## Math 5C: Vector Calculus II UCSB, Spring 2010

## **Course Logistics**

Lecture: MWF 1:00-1:50 Harold Frank Hall 1104

Textbook: Vector Calculus, by Miroslav Lovrić

**TAs:** 1. Danny Rife drife (-at-) math.ucsb.edu Office hours TBA in section

> Jon Cass jcass (-at-) math.ucsb.edu Office hours: South Hall 6431M, Tuesday 9-10

## **Course Overview**

This course serves to cover a few topics in advanced calculus that are of great import for other disciplines. In particular, we'll cover the various integrals of vector calculus and the theorems relating them, infinite series, power series, Fourier series, and an introduction to harmonic functions. The relevant sections in the text are those from chapter 5 through the end of the book with a few sections skipped.

## Exams and Grading

There will be three midterms and a (cumulative) final exam. The exams will be held in the lecture room on the following dates:

Exam I: Friday, April 16

Exam II: Friday, May 7

Exam III: Friday, May 28

Final: Wednesday June 9, 4-7 PM

The exams will only be given at the listed times. With enough begging and pleading, I might give a makeup exam of comically intense difficulty; probably nobody wants that, so let's say **No makeup exams will be given**. Although homework will be assigned, it will not be graded. However, it is important for learning the material! To stress this, some of the problems will appear on exams; if you understand the homework, you'll do well on the exams. Furthermore, practice exams will be posted about a week before each exam. These practice exams are identical in format to the real ones; if they look too difficult, use homework to get up to speed. There will be brief weekly quizzes in discussion section; attempting a quiz gives half credit, so attending is always worthwhile. These quizzes are worth up to 10% bonus on your final grade.

Two Best Exams: 30% each

Final Exam: 40%

Quizzes: 10% bonus

The final course letter grade is some heretofore unknown monotonically nondecreasing function of the numeric course grade.