

GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF SCIENCE AND TECHNOLOGY
MATHEMATICS 2140 A2
FALL SEMESTER 2002

SEP. 10 2002

TITLE: INTERMEDIATE CALCULUS I

PREREQUISITE: Math 1150 or equivalent.

SCHEDULE: Lectures T R 13:00 – 14:20 J204
Seminar F 11:30 – 12:20 J204

INSTRUCTOR: Thomas Kaip
Office J212
Extension 2963
Email kaip@gprc.ab.ca

OFFICE HOURS: T.B.A.

TEXTBOOK: Either: Calculus, Early Transcendentals, 4th Ed, James Stewart
(Chapters 10, 11, 12 and 14)

Or: Multivariable Calculus, 4th Ed, James Stewart
(Chapters 11, 12, 13 and 15)

COMPOSITION OF THE COURSE GRADE:

Final Exam	50%
Midterm Exam	30%
Assignments	20%

ASSIGNMENTS: Approximately 10 assignments will be given, then averaged for this grade.

COURSE TOPICS: Infinite Series, Test for Convergence, Taylor's Formula with Remainder, Power Series.
Parametric Representation of Plane Curves, Arc Length.
Polar Coordinates, Area, Arc Length, Conics.
Partial Derivatives, Directional Derivatives, Gradient, Tangent Planes.
Maxima and minima, Lagrange Multipliers.

CALCULATORS: No calculators allowed in Exams.