

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Pre-Trades/Tech Mathematics 2

CODE NO. : MTH163-3

SEMESTER: Two

PROGRAM: Pre-Trades / Pre-Technology

AUTHOR: Math Department

DATE: June 2014

PREVIOUS OUTLINE DATED: June 2013

APPROVED: "Colin Kirkwood"

June/14

DEAN

DATE

TOTAL CREDITS: 3

PREREQUISITE(S): MTH 162-3

HOURS/WEEK: 3

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I. COURSE DESCRIPTION:

This course is a continuation of MTH162-3 (from Semester One) for pre-trades and technology students. Students will expand on their use of math study skills and problem solving strategies. The focus will be on meeting the student's individual needs based on his or her personal goals as were specified in the plan developed last semester. In addition to further developing math concepts previously encountered in MTH162-3, topics of study may include: graphing linear relationships, quadratic, exponential and logarithmic equations, geometry, and trigonometry of right and oblique triangles with applications.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Implement the plan created in MTH162 to address any deficiencies in one's own numeracy and math skills required to meet the entry level criteria of the trades and technology program of choice.

Potential Elements of the Performance:

- Manage time to allow for completion of plan
 - Perform necessary tasks to meet the specified goals outlined in the plan
 - Reflect on progress at regular time intervals
 - Make adjustments to the plan as required
 - Evaluate the successfulness of the plan and make contingency plans, if needed
2. Explore some of the nuances associated with technical mathematics.

Potential Elements of the Performance:

- Perform calculations with exact and approximate numbers
- Round numbers
- Use scientific notation to represent large and small numbers
- Perform calculations involving multiple units of measure

3. Employ a variety of technology to assist in meeting goals.

Potential Elements of the Performance:

- Make efficient use of a scientific calculator to perform calculations
- Use spreadsheets to help solve problems involving mathematics
- Use websites and applications as resources to help complete goals

4. Solve problems involving mathematics.

Potential Elements of the Performance:

- exhibit perseverance, ability, and confidence to use mathematics to solve problems
- use a variety of problem-solving strategies and exhibit logical thinking
- work effectively with others to solve problems
- estimate and check answers to problems and determine the reasonableness of results
- communicate findings both in writing and orally using appropriate mathematical language and symbolism

III. TOPICS:

1. Implementing Your Plan
2. Technical Math
3. Using Technology
4. Solving Problems

IV. REQUIRED RESOURCES:

MyMathTest Access Code Package, Pearson Canada, ISBN: 0321557077

Calculator: SHARP Scientific Calculator EL-531.

Note:

The use of some kinds of calculators, cell phones, and other electronic devices may be restricted during tests.

V. EVALUATION PROCESS/GRADING SYSTEM:

Classroom Activities and Assignments	30%
MyMathTest Components	30%
Tests	40%

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
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.	

VI. SPECIAL NOTES:Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.