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: June 2011   **PREVIOUS OUTLINE DATED:** Jan. 2010

APPROVED: "B.Punch"

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                        CHAIR   **DATE**

TOTAL CREDITS: 5

PREREQUISITE(S): None

HOURS/WEEK: 5 hours/week

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. <u>Beginning Algebra</u>, 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 – 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:

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	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:

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.

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.

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. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

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

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

Disability Services:
If you are a student with a disability (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.

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*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade "C", (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. 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.

Student Portal:
The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to https://my.saultcollege.ca.

Electronic Devices in the Classroom:
Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

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.