SEP 26 2000

GRANDE PRAIRIE REGIONAL COLLEGE
MATH 2140 A2 FALL 2000

Title: Intermediate Calculus I

Schedule:

Tues., Thur.	11:30 - 12:50	J202
Wed.	16:30 – 17:20	A304

Instructor: Dr. Eric Chislett
Office C409
Phone 539-2003

$\sin(2\theta) = 2\sin(\theta)\cos(\theta)$
$\cos(2\theta) = \cos^2(\theta) - \sin^2(\theta)$

Textbook: Either: Calculus, Early Transcendentals, 4nd Edition, James Stewart, Brooks/Cole Publishing Company.
(Chapters 10, 11, 12, and 14 of this book)

Or: Multivariable Calculus, 4th Edition, James Steward, Brooks/Cole Publishing Company.
(Chapters 11, 12, 13, and 15 of this book)

Plus: Student Solutions Manual, by James Stewart, Daniel Anderson, Daniel Drucker, Brooks/Cole Publishing Company.

Grading:

Assignments	20%
Midterm Exam	30%
Final Exam	50%

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

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 Midterm Exam will be given on Thur. Oct. 26 during the class period.
The Final Exam time is set by the Registrar's office.
(Both the midterm and the final exam are closed book exams)

MATH 214 - Intermediate Calculus I

•3.0 *(fi)* (either term, 3-0-0)

Calendar description:

Infinite series. Plane curves and polar coordinates. Three dimensional analytic geometry. Partial derivatives.
Prerequisite: MATH 115 or equivalent.

Note: This course may not be taken for credit if credit has already been obtained in MATH 209 or MATH 217

Sections offered this term:

- (see Course Timetable)

This course is listed among the

- *prerequisites or corequisites for the courses:*
  CMPUT 304, 340, 406, 418, 422; GEOPH 437, 438; MATH 201, 215, 280, 334, 336; PHYS 281, 301, 302; STAT 221, 222, 265, 266, 471.

- *requirements or recommendations of the programs:*
  BA in Mathematics; BEd Major or Minor in Secondary Education; BSc (Sciences Mathématiques); Honors or Specialization in Chemistry, Computing Science, Physical Geography, Geophysics, Meteorology, Physics, Statistics; Specialization in Mathematics, Mathematics and Economics, Mathematics and Finance, Mathematics and Statistics for Actuarial Science; Honors in Physiology

Detailed Description:

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

References:

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