FD '01

MA10303 COLLEGE ALGEBRA (3)

Fall 2001
TTh 11:00 – 12:20 Henry Hall 225

Instructor: Dr. David Lani
  Office hours: TTh 12:30 – 1:00, by appointment; other times may be possible; location to be determined.
  Telephone (home): 538–3669

Course Description: Work focuses on algebraic expressions (polynomials, rational expressions, radical expressions); equations and inequalities; systems of equations and inequalities; basic concepts of functions; exponential and logarithmic functions; and applications. This course prepares students for MA110 Precalculus.

Textbook: Algebra for College Students 5th edition, by Gustafson and Frisk.

Supplies
  11" x 8.5" lined paper   #2 (or darker) pencils—no pens
  graph paper (4 – 5 blocks per inch)   scientific calculator with fraction capability

Topics Covered
  1. Concepts and properties of the real number system; equations; applications.
  2. Graphs and equations of lines; introduction to functions.
  3. Systems of linear equations: solving by graphing, elimination, and matrices.
  4. Linear inequalities in one and two variables; absolute values; systems of inequalities.
  5. Arithmetic of polynomials; complete factorization; solving equations by factoring; applications.
  6. Rational expressions; ratio and proportion; the four basic operations; rational equations.
  7. Radical expressions and equations; applications; rational exponents.
  8. Solving quadratic equations by factoring and formula; applications; graphs of quadratic functions.
  9. Introduction to exponential and logarithmic functions; properties of logarithms.
  10. Graphing conic sections; solving systems of second-degree equations.

Course Requirements

Attendance and Participation: A score is recorded for each class, based on actual time in class and active participation: 100 = no more than 10 minutes missed; 80 = no more than 20 minutes missed; 60 = no more than 30 minutes missed; 0 = more than 30 minutes missed. The two lowest scores are discarded.

Homework: Assignments are to be done on a "practice–on–your–own" basis; they will not be collected. However, quizzes will contain problems from the assignments—and possibly from other sources.

Quizzes: About 30 minutes in length, quizzes are closed-book, with no notes. At times, a calculator is allowed—but there is to be no borrowing. The lowest score of all the quizzes is discarded; consequently, there is no make-up for any quiz that is missed. Dates are shown on the course calendar.

Tests: Besides the final exam, there are three tests, all of which are closed-book, with no notes. At times, a calculator is allowed—but there is no borrowing. Dates are shown on the calendar. For tests that are missed, entirely different forms—usually more difficult—may be administered.

Final Exam: The final exam is comprehensive—it covers the entire course. It is closed-book, with no notes. A calculator is allowed on only the first of two parts.

Evaluation:

Grading		Scale	
Attendance/Participation	15% of final grade	90 – 100%	A
Quizzes	25% of final grade	80 – 89%	B
Tests	30% of final grade	70 – 79%	C
Final Exam	30% of final grade	60 – 69%	D
		below 60%	F

>>> FINAL EXAM: Wednesday, Dec 12, 2001 8:00 – 10:00 am