ECON5111
ECONOMICS OF STRATEGY
Course Outline
Semester 1, 2016

Part A: Course-Specific Information

Students are also expected to have read and be familiar with Part B Supplement to All 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: A/Prof Ben Greiner
Email: bgreiner AT unsw.edu.au
Office: Quad 3123
Consultation hours: Mondays 6-9pm, or by appointment

2 COURSE DETAILS

2.1 Teaching Times and Locations
Lectures/tutorials start in Week 1 and run to Week 13. Each student should enrol in the lecture and the tutorial. The combined lecture/tutorial meets on Mondays 6 – 9pm in in BUS 130 in the UNSW Business School building. Most tutorials (8-9pm) will be held a Computer Lab, location to be announced.

2.2 Units of Credit
This course carries 6 units of credit.

2.3 Summary of Course
This course covers the fundamentals of Game Theory and its applications. Game Theory is a revolutionary way of analysing strategic interactive situations. It is basic to the understanding of market competition among large firms, the designing of incentive contracts, bidding at auctions, bargaining, and other similar problems central to economics and business. This course covers simultaneous and sequential games and their solution concepts, games of imperfect information, repeated games, and a selection of applications and case studies.

2.4 Aims and Relationship to Other Courses
The course aims to train students’ strategic thinking and to provide them with basic tools and concepts to analyse strategic situations and behaviour. ECON 5111 is one of the specialist courses in the Business Strategy specialisation offered in the M Com (coursework) program. It may also be chosen as an elective in several other specialisations.

2.5 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 postgraduate 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 Postgraduate 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>
<tr>
<td>1 Knowledge</td>
<td>demonstrate a basic understanding of game theoretical tools and solution concepts,</td>
<td>Homework assignments Exam</td>
</tr>
<tr>
<td>2 Critical thinking and problem solving</td>
<td>analyse strategic situations and the incentives of players therein, and to derive predictions about behaviour, evaluate and analyse data of actual decisions made in strategic situations, and derive conclusions.</td>
<td>Homework assignments Reality Check blog Exam</td>
</tr>
<tr>
<td>3a Written communication</td>
<td>present and discuss findings from that strategic analysis and evaluation of actual decisions,</td>
<td>Homework assignments Reality Check blog Exam</td>
</tr>
<tr>
<td>3b Oral communication</td>
<td></td>
<td>In-class discussions</td>
</tr>
<tr>
<td>4 Teamwork</td>
<td>work collaboratively to complete a task.</td>
<td>Homework assignments In-class discussions</td>
</tr>
<tr>
<td>5a Ethical, environmental and sustainability considerations</td>
<td>Not specifically addressed in this course.</td>
<td></td>
</tr>
<tr>
<td>5b Social and cultural awareness</td>
<td>Not specifically addressed in this course.</td>
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</tbody>
</table>

3 LEARNING AND TEACHING ACTIVITIES

3.1 Approach to Learning and Teaching in the Course

The teaching philosophy of this course is based on the “Guidelines on Learning that Inform Teaching at UNSW” (http://www.guidelinesonlearning.unsw.edu.au). Specifically, the lectures, tutorials and assessment have been designed to actively engage students, and to create a climate of inquiry, dialogue, and creativity among students and between students and teacher. The lecturer aims to provide meaningful and timely feedback to students to improve learning outcome.

3.2 Learning Activities and Teaching Strategies

Through making decisions in classroom experiments, at the end of each meeting, you will experience many different strategic situations first hand. This trains your empathy, strategic thinking, and social interaction skills.

After the lecture, descriptions of the situations (experimental instructions), anonymised data sets containing the decisions of experiment participants, and a number of questions on each experiment will be posted online. The questions guide you in the analysis of the situations and data. Analysing the situations and your own decisions with formal and informal tools lets you practise logical thinking, sharpens your economic intuition, and improves your knowledge about social and economic behaviour of real people. Analysis can be done individually or in groups of up to 3 people.
At the beginning of each class, a number of students will be (more or less randomly) selected to present their analysis. Presentations are individual (and individually marked), each student is expected to be able to present on each question. Presenting your results in class improves your structuring and communication skills.

