

## Course Syllabus

ECO 3304.001 Techniques for Economic Research  
Spring 2013

### Instructor Contact Information

Minwook Ha    Hours: MW 1:00– 2:00 and by appointment    GR 2.816  
Minwook.ha@utdallas.edu

The Economics Department has a lab that you may visit without an appointment. Any of the graduate students in the lab will be able to help you with your problem sets.

### Course Pre-requisites, Co-requisites, and/or Other Restrictions

MATH 1314 and STAT 1342, or MATH 1314 and EPPS 3405, or other equivalents.

### Course Description

An introduction to the primary methods used in economic research. Topics include: information technology, computer software, mathematics, and statistics for economists. This course is designed to provide a foundation for all other upper level economics and finance courses.

### Student Learning Objectives/Outcomes

By the end of the course, you should be able to demonstrate some understanding of:

- Elementary concepts in calculus, probability theory, statistics, and empirical economic analysis
- How calculus, probability theory, and statistics can be used in economic analysis
- Economic research and sources of economic data

By the end of this course you should be able to think critically about economic models.

### Required Textbooks and Materials

Vijverberg, Murdoch, Hoch: *Basic Techniques for Economic Research*. This “book” is distributed free of charge.

### Suggested Course Materials

- A scientific calculator for exams and class exercises.
- A three-ring binder.
- Supplies to take sufficient notes for each class.
- Pencils and eraser.

### Readings & Academic Calendar

#### Exam Dates

First Exam: February 13

Second Exam: April 1

Third Exam: May 10

### Course Outline and Study Materials (Tentative)

*Part I. Working with Functions January 14 – February 11*

Chapters 1-5

*Part II. Optimization February 18 – March 6*

Chapters 6-8

*Part III. Probability March 18 - March 27*

Chapters 9-10

*Part IV. Probability Distributions April 3 – April 10*

Chapters 11 – 14

*Part V. Regression April 15 - May 1*

Chapters 15-18

### **Grading Policy**

Problem Sets:	30%
Exam 1:	20%
Exam 2:	20%
Exam 3	20%
Participation:	10%

Each exam, problem set, writing assignment, etc. will be graded on a 100 point scale (% correct). These will be combined using the weights above and then translated into final letter grades (A+ through F) as follows:

98 – 100	A+	88 – 89	B+	78 – 79	C+	68 – 69	D+	Below 60	F
93 – 97	A	83 – 87	B	73 – 77	C	63 – 67	D		
90 – 92	A-	80 – 82	B-	70 – 72	C-	60 – 62	D-		

I reserve the right to curve the grades in your favor. In other words the assignment from percent correct to letter grade will never be any more stringent than above but it may be more liberal so that, for example, the A-range may extend into the 80s, etc. For each grade, I will go over, in class, the relation between percent correct and letter grade.

### **Course & Instructor Policies**

There are no make-up exams. If you miss an exam, you can take an exam during the final exam period for this class.

### **Other Information**

<http://go.utdallas.edu/syllabus>