

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: TRADE CALCULATIONS

CODE NO. : ASM100

SEMESTER: 1

PROGRAM: AUTOMOTIVE SERVICES MANAGEMENT TECHNICIAN

AUTHOR: PHIL BRANNEN

DATE: August 99

PREVIOUS OUTLINE DATED:

Fall 98

APPROVED:

DEAN

K. DeRosario

DATE

June 10/99

TOTAL CREDITS: 3

PREREQUISITE(S): N/A

**LENGTH OF
COURSE:**

16 WEEKS

TOTAL CREDIT HOURS:

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For additional information, please contact Kitty DeRosario, Dean,
School of Technology, Engineering & Technical Trades
(705) 759-2554, Ext. 642*

COURSE NAME

COURSE NUMBER**I. COURSE DESCRIPTION:**

This course is intended to review and reinforce the elements of basic arithmetic, algebra, geometry and trigonometry that should prove useful and relevant to the automotive repair services trade. After reviewing and perhaps in some cases, being introduced to the various topics, the students will be expected to apply the concepts by solving practical applied problems as they pertain to the trade.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Use Common Fractions

Potential Elements of the Performance:

- Unit 11 – Multiplication of common fractions
- Unit 12 – Division of common fractions
- Unit 13 – Addition of common fractions
- Unit 14 – Subtraction of common fractions
- Unit 15 – Multiple operations of common fractions

2. Use Decimal Fractions

Potential Elements of the Performance:

- Unit 5 – Fractional equivalents
- Unit 6 – Addition of decimal fractions
- Unit 7 – Subtraction of decimal fractions
- Unit 8 – Multiplication of decimal fractions
- Unit 9 – Division of decimal fractions
- Unit 10 – Application of decimal fractions

3. Use Percent

Potential Elements of the Performance:

- Unit 16 – Simple percent
- Unit 17 – Simple percentages
- Unit 18 – Grades
- Unit 19 – Discounts
- Unit 20 – Profit & Loss, Commissions
- Interest & Taxes
- Percent of Error & Averages

4. Use Ratio & Proportion

Potential Elements of the Performance:

- Unit 31 – Ratios
- Unit 32 – Proportions

COURSE NAME

COURSE NUMBER**LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE
CONTINUED.....**

5. Algebra Formula Rearranging
Potential Elements of the Performance:
 - Solve and check simple equations (Handout)

6. Geometry
Potential Elements of the Performance:
 - Use Pythagorean theorem to solve problems with right angle triangles (Handout)
 - Calculate the perimeter, area, volume of basic shapes

7. Trigonometry
Potential Elements of the Performance:
 - Calculate the unknown using sine, co sine and tan (Handout)
 - Calculate applied problems by means of right angle and oblique angle trigonometry

III. TOPICS:

1. Fractions
2. Decimals
3. Percent
4. Ratio & Proportion Formula
5. Algebra
6. Geometry
7. Trigonometry

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Practical Problems in Mathematics for Automotive Technicians (5th Edition)
Scientific Calculator (e.g. Sharp EL-531L)

 COURSE NAME

 COURSE NUMBER

V. EVALUATION PROCESS/GRADING SYSTEM:

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual - Deferred Grades and Make-up</i>).	
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has been impossible for the faculty member to report grades.	

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the instructor. Credit for prior learning will be given upon successful completion of the following:

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.