Mathematics 1600
(Higher Arithmetic)
Course Outline
Winter Semester 1996-97, Grande Prairie Regional College

Instructor : Dr. Subhash Karnik

Class time : MWF 9:00 am - 9:50 am Room J203

Course Objective : To enable the students to do and understand thoroughly the Elementary and Junior High School Mathematics

Course Description : Mathematics 1600 3 (3-0-0) : Elementary Number Theory, Numeration Systems, Number Systems and Elementary Probability Theory.

Prerequisites : Math 30 or consent of the Department of Science and Technology, University Transfer. This course is restricted to Elementary Education students.

Detailed Description :
1. Divisibility, greatest common divisor, Euclidean algorithm, linear Diophantine equations
2. Prime factorization, Fundamental Theorem of Arithmetic
3. Congruence, tests of divisibility, solution of linear congruence
4. Representation of integers and arithmetic in other bases, binary numbers
5. Rational and irrational numbers and their representations as decimal expansions
6. Probability, sample space, the Multiplication, Addition and Subtraction rules, expectation

Text Book : Musser, Gary and Burger, William Mathematics for Elementary Teachers, A Contemporary Approach (latest edition) MacMillan College Publishing

Course is covered by : The course is covered by Chapters 1 to 11 of the text book with a possibility of addition of topics to kindle interest in the critical thinking and problem solving aspects of Mathematics.

Grading :

Assignments	20%	
Quizzes	20%	
Mid Term Exam	25%	
Final Exam	35%	

Schedule of Examinations : Mid-term Examination : Wednesday, February 19, 1997 (Tentative)

Final Examination : As will be scheduled by Registrar's Office in April 1997.