Pham Hoang Van
Baylor University

COURSE SYLLABUS
January 2008

Instructor: Pham Hoang Van; Cashion A301.1; 710-3521; van_pham@baylor.edu;
Office Hours: Tue 2:00-4:00P; Wed 9:15-11:15A

Course Time and Location: TR 9:30-10:50A, Cashion 305
Course Webpage: Course materials will be posted on Blackboard.

Course Description: This course is an introduction to the theory of games, a set of tools used to analyze the interactions among rational decision-makers. We apply these tools to study phenomena arising in economics, politics, law, among others. Working through the homework problems is essential for learning the material and learning the material is essential for getting a good grade in this class.

Text (Required): Prajit Dutta, *Strategies and Games*, MIT Press, 1999.

Grading:

Class attendance and homeworks	15%
Exam #1:	20%
Exam #2:	25%
Final Exam:	40%
TOTAL	100%

Exam Schedule:
Exam 1: Feb 26 Thursday
Exam 2: Apr 15 Thursday
Final Exam: May 10 Friday 9:00-11:00A

Attendance: Baylor University policy states that students must attend at least 75% of class meetings. Failure to do so can result in a failing grade.

Special Needs: Students with disabilities who request academic accommodations are required to register with the Office of Access and Learning Accommodation (OALA): 254-710-3605.

Course Outline

1. Introduction (Chs. 1-2)
2. Strategic Form (Simultaneous Move) Games
   - Dominant Strategies (Ch. 3)
   - Dominance Solvability (Ch. 4)
   - Nash Equilibrium (Chs. 5-7)
   - Mixed Strategies and Zero Sum Games (Chs. 8-10)

   [EXAM 1, Feb 26 Tuesday]
3. Extensive Form (Sequential Move) Games
   - Backward Induction (Chs. 11-12)
   - Subgame Perfect Equilibrium (Ch. 13)
   - Repeated Games (Chs. 14-17)

   [EXAM 2, April 15 Tuesday]
4. Games with Asymmetric Information
   - Moral Hazard and the Theory of Incentives (Ch. 19)
   - Games with Incomplete Information (Chs. 20-21)
   - Mechanism Design and the Revelation Principle (Ch. 22)
   - Auctions (Ch. 23)
   - Signaling and Screening / The Lemons Problem (Ch. 24)

   [FINAL EXAM, May 10 Friday 9:00-11:00AM]