

I. COURSE DESCRIPTION:

The objectives of this course are to introduce the student to a number of fundamental concepts that include measurement within the different systems and linking with precision and accuracy. The application of different areas of mathematics in the heavy equipment technology will be introduced. Topics will include algebra, geometry and trigonometry.

II. STUDENT PERFORMANCE OBJECTIVES:

The basic objectives are that the student develops an understanding of the methods studied, demonstrate knowledge of the facts presented and show an ability to use these in the solution of problems. To accomplish these objectives, exercises are assigned.

III. TOPICS:

<u>Topics to be Covered</u>	Approximate Time Frame
1. Measurement with Precision and Accuracy	6 hours
2. Formulas	9 hours
3. Trigonometry	9 hours
4. Force, Energy, Work and Power	9 hours
5. Simple Machines	9 hours
6. Gas Laws	6 hours

IV. LEARNING ACTIVITIES:

TOPIC NUMBER	TOPIC DESCRIPTION	REFERENCE CHAPTER ASSIGNMENTS
1.0	Measurement with Precision and accuracy	Handouts
2.0	Formulas	Handouts
3.0	Trigonometry	Handouts
4.0	Simple Machines	Handouts
5.0	Force, Energy, Work and Power	handouts
6.0	Gas Laws	Handouts

V. REQUIRED RESOURCES / TEXTS / MATERIALS:

1. Calculator: (Recommended) SHARP Scientific Calculator EL-531.
The use of some kinds of calculators, cell phones, and other electronic devices may be restricted during tests.

V. EVALUATION PROCESS/GRADING SYSTEM:

There will be three to five tests, each equally weighted.

The following semester grades will be assigned to students:

Grade	Definition	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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W	Student has withdrawn from the course without academic penalty.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.