

# INFORMATION ON MATH 214

## Calculus of Several Variables

Call Number 2994

August 30, 2004

**TIME OF MEETING:** Mon. Wed. Fri. 10:25 – 11:20; Thu. 9:10 – 10:05

**PLACE:** ES 147

**INSTRUCTOR:** W. F. Hammond, ES 137A, phone 442-4625.  
Office hours: Mon. & Wed. 2:45–3:30 , or by appt.  
Campus Email: [hammond](mailto:hammond)  
World Wide Web: <http://math.albany.edu/~hammond/>

**TEXT:** Monty Strauss, Gerald L. Bradley & Karl J. Smith, *Multivariable Calculus*, 3rd Edition, Prentice Hall, 2002, ISBN 0-13-033785-4

**PRE-REQUISITE:** Math 113 or Math 119 (Calculus II) or BC Advanced Placement with score 4 or 5.

### BULLETIN DESCRIPTION:

Curves and vectors in the plane, geometry of three-dimensional space, vector functions in three-space, partial derivatives, multiple integrals, line and surface integrals.

This material corresponds to Chapters 9–13 in the text. The Bulletin's description is somewhat simplistic.

### COURSE OBJECTIVE:

The objective of Math 214 is for the student to learn analytic geometry, differential and integral calculus in  $n$ -dimensional Euclidean space. The case where  $n$  is 1 is covered in first year calculus. This course will place emphasis on the cases where  $n$  is 2 or 3.

Furthermore, the successful student's objective will be (1) to *understand* calculus and (2) to be able not just to know how to solve problems similar to example problems but to be able to **figure out** how to solve other problems.

The content of the course will be largely defined by the methods used to solve the collection of problems in the daily assignments. Unless announced otherwise these assignments will not be collected for scoring in order to permit free discussion. The quizzes will be designed to check knowledge gained in working through the assignments. Occasionally written assignments may be used to supplant quizzes.

### TEST SCHEDULE:

Event	Weight	Date
Final examination	100	Thurs., Dec. 16, 1:00 – 3:00
Midterm test	50	Wed., Oct 27, in class
Weekly tests (10 @ 5 each)	50	sometimes by surprise
Total weight	200	

### ATTENDANCE:

Attendance at class meetings is a *requirement* for passing the course unless the student has been granted a special exception *in advance*. Unexcused absence may result in failure or grade reduction. There will be no retrospective excused absences from tests except for compelling emergencies and religious holidays, as provided by State law and University regulations.