

Political Science (POLS) 604
Conceptualization and Theory in Political Analysis
Wednesday 9 a.m. to 11:50 a.m.
Allen 2115

Ahmer Tarar
ahmertarar@tamu.edu
Allen 2045

Office Hours: Monday and Friday 11 a.m. to 12 p.m. or by appointment
979-845-2628

TA: Thiago Silva
nsthiago@tamu.edu
Allen 2046

January 17, 2017

COURSE OVERVIEW

This course builds upon POLS 601 (which is a prerequisite) and is a second course in game theory. The course is a combination of applied and advanced game theory. It is applied in that the primary focus will be to read and understand prominent game-theoretic models that have been used to study many important substantive topics in political science, in both domestic politics and international relations. It is advanced in that many of these models are quite technically sophisticated, and introduce game-theoretic concepts that we may not have fully encountered yet (additional equilibrium refinements, etc.), as well as whose solution is quite technically challenging. A major goal will be for students to learn how to construct parsimonious models that capture the core strategic features of political phenomena of interest. This is well-learned by studying many such models that others have constructed and analyzed, and thinking carefully about why these authors made the assumptions and modeling choices that they did. A second major goal will of course be to further develop your

technical ability to solve such models and find their equilibria. A third goal is to develop a knack for identifying the substantive importance of features of those equilibria—being able to understand which results are interesting and worth emphasizing, and being able to convince readers why they should care about your formal analysis and why it should be published. Besides further developing the tools in your game-theoretic “toolkit”, the logical deductive reasoning you will be engaged in throughout the course should enhance your ability to develop coherent and convincing theoretical arguments regardless of whether these arguments are formalized or not.

COURSE REQUIREMENTS

Your grade will be based on regular homework assignments, and an exam at the end of the semester (either in-class or take-home; this will be decided later). The homework assignments will together account for 70% of your grade, and the exam will account for 30% of your grade.

REQUIRED TEXTS

- Gehlbach, Scott. 2013. *Formal Models of Domestic Politics*. Cambridge University Press.
- Kydd, Andrew. 2015. *International Relations Theory: The Game-Theoretic Approach*. Cambridge University Press.

RECOMMENDED GAME THEORY TEXTS

- Tadelis, Steven. 2013. *Game Theory: An Introduction*. Princeton University Press. (An excellent intermediate-level text, with lots of applications from political science. Has an especially excellent treatment of decision theory. Provides formal statements of propositions and proofs, which is a slight advantage over the Osborne text.)
- Osborne, Martin J. 2004. *An Introduction to Game Theory*. Oxford University Press. (Another excellent intermediate-level text, with lots of applications from political science. Is perhaps a slightly gentler introduction than Tadelis, but is basically at the same level.)
- Gibbons, Robert. 1992. *Game Theory for Applied Economists*. Princeton University Press. (Another excellent intermediate-level text. This has no applications from political science, but is an absolute gem. Provides perhaps the most clear verbal explanations of solution concepts of all the texts on this list.)
- McCarty, Nolan, and Adam Meirowitz. 2007. *Political Game Theory: An Introduction*. Cambridge University Press. (This is an advanced-level text, and is written explicitly for political scientists. Therefore, contains the most political science applications. Covers social choice theory, which is unique among the texts on this list. Also provides a rigorous treatment of decision theory, which is also unique.)

SOME OTHER GAME THEORY TEXTS

- Osborne, Martin J., and Ariel Rubinstein. 1994. *A Course in Game Theory*. MIT Press. (An excellent advanced-level text. If you want to pursue game theory at an advanced level, you should own this text, and work through it. Doesn't provide much verbal discussion, and is not for the faint of heart.)
- Fudenberg, Drew, and Jean Tirole. 1991. *Game Theory*. MIT Press. (Another advanced-level text. Is probably the most comprehensive out there; covers almost every topic under the sun. Therefore is very useful as a reference if you want to pursue game theory at an advanced level. Not for the faint of heart.)
- There are other game theory texts out there, which I don't comment on simply because I am not as familiar with them. Some may be excellent.

