GRANDE PRAIRIE REGIONAL COLLEGE
MATH 2140 A2 FALL 2009

Title: Intermediate Calculus I

Schedule: Mon., Wed. 10:00 – 11:20 J229
Fri 9:00 - 9:50 B229

Instru**ctor:** Dr. Eric Chislett
Office C409
Phone 780-539-2003

Office Hrs: Mon 11:30 – 12:30
Tues 10:30 – 11:30
Wed 9:00 – 10:00
Fri 8:30 – 9:00 and 10:00 - 10:30

Textbook: Multivariable Calculus, 6th Edition, James Steward, Brooks/Cole Publishing Company.
(Chapters 11, 12, 13, and 15 of this book)

Grading:

Assignments	25%	first one attached
Term Exam #1	25%	
Term Exam #2	25%	
Final Exam	25%	

Assign'ts: There will be approximately 10 assignments given during the term, one per week. Given out on Tuesdays and are due before class on the following Tuesday.

Seminars: The assignments are usually finished during the seminars. But you do not have sufficient time during this one hour period to do all of any assignment.

Exams: The Final Exam time is set by the Registrar's office.
(Term and final exams are closed book exams)

Notes: $\sin(2\Theta) = 2\sin(\Theta)\cos(\Theta)$ $\quad \cos^2(\Theta) = \frac{1}{2}(1 + \cos(2\Theta))$
$\cos(2\Theta) = \cos^2(\Theta) - \sin^2(\Theta)$ $\quad \sin^2(\Theta) = \frac{1}{2}(1 - \cos(2\Theta))$

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MA 2140 3 (3-1-0) UT 60 Hours
Intermediate Calculus I
Infinite series; plane curves and polar coordinates; vectors and three dimensional analytic geometry; partial derivates.

Prerequisites: MA 1150 or MA 1010

Transfer: UA, UC, UL, AU, AF, CU, CUC, KUC, Other.

Detailed Description:

1. Review of techniques of integration.
2. Parametric representation of plane curves, arc length.
3. Polar coordinates, area, arc length, conics.
4. Infinite series; tests for convergence, Taylor's formula with remainder, power series.
5. Partial derivatives, directional derivates, gradient, tangent planes.
6. Maxima and minima. Lagrange multipliers.

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Assignment #1 Due Wed Sept 16

From Stewart, Calculus 6 Ed, Page 524