ECON2013/6013
Behavioural Economics: Psychology and Economics

Syllabus Version 02

Course Description
This course is an introduction to Behavioural Economics. It is not an easy field to define, but those who sympathize with it tend to share the belief that economists should aspire to making assumptions about humans that are as realistic as possible, and hence that we should develop methods and habits of mind to learn what is psychologically realistic. Some work in this field looks at contributions of psychologists and other scientists. This area is also linked to bounded rationality, decision theory, experimental economics and neuroeconomics.

The field, however, is not a fundamentally different way of doing economics. In this course, just like in any other high quality second year economics course, we will be attempting to think precisely and formally about what might be driving a particular behaviour or economic outcome. Therefore, the course is based on simple mathematical models. We will use introductory probability theory.

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<th>Semester and Year</th>
<th>S2, 2014</th>
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<td>Mode of Delivery</td>
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<tr>
<td>Prerequisites</td>
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<tr>
<td>Course Convener</td>
<td>Jose A. Rodrigues-Neto.</td>
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<tr>
<td>Consultation hours:</td>
<td>See details on WATTLE</td>
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<tr>
<td>Tutor(s) (optional)</td>
<td>Refer WATTLE</td>
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| Course Administrators | Mr Terry Embling (terry.embling@anu.edu.au),  
                          Room 1013, RSE Student Office,  
                          HW Arndt Building  
                          612-50384  

Please go to Terry with regards to all administrative matters. (Tutorial allocation for example is an administrative matter).
Course details change from semester to semester. Please check that you are reading the Course Outline for the correct semester and course.

All students must attend the lecture and a one hour tutorial every week. Tutorials start only in the second week.

Office hours: The office hours will be listed on Wattle. There will be several distinct and spread out office hours this semester, so we hope that for most of you one of those times will work with your schedule. Please let me know early on if that is not the case for you and we will make every effort to find a possibility for you to ask your questions.

There is no need to e-mail in advance; just turn up in my (or your tutor’s) office. Please, try to arrive at least 15 minutes before the end because there may be other students waiting to ask questions. If you have lengthy questions or many questions, please come early.

Please, if you need, do come to the office hours to ask any question about the lectures, tutorials, problem sets or the reading material. Email is good for questions about scheduling or if you think there is a typo in a problem set, but it not efficient for answering content related questions, where typically the question is short and the answer long. I have to be very strict about this given the class size. Please, try and ask course material questions in the lecture or tutorials or come to one of our office hours. I also will not respond to any substantive course material email right before the final exam.

Mode of instruction: The course runs through Semester 2, 2014. All students are expected to attend all classes and all tutorials throughout this period – please, do not make alternative commitments that will prevent your attendance at these times. The primary mode of instruction will be through our main classes, augmented by tutorials, and readings or videos. Due to the special interactive nature of this course, absences cannot be fully compensated by individual study or extra help during office hours. Therefore, if you anticipate that you will not be attending many classes and tutorials, it is recommended that you do not enrol in this elective course.

Tutorial exercises are designed to apply and reinforce the principles taught in lectures. Tutorial questions for the following week may become available on Wattle beforehand. I emphasise that you should attempt the tutorial problems before attending the tutorial, if they become available. The questions on the exams will be tutorial style problems. You will only learn problem solving skills (necessary to pass the course) through practice, NOT by simply writing down the answers given in tutorials. You learn by doing and practicing.

Course Homepage: The Course will have a Wattle page: wattlecourses.anu.edu.au
To access Wattle you need to type your student ID and password. Go to the link of ECON 2013. The material on the wattle page will include: Course Outline, lecture notes (slides), handouts, problems sets, and announcements. Please, check Wattle three times a week, at least. Please, make sure you are familiar with the system and have access early on.

**Announcements and information:** All important announcements will be made publically during our classes or via Wattle. Under no circumstance will any particular student obtain important course or exam information before the others. Moreover, no student will obtain more detailed information about exams than others. Please, do not ask us. The rules hold for all students; no exceptions.

**Classes:** Students are expected to attend all tutorials and classes from the beginning to the end. Please, do not make alternative plans because the dynamics (and opportunities to ask questions at the best times) of a life class cannot be replicated ex post. The classes will be on:

TBA ?:00 pm to ?:00 pm.

**TO BE CONFIRMED** Copland Lecture Theatre (building number 25):


**Learning Outcomes:** In order to satisfy the requirements of this course, students will need to acquire a thorough understanding of the concepts introduced during the semester, and will need to demonstrate that they can apply the corresponding tools and ideas to unfamiliar problems. Note that just memorising the steps used to solve examples discussed in lectures and assigned tutorial problems will not lead to a clear understanding of these concepts, and will not prepare students to tackle the problems they will be required to solve in the exams.

