GRANDE PRAIRIE REGIONAL COLLEGE

MATH 0130
COURSE OUTLINE
FALL 1993

INSTRUCTOR: Sukhvir Sandhu

CLASS TIME:
M W F 2:00 p.m. - 2:50 p.m.
T R 2:30 p.m. - 3:20 p.m.

OFFICE : Room C204

OFFICE PHONE: 539-2831

OFFICE HOURS:
11:00 am - 12:00 pm
1:30 pm - 2:20 pm   T/R. Other times by appointment.

PREREQUISITE: MA 0120 or MA 0130 placements.
Recommended: at least 5 or 6 in MA 20/MA 0120.

TEXT BOOK: College Algebra and Trigonometry by Jerome E. Kaufmann.

REQUIRED SUPPLIES: Binder, looseleaf, plastic covers, staples, pencil, pen, and calculator with trigonometric functions and exponential functions, math set.

COURSE GOALS: This course is designed to provide the students an understanding of polynomials, logarithms, trigonometry, sequence and series, quadratic functions, statistics, permutation and combinations, and probability. This course prepares the student for university transfer mathematics courses. The student will develop problem solving skills and gains an appreciation of the mathematics of modern society.

ATTENDANCE: Regular attendance is expected from all students and is essential for passing the course. Students who miss classes will find themselves falling behind and failing. Any student missing 10% of scheduled class time or more may not be permitted to write the final exam.

TESTS AND ASSIGNMENTS: There are four class tests, three take home tests, and three assignments. Any student not taking a test on a test date will receive zero for that test unless a medical certificate is supplied. College team members must notify the instructor prior to the test date if they are to be away. There will be a mid-term exam after the first four units . There will be a final exam after finishing the whole course with emphasis on the last half.

Assignments should be handed in on the specified dates.

Late assignments will be decreased by 10% per day and they will not be accepted after 2 days.

EVALUATION:

Assignments	9% [3% each]
Take-home Tests	12% [4% each unit]
Class tests	20% [5% each]
Mid-term exams	20%
Final Exam	39%
TOTAL	100%

GRADING:

9-point Grade	Percentage Equivalence		Designation
9	90 - 100		Excellent
8	80 - 89		
7	72 - 79		
6	65 - 71		Good
5	57 - 64		
4	50 - 56	→	Pass
3	45 - 49	→	Fail
2	26 - 44		
1	0 - 25		

1. Any student wishing to change their registration for fall courses must do so officially before September 13.

2. Any student wishing to withdraw from the course must do so officially before November 5 in order to avoid receiving a failing grade.

UNIT	TOPIC/DESCRIPTION
1	Review (Text References: Chapter 1,2,3,4) - Numbering system - Factoring quadratic equation - Co-ordinate geometry - Concept of a function and relations
2	Polynomial functions (Text References: Chapter 6) - Dividing polynomials - The remainder and factor theorems - Polynomial equations - Graphing polynomial functions
3	Exponential and Logarithmic Functions (Chapter 5) - Exponents and exponential functions - Applications of exponential functions - Logarithms - Logarithmic functions - Exponential and logarithmic equations; problem solving - Compilation with common logarithms

4   Conic section (Chapter 3, 12)
                           - Circles
                           - Parabolas
                           - Ellipses
                           - Hyperbolas

5   Trigonometric Functions, Graphing Trigonometric Functions, Trigonometric Equations (Chapter 7, 8, 9)

6   Sequences and Series (Chapter 13)
                           - Arithmetic sequences
                           - Geometric sequences
                           - Problem solving

7   Counting Techniques, the Binomial Theorem
                           - Permutations and combinations
                           - The Binomial Theorem.

8   Statistics
                           - Central tendency or ungrouped data
                           - Mean and standard deviation for grouped data
                           - Z-score and probability

ASSIGNMENTS: 1st Assignment from Unit 1

                      2nd Assignment from Unit 2 & 3

                      3rd Assignment from Unit 5

CLASS TESTS: Unit 2
                      Unit 3
                      Unit 5
                      Unit 6

TAKE-HOME TESTS: Unit 4
                      Unit 7
                      Unit 8