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

Office hours: Mon. & Wed. 2:45–3:30, or by appt.
Campus Email: hammond
World Wide Web: http://math.albany.edu/~hammond/


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 \( n = 1 \) is covered in first year calculus. This course will place emphasis on the cases where \( n = 2 \) 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:

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