ECON 1088-004
Math Tool for Economists II

Spring 2018

Instructor: Li Yao

Course meeting: MWF 1:00-1:50 PM ECON 117

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Office: ECON 309B

Office Hour: Wednesday 2:00-4:00 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:

{ Class periods will be devoted to lectures and practice. Therefore, good attendance is key to succeeding in the course. Attendance will be randomly taken for 5 times over the semester. No absences will be excused unless you have a good reason.

Grades:

{ Distribution:

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

{ Letter Grade Cuto s:

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Additional Notes:

Students with Disabilities

Tentative Sechdule

Week of	Course Material	Topics
Week 1	6.1, 6.2, 6.3	Slopes, Tangents, Derivatives
Week 2	6.4, 6.5	Rates of Changes, Limits
Week 3	6.6, 6.7, 6.8	Sums, Products, Chain Rules
Week 4	6.9, 6.10, 6.11	Higher Order, Exponentials, Logs
Week 5	Review	**Exam 1**
Week 6	7.1, 7.2, 7.3	Implicit Di erentiation, Economic Uses
Week 7	7.7, 7.8, 7.9	Elasticities, Continuity, Limits
Week 8	7.12, Review	L'Hopital's Rules, **Exam 2**
Week 9	8.1, 8.2, 8.3	Optimization
Week 10	8.6, 8.7, 11.1	Local Extrema, Inf2r8oecion,