ECON2206
Introductory Econometrics

Course Outline

Semester 2, 2015

Part A: Course-Specific Information

Students are also expected to have read and be familiar with Part B Supplement to All Undergraduate Course Outlines. This contains Policies on Student Responsibilities and Support, Including Special Consideration, Plagiarism and Key Dates. It also contains the BUSINESS SCHOOL PROGRAM LEARNING GOALS.
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1 STAFF CONTACT DETAILS
Lecturer-in-charge: Dr Minxian Yang
Room: ASB452
Phone No: 9385 3353
Email: m.yang@unsw.edu.au
Consultation Times: TBA
Tutors: TBA

1.1 Communications with staff
You should feel free to contact your lecturer about any academic matter. However, for efficiency, all enquiries about the subject material should be made at lectures or tutorials or during consultation time. Discussion of course subject material will not be entered into via lengthy emails.

1.2 PASS
The PASS scheme introduced in the UNSW Business School to help undergraduates and has previously only been available in the School of Economics to first year students. After many requests to extend PASS to second year, this year we are offering PASS in Introductory Econometrics for the first time so that you can gain extra support in this course. PASS will offer study groups, led by experienced third and fourth year students. Students enrolled in this course can join them on a voluntary basis with no need to book. Many students have found PASS helpful as it provides both extra problems for practice and discussion in a group setting and advice from good students who have already completed the course. It also provides an informal atmosphere with the opportunity to ask any questions that students may be hesitant to ask staff. The PASS sessions will start in Week 3 and the timetable will be available from the Course Website in Week 2.

2 COURSE DETAILS

2.1 Teaching Times and Locations
Lecture (Weeks 1-12): Wednesday 12:00pm – 2:00pm, Physics Theatre K14. Students should print out the relevant lecture slides before attending the lectures.

Tutorials (Weeks 2-13): See online UNSW timetable
Students should read relevant materials and attempt the tutorial questions before attending the tutorial classes.

2.2 Units of Credit
The course is worth 6 units of credit. There is no parallel teaching in this course.

2.3 Summary of Course
This course introduces the use of econometrics to explore and estimate economic relationships using linear regression models. Extensions covering statistical complications such as heteroskedasticity, data issues such as proxy variables, and regression with time series data will also be included. Practical computer applications feature throughout. The course will give students a basic understanding of methods required to model the inter-relationship between variables and prepare them for further studies of econometric methods.
2.4 Aim and Relationship to Other Courses
This course (ECON2206) provides an introduction to econometrics, which involves the application of statistical methods in the analysis of economic data. ECON2206 is a prerequisite for ECON3208 (Econometric Methods) and ECON3209 (Statistics for Econometrics).

2.5 Presumed knowledge
ECON1202 Quantitative Analysis and ECON1203 Business & Economics Statistics (BES), or equivalent courses, are prerequisites for ECON2206. The material covered in these courses is treated as assumed knowledge.

2.6 Student Learning Outcomes
The Course Learning Outcomes are what you should be able to DO by the end of this course if you participate fully in learning activities and successfully complete the assessment items.

The Learning Outcomes in this course also help you to achieve some of the overall Program Learning Goals and Outcomes for all undergraduate coursework students in the Business School. Program Learning Goals are what we want you to BE or HAVE by the time you successfully complete your degree. You demonstrate this by achieving specific Program Learning Outcomes - what you are able to DO by the end of your degree.

For more information on the Undergraduate Program Learning Goals and Outcomes, see Part B of the course outline.

The following table shows how your Course Learning Outcomes relate to the overall Program Learning Goals and Outcomes, and indicates where these are assessed:

<table>
<thead>
<tr>
<th>Program Learning Goals and Outcomes</th>
<th>Course Learning Outcomes</th>
<th>Course Assessment Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course helps you to achieve the following learning goals</td>
<td>On successful completion of the course, you should be able to:</td>
<td>This learning outcome will be assessed in the following items:</td>
</tr>
</tbody>
</table>
| 1 Knowledge                          | List and explain the assumptions underlying the regression models. Use STATA to analyse data. Present regression analysis results. | • Tutorial assignments  
• Course project  
• Final Exam |
| 2 Critical thinking and problem solving | Use the standard models to interpret and analyse real data in economics, finance and other social sciences | • Tutorial assignments  
• Course project  
• Final Exam |
| 3a Written communication            | Construct written work which is logically and professionally presented. | • Tutorial assignments  
• Final Exam |
| 3b Oral communication               | Communicate ideas in a succinct and clear manner. | Not specifically assessed. |
| 4 Teamwork                          | Work collaboratively to complete a task. | • Course project |
3 LEARNING AND TEACHING ACTIVITIES

3.1 Approach to Learning and Teaching in the Course
The philosophy underpinning this course and its Teaching and Learning Strategies are based on Guidelines on Learning that Inform Teaching at UNSW. These guidelines may be viewed at: www.guidelinesonlearning.unsw.edu.au. Specifically, the lectures, tutorials and assessment have been designed to appropriately challenge students and support the achievement of the desired learning outcomes. A climate of inquiry and dialogue is encouraged between students and teachers and among students (in and out of class). The lecturers and tutors aim to provide meaningful and timely feedback to students to improve learning outcome.

