

BOSTON COLLEGE
DEPARTMENT OF ECONOMICS

EC311.01
Fall 1997
T, Th 1:30-3:00 PM
Gasson 204

Chong-en Bai
148 Carney, x3690
Office Hours: Wed. 3:00-5:00
or by appointment

MATHEMATICS FOR ECONOMISTS

This is an introductory course in mathematical economics. The goal is to learn the application of mathematical concepts to economics. Gaining logical reasoning ability is another objective of the course.

Textbook:

Sydsaeter, Knut, and Hammond, Peter J., Mathematics for Economic Analysis, Prentice Hall, 1995.

The textbook is required reading.

Course Requirements:

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| Midterm Exam (Thur., October 23, in class) | 35% |
| Final Exam (Fri., December 12, 4:00pm) | 45% |
| Problem Sets | 20% |

There will be an in-class midterm exam, a comprehensive final exam (dates above), and regular problem sets.

There will be no make-up exams except for special reasons, so pay close attention to the dates. Those who miss an exam without my prior approval will get no credit. Late problem set will get at most 70% of full credit.

Academic Integrity: I expect all students to do only their own work on exams. Discussion on problem sets is encouraged, but each student should write up and hand in his/her own answer to the problem sets.

Contents of the Course

1. Introduction
Ch 1.
2. Functions
Ch 2.
3. Special Functions: I
Ch 3.
4. Limits and Continuity
6.1, 6.2, 6.4 - 6.7, 7.1.
5. Differentiation
Ch 4 and 5, 7.2-7.6.
6. Special Functions: II
Ch 8.
7. Single Variable Optimization
Ch 9.
8. Linear Algebra
Ch 12 and 13.
9. Partial Differentiation
Ch 15 and 16.
10. Optimization in Two Variables
17.1 -17.8.
11. Constrained Optimization
Ch 18.