Syllabus for Poli Sci 211:
Formal Models in Political Theory

(Last updated May 25, 2020)

Instructor:	Sean Ingham
Course time:	Mondays, 9am–11:50am
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Course description

What does it mean for public officials and citizens to respect the rule of law? What are political institutions, and how do they constrain political actors? By what mechanisms do institutional constraints become stronger or weaker or change over time? Why is it valuable to have institutions that establish the effective rule of law and constraints on public officials? These questions are the substantive focus of the seminar. Methodologically, the seminar focuses on approaches to these questions in political philosophy and social science that employ formal models.

The literature on political institutions is vast, and the goal of the seminar is not to survey the literature in a comprehensive or balanced way. The goal is instead to help students conceptualize and articulate questions about institutions with more analytical precision and sophistication, using a small sample of this larger literature as a stimulus. Each week we will drill deep into one or two articles or book chapters and reconstruct the authors' arguments, step by step, rather than surveying the general terrain at a bird's eye view. The focus will be on acquiring the skills needed to read and evaluate applications of game theory and formal modeling in political science, so that students can then read more widely in the literature on their own time.

Assignments and grades

Weekly problem sets and reading questions are designed to help students understand the formal models and reflect on their implications. For example, a problem set might ask the student to explain a step in an author's proof that the author left implicit, and reading questions might ask students to assess whether the assumptions of the formal model are justified, given the role the model is supposed to player in a scholar's argument. As part of the expectation for participation, students should be prepared to explain their answers in class during group discussions of the model.

Students are permitted to work on the problem sets in groups, but each student must write up and submit their own solutions. Students should upload their solutions to the Canvas website before each class session.

There are no penalties for late work, but I ask that you submit the problem sets on time, because we will all get more out of the class discussions if everyone has completed the problem sets and

readings on time. Students can submit revised versions of their problem sets at any point in the quarter, so it is better to submit an incomplete problem set than none at all.

The grade will be the average of students' grades on the problem sets and participation.

Teaching and learning during a pandemic

The university has adopted special grading policies for the Spring 2020 quarter due to the pandemic. You have the option of taking the seminar for a Satisfactory/Unsatisfactory grade, and you can switch from the letter grade option to this alternative at any point before the end of week 10, per the special university policy adopted for the Spring 2020 quarter. If you are considering this option, or unsure, please seek my advice.

For more information, see here: https://senate.ucsd.edu/COVID-19-Academic-Senate-Updates.

If at any point during the quarter you feel you are not able to meet the course expectations due to the pandemic, please discuss your situation with me so that we can make accommodations.

Prerequisites

Students will be assumed to have already completed either a graduate-level or advanced undergraduate-level introduction to game theory at the level of Martin Osborne's *An Introduction to Game Theory* or Steven Tadelis's *Game Theory: An Introduction*. If one lacks this background one should consult with the instructor before enrolling in the seminar and should be prepared to fill in the gaps in one's understanding with additional study. We will devote the first session to a review of some game-theoretic concepts.

Weekly Reading schedule

We will alternate between two kinds of questions: questions about how best to understand concepts like *institution*, *convention*, *social norm*, *popular control*, and *the rule of law*, and questions about the mechanisms by which institutions constrain political actors, the mechanisms by which they change over time, how they break down and fail, and so on. We will consider how answers to the first set of questions bear on the second.

W1 March 30. Introduction to the themes of the course; game theory refresher/primer

- Optional: Avner Greif and Christopher Kingston. 2011. "Institutions: Rules or Equilibria?" In *Political Economy of Institutions, Democracy and Voting.* Eds. N. Schofield and G. Gaballero. Springer.
- Optional: Steven Tadelis, *Game Theory: An Introduction.* Chapters 10, 11, especially 11.1–11.3.

W2 April 6. Social choice theory and the "new institutionalism"[1]

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[1]It's not so new anymore.

- David Baron and John Ferejohn. 1989. "Bargaining in Legislatures." *American Political Science Review* 83(4): 1181–1206.

- Kenneth Shepsle. 1989. "Studying institutions: some lessons from the rational choice approach." *Journal of Theoretical Politics* 1(2): 131–147.

- Sean Ingham. 2019. *Rule by Multiple Majorities.* Cambridge University Press. Chapters 2, 3.

W3 April 13. Constitutions and mass resistance to abuses of power

- Thomas Hobbes, *Leviathan*, Chapters 17–19, 21.

- Locke, *Second Treatise*, §§169–176, 220–226.

- Barry Weingast. 1997. "The Political Foundations of Democracy and the Rule of Law." *American Political Science Review* 91(2): 245–263.

W4 April 20. Democratic institutions and mass resistance

- James Fearon. 2011. "Self-Enforcing Democracy." *Quarterly Journal of Economics* 126: 1661–1708.

- Optional: Philip Pettit. 2012. *On the People's Terms: A Republican Theory and Model of Democracy.* Cambridge University Press. Introduction, §4 of ch. 4.

W5 April 27. What are institutions?

- Francesco Guala. 2016. *Understanding Institutions: The Philosophy and Science of Living Together.* Princeton University Press. Chapters 1, 2, and 4.

- Drew Fudenberg and Jean Tirole. 1990. *Game Theory.* MIT Press. §2.2, pp. 53-57 on correlated equilibria.

W6 May 4. The rule of law

- Frank Lovett. 2016. *A Republic of Law.* Cambridge University Press. Chapters 2 and 3.

- Frank Lovett. Forthcoming. "A Republican Argument for the Rule of Law." *Critical Review of International Social and Political Philosophy.*

- Optional: Gillian Hadfield and Barry Weingast. 2012. "What is law? A coordination model of the characteristics of legal order." *Journal of Legal Analysis* 4(2):471–514.

W7 May 11. Social norms and coordinated punishment

- Robert Aumann. 1976. "Agreeing to Disagree." *The Annals of Statistics* 4(6): 1236–1239.

- Optional: Dalkiran et. al. 2012. "Common knowledge and state-dependent equilibria." In *International Symposium on Algorithmic Game Theory*, pp. 84–95. Springer.

W8 May 18. Common knowledge and cultural practices

- Michael Chwe. 2001. *Rational Ritual: Culture, Coordination, and Common Knowledge.* Princeton University Press.

W9 May 25. Popular control as a check on state power

- Philip J. Reny. 2001. "Arrow's Theorem and the Gibbard-Satterthwaite Theorem: A Unified Approach." *Economic Letters* 70: 99–105.
- Sean Ingham. 2015. "Theorems and Models in Political Theory: An Application to Pettit on Popular Control." *The Good Society* 24(1): 98–117.
- Optional: Philip Pettit. 2012. *On the People's Terms: A Republican Theory and Model of Democracy.* Cambridge University Press. Introduction, §4 of ch. 4, Chapter 5.
- Optional: Sean Ingham. 2019. *Rule by Multiple Majorities.* Cambridge University Press. Chapters 1, 5.

W10 June 1. Endogenous authority

- George Mailath, Stephen Morris, and Andrew Postlewaite. 2017. "Laws and Authority." *Research in Economics* 71: 32–42.