

BSM937 APPLIED ECONOMETRICS

Academic Year 2012/13

Number of Aston Credits: 15

Number of ECTS Credits: 7.5

Staff Member Responsible for the Module:

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Availability: Please see office hours and how to book an appointment in the blackboard module area,

Or contact the Group Administrator, Ms. Lynne Woolley, SW3038

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Pre-requisites for the Module:

Basic quantitative skills such as Mathematics and Statistics.

Mode of Attendance:

On campus

Module Objectives and Learning Outcomes:

The aims of the module are to provide an introduction to the key econometric techniques that commonly used in the quantitative analysis of Economics, Business and management.

On successful completion of this module students will be able to:

- > Understand important econometric concepts and intuitions of some key econometric theory
- > Generate and test hypotheses, use alternative statistical models and draw inferences in applied quantitative analyses
- > Be familiar with data management skills and analysis tools using Stata
- > Carry out an econometric analysis independently and write an project

Module Content:

Fundamentals

- Topic 1:** Data management, Conducting a quantitative research project, and Regression basics
- Topic 2:** Simple Regression and OLS: concept, solution and property in practice; practical guide on conducting a quantitative analysis and writing a project
- Topic 3:** Multiple Regressions: solution, examples and issues

Further Topics

- Topic 4:** Freeing Up the Classical Assumptions: Heteroskedasticity, multicollinearity, endogeneity and IV approach
- Topic 5:** Selected Topics: Panel data models, Limited independent variable modeling

Coursework Presentation and Revision Examination

International Dimensions:

This module addresses international dimensions through direct examples in both lectures and computer sessions.

Corporate Connections:

The module aims to teach students important tools of quantitative analysis which is essential for corporate management. The module includes material relevant to business through examples and cases studies employed in both lectures and computer lab sessions.

Contribution of Research:

The module allows the student to learn about a variety of research techniques like the use of secondary sources and the analysis of secondary data. It allows student to learn basic econometric theory and skills that are essential for successive research in the area of economics and international business studies.

Ethics, Responsibility and Sustainability:

If the coursework project is conducted based on interview or surveys, or relate to sensitive issues, an ethical approval needs to be obtained beforehand.

Method of Teaching:

Combination of lectures using ample practical examples, weekly hands-on exercises, individual preparation of specific topics and case studies on which each makes class presentations and group workshop, revision tutorials and introduction to websites. This combination of teaching and learning methods is used to develop the knowledge and demonstrate and reinforce its relevance and applicability.

Method of Assessment:

A course project (50%) of no more than 5000 words due on Monday, the 22nd of April, 2013, 12pm; 2.5 hour closed book examination (50%) in Week 10.

An oral presentation is organized in Week 7 when everyone is given an opportunity to present the progress of the coursework development and individual feedback will be given.

Learning Hours:

Contact hours (including computer lab session)	30
Directed learning (including exercises, course preparation and revision)	50
Private learning and using Stata	35
Coursework preparation	32.5
Assessment	2.5
Total	150

Note:

Please note that the attendance to both lectures and computer sessions is required for this module. Absence needs to be explained in a written form.

The following essential and recommended readings are subject to change. Students should not therefore purchase textbooks prior to commencing their course. If students wish to undertake background reading before starting the course, many of the chapters/readings are available in electronic form via on-line library catalogues and other resources.

Essential Reading:

There will not be any core reading or essential reading for this module, in the sense that the students will not be required to buy any book. If you wish to buy one, it is a good idea to borrow a copy from the library to read some chapters first, in order to pick one that is suitable for your level. The teaching and learning of this module will be focused on my lecture notes. I list a few recommended books and resources for your reference below.

For the teaching and learning of this module, the most useful book is:
Wooldridge, Jeffrey M (2006), *Introductory Econometrics – A Modern Approach*, Michigan State University, South Western

If you have forgotten about the basics or wish to review some basics:
Hill R. Carter, Griffiths, William E and Judge George G. (2001), *Undergraduate Econometrics*, 2nd Edition, John Wiley & Sons, Inc. (Very basic)

A general handbook for Econometrics:
Green W Bill (2005), *Econometric analysis*, 5th Edition, Prentice Hall. (Advanced read)

For using Stata:
Adkins, Lee C. and Hill, R. Carter (2008), *Using Stata for Principles of Econometrics*, 3rd Ed, John Wiley & Sons, Inc.