# **ECON 422 Econometrics I**

University of Maryland, College Park Spring 2016

Instructor: Youngjin Yun Office: TYD 4118L Email: yun@econ.umd.edu Time: Tuesday & Thursday / 9:30am – 10:45pm Classroom: TYD 2108 Office Hour: Thursday 1:00-3:00pm or by appointment

## **I.** Course Description

The goal of this course is to give students a fairly intuitive introduction to regression analysis of economic data. After completing the course students should be able to: 1) interpret regression results; 2) understand the assumptions underlying regression analysis and form judgment whether they hold in a given context; and 3) conduct simple empirical research using economic data.

#### Prerequisite

One course with a minimum grade of C- from (ECON325, ECON326); and one course with a minimum grade of C- from (STAT400, ECON321).

## **Required Text**

Jeffrey M. Wooldrige. *Introductory Econometrics: A Modern Approach*, 6<sup>th</sup> Edition, Southwest-Cengage Publishers. (Older editions will also work.)

# **Other Useful References**

Angrist, Joshua D., and Jörn-Steffen Pischke. *Mastering 'Metrics: The Path from Cause to Effect*. Princeton University Press Gujarati, Damodar N., Dawn Porter, *Basic Econometrics*. 5<sup>th</sup> Edition, McGraw-Hill Education

# **II. Grading**

You can earn total 100 points throughout the semester. 50 points from problem sets, 20 points from midterm, 30 points from final. On top of this, 10-15 bonus points will be given by two(at least) or more quizzes.

#### **Problem Sets**

Working on problem sets is an important part of this course. There will be five problem sets(roughly biweekly), and each of them accounts for 10 points, 10% of the total grade. They will be graded more by efforts than accuracy. Solution will be given for every problem set. It is your responsibility to check your answer and study, since similar questions will appear again in quizzes and exams which will be graded purely on accuracy. You are welcome to work in groups on the problem sets, but each student must hand in her own work. Problem sets handed in within 24 hours after deadline will be discounted by 50%. No work will be accepted 24+ hours past due.

#### Quizzes

There will be at least two quizzes on random days. Quizzes will also function as random class attendance check and they give you extra points. No make-up quiz will be given for any reason. The quiz questions will be 100% based on the latest problem set whose solution is released.

## Exams

There will be one midterm exam and one final exam. The final exam will be cumulative with emphasis on the materials covered after the midterm. Exams are closed-book, but a cheat sheet of a letter size paper will be allowed. Statistical tables will be provided if necessary.

**No make-up exam** will be given for either the midterm or the final, except in the cases of illness(supported by documentation of illness, signed by a health care professional), religious observance, participation in University activities at the request of the University authorities, or compelling circumstances beyond the student's control.

## **III. Other Information**

## **Course Website and Up-to-date Information**

Announcements and all of the course materials will be posted on the website. (elms.umd.edu)

# **Computing Software**

The statistical software package for this course is Stata. Some problem set questions may involve Stata exercises. To use Stata, students can visit the BSOS computer labs in the basement of LaFrek Hall during their office hours (http://www.oacs.umd.edu/ComputerLabServices.asp).

#### Academic Integrity

The University has approved a Code of Academic Integrity, available online at <u>http://www.president.umd.edu/policies/docs/III-100A.pdf</u>. It prohibits students from cheating on exams, plagiarizing, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures. The Code will be strictly enforced.

#### **Students with Disability**

Students with disabilities are required to inform the instructor of their needs at the beginning of the semester. The Disabilities Support Service (301-314-7682) will be consulted to determine what the appropriate academic accommodations will be.

# **IV. Tentative Course Schedule**

Week	Date	Lecture	Textbook Ch.
1	1/26, 28	Introduction	Chapter 1
2	2/2, 4	Statistics Review	Appendix B,C
3	2/9, 11	Simple Linear Regression: I	Chapter 2
4	2/16, 18	Simple Linear Regression: II	Chapter 2
5	2/23, 25	Multiple Linear Regression: Estimation I	Chapter 3
6	3/1, 3	Multiple Linear Regression: Estimation II	Chapter 3
7	3/8	Midterm review	
	3/10	Midterm(9:20 – 10:50am, in classroom)	
8		Spring Break	
9	3/22, 24	Multiple Linear Regression: Inference	Chapter 4
10	3/39, 31	OLS Asymtotics	Chapter 5
11	4/5, 7	Multiple Linear Regression: Further Issues	Chapter 6
12	4/12, 14	Dummy Variables	Chapter 7
13	4/19, 21	Heteroskedasticity	Chapter 8
14	4/26, 28	Introduction to Time Series	
15	5/3, 6	More on Time Series (If time allows)	
16	5/10	Final Review	
	5/13	<b>Final</b> (8:00 – 10:00am, venue: TBA)	