
Multivariable Calculus

Math 212 Fall 2005
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Fowler 307 MWF 9:30pm - 10:25am
<http://faculty.oxy.edu/ron/math/212/05/>

Class 26: Wednesday November 13

SUMMARY Exam 2 Review

CURRENT READING Williamson & Trotter, Section 5.5, Chapter 6, Chapter 7

HOMEWORK Exam 2 Study Guide (Spring 2004 Exam 2 and Don Lawrence Study Guide questions)

Vector Fields and Gradient Fields

The Multivariable Chain Rule (Leibnizian Method, Jacobian Method)

Implicit Differentiation (Inverse Function Theorem, Implicit Function Theorem)

Extrema of Multivariable Functions (Unconstrained Optimization)

Extrema of Multivariable Functions (Constrained Optimization: The Method of Lagrange)

Curvilinear coordinates (polar, cylindrical, spherical)

Introduction to Iterated Integration

Multiple Integration

Change of Variables: Jacobi's Theorem

(YOUR FAVORITE TOPIC:) _____