

JOHN ABBOTT COLLEGE

ALGEBRA AND TRIGONOMETRY

(Math 201-009-50)

Pondération: 3-2-3

Number of class hours: 75

Credits: $2\frac{2}{3}$

Prerequisite: Math 436, 526 or failure in 536 (in high school)
or 201-007 or failure in 201-009 (in college)

Your teacher will provide you with contact information, a listing of office hours, and the breakdown of the class mark in your section (see the written supplement to this course outline).

Students are strongly advised to seek help from their teacher as soon as they begin to encounter difficulties in this course.

INTRODUCTION

This course is designed for students who need to review or relearn the basic skills in algebra and trigonometry. Successful completion of this course will allow you to take Calculus I and other college level mathematics courses.

OBJECTIVES

The successful student should be able to acquire a basic vocabulary in mathematics, develop basic skills in manipulating and simplifying algebraic expressions, acquire expertise in solving polynomial equations, linear inequalities, equations involving rational expressions, equations with one radical, and exponential and log equations, and also graph basic linear, quadratic, absolute value, exponential, logarithmic and trig functions, use Pythagoras's Theorem, the trig ratios, Law of Sines and Law of Cosines, prove simple trig identities, and prepare for other math courses at the college level.

COURSE CONTENT WITH SELECTED EXERCISES

References are to the *Algebra and Trigonometry* text by Carosiello, Gideon and Gatien. All problems in the text are part of the course except where noted below.

Chapter 1: Algebra

Chapter 2: Analytic Geometry (omit 2.14, 2.15)

Chapter 3: Equations and Inequalities (3.8 #1–10, omit 3.10)

Chapter 4: Algebraic Functions (omit 4.2, 4.6, 4.12, 4.15)

Chapter 5: Exponential and Logarithmic Functions

Chapter 6: Elements of Trigonometry (omit 6.1)

Chapter 7: Analytic Trigonometry (7.8: graph $y = \tan x$ only)

Chapter 8: Applications of Trigonometry

REQUIRED TEXT

Algebra and Trigonometry, by Carosiello, Gideon and Gatien (available at the college bookstore).

METHODOLOGY

This course meets three times a week for a total of five hours. Classes are primarily lectures with some discussion and problem-solving. Homework normally amounts to about seven hours a week. Many of the failures in this course are due to missing classes. You are expected to attend all lectures, to read the textbook, and to do the homework. Work is required! If something is unclear, ask your teacher before class, or after class, by e-mail or whatever.

OTHER RESOURCES

The MATH LAB (H-203) is open from 9:00 to 16:00 as a study area, and from 11:00 to 16:00 for borrowing course material or using the computers and printers for math assignments.

MATH WEBSITE: <http://www.johnabbott.qc.ca>

Go to Student Zone, Departments, Mathematics.

MATH HELP CENTRE: There is usually a teacher available for individual help (see posted schedule). The Math Help Centre is located in H-203 from 9:00 to 11:00 and in H-222 after 11:00.

MATH TUTORING CENTRE: Starting on the fifth week of each semester, first year students can be paired with a fellow finishing student for a weekly appointment in the Math Lab. Check the announcements in the department area.

LEARNING CENTRE: The Learning Centre, located in H-117A, offers study skills workshops and individual tutoring. If interested, see Brenda Rowe at the *beginning* of the semester. The number of spaces is limited.

DEPARTMENTAL ATTENDANCE POLICY

Regular attendance is expected. Missing six classes is grounds for automatic failure in this course. Many of the failures in this course are due to missing classes.

EVALUATION PLAN

A student's **Final Grade** is a combination of the **Class Mark** and the mark on the **Final Exam**. The method of determining the **Class Mark** will be given by your teacher on the first day of classes (see the supplement to this course outline). The **Final Exam** is set by the course committee, which consists of all instructors currently teaching this course, and is marked by each individual instructor.

The **Final Grade** will be whichever is the better of:

50% **Class Mark** + 50% **Final Exam Mark**

OR

25% **Class Mark** + 75% **Final Exam Mark**

A student CHOOSING NOT TO WRITE the Final Exam will receive a failing grade of 50% or their Class Mark, whichever is less.

COURSE COSTS

The book is about \$15. A scientific calculator is necessary (\$20). You may NOT use a graphing calculator for tests or the Final Exam in this course.

COLLEGE POLICY ON CHEATING AND PLAGIARISM

Cheating and plagiarism are unacceptable at John Abbott College. Students are expected to conduct themselves accordingly and must be responsible for all their actions. For more information on cheating and plagiarism, students should consult the Institutional Policy on the Evaluation of Student Achievement (IPESA), which is reprinted in the College Calendar or Student Agenda.

COLLEGE POLICY ON MID-SEMESTER ASSESSMENT

Students in their first and second semester have the right to feedback on basic skills in the first weeks of the semester so that they can seek extra help if necessary.

NOTICE TO STUDENTS ON GRADE REVIEW

It is the responsibility of students to keep all assessed material for at least one month past the grade review deadline in the event that they would want to request a grade review.

Students can learn more about their rights and responsibilities by reading the IPESA.