

SYLLABUS  
**MA10304 COLLEGE ALGEBRA**

Fall 1998

TR 2:00 – 3:20pm    H223

**INSTRUCTOR: DR. CHOCK Y. WONG**

Hy

**Office:** Henry Hall 018    (Phone: 739-4682)

**Office Hours:** MWF 10:00–11:00am, TH 1:00–2:00pm.

**Course Description:** Algebra knowledge and skills for college studies: Real number system, exponents and polynomials, rational and radical expressions; equations and inequalities with applications (including rational and radical equations, and systems of linear equations); beginning analytic geometry and functions; exponential and logarithmic functions; and other selected topics such as Sigma notation, Binomial Theorem, progressions.

**Prerequisites:** By placement test, or passing MA102; or consent of instructor.

**Textbook:** Algebra for College Students (fourth edition). By R. David Gustafson & Peter D. Frisk. *Brooks/Cole Publishing Company*. ISBN 0-534-25188-9.

**Topics to Covered:** The following chapters will be covered: 1 to 8, [10,] 12, & 14:

- (1) Concepts and properties of real number system. (Ch1.)
- (2) Polynomials: arithmetic; factoring. (Ch2 & Ch4.)
- (3) Linear equations and inequalities, inequalities involving absolute values. (Ch3.)
- (4) Rational expressions and equations. (Ch5.)
- (5) Rational exponents and radicals; equations containing radicals. (Ch7.)
- (6) Concepts of coordinate system; graphs of linear equations. (Ch6.)
- (7) Quadratic equations and inequalities. (Ch8.)
- (8) Systems of linear equations and inequalities: solutions by graphing, by substitution and addition, by determinants, (by matrices). (Ch10.)
- (9) Exponential and logarithmic functions and equations. (Ch12.)
- (10) Selected topics from Chapter 14.

Among the topics listed above, Chapter 1 to 5, and parts of Chapter 7, 8, and 10, may have been taught in **MA102**, and this course will give **REVIEW** to those topics. Others are **NEW** topics and will be taught in more details.

**Class Participation:**

Because of the fast pace of the course, attendance is extremely important. Class meetings will be conducted in an interactive manner: In addition to listening to lectures and taking notes, students are expected to actively participate in all kinds of class activities, including self-exercises, group discussions, presentations (board works), and so on. **Remember: Attendance and class presentations will be recorded and become an important part in grading.**

**Homework:** There will be two kinds of homework assignments:

(1) **Daily exercises.** For each section covered, a certain amount of *odd numbered problems* may be assigned as BASIC exercises; there will be some handout worksheet entitled “MA 103 EXERCISE #” as well. You must work them out (sometimes this is a part of in-class activities) on time to keep up with the progress of the course. You do not turn in these daily, instead, your performance in these exercises will be checked thru the following three ways:

- (i) You may be called to present your solutions in the board in the next class;
- (ii) Most of the problems in quizzes (and even in exams) will be chosen from these exercises;
- (iii) You need to turn in these exercises collectively in **every 4 or 5 weeks** (dates to turn in: TBA).

(2) **Review exercises.** For some important or NEW topics, there will be handout homework worksheets entitled “MA103 HOMEWORK #” to cover several sections related to the same topic, which need to be turn in for grading.

**Quizzes and Exams:** Quizzes will be given in weekly basis. Often a quiz is given in the beginning of a class meeting. NO makeup quiz is allowed, except a missing is due to illness (with doctor’s notes) or school sport events (a memo from director is required). **Remember to come to class on time to avoid missing any quiz!**

An one-hour midterm exam (in Week 8, covers Chapter 1 to 5, and Chapter 7) and an accumulated Final Exam will be given.

**Grading:**

Class Participation:	15% of the total
HW & QUIZZES:	40% of the total
Mid-term EXAM:	15% of the total
FINAL EXAM:	30% of the total