# SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554



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| Course Code: Title  | PLM100: INTRODUCTION TO PLUMBING  |
|---|---|
| Program Number: Name  | 4005: PRE-TRADES TECHNOLGY  |
| Department:   | PIPING TRADES   |
| Semester/Term:  | 17F   |
| 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:   | 3   |
| Total Hours:  | 45  |
| Vocational Learning<br>Outcomes (VLO's):<br>Please refer to program web page<br>for a complete listing of program<br>outcomes where applicable. | <ul> <li>4005 - PRE-TRADES TECHNOLGY</li> <li>#1. Function at a level of mathematics suited to the student's post-secondary program aspirations.</li> <li>#4. Develop effective learning and study skills.</li> <li>#5. Develop effective career planning skills.</li> <li>#6. Become familiar with the college study requirements.</li> <li>#7. Obtain basic technical skills and introduce students to the theory and lab content of a variety of technical disciplines.</li> <li>#9. Work with others</li> </ul>   |
| Essential Employability<br>Skills (EES):  | <ul> <li>#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</li> <li>#2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.</li> <li>#3. Execute mathematical operations accurately.</li> <li>#4. Apply a systematic approach to solve problems.</li> <li>#5. Use a variety of thinking skills to anticipate and solve problems.</li> <li>#6. Locate, select, organize, and document information using appropriate technology and information systems.</li> <li>#7. Analyze, evaluate, and apply relevant information from a variety of sources.</li> <li>#8. Show respect for the diverse opinions, values, belief systems, and contributions of others.</li> <li>#9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</li> </ul> |

|  | #10. Manage the use of time ar #11. Take responsibility for one   |   |   |
|--|---|---|---|
| Course Evaluation:                                 | Passing Grade: 50%, D   |   |   |
| Other Course Evaluation & Assessment Requirements: | Grade<br>Definition Grade Point Equivalent<br>A+ 90 - 100% 4.00<br>A 80 - 89%<br>B 70 - 79% 3.00<br>C 60 - 69% 2.00<br>D 50 - 59% 1.00<br>F (Fail) 49% and below 0.00 |   |   |
|  |   | ield /clinical placement<br>n field/clinical placement<br>situations with extenu<br>requirements for a constrar`s office. | nt or non-graded subject area.<br>nent or non-graded subject area.<br>uating circumstances giving a student<br>ourse. |
| Evaluation Process and                             | Evaluation Type   | Evaluation Weight   |   |
| Grading System:                                    | attendance  | 20%   |   |
|  | shop safety   | 10%   |   |
|  | specific practical assignments  | 40%   |   |
|  | written test  | 30%   |   |
| Books and Required Resources:                      | handouts by instructor  |   |   |
| Course Outcomes and<br>Learning Objectives:        | Course Outcome 1.<br>This course will provide the stur<br>practices, basic terminology an   |   | tion to tools, equipment, safe work<br>n the plumbing trade.  |
|  | Learning Objectives 1.  |   |   |
|  | Use personal protective equipment.  |   |   |
|  | Potential Elements of the Perfo<br>Select proper:<br>• safety work boots<br>• eye protection<br>• clothing and gloves   | rmance  |   |
|  | Course Outcome 2.   |   |   |
|  | Learning Objectives 2.  |   |   |
|  | Use Hand and Power Tools  |   |   |

Potential Elements of the Performance Safe and correct use of the following:

hammers, chisels, tubing cutters, wrap-a-rounds, files, soldering equipment, threading equipment

Safe and correct use of the following:

· power threading machines, roll groove, bending machines, drills and saws

# **Course Outcome 3.**

## Learning Objectives 3.

Identify, select and use a variety of piping materials. Potential Elements of the Performance:

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 4.

Follow written or oral instructions necessary to perform the required element's to complete assigned practical tasks.

Potential elements of the performance:

- read and understand sketches provided
- use required formulas to calculate overall measurements
- · read and apply charts to obtain the correct pipe lengths
- · layout pipe for cutting with pipe and tubing cutters, power machines
- · Lay out pipe and/or tubing for bending applications

#### Course Outcome 5.

## Learning Objectives 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:

- flared fittings
- compression fittings
- soft solder
- · hard solder
- rolled groove

| Date: | Monday, December 18, 2017  |
|-------|--|
|       | Please refer to the course outline addendum on the Learning Management System for further information. |