TOPICS

(The topics are broken down into 3 broad sections, and we will cover them in order. Sections II and III will be subject to minor changes and clarifications throughout the semester. For example, we won't really be covering entire chapters from the Gehlbach and Kydd texts, but parts of them; specific page numbers will be given the week before. Similarly, we won't be covering each chapter from each text; the exact chapters we will cover will be clarified later. Finally, some of the supplemental readings (mostly journal articles) may be changed to primary; this will also be clarified later.)

Section I: Core Concepts of Game Theory

1. Rapid Review of the Main Topics Covered in POLS 601:

- Decision Theory and Expected Utility Theory
- Simultaneous-Move Games of Complete Information (Strict and Weak Dominance, Nash Equilibrium-NE, Mixed-Strategy Nash Equilibrium-MSNE)
- Sequential-Move Games of Perfect Information (NE, Subgame-Perfect Equilibrium-SPE)
- Sequential-Move Games of Imperfect Information (NE, SPE, Perfect Bayesian Equilibrium-PBE)

Primary reading (as needed):

- Tadelis Chapters 1-8, 15-16, OR
- Osborne Chapters 1-7, 10

Supplemental reading:

- Gibbons Chapters 1, 2, and 4
- McCarty and Meirowitz Chapters 5, 7, and 8

2. Simultaneous-Move Games of Incomplete Information (Bayesian Nash Equilibrium-BNE)

Primary reading:

- Tadelis Chapter 12 OR Osborne Chapter 9
- Gibbons p.152-154 (Mixed Strategies Revisited) and p.155-157 (Auction)
- McCarty and Meirowitz p.156-159 (Jury Voting)

Supplemental reading:

- Gibbons Chapter 3
- McCarty and Meirowitz Chapter 6
- Austen-Smith, David, and Jeffrey S. Banks. 1996. "Information Aggregation, Rationality, and the Condorcet Jury Theorem." *American Political Science Review* 90:34-45.
- Feddersen, Timothy, and Wolfgang Pesendorfer. 1998. "Convincing the Innocent: the Inferiority of Unanimous Jury Verdicts." *American Political Science Review* 92:23-35.
- Feddersen, Timothy, and Wolfgang Pesendorfer. 1996. "The Swing Voter's Curse." *American Economic Review* 86:408-424.

3. Repeated Games (The One-Stage Deviation Principle; The Folk Theorem)

Primary reading:

- Tadelis Chapters 9-10 (sections 2.4.2, 2.5.2, and 8.3.4 may also be useful), OR
- Osborne Chapters 14-15

Supplemental reading:

- Gibbons p.82-102
- McCarty and Meirowitz Chapter 9
- Kydd Chapter 8
- McGillivray, Fiona, and Alastair Smith. 2000. "Trust and Cooperation Through Agent-Specific Punishments." *International Organization* 54(4): 809–824.

Section II: Game-Theoretic Models of Domestic Politics

1. Electoral Competition under Certainty

Primary reading:

- Gehlbach Chapter 1

Supplemental reading:

- Selections from *An Economic Theory of Democracy* by Anthony Downs
- Wittman, Donald A. 1973. "Parties as Utility Maximizers" *American Political Science Review* 67(2): 490–498.
- Callander, Steven. 2008. "Political Motivations." *Review of Economic Studies* 75(3): 671–697.

2. Electoral Competition under Uncertainty

Primary reading:

- Gehlbach Chapter 2

Supplemental reading:

- Calvert, Randall L. 1985. "Robustness of the Multidimensional Voting Model: Candidate Motivations, Uncertainty, and Convergence." *American Journal of Political Science* 29(1): 69–95.
- Selections from *Political Economics: Explaining Economic Policy* by Persson and Tabellini.
- Lindbeck, Assar and Jorgen Weibull. 1987. "Balanced Budget Redistribution as the Outcome of Political Competition." *Public Choice* 98(1–2): 59–82.

