

**MATH 201-009: Functions with Trigonometry**      Winter Semester 2007

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**Prerequisite**

Math 201-007 or Secondary IV 436 (with 60%)

**Important Information**

This course is intended for students who have failed or did not take the high school course Mathematics 064-536. This course will provide the functions background required for entry to Cegep level mathematics course.

**Textbook**

Algebra and Trigonometry, by Beecher, Penna and Bittinger, Publisher: Addison Wesley, 2<sup>nd</sup> Edition

**Objectives**

1. To solve problems involving algebraic or trigonometric functions.
2. To solve geometrical and trigonometric problems involving circles and triangles.

**Outline**

The course will cover the following material:

Basic Concepts of Algebra:	Chapter R, sections 1-6
Graphs, Functions and Models:	Chapter 1, sections 1-7
Functions, Equations and Inequalities:	Chapter 2, sections 1-6
Polynomial and Rational Functions:	Chapter 3, sections 1-6
Exponential and Logarithmic Functions:	Chapter 4, sections 1-6
The Trigonometric Function:	Chapter 5, sections 1-6
Trigonometric Identities, Inverse Functions and Equations:	Chapter 6, sections 1-5
Application of Trigonometry:	Chapter 7, sections 1, 2

**Teaching Methods**

Class time will be devoted to lectures and problem solving. During problem solving sessions, students are encouraged to work in groups. Problems taken from the book will be suggested after each session. They indicate the level of difficulty of the problems that the students are expected to solve. The book will be followed closely and it is absolutely essential that each student has a copy and brings it to every problem solving session. Additional exercises will be provided by the instructor.

## **Evaluation**

There will be weekly quizzes worth 20%. There will be four tests, each one is worth 20%. The exact dates will be announced at least one week prior to the tests. The last test will cover all materials learnt in the whole semester. Attendance is required for all term tests and quizzes. No possibility of making up test or quiz exists unless a written medical notice is presented immediately after student's recovery. Namely,

**Quizzes: 20%,      1<sup>st</sup> Test: 20%,      2<sup>nd</sup> Test: 20%,      3<sup>rd</sup> Test: 20%,      Final Test: 20%**

## **General**

The student is expected to memorize all the important definitions, formulas and rules, and the appropriate use of these has to be demonstrated in the correct logical sequence while solving a problem.

Students caught cheating during a test will get zero for that specific test and their names will be submitted to the College Administration (see the College Calendar for the school policy on cheating).

Any attempt to disturb the peace and quiet of the class will result in the expulsion of the miscreants from the class. Cheating will be dealt with absolutely no sympathy for the participants.