上海财经大学 Summer 2017

Instructor: Bram Cadsby Email Address: <u>bcadsby@uoguelph.ca</u> Teaching Assistant: Yang Jiaying Email Address: <u>28846592@qq.co</u> WeChat: shcjdxyjy

GAMES, DECISIONS AND ECONOMIC BEHAVIOUR

How do people make decisions when faced with economic choices? How do those choices interact to produce consequences for small groups or sometimes the entire world? Economists and other social scientists have constructed theories of choice and strategic behavior, often by making simple assumptions about rationality and self-interest. Do people really behave the way such theories predict? An exciting new approach to answering such questions is through behavioral experiments. An economist, Vernon Smith, and a psychologist, Daniel Kahneman, won the 2002 Nobel Prize for pioneering work on these problems. This course uses simple classroom experimental games to search for answers.

The course will involve playing decision-making games/experiments in the classroom. Many of these will be conducted using a computer network. Other games will be conducted by hand. Class sessions will involve analyzing the results of the games and comparing them to similar sessions that have been conducted elsewhere. A textbook will help us in this endeavor. It is called *Markets, Games and Strategic Behavior*, written by Charles Holt of the University of Virginia, and published by Addison-Wesley Publishing, 2007. There is also a pre-publication version available on the Internet. While the published textbook is a revised and improved version of the text, the pre-publication version is acceptable if it is the only version available to you. The teaching assistant will help you gain access to this material. It will generally make most sense to read each textbook chapter after you have participated in the game or games related to that chapter.

The grade for this course will be based on a scientific journal that you are required to write. In it, you should describe all the games/experiments done in class. Each entry must include the date of the experiment, the title of the experiment, the structure of the experiment, the theory that the experiment was designed to test and a summary of the results. You should also include a short discussion of the decisions you personally made in the experiment, how you felt when you saw what others did, and what you personally learned from each experiment and from the discussion of each experiment in class.

Your journal will be collected and graded twice during the course. Each installment will be worth 50% of your final grade. The first installment is due on Saturday July 29 at 12:00 noon. The second installment is due on Saturday August 5 at 10:00 p.m. Assignments should be submitted in **pdf format**. Please email them to the teaching assistant, Yang Jiaying, by the indicated deadline. Her email address is 28846592@qq.com. Late submissions will receive a penalty of 10% of the total grade available on the assignment if submitted within 12 hours of the indicated deadline. An additional 10% will be deducted for each additional period of 12 hours that the assignment is late. For example, if an assignment were 30 hours late, 30% of the available grade would be deducted. Since each assignment is worth 50% toward your final grade, you would lose 15 marks in this case and your assignment would be graded out of 35. Please plan ahead to make sure this does not happen to you.

If you miss any games/experiments due to absence from class, you should note the reason for your absence in your journal. You must then do your best to write a journal entry. Instead of describing what you personally did in the experiment, you should indicate what you think you would have done.

Please note that your journal is a major course assignment, which replaces the final examination used in most courses. Although you are encouraged to discuss your ideas and insights from the class experiments with your fellow students, you are not permitted either to read another student's journal or to copy from another student. Moreover, you must not copy passages from either the textbook or any other reading authored by another person. Violations of this rule will be considered academic misconduct, and will result in serious consequences.

The success of this course as a learning experience depends greatly on your attendance and active participation. Your comments and questions during class discussion are strongly encouraged. If you wish to speak to me after class, please talk to me or email me to set up an appointment.

Learning Objectives

- 1. To introduce you to the use of a scientific experimental methodology in the context of the social sciences;
- 2. To motivate you to think critically about the appropriateness of such a methodology in different situations;
- 3. To introduce or reexamine basic concepts from traditional "neo-classical" economics, psychology-influenced behavioural economics, and non-cooperative game theory through reflection on your own experiences, decisions and behavior;
- 4. To develop English scientific writing skills.

Course Outline and Textbook Readings

This outline is preliminary. Topics covered may be adjusted depending on timing and student interest. I am happy to recommend more advanced readings to students who are interested.

Class 1: Tuesday July 25 (10:05–11:45 and 13:20–15:00)

Introduction Pit Market Experiment Discussion of Pit-Market Experiment and supply-demand theory 2x2 Matrix Games – Prisoner's Dilemma and Coordination game Nash Equilibrium Reading after class 1: (i) Hard-copy textbook: Chapters 1 and 2 and Sections 3.1 to 3.3 of Chapter 3 OR

(ii) Pre-publication ebook: Chapters 1 and 2 and Sections I to 5.5 of Chapter 5 (iii) Pre-publication ebook: Chapters 1 and 2 and Sections I to III of Chapter 3.

Class 2: Thursday July 27 (10:05–11:45 and 13:20–15:00)

Guessing Game (also called "Beauty-Contest" Game): play and discuss. Price/Quality Market and discussion Lottery-Choice Game (to be done outside of class) Reading after class 2:

- (i) Hard-copy textbook: Sections 3.4 and 3.5 of Chapter 3 and Section 10.1 of Chapter 10 OR
- (ii) Pre-publication ebook: Sections IV and V of Chapter 3 and Chapter 17.

Class 3: Monday July 31 (10:05–11:45 and 13:20–15:00)

Discussion of Expected value, risk-aversion and risk neutrality Housing Market Experiment and discussion Altruism and Ultimatums Reading after class 3:

(i) Hard-copy textbook: Chapter 4, Chapter 11, Section 11.1 only, and Chapter 12 OR

(ii) Pre-publication ebook: Chapters 4 and Chapter 18, Section 1 only, and Chapter 23.

Class 4: Tuesday August 1 (10:05–11:45 and 13:20–15:00)

Voluntary Contribution Game Trust Game Conclusion

Reading after class 4:

(i) Hard-copy textbook: Section 13.1 of Chapter 13 and Chapter 14 OR

(ii) Pre-publication ebook: Section I of Chapter 24 and Chapter 26.