## Fall 2001

## TTh 9:30-10:50 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: Study includes real numbers and their properties; linear equations and inequalities; systems of equations and inequalities; polynomials and factoring; rational expressions; square roots and cube roots; graphs and equations of lines; and applications. This course prepares students for MA103 College Algebra.

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

## Supplies

$11^{\prime \prime} \times 8.5^{\prime \prime}$ lined paper
graph paper ( $4-5$ blocks per inch)
\#2 (or darker) pencils-no pens
scientific calculator with fraction capability

## Topics Covered

1. Concepts and properties of the real number system; exponents; order of operations.
2. Linear equations and inequalities; applications; formulas.
3. Systems of linear equations and inequalities: solving by graphing, substitution, addition; applications.
4. Integral exponents; polynomials: the four basic operations, including the long division algorithm.
5. Factoring polynomials: GCF, grouping, special formulas, trinomials; solving equations by factoring.
6. Ratio and proportion; rational expressions: the four basic operations; equations with fractions.
7. Roots and radical expressions: square roots and cube roots; arithmetic of radical expressions.
8. Slope of a line; writing equations of lines.
9. Solving quadratic equations by the quadratic formula.

## 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
Attendance/Participation 15\% of final grade
Quizzes $25 \%$ of final grade
Tests 30\% of final grade
Final Exam 30\% of final grade

| Scale |  |
| ---: | ---: |
| $90-100 \%$ | $A$ |
| $80-89 \%$ | B |
| $70-79 \%$ | $C$ |
| $60-69 \%$ | $D$ |
| below $60 \%$ | F |

>> FINAL EXAM: Monday, Dec 10, 2001 8:00-10:00 am

