COURSE OUTLINE: MTF108 - TRADE PRACTICES

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Approved: Corey Meunier, Chair, Technology and Skilled Trades

Course Code: Title	MTF108: TRADE PRACTICES
Program Number: Name	4051: METAL FABRICATION 4053: WELDING TECHNIQUES
Department:	IRONWKR APPR./WELDING RELATED
Academic Year:	2022-2023
Course Description:	This course covers all of the trade calculations and basic math skills a student will require to be work in the welding trade.
Total Credits:	2
Hours/Week:	2
Total Hours:	28
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Substitutes:	MTF100
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**4051 - METAL FABRICATION** VLO 7 Complete all work in compliance with health and safety legislation and prescribed organizational practices and procedures to ensure safety of self and others. **4053 - WELDING TECHNIQUES** VLO 1 Perform work responsibly and in compliance with the Occupational Health and Safety Act. VLO 5 Select appropriate tools and devices to perform mathematical calculations and technical measurements for successful completion of a project.
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 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:	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:	Kit: ILM Post-Secondary Package by Alberta Government Publisher: AK Graphics, Sault College Print Shop

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Solve problems involving whole numbers.	1.1 Solve problems with addition of whole numbers 1.2 Solve problems with subtraction of whole numbers. 1.3 Solve problems with multiplication of whole numbers 1.4 Solve problems with division of whole numbers.
Course Outcome 2	**Learning Objectives for Course Outcome 2**
Solve problems involving fractions.	2.1 Identify terms and concepts used with fractions. 2.2 Use practical fractions with a tape measure. 2.3 Change fractions to a common denominator. 2.4 Solve problems using whole numbers and fractions in practical applications.
Course Outcome 3	**Learning Objectives for Course Outcome 3**
Solve problems involving decimals.	3.1 Round decimal fractions to specified place values. 3.2 Add, subtract, multiply and divide decimal fractions. 3.3 Convert fractions to decimals. 3.4 Convert decimal inches and decimal feet to feet and inch

	Course Outcome 4	Learning Objectives for Course Outcome 4
		fractions with a practical denominator.
		3.5 Solve decimal fraction calculations.
	Solve problems involving percentage and ratios.	4.1 Calculate ratio problems: two quantities in the form of a ratio and two ratios in the form of a proportion.
		4.2 Convert between fractions, decimals and percent.
		4.3 Solve percent problems.
	Course Outcome 5	Learning Objectives for Course Outcome 5
	Solve problems involving geometric formulas.	5.1 Identify terms and concepts used in working with formulas.
		5.2 Identify formulas and solve problems for perimeter, area and volume.
		5.3 Calculate the weight of a solid.
		5.4 Calculate the capacity of a container in gallons and litres.
	Course Outcome 6	Learning Objectives for Course Outcome 6
	Solve problems involving metric and imperial measure.	6.1 Identify metric units of measure.
		6.2 Convert between units of measure.
		6.3 Convert imperial units: feet to inches, square inches to square feet and cubic measures to gallons.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Quizzes	50%
Tests	50%

Date: June 21, 2022

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