Instructor: Professor R. Alperin: Office: Duncan 239; Telephone: 924-5066; Office hours: TTH: 10:35-11:15; T: 1:30-2:30 or by appt.

Textbook: MULTIVARIABLE CALCULUS by Stewart, 6e or later

Course and Objectives: Calculus of Several Variables:
To learn 2- and 3- dimensional vector algebra and analytic geometry. To understand and apply the basic ideas of multivariable calculus: functions, limits, continuity, differentiation, and integration. To master the concepts and techniques of multivariable calculus and to use these methods in solving applied problems.

Prerequisite: Math 31 with grade of C- or better.

Grade: Final grade based on point total on tests: two 100 point midterms, 150 point final. Daily homework assignments (see below), odd numbered exercises only.

Daily Homework Assignments:
Chapter : Parametric Equations: 3 Lectures —
§1: 1-37; §2: 1-33; §3: 1-47

Chapter : Vectors: 6 Lectures—

Midterm
Chapter : Vector Functions: 4 Lectures—
§1: 1-17, 21-25, 29, 31; §2: 1-23, 37, 39; §3: 1-23, 29, 31; §4: 1, 3, 7-19

Chapter : Partial Derivatives: 7 Lectures—

Midterm
Chapter : Multiple Integrals: 7 Lectures—

Final