3. Special Interest Politics

Primary reading:

- Gehlbach Chapter 3

Supplemental reading:

- Grossman, Gene M. and Elhanan Helpman. 1994. "Protection for Sale." *American Economic Review* 84(4): 833–850.
- Grossman, Gene M and Elhanan Helpman. 1996. "Electoral Competition and Special Interest Politics." *Review of Economic Studies* 63(2): 265–286.

(If interested also see Grossman and Helpman. 2001. *Special Interest Politics* from MIT Press)

- Ashworth, Scott. 2006. “Campaign Finance and Voter Welfare with Entrenched Incumbents.” *American Political Science Review* 100(1): 55–68.

4. Veto Players (and Agenda-Setting)

Primary reading:

- Gehlbach Chapter 4

Supplemental reading:

- Romer, Thomas and Howard Rosenthal. 1978. “Political Resource Allocation, Controlled Agendas, and the Status Quo.” *Public Choice* 33(4): 27–43.
- Selections from Tsebelis, George. 2002. *Veto Players: How Political Institutions Work*
- Selections from Krehbiel, Keith. 1998. *Pivotal Politics*
- Crombez, Christophe, Tim Groseclose, and Keith Krehbiel. 2006. “Gatekeeping.” *Journal of Politics* 68(2): 322–334.
- Austen-Smith, David and Jeffrey S. Banks. 1990. “Stable Governments and the Allocation of Policy Portfolios.” *American Political Science Review* 84(3): 891–906.
- Laver, Michael and Kenneth A. Shepsle. 1990. “Coalitions and Cabinet Government.” *American Political Science Review* 84(3): 873–890.
- McCarty, Nolan. 1997. “Presidential Reputation and the Veto.” *Economics and Politics* 9(1): 1–26.

5. Delegation

Primary reading:

- Gehlbach Chapter 5

Supplemental reading:

- Bendor, Jonathan and Adam Meirowitz. 2004. “Spatial Models of Delegation.” *American Political Science Review* 98(2): 293–310.
- Bendor, Jonathan, Ami Glazer, and Thomas H. Hammond. 2001. “Theories of Delegation.” *Annual Review of Political Science* 4: 235–269.

- Epstein, David and Sharyn O'Halloran. 1994. "Administrative Procedures, Information, and Agency Discretion." *American Journal of Political Science* 38(3): 697–722.
- Selections from Huber, John D. and Charles Shipan. 2002. *Deliberate Discretion? The Institutional Foundations of Bureaucratic Autonomy*
- Huber, John D. and Nolan McCarty. 2004. "Bureaucratic Capacity, Delegation, and Political Reform." *American Political Science Review* 98(3): 481–494.
- Bawn, Kathleen. 1995. "Political Control versus Expertise: Congressional Choices About Administrative Procedures." *American Political Science Review* 89(1): 62–73.
- Gailmard, Sean and John W. Patty. 2007. "Slackers and Zealots: Civil Service, Policy Discretion, and Bureaucratic Expertise." *American Journal of Political Science* 51(4): 873–889.
- McCubbins, Mathew D. and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Policy Patrols versus Fire Alarms." *American Journal of Political Science* 28(1): 165–179.
- Calvert, Randall L., Mathew D. McCubbins, and Barry Weingast. 1989. "A Theory of Political Control and Agency Discretion." *American Journal of Political Science* 33(3): 588–611.
- Gilligan, Thomas W. and Keith Krehbiel. 1987. "Collective Decisionmaking and Standing Committees: An Informational Rationale for Restrictive Amendment Procedures." *Journal of Law, Economics, and Organization* 3(2): 287–335.

6. Coalitions

Primary reading:

- Gehlbach Chapter 6

Supplemental reading:

- Baron, David P. and John A. Ferejohn. 1989. "Bargaining in Legislatures." *American Political Science Review* 83(4): 1181–1206.
- Banks, Jeffrey S. and John Duggan. 2000. "A Bargaining Model of Collective Choice." *American Political Science Review* 94(1): 73–88.
- Deiermeier, Daniel and Timothy J. Feddersen. 1998. "Cohesion in Legislatures and the Vote of Confidence Procedure." *American Political Science Review* 92(3): 611–621.

