## THE SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# SAULT STE. MARIE, ONTARIO



## COURSE OUTLINE

COURSE TITLE:	Algebra				
CODE NO. :	MTH121-5	SEMESTER:	Two		
PROGRAM:	General Arts and Science				
AUTHOR:	Math Department				
DATE:	Dec. 2016	PREVIOUS OUTLINE DATED:	June		
APPROVED:		"Sherri Smith"	2016 Dec 2015		
		DEAN	DATE		
TOTAL CREDITS:	5				
PREREQUISITE(S):	None				
HOURS/WEEK:	5 hours/wee	k			
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### I. COURSE DESCRIPTION:

In this introductory algebra course students will learn concepts and skills leading to applications. For those planning to enroll in programs that require technical math, this course establishes a solid foundation. This course is also well suited to those who are entering fields of study where math is not a required component of the curriculum but where a working knowledge of algebra is expected. Topics of study include polynomials, factoring, graphing, solving linear equations and systems, exponents and radicals, and quadratic equations.

### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

- 1. Use basic algebraic concepts to solve linear equations.
- 2. Use factoring techniques to solve fractional linear equations.
- 3. Graph linear equations and inequalities using a variety of techniques.
- 4. Solve systems of linear equations using by graphical and algebraic methods.
- 5. Solve quadratic equations using a variety of techniques.

### III. TOPICS:

		Approximate Time Frame (Hours)
1.	An Arithmetic Review	5
2.	Equations	6
3.	Polynomials	9
4.	Factoring	8
5.	Rational Variable Expressions	10
6.	An Introduction to Graphing	6
7.	Graphing	6
8.	Systems of Linear Equations	9
9.	Exponents and Radicals	8
10.	Quadratic Equations	8

## IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- 1. <u>Beginning Algebra</u>, 9<sup>th</sup> Edition, Baratto et al
- 2. Calculator: 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:

The final grade will be determined by the following:

Unit Tests	80%
Class Activities & Assignments	<u>20%</u>
Total	100%

The following semester grades will be assigned to students:

The following	Grade Point	
Grade	Definition	Equivalent
A+ A	90 – 100% 80 – 89%	4.00
В	70 - 79%	3.00
С	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	
U	placement or non-graded subject area. Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
Х	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the	
NR W	requirements for a course. Grade not reported to Registrar's office. 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.