Residential Construction Plumbing I
(PFPB 2309: Fall 2025)

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

MODE OF INSTRUCTION
Face to Face

PREREQUISITE/CO-REQUISITE:
None

COURSE DESCRIPTION
Skill Development in the procedures and techniques employed by a plumber in the rough-in and top-out states of a new home or the remodeling of an older home. (From WECM)

COURSE OBJECTIVES
Upon completion of this course, the student will be able to
1. Identify the plumbing profession and responsibilities of a person working in the plumbing industry.
2. Identify causes and cost of accidents, methods of preventing accidents, safety precautions using plumbing tools, and safety precautions associated with various work areas.
3. Describe hand and power tools used in the plumbing trade.
4. Perform basic mathematical calculations used in plumbing and how to measure a pipe.
5. Understand how to read drawings and identify the different types of drawings used to install plumbing systems.
6. Identify and describe the various plumbing fixtures and describe types of faucets used in plumbing systems.

INSTRUCTOR CONTACT INFORMATION

Instructor: Henry LaRocca

Email: hlarocca@lit.edu

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

Office Location: Advanced Technology Building

Office Hours: Monday and Wednesday: 8:30 a.m. – 9:00 a.m. and
                                             4:00 p.m. – 4:30 p.m.
                     Friday: 8:00 a.m. – 10:00 a.m.

Approved: Initials/date

REQUIRED TEXTBOOK AND MATERIALS
Textbook: Plumbing Level One
Author: NCCER, Publisher: Pearson, Edition: 5th, ISBN: 9780137933839

MATERIALS AND TOOLS

Item	Quantity
3"-3 ring notebook and notebook paper	1
Pens/Pencils	4
25 ft. min. steel tape/6 ft. plumbers folder ruler	1 each
Safety glasses	1
Leather gloves	1 pair
Safety Shoes	1 pair
Construction 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
Plumb Bob	1

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	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Weeks 1 & 2	Module 02101 Introduction to the Plumbing Profession (Have Book and Plumbing tools/Materials available)	Read Syllabus, All Sections of Module	Homework M1 Review Questions M1 Concept Checks M 1Trade Terms (First Day of week 2) Exam: Professionalism (Last Day of Week 2) Lab 1: Professionalism Lab Lab 2: Resume (End of Week 2)
Weeks 3 & 4	Module 02102 Introduction to Plumbing Safety	All Sections of Module	Homework M2 Review Questions M2 Concept Checks M2 Trade Terms (First Day of Week 4) Exam: Plumbing Safety Last Day of Week 4) Lab 3: Inspect and put on personal protective equipment. Demonstrate the proper use of ladders.

			Lab 4: Inspect power tools (corded and cordless) to ensure they are safe to use)
			Inspect hand tools to ensure they are safe to use. Demonstrate the proper methods of lock-out/tagout for energy sources.
Weeks 5 & 6	Module 02103 Tools of the Plumbing Trade	All of Section 1.0.0 – Hand Tools Used In Plumbing	Lab 5: Identify plumbing hand tools. Lab 6: Properly use plumbing had tools. Demonstrate proper maintenance and storage of hand tools.
Weeks 7 & 8	Module 02103 Tools of the Plumbing Trade	All of Section 2.0.0 – Power Tools Used in Plumbing	Homework M3 Review Questions M3 Concept Checks M3 Trade Terms (First Day of Week 8) Test Hand and Power Tools Used in Plumbing (Last Day of Week) Lab 7: Identify plumbing power tools. Lab 8: Properly use plumbing power tools. Demonstrate proper maintenance and storage of power tools.
Weeks 9 & 10	Module 02104 Introduction to Plumbing Math	All Sections in Module	Homework M4 Review Questions M4 Concept Checks M4 Trade Terms (First day of week 10) Exam: Introduction to Plumbing Math (End of Week 10)

			Lab 9: Measure pipe using the following methods: End to End, End to Center, Center to Center, End to Face, Face to Face, Face to throat. Lab 10: Determine end-to-end dimensions by calculating fitting allowances and makeup.
Weeks 11 & 12	Module 02105 Introduction to Plumbing Drawings	All Sections in Module	Homework M5 Review Questions M5 Concept Checks M5 Trade Terms (First day of Week 12) Exam: Plumbing Drawings (Last day of Week 12) Lab 11: Sketch orthographic drawings. Lab 12: Sketch isometric drawings,
Weeks 13 & 14	Module 02110: Introduction to Plumbing Fixtures	All Sections in Module	Homework M10 Review Questions M10 Concept Checks M10 Trade Terms (First day of week 14) Exam: Plumbing Fixtures (Last day of Week 14) Lab 13/14: Identify the most commonly installed fixtures and appliances.
Week 15	Review		
Final Week	Finals	Final Exam	Over all modules covered.

COURSE EVALUATION
Final grades will be calculated according to the following criteria:
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Homework	15%
Exams	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 latest 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.