Instructor: Kelly McKinnie  
Office: 412 Herman Brown  
Email: mckinnie@rice.edu  
Phone: x4597

Time: MWF 11:00-11:50AM  
Classroom: Herzstein Hall (HZ) AMP  
Office Hours: MW 3:30-4:30 and by appt.

Webpage: www.math.rice.edu/~klm1

Recitations: For help with homework and course material.

Time: T,W,Th 7-9 PM  
Classroom: HZ AMP

TAs: Helge Krüger  
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Bridget Franklin  
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Christopher Davis  
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Course Overview: The purpose of this course is to apply the techniques of single variable calculus to functions of several variables. This course begins with a study of the geometry of 1, 2, 3, ..., n-dimensional Euclidean space by way of vectors. Continuity, differentiation and integration extend naturally to functions on these larger spaces and we study this extension. The main goal of this course is the integral theorems of vector analysis including the theorems of Green, Gauss and Stokes. These theorems can be viewed as the higher dimensional analogues of the fundamental theorem of calculus.

We will cover most of the sections of every chapter in the text book. I anticipate the chapters being covered in the following order: 1, 2, 4, 5, 6, 7, 8, 3.

Grades: Your grade in the class will be based on the following weights:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
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<tr>
<td>Midterm exams</td>
<td>25% each = 50% total</td>
</tr>
<tr>
<td>Final</td>
<td>35%</td>
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Homework: Homework will be due on Fridays at the beginning of class and returned the following week. Place your homework in the homework folders at the front of the room which are labeled by last name before class begins. Homework will not be pledged. Feel free to work together on homework assignments. However, the solutions you write up and turn in should be in your own words. Homework assignments will be posted on our Owlspace website.

Late homework will not be accepted for any reason.

In lieu of accepting any late homework, your lowest 2 homework scores will be dropped. Homework will be graded for correctness, clarity, and justification. For a problem to receive full credit, you must

- State the goal of the problem,
- Explain each step as necessary,
- Present the entire solution in a clean and clear format that is easy to follow.

Imagine that a fellow student will be reading your homework to study for an exam. If your work is not detailed enough to be useful, it is unlikely to earn much credit when graded.

Exams: There will be two midterms during the semester, one in February and one in March. The exact dates will be announced in class. There is also a final exam which will be given during the scheduled final exam time. If you have a legitimate schedule conflict with a midterm exam let me know as early as possible. You will be responsible for any material we cover in class.

Concerning the final: It is the policy of the mathematics department that no final may be given early to accommodate student travel plans. We will not know when the final in this course will be scheduled for some time. Therefore, if you should make plans to travel before the end of final exam period, and it turns out that the final for this course is after your scheduled departure date, you will have to choose between keeping your plans and receiving a zero for the final, or incurring the costs for changing your plans and taking the final at its scheduled time. Thanks for your understanding.

Disability Support: It is the policy of Rice University, as well as this instructor, that any student with a disability receive fair and equal treatment in this course. If you have a documented disability that requires academic adjustments or accommodations, please speak with me during the first two weeks of class. All discussions will remain confidential. Students with disabilities will also need to contact Disability Support Services in the Ley Student Center.