Course Objectives: This course aims to thoroughly treat the field of Game Theory, and provide you with useful tools for understanding current research and performing your own research in the field. This year’s focus is on material not covered in Schmeidler’s Summer 2009 course, and on applied game theory topics.

Course Requirements: Students will present a game theory article to the class, and write a short 3-5 page referee’s report (on another article that was not presented in class). The presentation and referee’s report each count for 45% of the grade. The remaining 10% is based on class participation and occasional homework assignments. Homework grades are based on full credit for a good faith effort, zero credit otherwise.


Other sources (not required):


I. Cooperative Game Theory


II. Games in Strategic (Normal) Form

1. Rationalizability and Iterative Elimination of Strictly Dominated Actions.


O-R, chapter 4.

III. Extensive Form Games with Perfect Information.
1. Repeated Games and Folk Theorems.
O-R, chapter 8.


IV. Extensive Form Games with Imperfect Information.

1. Sequential Equilibrium.
O-R, chapter 12.

2. Perfect Bayesian Equilibrium for games with observable actions, signaling games.
O-R, chapter 12.

V. Classical Models of Decision Making in Games.


VI. Articles in Game Theory.

1. Global Games


2. Common Knowledge


3. Mechanism Design


4. Oligopoly


5. Market Games


6. Timing Games.


7. Bargaining with Imperfect Information.


8. Sender-Receiver Games.


9. Repeated and Multi-stage Games with Imperfect Information


10. Political Economy


Students with disabilities that have been certified by the Office for
Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu/