

Calculus for the Life and Social Sciences - MA 121 – Section D1
Fall 2013 Semester
Lecture D1: Tu-Th 3:30PM - 5:00 PM

Discussion Sections:

D2:	Fri.	9:00 AM - 10:00 AM	MCS B31
D3:	Fri.	10:00 AM - 11:00 AM	MCS B31
D4:	Mon.	9:00 AM - 10:00 AM	MCS B31
D5:	Mon.	10:00 AM - 11:00 AM	MCS B31
D6:	Tue.	8:30 AM - 9:30 AM	MCS B31

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Office Hours: M 3-4, W 1-2

Teaching Fellow: TBA
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Office Hours: TBA

Text: **Calculus for Business, Economics, Life Sciences, and Social Sciences** (12th Ed.) – Barnett – Ziegler - Byleen (Pearson) 2011.

Remarks: This is a course on calculus and its applications. Calculus is the set of mathematical tools one uses to analyze how functions behave. Central to this is the notion of ‘rate of change’ which separates calculus from subjects like algebra, trigonometry, and analytic geometry where you first learn about functions, but not about their intrinsic properties. The methods we shall develop will help you take many ‘real world’ problems, from economics as well as the social and life sciences, and translate them into mathematical language so as to work out their solution.

Outline of concepts to be covered:

(Note: Some sections in a given chapter may be omitted due to time constraints.)

Ch.1	Linear Equations and Graphs
Ch.2	Functions and Graphs
Ch.3	Limits and the Derivative
Ch.4	Additional Derivative Topics
Ch.5	Graphing and Optimization
Ch.6	Integration

Exams: During the semester, there will be two, hour long exams, each worth 100 points. At the end of the semester, there will be a final exam worth 200 points. The schedule for these is at the bottom of the next page.

Homework: During the semester, I will generally assign homework on a daily basis. This homework is your primary means of learning the material, more so than even the lectures. Indeed, it is only by actually working out the solutions to problems that one really learns this material. Not doing homework is a *bad* idea and will result in a poor performance in the course. Additionally, there will be, throughout the course of the semester, 10 problem sets to turn in, each of which is worth 10 points for a total possible maximum of 100 points if you complete each perfectly. Each turn-in assignment will be due by the next class meeting after it was assigned. Late homework will **not** be accepted.

Grading: Your grade in the course will be based on the combined sum of your two exam grades together with the 10 turn in homework assignments as well as the final exam. As such, your grade will be based on the number of points earned out of a total possible maximum of 500 points.

Makeup Exams: Except in cases of illness and only then with a signed doctor's note, exams will be given **only** at scheduled times.

Discussion Sections: In addition to registering for the lecture section, each of you should be registered for **one** of the five discussion sections (F2-F6 above) that are held each week by my teaching fellow. The primary purpose of these discussion sections is for homework review and occasionally for the discussion of certain topics that can be covered independently of the current material being discussed in class. These discussion sections are a valuable resource, do not skip them!

Calculators: In this course, we shall not be using graphing calculators. From time to time, I may use a computer to demonstrate certain concepts. The use of graphing calculators during exams will **not** be permitted. However, the usage of non-graphing calculators is acceptable.

Cheating: I consider cheating to be a very serious offense and any cases of it will merit action by the University Academic Standards Committee.

Important Dates:

Substitute Monday on Tuesday October 15th
Holiday: Thursday November 28th (Thanksgiving)

Exam 1 - Thursday October 10
Exam 2 - Thursday November 14
Final - Tuesday December 17, 3 PM-5 PM

The last **lecture** will be Tuesday, December 10.

Web Page: <http://math.bu.edu/people/tkohl/teaching/current/121.html>