

EC3308, Spring 2017
Game Theory in Economics (T,TH 12:00-1:15)
Instructor: Hideo Konishi
(Office) 395 Maloney Hall
(Phone) 2-1209
(e-mail) hideo.konishi@bc.edu
(TA) Haydar Evren
(Office Hours) MW11:00-12:00

COURSE DESCRIPTION

Game Theory is the social science that analyzes how to think (and act) strategically in interactive situations. This course presents Game Theory with its applications to the real world situations. Although applications of Game Theory are a lot of fun, you also need to study hard to become familiar with techniques used in Game Theory. **They could involve a certain level of mathematics (calculus and logic).** Logical ways of thinking is particularly important. Without understanding the theory properly, you cannot apply insights from it to the real world situations appropriately. We begin with analyzing a few basic games: sequential move games, simultaneous move games, and their mixtures. After that, we proceed to broader classes of games, and discuss more applications. **You are not supposed to take this course if you have not finished Microeconomic Theory (EC2201) beforehand.**

TEXTBOOK

There is one required textbook for this course, *Games of Strategy* by A. Dixit and S. Skeath (Norton, 4th edition: but 3rd edition is OK, too). While the lectures will be mainly based on the textbook, some lectures will contain materials which are not presented in the book (I will give out some handouts). The bookstore should carry enough copies of the textbook. There are two more recommended books. One is *Thinking Strategically* by A. Dixit and B. Nalebuff (Norton). This is a book with many interesting stories, but no formal theory is introduced. The other is *Game Theory for Applied Economists* by Robert Gibbons (Princeton). This book is technically advanced (a Master level textbook), yet is still quite readable. These books are nice complements of the textbook.

GRADE

Your grade will be based on your performance on a midterm exam, a final exam, and homeworks. Homework will count for 10% of your course grade. The remaining 90% will be divided up between two exams: the midterm and final exam scores will count for 40% and 50%, respectively. The final is mainly on the latter half of lectures, but is a cumulative exam. The midterm is an in-class exam and is scheduled on March 2 (Thursday), and the final exam is scheduled on May 12 (Friday). **In principle, no make up exam will be given.** A student will not be allowed to take a make up exam unless he/she asks for it **in advance** for compelling reasons. You may work on homework problems with other students, but you are required to make up the answers independently.

ACADEMIC INTEGRITY POLICY

The Morrissey College of Arts and Sciences expects all students to adhere to the accepted norm of intellectual honesty in their academic work. Any form of cheating, plagiarism, or dishonest or collusion in another's dishonesty is a fundamental violation of these norms.

<http://www.bc.edu/offices/stserv/academic/integrity.html>

TENTATIVE SCHEDULE OF THE COURSE

Note that the course schedule may change

1. Before Midterm exam (basic theory): Chapters 1-7 (if 3rd edition, 1-8).
2. After the Midterm exam (advanced theory and applications): parts of Chapters 8, 9, 10, 12, and 15 (if 3rd edition, 9, 10, 11, 13, and 16).