. 3 tardies = 1 absences
 - A. Tardy- arriving within 15 minutes after class begins or leaving before the end of class.
 - B. More than 15 minutes late you will be counted absent.
 - C. If you sleep in class, you will be counted absent.
- IV. Excused absences. Only given to allow students to make up missed work.

- A. Will be given for documented Injury or Illness. The doctor's excuse required showing proof. Will count toward total days missed.
- B. Will be given for documented Death in immediate family. Will count toward total days missed.
- C. Approved LIT school functions; E.g., SkillsUSA, SGA etc. Will not count toward total days missed

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE CALENDAR

DATE	TOPICS	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Weeks 1-6	Service and Repair: Fixtures	Reading Plumbing 401 Chapter 1: Service and Repair: Fixtures	Chapter 1 Homework <ul style="list-style-type: none"> • PowerPoint Review • Visual Flashcards • Video: Six Traits of a True Profession • Video: Fixture Service Leak Repair Image Labeling Test Chapter 1 Test Lab 1: Faucets Lab 2: Kitchen Sinks Lab 3: Toilets Lab 4: Tubs and Showers
Weeks 7 & 8	Service and Repair: Water and Fuel Gas Distribution	Reading Plumbing 401 Chapter 2: Service and Repair: Water and Fuel Gas Distribution	Chapter 2 Homework <ul style="list-style-type: none"> • PowerPoint Review • Visual Flashcards • Video: Tankless Water Heater Video • Video: How It Works: Rheem Prestige Series Hybrid Heat Pump Water Heaters • Trenching & Excavation Safety Image Labeling Test

			Chapter 2 Test Lab: Water and Fuel Gas Distribution
Weeks 9 & 10)	Service and Repair: DWV Systems	Reading Plumbing 401 Chapter 3: Service and Repair: DWV Systems	Chapter 3 Homework <ul style="list-style-type: none"> • PowerPoint Review • Visual Flashcards • Video: Introducing RIDGID FlexShaft Drain Cleaning Machine • Video: RIDGID Seesnake* Camera with TruSense • Video: Oatey Shower Plan Liner Installation Image Labeling Test Chapter 3 Test Lab: PVC/Cast Iron DWV Repair Lab: Drain Cleaning Operation and Safety
Weeks 11 & 12	Plumbing Codes: Water Heaters	Reading Plumbing 401 Chapter 15: Plumbing Codes: Water Heaters	Chapter 15 Homework <ul style="list-style-type: none"> • PowerPoint Review • Video: Back Drafting Water Heater Exhaust Quiz Chapter 15 Test Lab: Water Heaters Lab: Water Heater Wall

Week 13 & 14	Plumbing Codes: Fuel Gas Piping	Reading Plumbing 401 Chapter 22: Plumbing Codes: Fuel Gas Piping	Chapter 22 July 3 - Homework <ul style="list-style-type: none"> • PowerPoint Review • Video: Gastite Bonding Chapter 22 Test Lab: Silver Solder/Brazing Lab: Fuel Gas
Week 15	Review		
	Final		

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Homework	15%
Image Labeling and Chapter Test	25%
Lab/Projects	40%
Final	20%

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

TECHNICAL REQUIREMENTS

The laQuiz technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.\

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.