

# Math 20a: Calculus of several variables

## Fall 2008

**Instructor:** Prof. Ivan Horozov

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**Office:** Goldsmith 205

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**Class schedule:** Mon Wed Thu 9-10 Goldsmith 317

**Office hours:** Monday 10-11am, Wednesday 11-12pm Thursday 10-11am, and by appointment

**Textbook:** Multivariable calculus (5th edition) by James Stewart ( ISBN 0-534-39357-8 )

**Class email list:** I will use the class e-mail list to communicate with the entire class. Please be careful when replying to the message so that you don't inadvertently direct a message meant for just me to the whole class.

**Calculators and other technology:** There is no official requirement to use graphing calculators or computer algebra systems in the course. However, you are welcome to do so in doing homework. **You may not use a calculator on exams.**

### Syllabus

Chapter 11 Parametric equations and Polar coordinates

Chapter 13 Vector in 3-dimensional space, surfaces

Chapter 14 Vector functions (parametrized curves) in 3-space

Chapter 15 Functions of several variables, derivatives, linear approximation, maxima-minima

Chapter 16 Multiple integrals of functions of several variables, volume, surface area

Chapter 17 Vector fields, line and surface integrals

### Exams, homework and grading

There will be 1 in-class midterm exam and a 3-hour final exam.

Homework will be assigned and collected weekly and will be graded and returned to you. Also, the assignments will be e-mailed regularly via the class mailing list;

The schedule for these events can be found on the calendar for Math 20a on my web site.

### Grading formula:

Homework – 40%

Mid-term – 20%

Final exam – 40%

**Students with disabilities:** If you are student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in 20a, please see me as soon as possible. Note that accommodation for an exam or an assignment cannot be made retroactively.