## PSC/ECO 288: GAME THEORY

Spring 2016 MW 15:25-16:40pm Mel iora 203

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O ce Hours: T 1:00-3:00pm

## **Teaching Assistants**

Peter Bils (Email: pbils@z.rochester.edu. O ce hours: W 9:00-10:30am, Harkness 109A).

Gleason Judd (Email: gleason.judd@rochester.edu. O ce hours: M 1:30-3:00pm, Harkness 316).

Seda Ozturk (Email: sozturk@ur.rochester.edu. O ce hours: W 12:30-2:00pm, Harkness 302).

Brad SmithI (Email: bsmith41@z.rochester.edu. O ce hours: T 9:30-11:00am, Harkness 109A).

In social interaction (political, economic, or other) individual welfare depends on the choices of multiple actors. Thus, individuals must anticipate other people's behavior in order to reach best decisions. Game theory is a systematic framework for understanding and analyzing such strategic interaction.

The goal of this course is to introduce the theory of games in a systematic way. We will cover basic solution concepts for simultaneous and sequential move games, with and without complete information. Applications will be drawn from models of con ict and war, electoral competition, voting and ag388SnevooapJ-437(comp)-27(et208eoandawet2M37(8-27n)3iJ-437(com208ec.edu)]TJ/F16 11.955

Lectures will be based on { but not limited to { materials from this book. Other optional textbooks you may wish to consult for a di erent perspective, additional examples, and generally to deepen your understanding are,

Strategy, by Joel Watson,

Games, Strategies, and Decision Making, by Joseph Harrington, and Strategies and Games, by Prajit Dutta.

Finally,

Thinking Strategically, by A. Dixit and B. Nalebu,

Weeks 6-9. Strategies. Subgame perfect Nash equilibrium. Information sets and imperfect information.

## Topic 3 Repeated Games

Weeks 10-11. Repeated games. Folk Theorems.

Topic 4 Static games of incomplete information

Weeks 12-13. Bayesian games.

Topic 5 Dynamic games of incomplete information

Weeks 14-15. Dynamic games of incomplete information. Sequential equilibrium. Signaling games.