

# **ECON 1088-200 Syllabus**

## **Econ 1088: Math Tools for Economists II**

**Summer 2006**

**Instructor:** Lei Yang

**Class Hours:** MTWRF 11:00-12:35

**Class location:** ECON 119

**Office:** Econ 309 B

**Office Hours:** MW 12:35-2:00 p.m. and by appointment

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**Website:** <http://ucsu.colorado.edu/~llyang>

**The web page is the most important resource for this class. All notes, homework, answer keys are going to be posted on this site.**

### **Course Description:**

This course is a continuation of Econ 1078. Basically, it consists of two parts: derivatives and integrals (chapters 9-11 of the text). These tools will help you to better understand the mathematical framework on which economic models are based.

### **Prerequisite:**

them.

**Exam Schedule:**

	Date
Exam1(In-class)	July 21, 2006
Exam2(In-class)	July 28, 2006
Exam3(In-class)	August 4, 2006
Final Exam(In-class)	August 11, 2006

**Grading:**

Homework: 15 points

In-class Exam1: 25 points

In-class Exam2: 25 points

In-class Exam3: 25 points

Final Exam: 35 points

1) Each in-class midterm is worth 25 points (I will drop the lowest in-class midterm grade). There will be **no make-ups**.

2) The Final is **compulsory** and **cumulative**. The final is worth 35 points. It cannot be replaced with any other exam under any circumstances. You can only rearrange your final if you have **three or more** finals on the same day.

**Topics covered in the course include (Tentative Course Outline):**

***Chapter 9 The Derivative:***

9-1 Introduction to Limits

9-2 Continuity

9-3 The Derivative

9-4 Power Rule and Basic Differentiation Properties

9-5 Derivatives of Products and Quotients

9-6 General Power Rule (Chain Rule)

9-7 Marginal Analysis in Business and Economics

***Chapter 10 Graphing and Optimization:***

10-1 First Derivative and Graphs

10-2 Second Derivative and Graphs

10-3 Graphing Rational Functions

10-4 Absolute Maxima and Minima

10-5 Optimization

***Chapter 11 Additional Derivative Topics:***



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