

**EC 3062  
Econometrics****MODULE INFORMATION**

Academic Year:	20011--20012	Lectures:	20
Year:	2	Classes:	9
Credits:	15	Private Study:	80
Semester:	1	Computer Sessions:	9
		Total Hours:	118

Prerequisites: Students should have a good working knowledge of basic probability and distribution theory, simple matrix algebra and the rudiments of statistical inference.

**MODULE LECTURER**

Lecturer: Stephen Pollock                      Room: Astley Clarke 108  
Telephone: 0116 252 5368  
Office Hours: Wednesday 10.0--11.0, 15.0--16.0      Email: [d.s.g.pollock@le.ac.uk](mailto:d.s.g.pollock@le.ac.uk)

**MODULE AIMS**

*Main Purpose:* To introduce the students to the theory and practice of modern econometrics and to provide some experience in using econometric computer software.

**MODULE DELIVERY**

*Lectures:* Wednesdays 11.0--13.00 Bennett Lecture Theatre 5

*Classes:* Thursday 9.0--10.0 and 11.0--12.0, Bennett First Floor CL F75b

## **ASSESSMENT**

A proportion of the marks, with a 20% weighting, will be awarded for the answers to any one of the exercise sheets that are to be found on the website. The answers must be delivered to the office of the Economics Department before the end of the term. The main assessment will be by a two-hour exam at the end of the semester (in January).

## **READING LIST**

The principal text for the course will be found at the following web address

<http://www.le.ac.uk/users/dsgp1/>

There are numerous texts that are appropriate to the course; and it is recommended that the students should study some of them in parallel with the text that is available on the website. The texts listed below should be accessible the students:

Stock, J.H., and M.W. Watson, (2007), Introduction to Econometrics, 2nd Edition. Pearson Addison-Wesley.

Asteriou D., and S.G. Hall, (2007), Applied Econometrics: A Modern Approach. Palgrave Macmillan.

Verbeek, M., (2008) A Guide to Modern Econometrics, 3rd Edition. John Wiley and Son

Davidson. R., and J.G. MacKinnon, (2004) Econometric Theory and Methods. Oxford University Press (New York)

## **WHERE TO GO FOR HELP**

Students are encouraged to ask questions in the lectures and seminars. Problems relating to the course can be discussed during the lecturer's office hours.

## **MODULE CONTENTS**

The lectures will correspond to the chapters of the text that is available on the website. These are as follows:

1. Conditional Expectations and Regression Analysis
2. Regression Analysis and Matrix Algebra
- 3 Univariate Time-Series Analysis
4. Forecasting with ARMA Models
5. Hypothesis Testing

6. Panel Data and the Analysis of Covariance
7. Limited Dependent Variables
8. Dynamic Regressions
9. Trends and Filters

## **EXERCISES/PROBLEM SHEETS**

Available from the website at: <http://www.le.ac.uk/users/dsgp1/>

## **COMPUTER PROGRAMS**

The computer program that will be used predominantly in the classes is *Gretl: Gnu Regression, Econometrics and Time-series Library*. This is a cross-platform software package for econometric analysis that is freely available at the address <http://gretl.sourceforge.net/>

For the specialised purposes of time series analysis, the programs *MESOSAUR*, *IDEOLOG* and *TSERIES* are available for downloading from the web site.

Another time-series package that is freely available is *ASTSA*, which is to be found at the address <http://www.stat.pitt.edu/stoffer/tsa2/>

The manuals or the brief instructions for the programs are provided on the web site of the course.