- Baron, David P. and Daniel Deiermeier. 2001. “Elections, Governments, and Parliaments in Proportional Representation Systems.” *Quarterly Journal of Political Science* 116(3): 933–967.
- Groseclose, Tim and James M. Snyder. 1996. “Buying Supermajorities.” *American Political Science Review* 90(2): 303–315.
- Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson, and Alastair Smith. 1999. “An Institutional Explanation of the Democratic Peace.” *American Political Science Review* 93(4): 791–807.

7. Political Agency

Primary reading:

- Gehlbach Chapter 7

Supplemental reading:

- Barro, Robert. 1973. “The Control of Politicians: An Economic Model.” *Public Choice* 14(1): 19–42.
- Ferejohn, John A. 1986. “Incumbent Performance and Electoral Control.” *Public Choice* 50(1–3): 5–26.
- Fearon, James D. 1999. “Electoral Accountability and the Control of Politicians: Selecting Good Types versus Sanctioning Poor Performance.” In Przeworski, Adam, Susan C. Stokes, and Bernard Manin (eds.), *Democracy, Accountability, and Representation*. New York: Cambridge University Press.
- Hölmstrom, Bengt. 1982. “Managerial Incentive Problems – A Dynamic Perspective.” In *Essays in Economics and Management in Honor of Lars Wahlbeck*. Helsinki: Swedish School of Economics.
- Fox, Justin and Kenneth W. Shotts. 2009. “Delegates or Trustees? A Theory of Political Accountability.” *Journal of Politics* 71(4): 1225–1237.
- Besley, Timothy. 2006. *Principled Agents?* Oxford: Oxford University Press.
- Canes-Wrone, Brandice, Michael C. Herron, and Kenneth W. Shotts. 2001. “Leadership and Pandering: A Theory of Executive Policymaking.” *American Journal of Political Science* 45(3): 532–550.

8. Regime Change

Primary reading:

- Gehlbach Chapter 8

Supplemental reading:

- Acemoglu, Daron and James A. Robinson. 2000. “Why Did the West Expand the Franchise? Growth, Inequality, and Democracy in Historical Perspective.” *Quarterly Journal of Economics* 115(4): 1167–1199.
- Acemoglu, Daron and James A. Robinson. 2001. “A Theory of Political Transitions.” *American Economic Review* 91(4): 938–963.
- Morris, Stephen and Hyun Song Shin. 2003. “Global Games: Theory and Applications.” In Dewatripont, Mathias, Lars Peter Hansen, and Stephen J. Turnovsky (eds.) *Advances in Economics and Econometrics: Theory and Applications, 8th World Congress of the Econometric Society*. New York: Cambridge University Press.
- Shadmehr, Mehdi and Dan Bernhardt. 2011. “Collective Action with Uncertain Payoffs: Coordination, Public Signals, and Punishment Dilemmas.” *American Political Science Review* 105(4): 829–851.

Section III: Game-Theoretic Models of International Relations

1. Power Change and War

Primary reading:

- Kydd Chapter 5

Supplemental reading:

- Fearon, James. 1995. "Rationalist Explanations for War." *International Organization* 49(3): 379–414.
- Powell, Robert. 2006. "War as a Commitment Problem." *International Organization* 60(1): 169–203.
- Chadeaux, Thomas. 2011. "Bargaining Over Power: When Do Shifts in Power Lead to War?" *International Theory* 3(2): 228–253.

2. Private Information and War

Primary reading:

- Kydd Chapter 6

Supplemental reading:

- Fearon, James. 1995. "Rationalist Explanations for War." *International Organization* 49(3): 379–414.
- Leventoglu, Bahar, and Ahmer Tarar. 2008. "Does Private Information Lead to Delay or War in Crisis Bargaining?" *International Studies Quarterly* 52(3): 533–553.
- Fey, Mark, and Kris Ramsay. 2011. "Uncertainty and Incentives in Crisis Bargaining: Game Free Analysis of International Conflict." *American Journal of Political Science* 55(1): 149–169.
- Meirowitz, Adam, and Anne Sartori. 2008. "Strategic Uncertainty as a Cause of War." *Quarterly Journal of Political Science* 3(4):327–352.
- Slantchev, Branislav. 2005. "Military Coercion in Interstate Crises." *American Political Science Review* 99(4): 533–547.

