ECON 1088-003
Math Tool for Economists II

August 2016

Instructor: Li Yao

Course meeting: MWF 2:00-2:50 PM HLMS 141

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Office: ECON 309B

Office Hour: Wednesday 3:00-5:00 PM

Course Description: This class is the second of a two course sequence. It is a continuation of ECON 1078 which builds upon the basic foundation developed in that course. We will study derivatives, optimization, and integrals. These are Chapters 6,7,8,9, and 11 in the textbook. These tools will help you better understand the mathematical framework on which economics models are based and help prepare you for more advanced economics.

Prerequisite: ECON 1078 or equivalent.

Textbook: *Essential Mathematics for Economic Analysis*, 4th Edition. Authors: Knut Sydsaeter and Peter Hammond.

Course Policies:

- General:

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- Grades:

  - Distribution:

Attendance	5%
Assignments	5%
Midterm1	20%
Midterm2	20%
Midterm3	20%
Final Exam	30%

  - Letter Grade Cuto s:

>= 93.00	A	73.00 - 76.99	C
90.00 - 92.99	A-	70.00 - 72.99	C-
87.00 - 89.99	B+	67.00 - 69.99	D+
83.00 - 86.99	B	63.00 - 66.99	D
80.00 - 82.99	B-	60.00 - 62.99	D-
77.00 - 79.99	C+	<= 59.99	F

  - Curving: Midterms will be curved individually, and a curve may be applied to the overall course grade according to departmental standards.

- Homework:

  - The homework usually is assigned on Monday and due on next Friday. There will be 10 assignments, but I will only collect 5 of them. Please always be prepared to turn in your assignment on the due day.

  - Students are encouraged to work in groups on homework assignments. The assignments (while graded) are for your own practice and understanding of the material. If you dont fully understand the problems, you will struggle on the exams. You are welcome and encouraged to attend o ce hours to discuss homework problems.

  - No late assignments will be accepted under any circumstances.

- Exams:

  - Midterms: Midterm will be given during lecture time on the fixed dates in the schedule given

Additional Notes:

Students with Disabilities

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Center for Community N200, and http://www.Colorado.EDU/disabilityservices.

Tentative Sechdule

Week of	Course Material	Topics
Aug 22nd	6.1, 6.2, 6.3	Slopes, Tangents, Derivatives
Aug 29th	6.4, 6.5	Rates of Changes, Limits
Sept 5th	6.6, 6.7, 6.8	Sums, Products, Chain Rules
Sept 12th	6.9, 6.10, 6.11	Higher Order, Exponentials, Logs
Sept 23th	Review	**Exam(Sept 19th)**
Sept 26th	7.1, 7.2, 7.3	Implicit Di erentiation, Economic Uses
Oct 3rd	7.7, 7.8, 7.9	Elasticities, Continuity, Limits
Oct 10th	7.12, Review	L'Hopital's Rules, **Exam(Oct 14th)**
Oct 17th	8.1, 8.2, 8.3	Optimization
Oct 24th	8.6,8.7, 11.1	Local Extrema, Inflection, Functions of two variables
Oct 31st	11.2, 11.3, 11.6	Partial derivatives, More variables
Nov 7th	11.7, 11.8,	Economic application, Partial elasticity
Nov 14th	Review	**Exam(Nov 16th)**
Nov 21th	———-	Fall Break
Nov 28th	9.1, 9.2, 9.3	Integration, Properties
Dec 5th	9.4, 9.5, 9.6	Integration Rules
Final Week	——-	**FINAL (Dec 15th at 1:30pm)**