

# Calculus

**Credits:** 4

**Level:** Introductory

**Location:** Sci217, MWF 9.30–10.20am, Fall 2007

**Instructor:** Matt Ollis, [matt@marlboro.edu](mailto:matt@marlboro.edu)

**Website:** <http://cs.marlboro.edu/courses/fall2007/calculus/home>

## 1 Blurb

Calculus is one of the great products of human intellectual endeavour. It involves taming the infinite and the infinitesimal to develop techniques that have applications throughout the sciences and beyond. In this course we'll spend some time developing the theoretical underpinnings of Calculus. However, the emphasis will be on understanding the two main tools of Calculus—the derivative and the integral—and how they can be deployed to solve a wide variety of problems.

The course will approximately follow the first six chapters of the 5th edition of Stewart's *Single Variable Calculus* (Thomson Brooks-Cole 2005, ISBN: 0-534-49676-8).

## 2 Assignments and Grades

There will be a weekly homework assignment, due at 4pm each Friday. The questions to be handed in will be announced on the website and in class during the previous week. The assignments contribute 40% of your grade. Also available on the website will be a list of practice problems that need not be handed in but should be used to test your own understanding of the material (full solutions to most of these problems will be available on reserve in the library).

There will be three quizzes, one after each of Chapters 2, 4 and 6. Expect them in Weeks 4, 8 and 12. Your best two of the three quizzes contribute 10% each to your grade.. There will be a  $2\frac{1}{2}$  hour final exam during exam days. This contributes 40% to your grade.

Attendance, class participation and prompt submission of homework are expected. Your performance in these areas will influence your final result by up to one letter grade.

### **3 What to do now**

Read the section “A Preview Of Calculus” in Stewart (pp. 2–10) and then show up in class on Friday morning.

### **4 A couple of final comments**

You are expected to be aware of the college’s policy on academic integrity and to abide by it. It can be found on the college website, and is linked from the course website. Please come and talk to me if anything is unclear.

This is a four credit course. This means you should be expecting to spend in the region of twelve hours each week (including class time) working on it.