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. 2011 **PREVIOUS OUTLINE DATED:** Jan.

2010

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.

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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.	Algebraic Fractions	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. Beginning Algebra, 8th 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.

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V. EVALUATION PROCESS/GRADING SYSTEM:

There will be six tests:

Test 1 will cover Topics 1, 2 & 3 - 20%.

Test 2 will cover Topic 4 - 10%.

Test 3 will cover Topic 5 – 10%.

Test 4 will cover Topics 6 & 7 - 20%.

Test 5 will cover Topic 8 – 15%.

Test 6 will cover Topics 9 & 10 – 10%.

There will also be class activities and assignments which will contribute 15% to the final grade.

The following semester grades will be assigned to students:

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Grade	<u>Definition</u>	Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	
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 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.