MTH 135   SYLLABUS   INTRODUCTION TO ALGEBRA   FALL 1994
Instructor: Laura A. Shears
phone: 484-2600
office hours: M, W 12:45-1:15P.M.   **office location**: in back of the
              T, Th 9:30- 10:00A.M.   administration building
                                                             or by appointment

Academic Enrichment Center: Check out this center in the back of the library for additional study aids and tutoring.

Text: Aufmann, Richard N. & Barker, Vernon C. (1991), <u>Introductory Algebra An Applied Approach</u> (3rd ed.) Boston: Houghton Mifflin Co.

Class Meets: M T W TH 10:30 - 11:30A.M. Rm. 206

Course Description: A course designed to develop proficient manipulation of algebraic expressions. Topics include solving quadratic equations, radical, inequalities, factoring, and graphing. Applications will be included.

Learning Objectives: By the end of the course the student will be able to:
  - Use the basic laws for integer exponents and order of operations to simplify algebraic
    expressions.
  - Factor trinomials, the difference of squares, the sum and difference of cubes and be able to use
    group factoring.
  - Add, subtract, multiply, and divide algebraic fractions.
  - Write an equation for a line given: a. the slope and a point on the line, b. the slope and the y-
    intercept, c. two points on the line, d. a point and the equation for a line parallel or
    perpendicular to the line. e. the graph of the line.
  - Graph linear equations and interpret the graphs.
  - Solve systems of two linear equations in two variables by elimination, substitution, and
    graphing.
  - Solve and graph inequalities in two variables.
  - Simplify radicals which contain numeric and variable expressions.
  - Solve quadratic equations by factoring, use of the quadratic formula and graphing.

Davenport College Success System:

Oral/Written: by describing and explaining the content of written material accurately.

Mathematics: accurate basic mathematics on homework, tests, and quizzes.

Interpersonal/
Human Relations: effective listening and questioning skills by active participation in class.

Problem Solving: demonstrated on application problems, on tests, quizzes, and homework.

Reliability: a sense of responsibility for attendance, punctuality, and deadlines by being in
                  class and turning in assigned activities on time.

Grading:

Tests: There will be 8 tests worth 100 points each. The lowest test score will be dropped. If a test is missed the score is a zero and that is the score that I will drop. (If extenuating circumstances occur, *you must put the request for an exception in writing*. Be aware that makeup tests are often slightly more difficult than the regular in class exam, however they cover the same material so they should be doable if you are prepared for the test.)

Final Exam: There will be a cumulative final exam during finals week. The final exam will count as 20% of your grade. (It cannot be the grade dropped.) No final exam may be taken early.
Date of final: Mon. Dec. 12, 1994
Time of final: 10:30-12:30P.M.

Writing Exercise: It is important that you learn to explain in words as well as numbers how to solve math exercises. You will have five exercises for which you will be required to give a written explanation of your solution. Each written exercise will be worth 10 points for a total of 50 points or 5% of your grade.

Oral Exercise: One important objective of any course is that the student will be able to explain to others what she/he has learned in both a written and oral form. The tests will require you to show in written form how well you can work through the exercises. Each student will have opportunities to demonstrate problems in front   of the class or in small groups. These exercises will be worth 50 points or 5% of your grade.

Extra Credit: Up to 4 extra credit points may be added to your test score for each unit test by the following method:
 On test days you may turn in your take home assignments for that unit. I will pick four problems randomly from the assignment and check them. You must show your work to receive credit since most of the answers are in the book anyway.

Grading Scale:

93-100 A	83-86 B	73-76 C	63-66 D
90- 92 A-	80-82 B-	70-72 C-	60-62 D-
87- 89 B+	77-79 C+	67-69 D+	Below 60 (No Credit)

Attendance: I will take attendance each day. The writing and oral exercises will be completed in class, so attendance is very important for you to have a chance at all the possible points. *It is not sufficient to come to part of the class and then leave when it is the students turn to do problems.* I will start class on time, but let you leave a few minutes early so that you have a chance for a short break between your classes.

Assignments: I will hand out an exercise assignment sheet for each unit. You should allow 2 hours every day to do your daily exercises. Be sure to show all steps in solving each exercise. Don't forget the extra credit opportunities for doing your homework. The test exercises will be very similar to the daily assignments and in class worksheets.