ECON 702 Game Theory and Strategic Interactions  
Spring 2016  
Th 1:00-3:45, Thompson Hall Rm 919  

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Course description:  
Game theory is a tool for analyzing the strategic interactions between decision makers (or “players”). In these interactions the choices of any one “player” affects and is known to affect the outcome for other “players” too. The objectives of the course are (1) to introduce the main concepts and ideas of game theory and (2) to apply these ideas to a range of topics from economics and other social sciences. The specific applications to be discussed will depend on the students’ research interests.  

Readings:  
The main text is  
If you want a more rigorous mathematical treatment, you may want to consult  
Osborne and Rubinstein, A Course in Game Theory  
This text is available for download on Osborne’s website:  
https://www.economics.utoronto.ca/osborne/  

Additional sources will be made available in Moodle.  

Course Requirements and Grading:  
There will be weekly problem sets (25% of the final grade), a mid-term (25% of the final grade), a final exam (25% of the final grade) and a term-paper (25% of the final grade).  
The term-paper can be a literature review of game theoretical approaches or an application of game theory to a topic of your choice.
Preliminary plan:

Jan 21    Introduction, general setup and terminology (O1-2)
Jan 28    Nash equilibrium Games with sequential moves (O2 and 12)
Feb 4     Illustrations (O3)
Feb 11    Mixed strategies (O4 and 11)
Feb 18    Bayesian games (O9)
Feb 25    Evolutionary games (O13)
March 3   Extensive games (O5)
March 10  Illustrations and extensions (O6 and 7)
March 17  -- spring break --
March 24  Repeated games (O14 and 15)
March 31  Signaling games (O10)
April 7,   The core (O8)
April 14  Bargaining (O16)
April 21  Review