

ECON3124 / ECON5324

Behavioural Economics

Course Outline

Semester 1, 2017

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, Academic Misconduct and Plagiarism, and Key Dates. It also contains the BUSINESS SCHOOL PROGRAM LEARNING GOALS.

Table of Contents

<u>1</u>	<u>STAFF CONTACT DETAILS</u>	<u>1</u>
<u>2</u>	<u>COURSE DETAILS</u>	<u>1</u>
2.1	Teaching Times and Locations	1
2.2	Units of Credit	1
2.3	Summary of Course	1
2.4	Aims and Relationship to Other Courses	1
2.5	Student Learning Outcomes	1
<u>3</u>	<u>LEARNING AND TEACHING ACTIVITIES</u>	<u>3</u>
3.1	Approach to Learning and Teaching in the Course	3
3.2	Learning Activities and Teaching Strategies	3
<u>4</u>	<u>ASSESSMENT</u>	<u>3</u>
4.1	Formal Requirements	3
4.2	Assessment Details	3
4.3	Individual Assignments	3
4.4	Midterm Exam	4
4.5	Final Exam	4
4.6	Quality Assurance	4
<u>5</u>	<u>COURSE EVALUATION AND DEVELOPMENT</u>	<u>5</u>
<u>6</u>	<u>COURSE RESOURCES</u>	<u>5</u>
<u>7</u>	<u>COURSE SCHEDULE</u>	<u>6</u>
7.1	Lecture Schedule	6
7.2	Tutorial Schedule	6

1 STAFF CONTACT DETAILS

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Consultation Times: TBC

2 COURSE DETAILS

2.1 Teaching Times and Locations

Each student should enrol in the lecture and the tutorial. The combined lecture meets on Mondays 4-6pm in the Michael Hintze Theatre, Tyree Energy Technology Building (K-H6-LG03). The tutorials are scheduled for Mondays 10-11am and 11am-12pm in Matthews 104, and 1-2pm in Blockhouse G13.

2.2 Units of Credit

This course carries 6 units of credit. This course may be taught in parallel to Undergraduate and Postgraduate students.

2.3 Summary of Course

Recent empirical and experimental evidence have shown that people suffer from systematic behavioural biases. This deviates from the notion of rationality pervasive in standard economic theory. In this course, we will explore a few important biases and learn how they are currently being modelled. Using these models, we will then examine its implications on the design of contracts in various economic settings: industrial organization, principal-agent settings and government policy design. The student will gain an appreciation for how economists are thinking about modelling behavioural biases and how it shapes the economic predictions in standard models.

2.4 Aims and Relationship to Other Courses

The prerequisites for this course are ECON2101 Microeconomics 2 or ECON2112 Game Theory and Business Strategy. It is also a follow-up course to ECON2126 Principles of Experimental & Behavioural Economics which aimed to introduce students to the method of experimental economics. ECON2126 is NOT a prerequisite for this course, however if you have not taken that course, make sure to get in touch with the lecturer to catch up on some key readings from that course before the first lecture.

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 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:

Program Learning Goals and Outcomes		Course Learning Outcomes	Course Assessment Item
<i>This course helps you to achieve the following learning goals</i>		<i>On successful completion of the course, you should be able to:</i>	<i>This learning outcome will be assessed in the following items:</i>
1	Knowledge	Know what “behavioral economics” is, know the material covered in the course.	<ul style="list-style-type: none"> • Problem Sets • Mid-term exam • Final exam
2	Critical thinking and problem solving	Critically question claims made by behavioural economists and use the tools learned in class to explain real world phenomenon.	<ul style="list-style-type: none"> • Problem Sets • Mid-term exam • Final exam
3a	Written communication	Communicate the basic ideas of behavioural economics in a lucid manner.	<ul style="list-style-type: none"> • Problem Sets • Mid-term exam • Final exam
3b	Oral communication	Not specifically addressed in this course.	<ul style="list-style-type: none"> •
4	Teamwork	Work collaboratively to complete a task. This pertains particularly to the problem sets which I encourage you to work together.	Implicitly assessed through your performance in class participation and problem sets
5a.	Ethical, environmental and sustainability considerations	Not specifically addressed in this course.	
5b.	Social and cultural awareness	Not specifically addressed in this course.	

