GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF COMPUTING, MATHEMATICS and STATISTICAL SCIENCES
MATHEMATICS 1010 A3
WINTER 2005

Title: Calculus II

Prerequisite: Math 1000

Schedule:

Lecture A3	T	R	10:00-11:20	J229
Seminar AS1		R	1:30-2:20	J227
Seminar AS2		R	12:30-1:20	J227

Instructor: Thomas Kaip
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Phone : 2963
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Textbooks: James Stewart; Calculus Early Transcendental 5th Ed.

Grading:

Assignments	10%
Quizzes	15%
Midterm	25%
Final Exam	50%

Content: Techniques of integration. Applications of integration to planar areas and lengths, volumes and masses. Introduction to differential equations: laplace transforms, separable, linear, direction fields, Euler's method, applications. Infinite series, power series, Taylor expansions with remainder terms. Polar coordinates. Rectangular, spherical and cylindrical coordinates in 3-dimensional space. Parametric curves in the plane and space: graphing, arc length, curvature; normal binormal, tangent plane in 3-dimensional space. Volumes and surface areas of rotation.

Quizzes : Quizzes will be held in the latter 30 minutes of the seminar. There will be a total of n Quizzes. The best n-2 quizzes will count towards your grade.

Calculators : Calculators **WILL NOT** be allowed in quizzes and exams.