

University of Nottingham Malaysia Campus

**School of Economics**

**Quantitative Economics III**

Module Outline Autumn 2011

Module Code	L12306
Credits	15

Lecturer	Dr. Jimmy Teng (DB05) <a href="mailto:Jimmy.Teng@nottingham.edu.my">Jimmy.Teng@nottingham.edu.my</a>
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Tutor	Dr. Camilla Jensen <a href="mailto:Camilla.Jensen@nottingham.edu.my">Camilla.Jensen@nottingham.edu.my</a>
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Lectures	14
Computer Classes	4
Tutorials	4

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## Introduction

This module is an introduction to the theory and practice of econometric methods, focusing on regression analysis and its application to economic situations. The module will pay particular attention to the principles of estimation and inference in the multiple regression model, and will rely on illustrations and intuition to develop understanding of the techniques and their interpretation. Students deepen their understanding of the material covered in class via a series of 'hands-on' computer classes using specialist econometric software (*EViews 7*) and a set of tutorials that will review worked examples that is set as homework.

The module builds on the material developed in Quantitative Economics II, which it elaborates and extends, principally in relation to the multiple regression model.

## Module Aims and Learning Outcomes

The main aims of this module are to:

- introduce students to the principles, uses and interpretation of regression analysis most commonly employed in applied economics using cross-section data;
- provide students with sufficient knowledge of regression methods to critically evaluate and interpret published empirical research;
- enable students to undertake empirical analyses using specialist econometric software

On completion of this module students should be able to:

- ✓ demonstrate understanding of assumptions, methods and data used in regression;
- ✓ interpret and manipulate the coefficients of multiple regressions
- ✓ interpret performance criteria;
- ✓ conduct hypothesis testing on the coefficients of regression equations;
- ✓ perform econometric analyses of their own using economic data.

## Module Content and the Adopted Textbook

This module, like Quantitative Economics IV that follows in the second semester, adopts a single textbook, *Introductory Econometrics* (4<sup>th</sup> edition) by Jeffrey Wooldridge. QEIII will cover the first six chapters of this textbook, which represent the foundations of regression analysis. Later chapters are covered in QEIV. Lectures, tutorials and computer classes are based on the material in the book and will use exercises, data and illustrations from it. Although there are multiple copies of this textbook in the library, it is recommended that you purchase it, either individually or with a friend. Note however that any introductory textbook of econometrics will cover the material reviewed in this module. Wooldridge is available from University Bookshop or online. Additional resources, such as exercises, and additional explanations that illustrate many of the concepts reviewed in the textbook are available for free download on the textbook **companion website** <http://edu.cengage.co.uk/>.

Wooldridge, J. (2009) *Introductory Econometrics*, Fourth Edition, Cengage Learning.

## Lectures

There are 14 lectures which will cover the principles of regression analysis, covering the first six chapters of Wooldridge including topics such as estimation and inference in the simple and multiple regression model; functional form; reporting regression results; testing linear restrictions; asymptotic principles and properties.

All lecture slides will be available on WebCT ahead of lectures. It is recommended that you print these out before each lecture so you can annotate them during class. However, you should not treat them as a substitute for attendance at lectures. The venue for the lectures is BlockB-BA 18.

## Computer Classes

The module also comprises four computer classes in which students are introduced to state of the art the specialist econometrics software, *Eviews 7*. The exercises that we will go through in the computer lab are available on *WebCT* and will be uploaded at the start of each class and annotated during class. *Eviews* is available from any networked computer on the University (student versions of it are available at modest cost from the publisher) for to allow you to work through the exercises in your own time after each class or as part of your revision. Computer classes are scheduled for the last four weeks of term.

## Tutorials

There are also four tutorials during the term, the first three review answers to assignments that are available for download on *WebCT* ; the final tutorial will review a previous examination paper. You are required to complete all assignments ahead of tutorials so that you can use them when answering questions in the tutorials. Assignments should be viewed as a means of assessing progress and familiarisation with examination questions. Assignment marks do not count towards your final mark, but completion is a compulsory part of the module. Failure to complete assignments may prevent you from proceeding in to the final year.

## Schedule of Classes

The timetable of classes is given below. Lecturers begin in the week beginning 26<sup>th</sup> September 2011.

Week	2	3	4	5	6	7	8	9	10	11	12	13
Beginning	26/9	03/10	10/10	17/10	24/10	31/10	07/11	14/11	21/11	28/12	05/12	12/12
lectures	1	2,3	4,5	6,7	8	9	10	11	12	13	14	
Computer classes						1		2		3		4
tutorials					1		2		3		4	

## Assessment

The module is assessed by a two-hour written examination. See *WebCT* for sample exam papers.