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. This happens mostly through participation during classes, “worksheets” (problem sets), and guiding questions to articles to be discussed in classes.

3.2 Learning Activities and Teaching Strategies

I will use a judicious mix of lectures and work in small groups to help you understand the assigned materials. It is imperative that you read the *required* readings in advance. While there is no expectation that you know every itsy-bitsy detail, I do expect you to have an understanding of the basic ideas studied, the methodology used (e.g., imagining scenarios, enacting scenarios), the notation, the basic results, and of the things that you do not understand.

The detailed subject matter is explained below in the course outline.

4 ASSESSMENT

4.1 Formal Requirements

In order to pass this course, you must:

- achieve a composite mark of at least 50 out of 100; and
- make a satisfactory attempt at ALL assessment tasks (see below).

4.2 Assessment Details

Assessment Task	Weighting	Length	Due date
1. Bi-weekly Individual Assignments	30%	See 4.3 below	See 4.3 below
2. Mid-term exam	30%	See 4.4 below	Week 7
3. Final exam	40%	See 4.5 below	University exam period

4.3 Individual Assignments

Every two weeks, starting from the third week, students will be assigned a problem set. These problem sets are challenging and more difficult than the materials covered in class. Do not leave things to the last minute! A sample problem set will be handed out during the first class. This sample problem set will not be graded, but it will illustrate the preliminary knowledge needed for the course. The problem sets can be found on my website Monday evening.

Deadline: Students must submit a hard copy a week after the problem sets are posted. For example, the first problem set is due before class in week 4, and the second problem set is due before class in week 6. Please do not use plastic sheets or binders. Simply staple the pages together. The student's name and ID should be on the cover page. Each assignment counts for 5 per cent of the final mark.

Late Submission Policy:

If you fail to submit your assignment by the given deadline your assignment will not be marked. Your team has many weeks to complete the assignment and it is your risk if you decide to leave it to the last few days to complete.

Plagiarism: While discussing the assignments with other individuals is permitted, do not lend your assignment to another student. When an assignment is copied, it is difficult for the instructor to determine who the copier is and you may be penalized heavily.

Special consideration: Each of these assignments counts for 5% of the final mark. As each assignment contributes less than 20% to the assessment, special consideration does not apply. You have a substantial period to prepare each assignment, and you run a risk if you do not work on it until the last few days.

4.4 Midterm Exam

The midterm exam covers the material covered in Weeks 1 to 6. It will have four parts. Each part will have two questions. The student is required to pick one question in each part to answer. Answering more than the required number of questions will not garner any extra merits and maybe subjected to harsher grading. Questions will be based on the questions from the problem sets. Note that, given changes in the course content, past exam papers for this subject may be (very) misleading.

4.5 Final Exam

The final exam covers the material covered in Weeks 1 to 12. It will have four parts. Each part will have two questions. The student is required to pick one question in each part to answer. Answering more than the required number of questions will not garner any extra merits and maybe subjected to harsher grading. Questions will be based on the questions from the homeworks and the midterm exam. Note that, given changes in the course content, past exam papers for this subject may be (very) misleading.

4.6 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 myExperience Survey Tool 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

There is no prescribed textbook for this course. However, there are several helpful books relevant to the course. Students are not required but encouraged to consult these materials for reference:

- Dhami, Sanjit 2016, *The Foundations of Behavioral Economic Analysis*, Oxford University Press.
- Spiegler, Ran 2011, *Bounded Rationality and Industrial Organization*, Oxford University Press.
- Angner, Erik 2016, *A Course in Behavioral Economics, 2nd Edition*, Palgrave Macmillan.

