MA102 INTRODUCTORY ALGEBRA (3)

Fall 2000
TTh 9:30−10:50 H33
INSTRUCTOR: Dr. David Lani

Availability / Contact Information:
   Office hours: TTh 12:30 − 1:00 and by appointment; location to be determined.
   Telephone (home): 538-3669

Course Description: An introduction to algebra, this course includes: the real numbers and their properties, linear equations and inequalities, systems of linear equations and inequalities, polynomials and factoring, rational expressions, square roots and cube roots, graphs and equations of lines, and applications of equations. This course prepares students for MA103, College Algebra.

Textbook: Beginning Algebra 5th edition, by Gustafson and Frisk, Brooks/Cole Publishing Company.

Supplies:
   11" x 8.5" lined paper   #2 (or darker) pencils
   graph paper (4 – 5 blocks per inch)   scientific calculator with fraction capability

Topics Covered:
   1. Concepts and properties of the real number system. (Ch 1)
   2. Linear equations and inequalities; some applications. (Ch 2)
   3. Systems of linear equations and inequalities: solving by graphing, by substitution, by addition. (Ch 3)
   4. Polynomials: integral exponents; the four basic operations; the long division algorithm. (Ch 4)
   5. Factoring polynomials: GCF, grouping, special formulas, trinomials; solving equations by factoring. (Ch 5)
   6. Rational expressions: ratios and proportions; the four basic operations; equations with fractions. (Ch 6)
   7. Roots and radicals: square roots and cube roots. (Ch 7)
   8. Equations of lines: slope of a line; writing equations of lines. (Ch 8)
   9. Quadratic equations (optional): brief introduction; the quadratic formula. (Ch 9)

Course Requirements:

   Homework: All work and/or explanations leading to solutions must be included. Assignments are due at the beginning of class; otherwise, they are considered late. Work that is no more than one class late is accepted but assessed a 20% deduction. Work that is more than one class late is not accepted; a score of 0 is recorded. The two lowest scores are discarded.

   Quizzes: In general, there is a quiz every two weeks. These are announced and are 20–30 minutes long. The lowest score is discarded.

   Midterm Exams: There are two midterm exams: Exam #1 covers chapters 1–4; Exam #2 covers chapters 5–7. Dates are to be determined.

   Final Exam: December 11, 8:00−10:00 am. The final exam is comprehensive; it covers the entire course.

Evaluation:

Grading		Scale	
Class Participation	10% of final grade	100 – 90%	A
Homework	10% of final grade	89 – 80%	B
Quizzes	20% of final grade	79 – 70%	C
Midterm Exams	30% of final grade	69 – 60%	D
Final Exam	30% of final grade	below 60%	F