3.2 Learning Activities and Teaching Strategies
The examinable content of the course is defined by the references given in the Lecture Schedule, the content of Lectures, and the content of the Tutorial Program.

Lectures
The purpose of lectures is to provide a logical structure for the topics that make up the course; to emphasize the important concepts and methods of each topic; and to provide relevant examples to which the concepts and methods are applied.

Tutorials
Tutorials begin in Week 2 and are an integral part of the subject. Tutorial presentations, discussions, solutions to problems are designed to help students deepen their understanding and practise learnt material.

Out-of-Class Study
While students may have preferred individual learning strategies, it is important to note that most learning will be achieved outside of class time. Lectures can only provide a structure to assist your study, and tutorial time is limited.

An “ideal” strategy (on which the provision of the course materials is based) might include:

1. Read the relevant chapter(s) of the text and relevant lecture slides before the lecture. This will give you a general idea of the topic area.
2. Attend lectures. Here the context of the topic in the course and the important elements of the topic are identified. The relevance of the topic should be explained.
3. Attempt tutorial questions before attending the tutorial class. This helps you identify issues that can be clarified or resolved in the tutorial class.

The course project, assignments and many tutorial questions require econometrics software. STATA is recommended for this course. STATA is available in ABS computer...
labs. We have booked the computer labs for practice, tutorial exercises and the Course Project. The details will soon be available on Moodle.

4 ASSESSMENT

4.1 Formal Requirements
To be eligible for a passing grade in this course, students must:
   a) Achieve a composite mark of at least 50 per cent;
   AND
   b) Satisfactorily complete all assessment tasks or submit appropriate documentation relating to your failure to complete a task to the Lecturer in Charge.
   AND
   c) Achieve a satisfactory level of performance in the final exam. This usually means a minimum mark of 50 per cent. Any student having an overall mark of 50 or more but less than 50 per cent in the final examination will be given an UF grade (unsatisfactory fail).

4.2 Assessment Details

<table>
<thead>
<tr>
<th>Assessment Tasks</th>
<th>Weight</th>
<th>Length</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial Assignments</td>
<td>20%</td>
<td>≤ 4 pages</td>
<td>Tut time, Weeks 5 and 12, 10% each</td>
</tr>
<tr>
<td>Course Project</td>
<td>20%</td>
<td>≤ 8 pages</td>
<td>Tut time, Week 9</td>
</tr>
<tr>
<td>Final Exam</td>
<td>60%</td>
<td>2 hours</td>
<td>University Exam Period</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Work commitments, holiday or travel or wedding plans, are NOT valid excuses for failing to complete any of the assessment tasks.

4.3 Tutorial Assessments
Tutorials start Week 2. The Tutorial Program questions will be posted on the course website. Each week a series of problems based on the lecture material will be set. You should attempt all questions before attending tutorial classes. You must attend at least 80% of tutorials.

Two tutorial assignments (due Week 5 and Week 12) will be collected and marked as the Tutorial Assessment. The two tutorial assignments (10% weight on each) will account for 20% of your total assessment for the course.

The two assignments must be handed in to the tutor at (or before) the beginning of your tutorial class in Week 5 and 12 respectively. Otherwise a mark of zero will be given. Staff members other than your tutor will NOT accept your assignment.

The tutorial assignments are designed to assess your understanding of regression models, your ability to interpret regression results and appraise the quality of a model. The tutorial assignments involve analysing data with STATA. The criteria used for marking the assignments are correctness and clarity of the answers presented. The
tutorial assignments and the course project (see below) are designed to assess progress toward learning goals listed in section 2.6.

4.4 Course Project
The course project questions and data set will be available from the course website. The project involves an in-depth econometric analysis of an applied economic problem. The project will require the analysis of a data set using regression methods. The project will be similar in structure to the tutorial assignments. However the project will draw on material covered in all of Weeks 1-7 of lectures. Students need to provide detailed written answers to the project questions and include a print-out of their STATA commands and output.

More details on the Course Project, which is group based, will be given in a separate file to be posted on the course website.

4.5 Late Submission of Tutorial Assignments and Course Project
20% of the value of the submission will be deducted for each day (24 hours). This rule is applicable to both hardcopy and softcopy submissions. Work submitted more than five days late will not be marked. If you delay submission, it is your responsibility to hand the assignment to your tutor. Staff members other than your tutor will NOT accept your project reports.

4.6 When Sickness Affects Your Submission
If you are unable to hand in your assignment or course project because of sickness, you must apply for special consideration. Applications for special consideration must be lodged online through myUNSW within 3 working days of the assessment (Log into myUNSW and go to My Student Profile tab > My Student Services channel > Online Services > Special Consideration). Then submit the originals or certified copies of your supporting documentation and a completed Professional Authority form (pdf - download here) to Student Central.