I also encourage students to read some very excellent popular economics books in their spare time for inspiration:

- Kahneman, Daniel 2013, *Thinking, Fast and Slow*, Farrar, Straus and Giroux.
- Thaler, Richard 2016, *Misbehaving: The Making of Behavioral Economics*, W. W. Norton & Company.
- Thaler, Richard and Cass Sunstein 2009, *Nudge: Improving Decisions About Health, Wealth, and Happiness*, Penguin Books.
- Akerlof, George and Robert Shiller 2015, *Phishing for Phools: The Economics of Manipulation and Deception*, Princeton University Press.

Since this course will be exploring the differences between the standard models versus behavioural models, a deep understanding of the rational agent model is essential to understanding the course. The student is expected to have taken ECON2101 Microeconomics 2 or ECON2112 Game Theory and Business Strategy, where knowledge of the rational agent is covered. If the student feels uncomfortable with the standard models, I recommend the following books for helpful references:

- Gibbons, Robert 1992, *Game Theory for Applied Economists*, Princeton University Press.
- Tadelis, Steven 2013, *Game Theory: An Introduction*, Princeton University Press.

For each topic the lecturer will provide a list of reading material during class.

7 COURSE SCHEDULE

7.1 Lecture Schedule

Lectures start in Week 1 and finish in Week 12. Basically there will be 3-6 pieces of required reading for each topic. The details will always be available about one week in advance. *The schedule might be subject to change.*

Week 1 27 February	Refresher	<i>A review of basic game theory, industrial organization, contract theory and decision theory</i>
Week 2 6 March	Loss Aversion I	<i>Explore the basic techniques to model loss aversion</i>
Week 3 13 March	Loss Aversion II	<i>Explore the implications of loss aversion on contract design</i>
Week 4 20 March	Over-confidence I	<i>Explore the basic techniques to model over-confidence</i>
Week 5 27 March	Over-confidence II	<i>Explore the implications of over-confidence on contract design</i>
Week 6 03 April	Over-confidence III	<i>An alternative view on over-confidence: apparently over-confident</i>

Week 7 10 April	Mid-term Exam	
Mid-semester break: Friday 14 – Saturday 22 April inclusive		
Week 8 24 April	Time Inconsistency I	<i>Explore the basic techniques to model time-inconsistent preferences</i>
Week 9 1 May	Time Inconsistency II	<i>Explore how contracts can be designed to take advantage of time inconsistency</i>
Week 10 8 May	Time Inconsistency III	<i>Further concerns with time inconsistency: commitment vs. flexibility</i>
Week 11 15 May	Policy Design I	<i>Discuss recent developments of paternalistic policies.</i>
Week 12 22 May	Policy Design II	<i>Discuss Yu (2016)</i>

7.2 Tutorial Schedule

Tutorials start in Week 2 and finish in Week 13.

Week 2 27 February	Refresher	A review of basic game theory, industrial organization, contract theory and decision theory
Week 3 6 March	Loss Aversion I	Explore the basic techniques to model loss aversion
Week 4 13 March	Loss Aversion II	Explore the implications of loss aversion on contract design
Week 5 20 March	Over-confidence I	Explore the basic techniques to model over-confidence
Week 6 27 March	Over-confidence II + III	Explore the implications of over-confidence on contract design and apparently over-confident

Week 03 April	7	Mid-term Exam	No Tutorial
Week 10 April	8	Mid-term Exam Reflection	Discuss solutions of the mid-term exam
Mid-semester break: Friday 14 – Saturday 22 April inclusive			
Week 24 April	9	Time Inconsistency I	Explore the basic techniques to model time-inconsistent preferences
Week 1 May	10	Time Inconsistency II	Explore how contracts can be designed to take advantage of time inconsistency
Week 8 May	11	Time Inconsistency III	Further concerns with time inconsistency: commitment vs. flexibility
Week 15 May	12	Policy Design I	Discuss recent developments of paternalistic policies.
Week 22 May	13	Policy Design II	Discuss Yu (2016)