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: January **PREVIOUS OUTLINE DATED:** Sept.

2009

APPROVED: "B. Punch"

CHAIR DATE

2008

TOTAL CREDITS: 5

PREREQUISITE(S): None

HOURS/WEEK: 5 hours/week

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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.	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, 7th Edition, Hutchison, Bergman, Hoelzle, Baratto
- 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:

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 – 20%.

Test 6 will cover Topics 9 & 10 – 20%.

The following semester grades will be assigned to students:

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Grade	<u>Definition</u>	Grade Point 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 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:

Disability Services:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

Tuition Default:

Students who have defaulted on the payment of tuition (tuition has not been paid in full, payments were not deferred or payment plan not honoured) as of the first week of March will be removed from placement and clinical activities. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.