MA103-04 COLLEGE ALGEBRA

Fall 2001

MWF 1:00 – 1:55pm   Room: H225

INSTRUCTOR: DR. CHOCK Y. WONG

Office: Henry Hall 018   (Phone: 739-4682; email: wongma103@hotmail.com)
Office Hours: MTWRF 11:00–11:55am, T 2:00–3:00.

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

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

Textbook: <u>Algebra for College Students</u> (fifth edition). By R. David Gustatson & Peter D. Frisk. *Brooks/cole Publishing Company.*

Objectives: By taking this course, the student will gain knowledge and skills on:

(1) Basic concepts and properties of the Real Number system;
(2) Linear and quadratic equations (and inequalities);
(3) Basic concepts of Rectangular Coordinate system, lines on the xy-plane;
(4) Systems of linear equations - solutions by graphing, and by elimination;
(5) Polynomials - arithmetic and factoring !
(6) Rational expressions - arithmetic, equations;
(7) Radical expressions – arithmetic, equations, and conversion to rational exponents;
(8) Exponential functions and logarithmic functions;
(9) Binomial theorem and mathematical induction;
(10) Basic concepts and computational skills of probability.

Chapters to Covered: The following chapters will be covered: 1 to 8, 10, (11,) & 13. See details from the attached "Tentative Schedule of the Course". Please note that among the chapters listed above, Chapter 1 to 8, may have been taught partly in **MA102**, and this course may only give REVIEW to those topics. Topics in Chapter 10 and 13 are NEW to most students 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 participate in all kinds of class activities, including self-exercises, group discussions, presentations (board works), and so on. **Rebember: Class participation (including attendence) will be counted 10% in grading.**

Typeset by $\mathcal{AMS}$-TEX

Homework: For each section being covered, certain amount of (odd-numbered) problems will be assigned as on-your-own exercises (don't need to turn in). Please try your best to work out most of these problems, so that you can keep up with the progress of the course. Quizzes and exams will be based on these problems.

Quizzes and Exams: See the Tentative Schedule for information about dates and contents of the quizzes and exams. In general, NO makeup quiz is allowed, except for documented medical reasons. (Grading penalty may apply to makeup quizzes.) Quizzes will be given in the first half of class meetings, thus **remember to come to class on time to avoid missing any quiz!**

Grading:

Class Participation:	10% of the total
QUIZZES:	30% of the total
EXAM 1:	15% of the total
EXAM 2:	15% of the total
FINAL EXAM:	30% of the total