THE SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Algebra

CODE NO.: MTH121-5 SEMESTER: One

PROGRAM: General Arts and Science

AUTHOR: Math Department

DATE: Jan. 2012 **PREVIOUS OUTLINE DATED:** Jan.

2011

APPROVED: "B. Punch"

CHAIR DATE

TOTAL CREDITS: 5

PREREQUISITE(S): None

HOURS/WEEK: 5 hours/week

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School of Environment & Technology (705) 759-2554, Ext. 2681

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.

2

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>, 8th Edition, Baratto et al
- 2. Calculator: SHARP Scientific Calculator EL-531.
- 3. Geometry Set
- 4. Graph Paper
- 5. Geogebra
- 6. Word and Excel 2010

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	60%
Assignments	10%
Quizzes	10%
Mental Math Activities	10%
<u>Attendance</u>	10 %
Total	100%

The following semester grades will be assigned to students:

		Grade Point
Grade	<u>Definition</u>	Equivalent
A+	90 – 100%	4.00
Α	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 placement or non-graded subject area.	
U	Unsatisfactory achievement in	
O	field/clinical placement or non-graded	
	subject area.	
Χ	A temporary grade limited to situations	
Λ	with extenuating circumstances giving a	
	student additional time to complete the	
	requirements for a course.	
NR	Grade not reported to Registrar's office.	
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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.