EC308, Fall 2000 Game Theory in Economics (T,TH 9:00-10:20) Gasson 302 Instructor: Hideo Konishi (Office) Carney 240 (Phone) 2-1209 (e-mail) \QTR{tt}{hideo.konishi@bc.edu} (Office Hours) M 1:00-3:00\bigskip

#### 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 some mathematics. 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.

#### TEXTBOOK

There is one required textbook for this course, *Games of Strategy* by A. Dixit and S. Skeath. While the lectures will be mainly based on the textbook, some lectures may contain material which is not presented in the book. There is one more recommended book, *Thinking Strategically* by A. Dixit and B. Nalebuff. This is a book with many interesting stories, but no formal theory is introduced. These two books are nice complements.

# GRADE

Your grade will be based on your performance on two midterm exams, a final exam, and homeworks. Homework will count for 10\% of your course grade. The remaining 90\% will be divided up between three exams equally: the first midterm, second midterm, and final exam scores will count for 30\% for each (noncumulative: essentially a three midterm system). The first midterm exam will be held on October 5 (TH), the second on November 7 (T), and the final exam on December 14 (TH: 12:30pm). Midterm exams are in-class exams. **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.

# TENTATIVE SCHEDULE OF THE COURSE

### Note that the course schedule may change

First block (covered by the first midterm: October 5) Chapters 1,2,3,4,5

Second block (covered by the second midterm: November 7) Chapters 6,8,9

Third block (covered by the final: December 14) Chapters 11,12,14