SAULT COLLEGE OP APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

	MATHEMATICS
Course Title	
	MTB 151-3
Code No.:	
	HEAVY EQUIPMENT DIESEL
Program	
	TWO
Semester:	
	OCTOBER, 1985
Date	
	D. TROWBRIDGE
Author	

New   Revision:

APPROVED Cfiåirpérs^rf ^ /^   Date / ^   ^/<f^

MATHEMATICS
MTH 151-3
HEAVY EQUIPMENT DIESEL

CALENDAR DESCRIPTION

MATHEMATICS   MTH 151-3

  Course Number   Course Name

PHILOSOPHY/GOALS;

VIhen the student has successfully completed this course he will have an
understanding of the material listed elsewhere. The intention is to give
the student sufficient background to solve work related problems.

METHQD OF ASSESSMENT (GRADING METHOD):

     Three major tests during the semester

     Test 1 on topics 1, 2, 3

     Test 2 on topic 4

     Test 3 on topics 5, 6, 7

     Additional short tests may be given.

TEXTBOOK(S):

     Practical Problems in mathematics for Vehicle Technicians
     by George Moore

OBJECTIVES;

The basic objective is for the student to deveiop an understanding of the
methods studied, knowledge of the facts presented and an ability to use
these in the solution of problems. For this purpose, exercises are
assigned. Test will refleet the sort of work contained in other
assignments. The level of competency demanded is the level required to
obtain an overall passing average on the tests. The material to be covere
is listed on the following page.

MATHEMATICS
MTH 151-3
HEAVY EQUIPMENT DIESEL

TOPIC NO	PERIODS	TOPIC DE3CRIPTI0N	REFERENC
		Ruler Fractions and Decimals	Moore
		Reducing terms	Unit 1-]
		Finding common denominator	
		Adding and subtracting fractions and mixed numbers	
		Conversions between common fractions and decimals	
		Arithmetic with fractions	
		Percent	Moore
		Percents and common fractions	Unit 17
		Solving for Percentage or base or rate	
		Interest, discount and sales tax problems	
	^	Conversion of Units	Moore
		Linear Units	Unit 24-
		Area and volume	
		Metric system	
		Angular measurement	
	12	Algebra Fundamentals	Moore
		Signed numbers, including addition, subtraction, and multiplication	Unit an(Manuser:
		Repeated factors	30-35
		Operations with exponent	
		Evaluating formulas	
		Solving linear equations in one unknown	
		Solving proportions	
		Gear and pulley problems	
		Geometry	Moore
		Points, lines, angles, circles.	Unit ane
		circumference, area, triangles, polygons, perimeters, surface areas, volumes and weights	Manuser; 28-38

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                    MATHEMATICS
                    MTH 151-3
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TOPIC NO.   PERIODS   TOPIC DESCRIPTION                      REFERENC

    6          7      Trigonometry                           Manuscri
                      Definitions of trig functions
                      Use of tables and calculator
                      Right Triangles
                      Solution of Equilateral and Isosceles
                      triangles using right triangles

    "^         3      Shop Problems                          Moore
                      In co-operation with major subject     Unit 36-
                      instructors, suitable shop problems will
                      be discussed
                      Topics might include engine displacement
                      and hydraulic piston forces.
TOTAL HOURS    44
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