

Fundamental Methods of Mathematical Economics I, ECON 3410
Department of Economics, Brooklyn College
Course Syllabus, FALL 2015

Instructor: Thomas Hauner
TUES, THURS 9:30 – 10:45 AM
Room: Whitehead-305

Office: Whitehead-102
Office Hours: THURS 11:00 AM – 12:00 PM
Email: thauner@gradcenter.cuny.edu
Website: www.thauner.tk
Telephone: (620)-842-8637

Prerequisite: Economics (or Business) 2200

Required “Text”: Access to MyMathLab.com, courseID: hauner32721

Suggested Text: Barnett, Ziegler, Byleen. College Mathematics for Business, Economics, Life Sciences & Social Sciences. Pearson. 12th edition.

Students must be able to access MyMathLab.com (MML) for homework exercises, reviews, problem sets, and solutions to exercises (not just answers, like in the back of the book).

NOTE: MML access includes an eBook version of the textbook, therefore you do not need to buy book separately. Used book MML access codes will not be valid.

There exist three different means of acquiring MML access codes (and a copy of textbook):

1. MML access code + loose leaf version of textbook
ISBN: 9780321688231
2. MML access code + Hard cover textbook
ISBN: 9780321714527
3. **MML access code only (includes eBook access online)**
ISBN: 9780321199911

If you have trouble with a purchased access code, please try 247pearsoned.custhelp.com, 844-292-7015, or [@PearsonSupport](https://twitter.com/PearsonSupport) on Twitter.

Course Description:

This course will develop the mathematical tools necessary for further study in economics. The aim is to apply algebra, matrix algebra and differential calculus to economic analysis of stylized questions.

Course Schedule:

The schedule outlined below is tentative, very ambitious and subject to constant change.

<u>Class Dates</u>	<u>Topics</u>	<u>Reading</u>
Aug 27, Sep 1	Introduction, algebra review	Appendix A
Sep 3, Sep 8	Finish algebra review	Appendix A, Appendix B
Sep 10	No class (Monday schedule)	
Sep 15	No class	
Sep 17	Linear graphing	Chp 1.1 – 1.3
	<i>NOTE: "W" officially assigned for withdrawal</i>	
Sep 22	No class	
Sep 24, Sep 29	Elementary functions and graphs	Chp 2.1 – Chp 2.4
Oct 1, Oct 6	Exponential and logarithmic functions	Chp 2.5 – Chp 2.6
Oct 8	Midterm exam 1	
Oct 13, Oct 15	Systems of equations and matrices	Chp 4.1 – Chp 4.3
Oct 20, Oct 22	Gaussian elimination	Chp 4.4
Oct 27, Oct 29	Matrix Operations	Chp 4.5 -- Chp 4.6
Nov 3, Nov 5	Limits and continuity	Chp 10.1 – Chp 10.3
Nov 10, Nov 12	Derivatives and differentials	Chp 10.4 - Chp 10.7
Nov 17	Midterm exam 2	
Nov 19, Nov 24	Derivative topics	Chp 11.1 – Chp 11.2
Nov 26	No class (Thanksgiving recess)	
Dec 1, Dec 3	Special derivative rules	Chp 11.3 – Chp 11.4
Dec 8, Dec 10	Implicit differentiation, rates	Chp 11.5 – Chp 11.6
Dec 22	Final exam, 8:00 – 10:00 AM in Whitehead 305	

Grading:	Homework	20%
	Midterm exam (best of 2)	40%
	Final exam	40%

- There will be NO makeup exams, unless under a documented extraordinary circumstance.
- There will be 2 midterm exams. The lowest midterm grade will be dropped.
- The exams are *not* explicitly cumulative, however the material is naturally cumulative.
- *NOTE: A 100% on a midterm and final still results in a B- final grade! Homework counts!*

Grading Scale:

<i>Letter Grade</i>	<i>%</i>	<i>Letter Grade</i>	<i>%</i>
A	93-100	C	73-77
A-	90-92	C-	70-72
B+	88-89	D+	68-69
B	83-87	D	63-67
B-	80-82	D-	60-62
C+	78-79	F	below 60

Homework:

Homework will be assigned weekly. All homework assignments will be online on MML and thus require a valid student access code. The course ID is “hauner32721”.

Policies:

1. Students are expected to attend all classes and arrive on time. Attendance will be taken.
2. Silence all cell phones during lectures and exams.
3. Students may NOT leave the classroom during exams. Please use the restroom before an exam begins.
4. There are NO makeup exams.
5. Emails to the instructor must contain “ECON 3410” in the subject line.

Studying Tips:

1. Read the textbook, *before* class!
2. **Ask questions.** During lectures, during a scheduled office hour, or via email.
3. Re-read your class notes after each lecture.
4. Copy your notes after lectures and before each exam.
5. Practice, practice, practice. Do as many practice problems as you can, and make an honest effort before looking at the solution.
6. Utilize the Learning Center (1300 Boylan Hall) for tutoring and/or extra help.
7. Do additional problems, reviews, and practice tests in MML.
8. Use alternative resources, like Khan Academy videos online.