Department of Economics

ECON 0004: APPLIED ECONOMICS
Term 2 (Spring 2023)[1]

LECTURER

Dr. Dunli Li (dunli.li@ucl.ac.uk)
Weekly student feedback and consultation hours will be held during the teaching term.

COURSE DESCRIPTION

This course is about the analysis of data within economics, and the interpretation of empirical results. More specifically the course aims are to:

- Provide an introduction to the application of economic theory to data
- develop an understanding of simple and commonly used econometric techniques
- Impart an ability to understand and interpret results both statistically and economically
- Introduce you to widely used software in applied economics (STATA)

OBJECTIVES OF THE COURSE

At the end of the course, students should be able to:

- Design simple econometric strategies to test relationships suggested by economic theory
- Understand the statistical theory behind linear regression techniques
- Test these relationships and estimate their empirical magnitude in the data using simple econometric packages
- Understand and interpret these results and their relevance to the related economic problem

GENERAL STRUCTURE OF THE COURSE

In this module,

- there will be 10 lectures, 4 practical lectures and 5 tutorials.
- formative assessment: you are required to hand in three tutorial assignments 2, 3 and 4. Tutorials 1 and 5 are not to be handed in.
- summative assessment: STATA empirical group project (20%) and final coursework assessment (80%)

[1] Updated on 02/05/2022.

TEXTBOOKS

There is no single textbook for the course. I would recommend the following introductory text on econometrics:

Jeffrey Wooldridge, "Introductory Econometrics: A modern approach", 7th edition **(**see the link to the textbook which you can access with the UCL single sign-on)

COURSE OUTLINE (more readings might be provided)

Lecture 1: Introduction to data, economic modelling and econometrics

Suggested readings:

- Wooldridge, Chapter 1

Lecture 2: The regression model and OLS estimator

Suggested readings:

- Wooldridge, Sections 2-1,2-2,2-3, 3-3b

Lecture 3: Properties of OLS estimator and hypothesis testing

Suggested readings:

- Wooldridge, Sections 2-3c, 2-5, 4-1, 4-2, 4-3

Lecture 4: Multiple regression and functional form issues

Suggested readings:

- Wooldridge, Sections 3-1, 3-2, 3-4, 3-5, 4-4, 6-2, 7-1, 7-2, 7-3, 7-4

Lecture 5: Causality, experimental and quasi-experimental evidence

Suggested readings:

- J. Angrist and J. S. Pischke (2008), "The experimental ideal", from *Mostly Harmless Econometrics: An Empiricist's Companion*
- Schweinhart, L.J. et al. (2005), "The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions and Frequently Asked Questions"
- Duflo, E. (2001) "Schooling and labour market consequences of school construction in Indonesia", *American Economic Review* 91: 795---813

Lecture 6: Consumer demand

Suggested readings:

- Deaton, A. and J. Mullbauer (1980), "Consumer demand", from *Economics and Consumer Behavior*

Lecture 7: Consumption and saving

Suggested readings:

- N. Gregory Mankiw (2015), "Understanding Consumer Behaviour", chapter 16, *Macroeconomics*

Lecture 8: Employment and Minimum Wages

Suggested readings:

- Card, D. and A. Krueger (1994), "Minimum wages and employment: A case study of the fast---food industry in New Jersey and Pennsylvania", *American Economic Review*, Vol. 84:4

Lecture 9: Labour supply

Suggested readings:

- Labour Economics, 8th edition, by George J. Borjas, Chapter 2 "Labour Supply"

Lecture 10: Review