Summary and Objectives. This class covers topics that fall under the heading of *dynamic game theory*. Although we will also study dynamic games with complete information, there will be disproportionate weight placed on dynamic games with asymmetric information and problems in which learning is paramount.

More specifically, we will study topics in bargaining, dynamic bargaining and search, repeated games, games with reputation concerns, experimentation and information aggregation.

Readings and lectures are organized around a twofold goal:
- an in-depth study of the papers that are considered “central” to each topic.
- a description of the “frontier” of each topic with a focus on open questions.

We will also cover some earlier topics which are well understood because (i) they belong to the standard intellectual tool kit of an economic theorist, (ii) more importantly, they pave the way for the later topics.

Grading and Lecture Style. Lectures will cover the basic foundations of the models followed by the discussion of many theoretical and applied papers written in that area. Depending on enrollment, each student will be required to present two or three papers during the semester, and each presentation will be an hour long. I will be presenting about one half of the total number of lectures. There will be no problem sets or exams, and grades will be based on the presentations, contribution during the class discussions, and a short paper due during the finals week of the semester.

Topics, readings, and papers


i. Axiomatic bargaining and Nash’s Solution:
   (2) “Two-person cooperative games,” Nash (1953)

ii. Alternating-offers bargaining
   (1) “Perfect equilibrium in a bargaining model,” Rubinstein (1982)*
   (2) “Involuntary unemployment as a perfect equilibrium in a bargaining model,” Shaked and Sutton (1984)
   (3) “Compromise is Key to Repeated Bargaining,” Dutta and Takahashi (2013) *
iii. Bargaining under incomplete information and reputations

(1) Bargaining and Reputation \textit{Abreu and Gul (2000)*}

(2) On the role of outside options in bargaining with obstinate parties, \textit{Compte and Jehiel (2002)}

iv. Bargaining in markets with random or directed search

(1) “Equilibrium in a market with sequential bargaining,” Rubinstein and Wolinsky (1985)*

(2) “Bargaining and Reputation in Search Markets,” \textit{Atakan and Ekmekci (forthcoming)*}

(3) “Pricing and Matching with Frictions,” \textit{Burdett et al. (2001)*}


i. The chair-store paradox and reputation in finitely repeated games

ii. Reputation in infinitely repeated games under perfect monitoring

(1) “Reputation and equilibrium selection in games with a patient player,” \textit{Fudenberg and Levine (1989)}

(2) “Public trust and government betrayal,” \textit{Phelan (2006)}


iii. Imperfect monitoring, the product-choice game, and reputation

(1) “Maintaining a reputation when strategies are imperfectly observed,” \textit{Fudenberg and Levine (1992)}

(2) “Imperfect monitoring and impermanent reputations,” \textit{Gossner et al. (2011)}

iv. Reputation in the long run

(1) Imperfect monitoring and impermanent reputations, \textit{Cripps et al. (2004)}

(2) “Reputation in Long-run Relationships,” \textit{Atakan and Ekmekci (2012)}

(3) “A two-sided reputation result with long-run players” \textit{Atakan and Ekmekci (2013)}

(4) “Bargaining, Reputation, and Equilibrium Selection in Repeated Games with Contracts,” \textit{Abreu and Pearce (2007)}
1.3. Value of information, experimentation, and information aggregation.

i. Basics

(1) “Equivalent Comparisons of Experiments,” Blackwell (1953)

ii. Information aggregation in auctions

(1) “The losers curse and information aggregation in common value auctions,” Pesendorfer and Swink (1997)


(3) “Auction, Actions, and the Failure of Information Aggregation,” Atakan and Ekmekci (Forthcoming)

iii. Information aggregation in elections


References


