Pony

SYLLABUS

MA103 COLLEGE ALGEBRA

Winter 1999

TTH 7:05-9:10pm PH

INSTRUCTOR: MR. D. SCOTT POWELL

Office: Henry Hall 019(Math Lab) (Phone: 734-9168)
Email: dpowell@hpu.edu, dssport@juno.com, dpowell@hawaii.edu
Office Hours: MWF 10:30-11:00am, 12:00-12:30pm.

Course Description: Algebra knowledge and skills for college studies: Real number system, exponents and polynomials, rational and radical expressions; equation 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** (forth edition). By R. David Gustatson & Peter D. Frisk. *Brooks/Cole Publishing Company.* ISBN 0-534-25188-9

Topics Covered: The following chapters will be covered: 1 to 8, (10), 12 & 14.

1) Concepts and properties of the real number system. (Chp 1).
2) Polynomials: arithmetic; factoring (ch 2 & ch 4.)
3) Linear equations and inequalities, inequalities involving absolute values. (ch.3)
4) Rational expressions and equations. (ch 5)
5) Rational exponents and radicals; equations containing radicals. (ch 7)
6) Concepts of coordinate system; graphs of linear equations. (ch 6)
7) Quadratic equations and inequalities. (ch 8).
8) Exponential and logarithmic functions and equations. (ch 12)
9) Systems of linear equations and inequalities: solutions by graphing, by substitution and addition and by determinates, (by matrices). (ch 10).
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. Other are NEW topics and will be taught in more detail.

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 seat work, group discussion, presentations(board work) and so on.
Remember: Attendance and class participation 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; You may also receive worksheets as well. You must work them out (sometimes this is part of the 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 checked in the following ways:

i) You may be called to present your solutions on the board in the next class;
ii) Most problems in quizzes and sometimes exams will be from these problems.
iii) You need to turning these exercises collectively **every 2 to 3 weeks.**

2) **Review Exercises.** For some important or NEW topics, there will be additional problems assigned.

Quizzes and Exams: Quizzes will be given on a weekly basis(starting next Thursday). Often a quiz is given in the beginning of a class meeting. NO makeup quiz is allowed, except an illness(doctors note). **Remember to come to class on time to avoid missing any quiz!**

One mid-term exam (covering chapters 1 to 5 and 7) and a 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

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