On satisfying the requirements for this course, students should have the knowledge and skills to:

- Understand how behavioural economists think and approach economic questions.
- Fully understand and be able to clearly express the advantages, disadvantages, criticisms and limitations of Behavioural Economics.
- Understand the tools taught in class and be able to recognise their application to the analysis of real world situations.
- Recognise the strategic issues in a problem.
- Understand aspects of decision-making under uncertainty and solve simple analytical problems.
**Workload:** Students taking this course are expected to commit at least 10 hours a week to completing the work, comprising:

- 2 hours a week of lectures.
- 1 hour a week of tutorial.
- 7 hours a week: reading, thinking, writing Problem Sets, and tutorial preparation.

**Exams:** There will be no mid-term exam. The final exam will be held in the exam period after classes have finished. We will announce the exact date and time as soon as ANU Examination Office has given them out. The final exam will cover all materials taught in this course, except for the optional more advanced materials, which will be clearly marked with **NEE** (which stands for “**not entirely essential**”).

**Grades:** the final grade will be composed of 25% problem sets + 75% final exam.

**Problem sets:** We will upload Problem Sets (and their due dates) during the course. Please check Wattle at least 3 different days every week. Under no circumstance will late Problem Sets be accepted. We will also not accept Problem Set answers by email. Please observe these rules. In each Problem Set, a single question will be graded. All marks of that PS correspond to the marks that the student obtains for this particular question. We will only announce the chosen question ex post. If the Problem Set is not submitted on time, the grade is zero. Final marks for this component will take into account all but one of the grades (the lowest grade); that is, we will disregard your worst Problem Set. This makes room for an unpredictable contingency that may arise during the course. It is recommended that you submit all Problem Sets and do not waste this chance as you may face an unforeseen problem preventing you to do your best on the last PS. You also want to maximize your grade by maximizing your chances to score as high as possible.

**Scaling:** Your final mark for the course will be based on the raw marks allocated for each Problem Set or examination. However, your final mark may not be the same number as produced by that formula, as marks may be scaled. Any scaling applied will preserve the rank order of raw marks (i.e. if your raw mark exceeds that of another student, then your scaled mark will exceed the scaled mark of that student), and may be either up or down.

**Tentative Outline of the Classes:**

**TO BE CONFIRMED** The following dates refer to 2013.
21/07 – Class 1: introduction to Behavioural Economics and Review of preferences and utilities.

28/07 – Class 2: the classic approach to deterministic decisions. Simple alternatives using utility maximization.


18/08 – Class 5: Allais Paradox. Rank-dependent preferences and loss aversion.


01/09 – Class 7: probability weighting functions. Rank-Dependent Utility Theory: the theory and some applications.

Teaching Break – no classes.

22/09 – Class 8: Bayes Rule and heuristic rules, including base-rate neglect and conjunction rule. Other behavioural and psychological effects. Example of a poorly designed experiment.


20/10 – Class 10: a model of anticipatory utility. Information aversion. Unanticipated changes in preferences (theory and applications on hunger and on magnifying endowment effects).

27/10 – Class 11: decisions across time. Hyperbolic Discounting: basics, applications, and criticisms.

31/10 – Class 12 (compensating holiday): a model of addiction. Special review for the final exam.

Main Textbooks: there is no mandatory textbook.

NEE: Many reading materials will be indicated along the course. Some of them will be marked with NEE, which stands for “not entirely essential” for this course. While we recommend you read as much as possible (and this will not only inform you, but will also motivate you), some materials are clearly too technical or too advanced for this level. In this case, we will not expect that a full understanding of these materials is acquired by students. The assessments are designed so that students that have not read NEE materials can obtain full marks.

Please, note that **NEE is not a black list**. Although they may also contain more technical/advanced materials, concepts and ideas, advanced NEE papers and NEE readings usually contain also simple ideas and concepts that will be required; we are only claiming that there will be other sources for students to
obtain this basic knowledge. In sum, you do not need to read any NEE material to obtain full marks, but we would recommend that you do try at least some of them.

References (in no particular order). Warning: some of these books may contain very advanced material that, obviously, will not be part of this introductory course. This is a very ample list of materials in the field:

This list will probably be updated during the semester

Models of Bounded Rationality, Vols, 1, 2, 3, Herbert A. Simon, MIT Press. NEE.


Modeling Bounded Rationality, Ariel Rubinstein, MIT Press. NEE.

Bounded Rationality: The Adaptative Toolbox, Gerd Gigerenzer and Reinhard Selten, Editors, MIT Press. NEE

Thinking about Addiction: Hyperbolic Discounting and Responsible Agency, Craig Hanson, Editions Rodopi B. V., Amsterdam – New York, NY 2009. NEE

Games of Strategy, Dixit, A., S. Skeath, and Reiley, third edition, Norton. NEE

Prospect Theory for Risk and Ambiguity, Peter P. Wakker, Cambridge. NEE


Kahneman, D., Nobel Prize Lecture (2002):

Smith, V., Nobel Prize Lecture (2002):


