ECON 0004: APPLIED ECONOMICS
Term 2 (Spring 2023)\(^1\)

LECTURER
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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:

(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:

Lecture 6: Consumer demand
Suggested readings:

**Lecture 7:** Consumption and saving

*Suggested readings:*


**Lecture 8:** Employment and Minimum Wages

*Suggested readings:*


**Lecture 9:** Labour supply

*Suggested readings:*

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

**Lecture 10:** Review