

# POL 576: Formal Political Analysis II

Fall 2015

Matias Iaryczower

Department of Politics, Princeton University

**Summary.** This course builds on POL 575, to further develop the analytical foundations for examining problems in collective choice. Topics include vote buying, multilateral bargaining, strategic information transmission, strategic voting with incomplete information, career concerns, and strategic experimentation. Readings combine textbooks and research literature. Prerequisite: POL 575.

**Contact Information & Logistics.** Instructor: Matias Iaryczower, 040 Corwin Hall, email: miaryc@princeton.edu. Class meets M-W 9 am - 10:30 am, location: Corwin 127. I will have office hours Mondays from 2:30 to 4pm. There is no single textbook for the course, but there are several great options. If you want to buy an advanced game theory textbook, I would recommend “Game Theory”, by Drew Fudenberg and Jean Tirole. “Game Theory”, by Roger Myerson, and “A Course in Game Theory”, by Martin Osborne and Ariel Rubinstein are also great books, and particularly insightful in certain topics (e.g., Myerson’s presentation of sequential equilibrium, communication, cooperative games, and others). For a more introductory level, see “An Introduction to Game Theory”, by Martin Osborne or “Political Game Theory”, by McCarty and Meirowitz. (We will be in-between these levels throughout the course.) Finally, see “Positive Political Theory” books (in particular PPT II) by Austen-Smith and Banks, for formal positive political theory.

**Course Requirements and Grades.** Grades are based on the following weighting scheme: Assignments (40%), Final Exam (30%), Presentations (30%). Examinations are “closed-book”, due at the time and place specified on the exam. Collaboration on the examinations is prohibited. Students can work together on assignments - and indeed are encouraged to do so - but the final answers must be written independently. Late assignments will not be accepted, unless for a valid (documented) medical reason. The date that an assignment is due will be announced in lecture when the assignment is distributed. Assignments will be due in class at the start of the lecture on the day they are due. If there is any ambiguity in these policies, it is your responsibility to get clarification from me.

**Outline.** The focus of the course will be on game theory and its applications to politics, without a particular emphasis on field. Throughout the course, we will cover part of the

following papers/chapters to illustrate applications of the theory to address political problems (papers with a (+) sign to be included if time allows):

## I. STATIC GAMES OF COMPLETE INFORMATION.

1. **Redistribution in Alternative Electoral Systems.** Myerson, Roger. Incentives to Cultivate Favored Minorities Under Alternative Electoral Systems. *American Political Science Review* (1993) vol. 87 (4) pp. 856-869.
2. **Redistribution and Public Goods in Alternative Electoral Systems.** Alessandro Lizzeri and Nicola Persico, "The Provision of Public Goods under Alternative Electoral Incentives" *American Economic Review*, Vol. 91, No. 1 (Mar., 2001), pp. 225-239.

## II. DYNAMIC GAMES OF COMPLETE INFORMATION.

1. **Vote Buying.** Groseclose, Timothy and Jim Snyder. "Buying Supermajorities", *American Political Science Review* (1996) vol. 90 (2) pp. 303-315; Banks, Jeffrey. "Buying Supermajorities in Finite Legislatures." *American Political Science Review* (2000) pp. 677-681.
2. **Vote Buying (+).** Eddie Dekel, Matthew O. Jackson, and Asher Wolinsky. "Vote buying: General elections." *Journal of Political Economy* 116.2 (2008): 351-380. [See also Dekel, Eddie, Matthew Jackson and Asher Wolinsky. "Vote Buying: Legislatures and Lobbying". *Quarterly Journal of Political Science* (2009) vol 4., pp. 103-128.]
3. **Bargaining.** Austen-Smith and Banks PPT II Ch. 6.
4. **Bargaining (+).** Daniel Diermeier, Hulya Eraslan and Antonio Merlo, "A Structural Model of Government." *Econometrica*, Vol. 71, No. 1, (Jan., 2003), pp. 27-70.
5. **Bargaining (+).** Francois, Patrick, Ilia Rainer, and Francesco Trebbi. "How Is Power Shared in Africa?" No. w18425. National Bureau of Economic Research, 2012.
6. **Dynamic Optimization.** Jianjun Miao, "Economic Dynamics in Discrete Time", 2014 MIT Press. Chapters 5-7.
7. **Markov Perfect Equilibria.** Daron Acemoglu and James A. Robinson, "A Theory of Political Transitions", *The American Economic Review*, Vol. 91, No. 4 (Sep., 2001), pp. 938-963.
8. **Markov Perfect Equilibria.** Iaryczower, Matias and Oliveros, Santiago. *Competing for Loyalty: The Dynamics of Political Support.* Typeset.
9. **Repeated Games.** Basic Concepts in Repeated Games.

### III. STATIC GAMES OF INCOMPLETE INFORMATION.

1. **Common Values.** Feddersen and Pesendorfer. “Convicting the Innocent: The Inferiority of Unanimous Jury Verdicts”. *American Political Science Review* (1998) pp. 23-35.
2. **Common Values.** Duggan, John and Martinelli, Cesar. “A Bayesian Model of Voting in Juries.” *Games and Economic Behavior* 37, 259-294 (2001).
3. **Common Values.** Iaryczower, Matias and Shum, Matt, “The Value of Information in the Court: Get it Right, Keep it Tight,” with Matthew Shum. *American Economic Review*, Vol. 102, No. 1, Feb. 2012 , pp. 202-237.
4. **Global Games and Regime Change (+).** Stephen Morris and Hyun Song Shin. “Heterogeneity and Uniqueness in Interaction Games.” (2003).

### IV. INTRODUCTION TO MECHANISM DESIGN.

1. **Mechanism Design.** Fudenberg and Tirole Book, Ch.7. (7.2, 7.3, 7.4.3, 7.4.4).
2. **Mechanism Design (+).** Alonso, Ricardo, and Niko Matouschek. “Optimal delegation.” *The Review of Economic Studies* 75.1 (2008): 259-293.

### V. DYNAMIC GAMES OF INCOMPLETE INFORMATION.

1. **Strategic Information Transmission.** Crawford and Sobel. Strategic Information Transmission. *Econometrica* (1982) pp. 1431-1451.
2. **Strategic Information Transmission (+).** Austen-Smith and Banks. “Cheap Talk and Burned Money.” *Journal of Economic Theory* (2000).
3. **Strategic Information Transmission (+).** Austen-Smith. Strategic Transmission of Costly Information. *Econometrica* (1994) pp. 955-963.
4. **Bargaining.** Dilip Abreu and Faruk Gul. “Bargaining and Reputation”. *Econometrica*, Vol. 68, No. 1 (Jan., 2000), pp. 85-117.
5. **Herdning.** Bikhchandani et al. A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades. *Journal of Political Economy* (1992) vol. 100 (5) pp. 992-1026.
6. **Experimentation.** Strulovici, Bruno. “Learning while voting: Determinants of collective experimentation.” *Econometrica* 78.3 (2010): 933-971.
7. **Political Agency.** Banks and Sundaram. “Optimal Retention in Agency Problems”. *Journal of Economic Theory* (1998), 82, pp. 293 - 323.
8. **Political Agency (+).** Besley and Prat. Handcuffs for the Grabbing Hand? Media Capture and Government Accountability. *The American Economic Review* (2006) vol. 96 (3) pp. 720-736.