

Math 1A Summer 2009 Syllabus

Bradley Froehle

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The entire contents of this syllabus, and lots more information, can be found on the course website: <http://math.berkeley.edu/~bfroehle/teaching/summer1a/>.

About the Instructor:

My name is Bradley Froehle and I will be the instructor for the course. I am entering my third year of graduate studies in the Berkeley math department. You can most easily contact me in my office hours (see below) or at bfroehle@math.berkeley.edu.

Office Hours:

My office is 1039 Evans and my office hours are tentatively scheduled as follows:

Monday: 12:30-1:30p Wednesday: 8:30-9:30a Thursday: 8:30-9:30a

About the Course:

An introduction to differential and integral calculus of functions of one variable, with applications. This course is intended for majors in engineering and the physical sciences.

The class will meet MTWTF 10:10-12:00p in 6 Evans. It is officially listed as one hour of lecture and one hour of discussion section. In practice this will not occur. Instead, I will lecture for a bit then we will work on some problems then I will lecture a bit more and then we will work on some more problems, etc. I do plan to have a 10 minute break in the middle of class.

The prerequisites for this course include three and one-half years of high school math, including trigonometry and analytic geometry, plus a satisfactory grade in one of the following: CEEB MAT test, an AP test, the UC/CSU math diagnostic test, or 32. Consult the mathematics department for details. Students with AP credit should consider choosing a course more advanced than 1A.

Textbook:

We will be using Stewart's *Single Variable Calculus (Early Transcendentals for UC Berkeley)*. The book is available at the bookstore. We will be covering Chapters 1–6, omitting any sections about using graphing calculators.

Grading:

There are four basic components to your grade in this class.

Homework (10%): There will be homework assigned every week and collected most Tuesdays and Thursdays at the start of class. On each assignment, several randomly selected problems will be graded for accuracy and the rest of the assignment will be graded for completeness. Your lowest two homework scores will be dropped. Homework will be posted on the course website at <http://math.berkeley.edu/~bfroehle/teaching/summer1a/homework.html>.

Quizzes (10%): On each day that the homework is due, you will be given a quiz. The quizzes will be based heavily on the homework that was turned in on that day. Your lowest two quiz scores will be dropped.

Midterms (40% total): There will be two one-hour midterms given in class. They will be based off the homework assignments and the examples I covered in class. You are allowed to make a page of notes limited to one side of one sheet of 8.5" by 11" paper to use on the exams but no other aids (books, calculators, etc...) are allowed on the exams. The midterm dates are as follows:

Midterm 1: Friday, July 10

Midterm 2: Friday, July 31

Each midterm will count for 20% of your final grade. The lower of the midterm scores (or a missed midterm) will be replaced by the score on the final exam if it is higher. Beware: the material becomes more difficult as we proceed through the course, so it is in your best interest to do well on each midterm.

Final Exam (40%): The final exam is on Friday, August 14 during our usual class time. It will be a cumulative exam, but there will be a slight emphasis on the material covered after the second midterm. You will be allowed to make a cheat sheet covering both sides of one sheet of 8.5" by 11" paper for the exam.

Previous grade distributions for Math 1A have been roughly 25% A's, 35% B's, 25% C's and 15% D's and F's.

Make Up Exams/Quizzes/Homework:

Missed quizzes, missed exams, and late homework all count as zero, even if you join the course late or have a legitimate reason for missing the test. *No make-up exams!*

Collaboration:

You are allowed, and in fact encouraged, to work on the homework problems together and form study groups for the class; *however*, you must write up your own homework solutions and there is no collaboration allowed on the quizzes, midterms, or final exam.

Important Deadlines:

Here are some deadlines regarding summer session registration:

Last day to cancel registration: June 19

Last day to drop *for refund*: June 26

Last day to change course grading option: July 31

Last day to drop *without refund*: July 31

Special Arrangements: If you have special testing arrangements through DSP, please talk to me as soon as possible. I will need at least a week in order to set up different arrangements for testing.

Some General Advice: Math is not a spectator sport. While it is important to come to lecture and try to absorb the material, there is simply no substitute for rolling up your sleeves and working through some problems.

We are condensing a 15 week course into 8 weeks. As a result, this course will move very quickly and falling behind even for a day can be very dangerous. While most of the course material is in the book, it is not my job to simply regurgitate what is in the textbook so I highly recommend keeping up with the lecture as well as reading the textbook.

If you do not understand something said in class or want an alternative perspective on the material, please, please, please come to office hours or drop me an e-mail.