COURSE OUTLINE: PLM100 - INTRO TO PLUMBING

Prepared: Andy Vine
Approved: Corey Meunier, Dean, Technology, Trades, and Apprenticeship

Course Code: Title	PLM100: INTRODUCTION TO PLUMBING
Program Number: Name	4005: PRE-TRADES TECHNOLGY
Department:	PIPING TRADES
Academic Year:	2024-2025
Course Description:	Students will gain basic knowledge about plumbing. They will have the opportunity to practice safe handling and proper use of hand and power tools. They will practice performing various basic plumbing skills.
Total Credits:	3
Hours/Week:	6
Total Hours:	42
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**4005 - PRE-TRADES TECHNOLGY** VLO 1 Function at a level of mathematics suited to the student's post-secondary program aspirations. VLO 4 Develop effective learning and study skills. VLO 5 Develop effective career planning skills. VLO 6 Become familiar with the college study requirements. VLO 7 Obtain basic technical skills and introduce students to the theory and lab content of a variety of technical disciplines. VLO 9 Work with others
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. EES 3 Execute mathematical operations accurately. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 6 Locate, select, organize, and document information using appropriate technology and information systems. EES 7 Analyze, evaluate, and apply relevant information from a variety of sources. EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others. EES 9 Interact with others in groups or teams that contribute to effective working

	relationships and the achievement of goals. EES 10 Manage the use of time and other resources to complete projects. EES 11 Take responsibility for ones own actions, decisions, and consequences.
Course Evaluation:	Passing Grade: 50%, D A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	Theory Tests = 30% Application Exercises= 40% Final Assessment = 30% Grade Definition Grade Point Equivalent A+ 90 - 100% 4.00 A 80 - 89% B 70 - 79% 3.00 C 60 - 69% 2.00 D 50 - 59% 1.00 F (Fail) 49% and below 0.00 CR (Credit) Credit for diploma requirements has been awarded. S Satisfactory achievement in field /clinical placement or non-graded subject area. U Unsatisfactory achievement in field/clinical placement or non-graded subject area. X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. NR Grade not reported to Registrar`s office. W Student has withdrawn from the course without academic penalty.
Books and Required Resources:	handouts by instructor
Course Outcomes and Learning Objectives:	

Course Outcome 1	**Learning Objectives for Course Outcome 1**
This course will provide the student with an introduction to tools, equipment, safe work practices, basic terminology and calculations used in the plumbing trade. 1. Use personal protective equipment.	Potential Elements of the Performance 1.1 Select proper: - safety work boots - eye protection - clothing and gloves
Course Outcome 2	**Learning Objectives for Course Outcome 2**
2. Use Hand and Power Tools	Potential Elements of the Performance 2.1 Safe and correct use of the following: - hammers, chisels, tubing cutters, wrap-a-rounds, files, soldering equipment, threading equipment

	2.2 Safe and correct use of the following: - power threading machines, roll groove, bending machines, drills and saws
Course Outcome 3	**Learning Objectives for Course Outcome 3**
3. Identify, select and use a variety of piping materials.	Potential Elements of the Performance: 3.1 Identify and select as required: - copper tube and fittings, malleable iron fittings, steel pipe, steel tube, cast iron fittings and thermoplastics
Course Outcome 4	**Learning Objectives for Course Outcome 4**
4. Follow written or oral instructions necessary to perform the required element`s to complete assigned practical tasks.	Potential elements of the performance: 4.1 read and understand sketches provided 4.2 use required formulas to calculate overall measurements 4.3 read and apply charts to obtain the correct pipe lengths 4.4 layout pipe for cutting with pipe and tubing cutters, power machines 4.5 Lay out pipe and/or tubing for bending applications
Course Outcome 5	**Learning Objectives for Course Outcome 5**
5. Use a variety of methods required to join pipe and fittings in order to complete a specified practical assignment.	Potential Elements of the performance: 5.1 flared fittings 5.2 compression fittings 5.3 soft solder 5.4 hard solder 5.5 rolled groove

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Employability skills	10%
shop safety	20%
specific practical assignments	40%
written test	30%

Date: August 9, 2024

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.