

PSC 633
Advanced Topics of Political Inquiry
Fall 2009

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And by appointment

Course Description

This course builds upon the foundations of PSC 533, Formal Political Theory. A working knowledge of game theory and mathematics is assumed, though we will review important concepts in the first few weeks. This course is intended to move students towards integrating formal models in their own research. We will cover more advanced formal approaches that are common in current research, replicate the findings of classic models and discuss their substantive contributions to the literature, and devote considerable time to discussing the empirical evaluation of theoretical models.

The course consists of three parts. In the first we will lay the foundations for analyzing more advanced models by reviewing essential mathematical techniques. In the middle portion of the course, we will explore models with spatial, bargaining and signaling components, and combinations thereof. In the last section of the course, we will discuss various topics of concern in integrating formal theory into substantive social science research.

The primary requirement of the course is homework assignments. There will be 5 assignments; two on mathematical foundations and one each on social choice, bargaining games, and signaling games. The homeworks are due on weeks marked with an asterisk. There will also be a take home midterm covering these same topics, which is due on the week marked with a double asterisk. Finally, students will participate in a poster session, presenting the results of either an empirical test of an existing formal model, replication and extension of an existing model, or proposing an original model. Details TBA.

Grading

Homework	40%
Midterm	30%
Poster	30%

Required Books

- ¹ de Marchi, Scott. 2005. *Computational and Mathematical Modeling in the Social Sciences*.
Gill, Jeff. 2006. *Essential Mathematics for Political and Social Research*.
McCarty, Nolan and Adam Meirowitz. 2007. *Political Game Theory*.
Morton, Rebecca. 1999. *Methods and Models*.
Mueller, John. 2003. *Public Choice III*.

¹All other readings available online. Some titles have been abbreviated below for the sake of space.

September 2: Introduction

September 9: Math I: Linear Algebra

Gill, chapters 3-4.

September 16: Math II: Calculus

Gill, chapters 5-6.*

September 23: Math III: Spatial Analysis

Gill, chapter 2.*

McKelvey, Richard. 1979. "General Conditions for Global Intransitivities in Formal Voting Models."

Tsebelis, George. 1995. "Decision Making in Political Systems."

September 30: Social Choice I

Mueller, chapters 1 - 3, 14.*

M & M, chapter 4.

October 7: Social Choice II

Mueller, chapters 4 - 5, 11, 15 - 17.

October 14: Bargaining Theory

M & M, chapter 10.*

Nash, John. 1950. "The Bargaining Problem."

Romer, Thomas and Howard Rosenthal. 1979. "Bureaucrats versus Voters."

Fearon, James. 1995. "Rationalist Explanations for War."

October 21: Signaling Games

M & M, chapter 8.*

Fearon, James. 1997. "Signaling Foreign Policy Interests."

Canes-Wrone, Brandice, Michael Herron and Kenneth Shotts. 2001. "Leadership and Pandering."

October 28: Bargaining and Signaling

Groseclose, Tim and Nolan McCarty. 2001. "The Politics of Blame."

Fearon, James. draft. "Fighting rather than Bargaining."

November 4: EITM I: Evaluating Theoretical Contributions of Models

Morton, chapters 1 - 5.**

Clarke, Kevin and David Primo. 2007. "Modernizing Political Science: A Model-Based Approach."

Bueno de Mesquita, Bruce et al. 1999. "An Institutional Explanation of the Democratic Peace."

November 11: EITM II: Experimental Evaluation of Models

Morton, chapters 6 - 9.

McKelvey, Richard and Thomas Palfrey. 1992. "An Experimental Study of the Centipede Game."

Levitt, Steven and John List. 2007. "What Do Laboratory Experiments..."

Haile, Phili, Ali Hortasu and Grigory Kosenok. 2008. "On the Empirical Content of QRE."

Dana, Jason, Daylian Cain and Robyn Dawes. 2006. "What You Don't Know Won't Hurt Me."

Folwer, James. 2008. "Altruism and Turnout."

Gerber, Alan, Donald Green and Christopher Larimer. 2008. "Social Pressure and Voter Turnout."

Glazer, Amihai. 2008. "Voting to Anger and to Please Others."

November 18: EITM III: Statistical Evaluation of Models

Signorino, Curtis and Ahmer Tarar. 2006. "A Unified Theory and Test of Deterrence."

Bas, Muhammet, Curtis Signorino and Robert Walker. 2007. "Statistical Backwards Induction."

Carubba, Clifford, Amy Yuen and Christopher Zorn. 2007. "In Defense of Comparative Statics."

As well as both responses.

Powell, Robert. 1996. "Stability and the Distribution of Power."

Reed, William et al. 2008. "War, Power and Bargaining."

December 2: EITM IV: Computational Modeling

de Marchi, chapters 1 - 3.

Fowler, James and Michael Laver. 2008. "A Tournament of Party Decision Rules."

Filson, Darren and Suzanne Werner. 2007. "The Dynamics of Bargaining and War."

December 9: Poster Sessions

Details TBA.