Presentations are followed by (moderated) group discussions involving all students in class. You will learn from each other and train your argumentation and discussion skills.

Necessary game theoretical background will be provided to you in lecture form. Lecture slides will be posted online after class. Understanding the theory will give you more insight into strategic behaviour, and improve your analytical skills.

4 ASSESSMENT

4.1 Formal Requirements
In order to pass this course, you must achieve a composite mark of at least 50.

4.2 Assessment Details

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Weighting</th>
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</thead>
<tbody>
<tr>
<td>1. Assignments, oral presentations, participation in group discussions and in reality check blog</td>
<td>30%</td>
</tr>
<tr>
<td>2. Two written assignments</td>
<td>10% + 10%</td>
</tr>
<tr>
<td>3. Final exam</td>
<td>50%</td>
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</table>

Assignments, oral presentations and participation in group discussions
Assignments will be given in each class. At the beginning of each class, several students will be asked to analyse the strategic situations they experienced at the end of the last class, and to discuss the actual behaviour of students based on collected decision data. This is followed by a group discussion. Marking is done continuously based on content and style of presentation and discussion. Additionally, students are expected to write a short blog post after each class on real-world examples of the discussed strategic situations.

Written assignments
Two assignments will be marked in written form. This will be announced by the lecturer when giving out the assignment.

Final exam
The final exam will be held in the University examination period. It will cover the entire course. Students should note that, given changes in content and method of the course, past exam papers for this subject may be misleading. In the exam students will be provided with a description of a strategic situation, and a summary of decision data collected in an experiment on this situation. Students will be asked to summarise the essential strategic properties of the situation, to describe the individual incentives of players, to make predictions about behaviour based on justified assumptions, to compare those predictions with the decision data and to discuss potential discrepancies. Marking will be based on proficiency in applying game-theoretic tools, as well as logic and justification of arguments.
4.3 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
Your suggestions, comments and observations with respect to content of the course, delivery of content, and assessment tasks are welcome, as they help to improve the course in the future. Feel free to communicate your views directly to the lecturer. We will seek your feedback also through UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process.

6 COURSE RESOURCES
The website for this course is on UNSW Moodle at: https://moodle.telt.unsw.edu.au/login/index.php

Resources available to students consist of:
- Classroom experiment instructions – will be provided in each class
- Collected decision data – will be provided online after experiments
- Lecture slides – will be provided online after class

Suggested reading:
# COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week 1</th>
<th>29 February</th>
<th>Introduction: procedures, outlook, basic concepts of game theory</th>
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<tbody>
<tr>
<td>Week 2</td>
<td>7 March</td>
<td>Markets I: competition</td>
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<tr>
<td>Week 3</td>
<td>14 March</td>
<td>Markets II: monopoly, oligopoly, timing, and commitment</td>
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<td>Week 4</td>
<td>21 March</td>
<td>Bargaining: giving, ultimatums and negotiations</td>
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<td></td>
<td>28 March</td>
<td>MIDTERM BREAK - NO LECTURE</td>
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<tr>
<td>Week 5</td>
<td>4 April</td>
<td>Cooperation: dilemmas, common pools and public goods</td>
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<td>Week 6</td>
<td>11 April</td>
<td>Limited cognition, infinite games</td>
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<td>Week 7</td>
<td>18 April</td>
<td>Trust and reputation</td>
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<td>Week 8</td>
<td>25 April</td>
<td>ANZAC Day - NO LECTURE</td>
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<tr>
<td>Week 9</td>
<td>2 May</td>
<td>Private value auctions</td>
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<td>Week 10</td>
<td>9 May</td>
<td>Common value, multi unit, and all-pay auctions</td>
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<tr>
<td>Week 11</td>
<td>16 May</td>
<td>Coordination, cheap talk, and mixed equilibria</td>
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<tr>
<td>Week 12</td>
<td>23 May</td>
<td>Information: Signaling and cascades</td>
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<tr>
<td>Week 13</td>
<td>30 May</td>
<td>Recap</td>
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The schedule might be subject to changes.