

## Syllabus for GOVT 7074: Game Theory 2, Spring 2015

*Instructor:* Andrew Little, 301 White Hall, andrew.little@cornell.edu

*Location:* Tuesday 2:30-4:25, White Hall 106

*Office Hours:* Wednesday 2:00-4:00 or By Appointment

This is the second in a two course sequence that introduces graduate students in political science (and related fields) to game theory. In this course we will cover some new topics not covered in the first semester, but primarily focus on reading and writing models.

In general we will alternate between lectures that expand upon topics from Game Theory 1 and introduce new topics, discussing papers that use these topics in a seminar format, and student presentations of the project they develop for the class.

### Requirements and Grading

Your grade will be determined as follows:

- Participation (10%)
- Problem Sets (10%)
- Midterm presentation of your Project (10%)
- Presentations of other papers (20%)
- Final paper/presentation (50%)

I will assign a few problem sets throughout the semester, but most of the evaluation will center around the readings and final paper. A primary purpose of the class is for students to develop a game theory model. We will dedicate a class in the middle of the semester for students to give short presentations (10-15 minutes) of a proposed idea and get feedback from each other. I expect you to come discuss this with me at least once before that presentation.

The final class(es) will be students giving longer presentations of their model/paper (30-40 minutes), which should be near completed at that point.

The paper will be due the last day of exams. The most important part of the paper is to have a model which you have solved (or at least solved enough to say something concrete and interesting). I don't expect a comprehensive introduction, literature review,

or conclusion, but there should be enough before and after the model to say why it is new and interesting.

Two times in the semester you will also present one of the papers we discuss in class. The presentation will be 30-40 minutes, roughly analogous to what you would present if the paper was your job talk. To do this properly you will need to read the model very carefully! I will “go first” when covering signaling to give an idea of what is expected.

## The Topics

We will start with a review of signaling models and “refinements” on off-the-path beliefs. After this, we will cover four topics, which will comprise of a week of lecturing and a week of discussion. **What we cover – both generally and in terms of specific readings – will primarily be driven by student interests!** We will collectively discuss which of the following topics to cover:

### Repeated Games, Markov Perfect Equilibrium

Potential readings:

- Daron Acemoglu and James Robinson, 2000. “Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective”
- Bruce Bueno de Mesquita et. al., 2003. “The Logic of Political Survival.” Chapter 3.

### Cheap Talk

- David Austen-Smith, 1992. “Strategic Models of Talk in Political Decision Making”
- David Austen-Smith and Jeffrey Banks, 2002. “Costly signaling and cheap talk in models of political influence”
- Andrew Kydd, 2003. “Which Side Are You On? Bias, Credibility, and Mediation”

### Principal Agent Models and Accountability

- John Ferejohn, 1986. “Incumbent Performance and Electoral Control”
- James Fearon, 1999. “Electoral Accountability and the Control of Politicians: Selecting Good Types versus Sanctioning Poor Performance”

- Scott Ashworth, 2005. "Reputational Dynamics and Political Careers"

### **(Incomplete Information) Coordination**

- Torun Dewan and David Myatt, 2008. "The Qualities of Leadership: Direction, Communication, and Obfuscation"
- Ethan Bueno de Mesquita, 2011. "Regime Change and Revolutionary Entrepreneurs"
- Andrew Little, 2012. "Elections, Fraud, and Election Monitoring in the Shadow of Revolution"

### **Some Other Nominations**

- Electoral Competition
- Bargaining and Conflict
- Mechanism Design
- Evolutionary Game Theory
- Choosing to Release and Manipulate Information (Authoritarian Institutions)
- Other Suggestions?

## **Schedule**

### **January 27: Introduction, Lecture 1 on Signaling**

Some suggested readings:

- Lecture Notes from Debraj Ray: <http://www.econ.nyu.edu/user/debraj/Courses/05UGGameLSE/Handouts/05ugg110.pdf>
- Robbert Gibbons, "Game Theory for Applied Economists", Chapter 4
- Martin Osborne, "An Introduction to Game Theory", 10.1-10.7
- In-Koo Cho and David Kreps, 1987. "Signaling Games and Stable Equilibria"
- Jeffrey Banks and Joel Sobel, '1987. 'Equilibrium Selection in Signaling Games'

### **February 3: Lecture on Signaling and Refinements**

See above.

### **February 10: Discussion of Signaling Models**

Potential Readings:

- James D. Fearon, 1994. "Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs"
- Sanford C. Gordon and Catherine Hafer, 2005. "Flexing Muscle: Corporate Political Expenditures as Signals to the Bureaucracy"
- Lohmann, Susanne, 1993. "A Signaling Model of Informative and Manipulative Political Action"
- John Ginkel and Alastair Smith, 1999 "So You Say You Want a Revolution"
- Ernesto Dal Bo and Robert Powell, 2009. "A Model of Spoils Politics"

**February 17: No Class (Feb Break)**

**February 24: Topic 1 Lecture**

**March 3: Topic 1 Discussion**

**March 10: Presentation of Proposals**

**March 17: Topic 2 Lecture**

**March 24: Topic 2 Discussion**

**March 31: No Class (Spring Break)**

**April 7: Topic 3 Lecture**

**April 14: Topic 3 Discussion**

**April 21: Topic 4 Lecture**

**April 28: Topic 4 Discussion**

**May 5: Presentation of Papers**