3. Arms Competition and War

Primary reading:

- Kydd Chapter 7

Supplemental reading:

- Bas, Muhammet, and Andrew Coe. 2012. “Arms Diffusion and War.” *Journal of Conflict Resolution* 56(4): 651–674.
- Downs, George, David Roche, and Randolph Siverson. 1985. “Arms Races and Cooperation.” *World Politics* 38(1): 118–146.
- Jackson, Matthew, and Massimo Morelli. 2009. “Strategic Militarization, Deterrence, and Wars.” *Quarterly Journal of Political Science* 4(4):279-313.

4. Diplomacy and Signaling

Primary reading:

- Kydd Chapter 9

Supplemental reading:

- Fearon, James. 1997. “Signaling Foreign Policy Interests: Tying Hands Versus Sunk Costs.” *Journal of Conflict Resolution* 41(1): 68–90.
- Kurizaki, Shuhei. 2007. “Efficient Secrecy: Public Versus Private Threats in Crisis Diplomacy.” *American Political Science Review* 101(3): 543–558.
- Sartori, Anne. 2002. “The Might of the Pen: A Reputational Theory of Communication in International Disputes.” *International Organization* 56(1): 121–149.
- Schultz, Kenneth. 1998. “Domestic Opposition and Signaling in International Relations.” *American Political Science Review* 92(4): 829–844.

5. Domestic Politics and International Relations

Primary reading:

- Kydd Chapter 11

Supplemental reading:

- Fearon, James. 1994. “Domestic Political Audiences and the Escalation of International Disputes.” *American Political Science Review* 88(3): 577–592.
- McGillivray, Fiona, and Alastair Smith. 2005. “The Impact of Leadership Turnover and Domestic Institutions on International Cooperation.” *Journal of Conflict Resolution* 49(5): 639–660.

- Milner, Helen, and B. Peter Rosendorff. 1997. “Democratic Politics and International Trade Negotiations: Elections and Divided Government as Constraints on Trade Liberalization.” *Journal of Conflict Resolution* 41(1):117-146.
- Smith, Alastair. 1998. “International Crises and Domestic Politics.” *American Political Science Review* 92(3): 623–639.

6. Cooperation Theory

Primary reading:

- Kydd Chapter 8

Supplemental reading:

- Bendor, Jonathan, and Piotr Swistak. 1997. “The Evolutionary Stability of Cooperation.” *American Political Science Review* 91(2): 290–307.
- McGillivray, Fiona, and Alastair Smith. 2000. “Trust and Cooperation Through Agent-Specific Punishments.” *International Organization* 54(4): 809–824.
- Schultz, Kenneth A. 2005. “The Politics of Risking Peace: Do Hawks or Doves Deliver the Olive Branch?” *International Organization* 59(1): 1-38.
- Signorino, Curtis. 1996. “Simulating International Cooperation Under Uncertainty.” *Journal of Conflict Resolution* 40(1):152-205.

7. Multilateral Cooperation

Primary reading:

- Kydd Chapter 10

Supplemental reading:

- Alt, James, Randall Calvert, and Brian Humes. 1988. “Reputation and Hegemonic Stability: A Game-Theoretic Analysis.” *American Political Science Review* 82(2): 445–466.
- Gilligan, Michael. 2004. “Is There a Broader-Deeper Tradeoff in International Multilateral Agreements?” *International Organization* 58(3): 459–484.
- Pahre, Robert. 1994. “Multilateral Cooperation in an Iterated Prisoner’s Dilemma.” *Journal of Conflict Resolution* 38(2): 326–352.