Note that the 50% rule at 4.1 (c) applies to the re-weighted final exam. Work commitments, holiday or travel or wedding plans are NOT valid excuses for failing to submit your assignments or course project.

4.7 Final Examination
The final exam will be held in the University examination period and will be 2 hours long. The final exam will cover the entire course. Further information on the content and structure of the Final Exam will be provided towards the end of session.

The final exam is designed to assess knowledge of econometric concepts, your understanding of the regression models and the application of regression methods to real world problems. The questions will involve interpretation of regression results, basic calculations, hypothesis testing, and evaluation of regression models. The final exam is designed to assess achievement of some learning goals in 2.6.

4.8 Quality Assurance
The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program
learning goals are being achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential and will not be related to course grades.

5 COURSE EVALUATION AND DEVELOPMENT

Each year feedback is sought from students and other stakeholders about the courses offered in the School and continual improvements are made based on this feedback. UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process is one of the ways in which student evaluative feedback is gathered. You are strongly encouraged to take part in the feedback process.

6 COURSE RESOURCES

The website for this course is on UNSW Moodle at http://moodle.telt.unsw.edu.au. The course website contains copies of: Course Outline, Lecture Slides; Tutorial Questions; Data sets required for the tutorial questions; How to Use STATA; examples of STATA programs; and Announcements. Students should consult this website at least once a week as it contains important information about the course. It will be assumed that all students have seen Announcements posted on the course website.

The required textbook for this course is:


This textbook is currently in stock at the UNSW bookstore, and copies are held in Open Reserve in the Main Library.

The 2nd and 3rd or 5th editions of the textbook are very similar to the 4th edition, and are fine to use.

There is a companion book for the textbook that may be useful to refer to throughout the session:


This companion book is available electronically via the textbook website: access to the solution manual is free with the purchase of the book. Older, hardcopy versions of the Student Solution Manual are held in the Main Library.

The following books provide an alternative presentation of similar material:

More advanced treatment of the topics covered in the course are presented in the textbooks:

7 COURSE SCHEDULE

7.1 LECTURE SCHEDULE

Note: The below schedule is an approximation. Its order and contents may vary. The date in the first column is Monday for each week and is not the lecture date.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction, Textbook Ch1</td>
</tr>
<tr>
<td>27 July</td>
<td></td>
</tr>
<tr>
<td>Week 2</td>
<td>Simple Regression Model, Textbook Ch2</td>
</tr>
<tr>
<td>3 August</td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Multiple Regression: Estimation, Textbook Ch3</td>
</tr>
<tr>
<td>10 August</td>
<td></td>
</tr>
<tr>
<td>Week 4</td>
<td>Multiple Regression: Inference I, Textbook Ch4</td>
</tr>
<tr>
<td>17 August</td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>Multiple Regression: Inference II, Textbook Ch4</td>
</tr>
<tr>
<td>24 August</td>
<td>Assignment 1 Due</td>
</tr>
<tr>
<td>Week 6</td>
<td>Asymptotics and Further Issues, Textbook Ch5,6</td>
</tr>
<tr>
<td>31 August</td>
<td></td>
</tr>
<tr>
<td>Week 7</td>
<td>Qualitative Information, Textbook Ch7</td>
</tr>
<tr>
<td>7 September</td>
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</tr>
<tr>
<td>Week 8</td>
<td>Heteroskedasticity, Textbook Ch8</td>
</tr>
<tr>
<td>14 September</td>
<td></td>
</tr>
<tr>
<td>Week 9</td>
<td>Specification Issues, Textbook Ch9</td>
</tr>
<tr>
<td>21 September</td>
<td>Course Project Due</td>
</tr>
<tr>
<td>Week 10</td>
<td>(Monday 5 Oct is a public holiday) Time Series Data: Basic Regression, Textbook Ch10</td>
</tr>
<tr>
<td>5 October</td>
<td></td>
</tr>
<tr>
<td>Week 11</td>
<td>Time Series Data: Further Issues, Textbook Ch11</td>
</tr>
<tr>
<td>12 October</td>
<td></td>
</tr>
<tr>
<td>Week 12</td>
<td>Pooling Cross Sections, Textbook Ch13</td>
</tr>
<tr>
<td>19 October</td>
<td>Assignment 2 Due</td>
</tr>
<tr>
<td>Week 13</td>
<td>NO LECTURES</td>
</tr>
<tr>
<td>26 October</td>
<td>Only Tutorials</td>
</tr>
</tbody>
</table>

Mid-semester break: Saturday 26 September - Monday 5 October inclusive

7.2 TUTORIAL SCHEDULE

Weekly tutorial questions (Tutorial Program) will be posted in the course website. Many tutorial exercises require the use of an econometric software package. STATA is recommended for this purpose. STATA is available in all Business School computer labs.