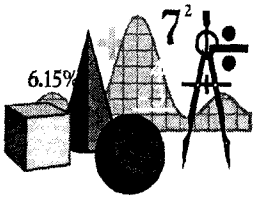

MATH 10360

COLLEGE ALGEBRA

MEETING DATES: October 7 - December 18, ~~1996~~ 1998
MEETING TIMES: Mondays and Wednesdays, 5:30 - 7:35 PM
REQUIRED TEXT: Algebra for College Students (Fourth Edition) by Gustafson and Frisk

INSTRUCTOR: Mrs. Janet Hume (833-0050)

COURSE DESCRIPTION: After a review of the real number system, exponents, and polynomials, the topics to be covered in the course are as follows: solving linear equations and inequalities; working with rational expressions; graphing equations and inequalities; solving systems of equations and inequalities; working with radical expressions; solving quadratic equations; graphing quadratic functions; working with complex numbers; graphing functions; and working with logarithms.

GRADING: The grade in Math 103 will be based on five exams, attendance, and participation in class. Exams will be worth 100 to 150 points each, depending on length of exam and amount of material incorporated in the exam. Perfect attendance will be worth 80 points, with four points deducted for each class that is missed. Class participation includes asking and answering questions, completing problems that are assigned in class, and completing homework. Students can earn up to 100 class participation points. At the end of the term, the course grade will be computed by dividing total number of points earned by total possible points.

ATTENDANCE: Students are expected to attend all classes. If you are unable to attend a class, you are still responsible for the material that was covered, including completing the homework exercises that accompany that material. If you have a legitimate reason for absence (illness with doctor's excuse, family emergency, TDY) when a test is being given, contact the instructor immediately to schedule a make-up. Depending on the circumstances, make-ups will be given at the discretion of the instructor.

HOMEWORK: As much as possible, we will follow the attached course outline. Each week, you should preview the material that will be covered in class by reading the appropriate chapter sections. After the material has been covered in class, you should attempt as many of the odd-numbered problems as needed for you to achieve mastery of that topic. There will be opportunity to ask questions about the exercises at the beginning of each class session. You are expected to follow the procedure outlined herein and keep up with the reading and completion of written exercises.

COURSE OUTLINE

OCT. 7 Distribute syllabus, complete information sheet, review material in Chapter 1

OCT. 9 Chapter 2 - Exponents and Polynomials - Sections 2.1, 2.3, 2.4, 2.5, 2.6

OCT. 16 Chapter 3 - Equations and Inequalities - Sections 3.1, 3.5, 3.6, 3.7

OCT. 21 **EXAM #1** - Chapters 1, 2, and 3

OCT. 23 Chapter 4 - Factoring Polynomials - Sections 4.1, 4.2, 4.3, 4.4, 4.5

OCT. 28 Chapter 5 - Rational Expressions - Sections 5.1, 5.2, 5.3

OCT. 30 Chapter 5 - Rational Expressions - Sections 5.4, 5.5

NOV. 4 **EXAM #2** - Chapters 4 and 5

NOV. 6 Chapter 6 - Graphs, Equations of Lines, and Variation - Sections 6.1, 6.2

NOV. 13 Chapter 6 - Graphs, Equations of Lines, and Variation - Section 6.3
Chapter 10 - Systems of Equations and Inequalities - Sections 10.1, 10.2

NOV. 18 Chapter 10 - Systems of Equations and Inequalities - Sections 10.3, 10.4

NOV. 20 **EXAM #3** - Chapters 6 and 10

NOV. 25 Chapter 7 - Rational Exponents and Radicals - Sections 7.1, 7.2, 7.3

NOV. 27 Chapter 7 - Rational Exponents and Radicals - Sections 7.4, 7.5, 7.6, 7.7

DEC. 2 Chapter 8 - Quadratic Equations - Sections 8.1, 8.2, 8.3, 8.4

DEC. 4 **EXAM #4** - Chapters 7 and 8

DEC. 9 Chapter 6.6 - Introduction to Functions and Chapter 9 - More Functions and Operations on Functions - Sections 9.1, 9.2, 9.5

DEC. 11 Chapter 12 - Exponential and Logarithmic Functions - Sections 12.1, 12.2, 12.3

DEC. 16 Chapter 12 - Exponential and Logarithmic Functions - Section 12.5
Review of functions and logarithms

DEC. 18 **EXAM #5** - Chapters 6.6, 9, and 12