Course Objectives

The aim of the course is to help you develop a working knowledge of econometrics and its applications to real-world economic data. The course will cover a range of topics from simple and multivariate regression methods, instrumental variables, simultaneous equation models, limited dependent variable models and maximum likelihood methods. By the end of the session you will be able to read and understand most analyses performed by other econometricians. More importantly, you will be able to do your own empirical research.

Textbook

The required textbook for the course is:


This book is denoted by “W” in the lecture outline below.

The following companion book for the text may be useful to refer to throughout the session:


Both of these books are currently in stock at the UNSW bookstore, and multiple copies of each are held in Open Reserve in the Main Library.

The following books provide an alternative presentation of similar material:


Further readings will be indicated during the lectures. Students are responsible for all the assigned readings.

Software

Throughout the session we will regularly apply the methods covered in the lectures to the analysis of economic issues using real-world data. The econometric software recommended for these applications is *SHAZAM* - the School has a site license for this package and you will be able to purchase a CD with this software to install on your own PC ($10 from the School of Economics Office: JG223). *SHAZAM* is also available in the Faculty computing labs, and *SHAZAM* can be run over the internet (follow the link from the course WebCT page or go directly to the *SHAZAM* web site http://shazam.econ.ubc.ca).

You may find it useful to refer to the software manual:


It is not necessary to buy this manual (there are copies in the library) as you will be provided with information about using *SHAZAM* during class plus there is substantial on-line documentation in *SHAZAM* (and at the *SHAZAM* homepage).
There are a range of very good, alternative statistical computing package that you may be familiar with, or would like to learn. These packages include STATA, Gauss, EViews, RATS, S-Plus and SAS. You are welcome to use an alternative computing package for the tutorial assignments (though first check it with the lecturer).

**Assessment**

Assessment will be based on tutorial work, a mid-session examination and an end-of-session examination, with the following weights:

- Tutorial Assignments 20%
- Mid-Session Examination 20%
- End-of-Session Examinations 60%

**Tutorials**

An important purpose of tutorials is to give you the opportunity to raise questions about difficult topics or problems encountered in studying the course -you should come prepared with questions of your own. To facilitate discussion a set of exercises will be assigned each week. You should attempt all of them. You will not gain a proper understanding of the topics unless you master the assignments. The tutorial exercises also give a good indication of the kind of questions that can be expected in examinations. Many of the exercises will require you to complete computing tasks.

Answers to tutorial assignments may be collected without warning throughout the session! Four tutorial assignments (5% weight on each) will count towards 20% of your total mark for the course. Each week you should come with prepared answers to the tutorial questions in case the assignment is collected.

**Mid-Session Examination**

There will be a 90 minute mid-session examination on Monday 19/09/05 (Week 9 of session). This examination will be held during the regular lecture time. Subject material from weeks 1-8 inclusive will be examined.

**Exceptional Circumstances**

If you believe that your performance in the subject, whether during session or in an examination, has been adversely affected by illness or for any other reason, you should notify the Registrar and ask for special consideration in the determination of your results.

Requests for special consideration must be accompanied by appropriate documentation. They should be made as soon as practicable after the problem occurs. Applications made more than seven days after the final examination in a subject will only be considered in exceptional circumstances. Special consideration request forms and details of required documentation are available from the Student Centre in the Chancellery.

Students should be aware that lodgement of a request for special consideration does not guarantee the granting of a supplementary examination. This will only be recommended by the School of Economics for students whose final examination performance has been affected by serious illness or other extraordinary circumstances which can be documented AND if there is evidence on the basis of performance during the session that the student has made satisfactory progress.

**Consultation**

Students are encouraged to ask questions related to this course during lectures and tutorials. The lecturer will have regular office hours (these will be announced in the first lecture and listed on the course web page) for further consultations. Other consultation times are possible by appointment.
Academic Misconduct

Students are reminded that the University regards academic misconduct as a very serious matter. Students found guilty of academic misconduct are usually excluded from the University for two years. Because of the circumstances of individual cases the period of exclusion can range from one session to permanent exclusion from the University.

The following are some of the actions which have resulted in students being found guilty of academic misconduct in recent years:

1. Taking unauthorised materials into examinations.
2. Submitting work for assessment knowing it to be the work of another person.
3. Improperly obtaining prior knowledge of an examination and using that knowledge in the examination.
4. Failing to acknowledge the source of material in an assignment.

Students should refer to the 2005 Student Guide published by the University of New South Wales. This gives further details on behaviour which is unacceptable, and penalties incurred for inappropriate conduct.
Lecture Outline

Table 1. Guide to Lecture Topics

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25/07/05</td>
<td>Introduction, The Simple Regression Model</td>
<td>W: 1, 2</td>
</tr>
<tr>
<td>2</td>
<td>01/08/05</td>
<td>Multiple Regression Analysis: Estimation</td>
<td>W: 3</td>
</tr>
<tr>
<td>3</td>
<td>08/08/05</td>
<td>Multiple Regression Analysis: Inference</td>
<td>W: 4</td>
</tr>
<tr>
<td>4</td>
<td>15/08/05</td>
<td>Asymptotics and Further Issues</td>
<td>W: 5, 6</td>
</tr>
<tr>
<td>5</td>
<td>22/08/05</td>
<td>Qualitative Information</td>
<td>W: 7</td>
</tr>
<tr>
<td>6</td>
<td>29/08/05</td>
<td>Heteroskedasticity</td>
<td>W: 8, 9</td>
</tr>
<tr>
<td>7</td>
<td>05/09/05</td>
<td>Regression analysis of time series data</td>
<td>W: 10</td>
</tr>
<tr>
<td>8</td>
<td>12/09/05</td>
<td>Further issues with time series</td>
<td>W: 11</td>
</tr>
<tr>
<td>9</td>
<td>19/09/05</td>
<td>MID-SESSION EXAM</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>26/09/05</td>
<td>Mid-session break</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>03/10/05</td>
<td>Public Holiday</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>10/10/05</td>
<td>Panel Data</td>
<td>W: 13</td>
</tr>
<tr>
<td>13</td>
<td>17/10/05</td>
<td>Instrumental Variables, Simultaneous Equation Models</td>
<td>W: 15, 16</td>
</tr>
<tr>
<td>14</td>
<td>24/10/05</td>
<td>Limited Dependent Variable Models, Maximum Likelihood Estimation</td>
<td>W: 17</td>
</tr>
<tr>
<td>15</td>
<td>31/10/05</td>
<td>Review</td>
<td></td>
</tr>
</tbody>
</table>