



Hankuk University of Foreign Studies

2020 Summer Session

ECON 400 Econometrics

Course Outline

Term: July 06-August 07, 2020

Class Hours: 12:00-13:50 (Monday through Friday)

Course Code: ECON 400

Instructor: Eric McDermott

Home Institution: University of Illinois

Office Hours: By Appointment

Email: emcd@illinois.edu

Credits: 4

Class Hours: This course will have 72 class hours, including 40 lecture hours, 10 lecturer office hours, 10-hour TA discussion sessions, 2-hour review sessions, 10-hour extra classes.

Course Description:

The purpose of this course is to help students learn how to use statistical and econometric methods in empirical economic applications. This course is oriented towards the practical applications of economic theory with econometric methods rather than the theoretical development of these subjects. This course emphasizes to analyze economic problems using statistical and econometric methods.

Course Objectives:



This course intends to train economics major (or other) students to be more analytically oriented. This will enhance their job market skills and/or provide better preparation for the graduate school to become professional economists.

This course is comprised of 4 sessions of 120 minutes per week for 5 weeks. This course is very intensive and covers course content equivalent to one regular semester class in U.S. colleges.

Prerequisites:

1. Principles of Microeconomics or equivalent
2. Introductory Statistics, Statistics for Economics, or equivalent

Required Textbook:

Introductory Econometrics: A Modern Approach by Jeffrey M. Wooldridge, online access via Cengage Learning

Grading & Evaluation:

Midterm	40%
Final Exam	40%
Homework	20%

Assignments and exams may be curved but the curve will not in any way reduce the grade of any student. All students are expected to attend and participate in all class sessions.

Plus/Minus Grade Cutoffs

A+ ≥ 97	B+ ≥ 87	C+ ≥ 77	D+ ≥ 67	60 > F
97 > A ≥ 93	87 > B ≥ 83	77 > C ≥ 73	67 > D ≥ 63	
93 > A- ≥ 90	83 > B- ≥ 80	73 > C- ≥ 70	63 > D- ≥ 60	

Computer Program:

We will use Stata for our class. Stata is relatively inexpensive but comprehensive statistical and econometrics program, and very easy to learn. Stata is widely used in academic research area and becomes increasingly popular in business area too. Stata runs on both Windows and Mac OS. **You need to purchase and install Stata program in your computer. To avoid any possible problems, I strongly recommend you do this while you are in your U.S. school before you come to AUIA summer program. You CANNOT take this course without Stata.**



- Go to www.stata.com → Purchase → Order Stata → select Country (United States) → select Students and New Purchase → select Stata product: Stata/IC 6 month license

Course Schedule

(*This schedule is tentative and subject to change depending on the pace of the class but I will notify all students of any changes).

Week 1: Econometrics and OLS

Session 1: Chapter 1: The Nature of Econometrics and Economic Data

Session 2: Chapter 2: The Simple Regression Model

Session 3: Introduction to Stata

Session 4: TA Review Session

Week 2: Multiple Regression Analysis

Session 5: Chapter 3: Multiple Regression Analysis: Estimation

Session 6: Chapter 4: Multiple Regression Analysis: Inference

Session 7: Chapter 5: Multiple Regression Analysis: OLS Asymptotics

Session 8: TA Review Session

Week 3: Violation of OLS Regression Assumptions

Session 9: Midterm Exam

Session 10: Chapter 7: Multiple Regression Analysis with Qualitative Information

Session 11: Chapter 8: Heteroskedasticity

Session 12: TA Review Session

Week 4: Regression Analysis with Time Series Data

Session 13: Chapter 9: More on Specification and Data Problems

Session 14: Chapter 10: Basic Regression Analysis with Time Series Data

Session 15: Chapter 12: Serial Correlation and Heteroskedasticity in Time Series Regressions

Session 16: TA Review Session

Week 5: Panel Data Regression Analysis

Session 17: Chapter 13: Panel Data Method: Pooling Cross Sections Across Time

Session 18: Semester Review

Session 19: Final Exam