

Math 118: Fundamental Principles of the Calculus
Fall 2012

Instructor: Quentin Berger - KAP 424C

Office Hours: Mon, Wed, Thu, 3:00 - 5:00 PM, or by appointment

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Home Page: <http://dornsife.usc.edu/quentin-berger>

Sections:	39423R	39427R
Lectures:	MWF: 9:00-9:50am in ZHS168	MWF: 11:00-11:50am in ZHS168
Teaching Assistant:	Kira Sushkoff-Nguyen sushkoff@usc.edu	Weisheng Xie weishenx@usc.edu
Discussions:	Tue,Thu: 8,9,10am in GFS112	Tue,Thu: 8,9,10am in GFS111

Course Description: The main goal of this course is to give an introduction to the fundamental principles, methods, and tools of Calculus: we will cover single variable calculus and touch upon multivariable calculus. The most interesting point is that we will illustrate these concepts with examples from economics and business.

Course Home Page: <http://dornsife.usc.edu/quentin-berger/teaching/>

Prerequisite: Math 117: Introduction to Mathematics for Business and Economics

Textbook:

1. Required: L.D. Hoffman and G.L. Bradley, Calculus for Business, Economics, and the Social and Life Sciences, Brief 11th ed., McGraw-Hill, New York, 2013.
2. Recommended: Students Solution Manual

Course Outline: The following outline is only intended to be a rough guide and the material covered might be altered slightly as the course progresses.

Sections 1.1 - 1.6: Functions, Graphs, and Limits	3 lectures
Sections 2.1 - 2.6: Differentiation	7 lectures
Sections 3.1, 3.2, 3.4, and 3.5: Additional Applications of the Derivative ..	8 lectures
Sections 4.1 - 4.4: Exponential and Logarithmic Functions	5 lectures
Sections 5.1 - 5.4: Integration	7 lectures
Section 6.1: Integration by Parts	2 lectures
Sections 7.1 - 7.3, and 7.6: Calculus of Several Variables	8 lectures

Grading:

Quizzes/Homework = 15% ; Midterm 1 = 25% ; Midterm 2= 25% ; Final Exam = 35%

Quizzes/Homework:

Homework problems will be posted on the Course Home page, and on Blackboard every week, on Tuesday. Each week, I will decide whether homework should be collected (most likely once every three weeks). If it is the case, I will notify if it on the Course webpage and on Blackboard on Tuesday, when assigning problems, and collect homework the following Monday, in class. Collaboration is allowed to solve problems, but please, no copy/paste!

A quiz will also be given each week on Tuesday, except for the first week of class, and for the weeks when homework is collected or when midterms are held. The quiz problems will be similar to homework problems assigned in the previous week. For example, the quiz problems on Sept 4 will be similar to homework problems assigned on Aug 27.

The two lowest quiz/homework grades will be dropped in the final grade calculations. All quizzes will be closed-book and no calculators are allowed or needed.

Midterm Exams:

There will be two midterm exams: Wednesday, October 10 (exam 1) and Wednesday, November 7 (exam 2). The time and place will be announced later (again, on the webpage and Blackboard). Both exams will be closed-book. No calculators are allowed or needed.

Final Exam:

The final exam will be common to all students who followed Math 118. It will be held for all of you at the time specified in the University Schedule of Classes: Wednesday, December 19, 2-4pm, location to be announced. The final exam will be closed-book and no calculators are allowed or needed.

Expectations:

Official announcements, homework assignments, quizzes and midterms solutions will be posted on the course website, and Blackboard. You are expected to check these sites on a regular basis. You are encouraged to read the appropriate sections of the textbook in advance and discuss the homework assignments with other students. If you have any question/remark on the lectures, you are welcome to discuss it with me during office hours, or to send me an email.

Behavior:

Common sense: preventing other students from concentrating and learning and instructor from teaching is prohibited. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office of Student Judicial Affairs for disciplinary action. No use of cell phone in class!

As far as academic integrity is concerned, collaboration, use of notes, or any electronic devices during quizzes, midterms or the final exam are strictly banned, and may also be subject to disciplinary action.

Sum up: Important days

Homework: Weekly on Tuesdays, collected once every 3 weeks the following Monday (notified);

Quizzes: Weekly on Tuesdays, except when homework is collected, and when midterms are held;

Midterm 1: Wednesday, October 10;

Midterm 2: Wednesday, November 7 ;

Drop Deadline: Friday, November 16;

Thanksgiving: November 21-24;

Final: Wednesday, December 19, 2:00-4:00pm.