ECON0020

Quantitative Economics and Econometrics Syllabus

LECTURER: Dennis Kristensen

PREREQUISITES
ECON0002: Economics; ECON0005: Statistical Methods in Economics; ECON0004: Applied Economics (Or equivalents).

COURSE DESCRIPTION
Aims: To provide students with a thorough understanding of core techniques of quantitative economics and econometrics and their application to test economic theories and measure magnitudes relevant for economic policy and other decisions, as a foundation for subsequent study of quantitative topics within the degree programme, and as one of the key elements in the professional training of an economist.

Suitable for: This module is open to Term 1 Affiliates only. Full year students should see ECON0019. Students may take ECON0020 with the permission of the Affiliate Student Tutor but are advised to check with their home university that the single term option will fulfill the requirements of their home degree program.

Assumed knowledge: Students should know the basic probability and statistics: probability models, conditional probability, independence, Bayes rule; discrete and continuous random variables; sampling and sampling distributions, point and interval estimation and hypothesis testing.

OBJECTIVES

At the end of Term 1, students should:

Understand the main techniques (most importantly, OLS regression) of quantitative economics and econometrics, including their theoretical properties.

Understand how these techniques can be applied to test economic theories and measure economic magnitudes.
Gained practical experience through empirical applications of the techniques using the software package STATA.

ASSESSMENT

Affiliate students typically have to complete a 2 hour written examination at the end of Term 1. Their final marks will be solely based on this exam.

READING LIST

The course will be based on the following textbook: Jeffrey Wooldridge: "Introductory Econometrics".

There are multiple editions of this textbook. You can, for example, obtain the EMEA edition which is an inexpensive version of Wooldridge's original textbook which does not have technical appendices.

Alternatively, you can use any of Editions 4–7 of the full version of Wooldridge's textbook. They cover the same material as the EMEA edition but come with ad-
additional material, including technical appendices.

The latest full edition can be accessed for free at
kttps://bibliu.com/app/#/view/booŁs/9781337671330/ when using your UCL credentials to log in.