MATH 160 OUTLINE

PRECALCULUS MATHEMETICS

TEXT: PreCalculus Functions and Graphs

11th Edition, Swokowski/Cole

Approved: JUNE 2007 **Effective: FALL 2007**

MATERIAL TO BE COVERED	SECTIONS FROM TEXT	TIME LINE
Graphs of equations and lines, definition and graphs of functions, quadratic functions, operations on functions.	2.2 - 2.7	10 Hours
Polynomial functions, complex and rational zeros of polynomials, rational functions.	3.1 - 3.5	7.5 Hours
Inverse, exponential and logarithmic functions; exponential and logarithmic equations and applications.	4.1 - 4.6	6.5 Hours
Angles, trigonometric functions of angles and real numbers, graphs of trigonometric functions, applications.	5.1 - 5.7	6.5 Hours
Trigonometric identities and equations; sum, difference, multiple-angle and half-angle formulas; inverse trigonometric functions.	6.1 - 6.4 & 6.6	6.5 Hours
Vectors, the dot product.	7.3 - 7.4	2 Hours
Systems of nonlinear equiations, partial fractions.	8.1 & 8.10	3.25 Hours
Infinite sequences and summation notation, arithmetic and geometric sequences, mathematical induction, the Binomial Theorem.	9.1 - 9.5	6.5 Hours
Parabolas, ellipses, hyperbolas.	10.1 - 10.3	3.5 Hours

*** One hour = 1 hour of face time. ****This outline allows for 4 hours of exams.

16 Week Term: 1 week = 3.75 hours (face time) 6 Week Term: 1 week = 10 hours (face time)

This course is a prerequisite for Math 180 (Calculus) and, consequently, it is important that the students develop sufficient skills and background to increase their chance of success in calculus.

**** See reverse side for important Department Policy****

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