

PE I: Formal Models of Domestic Politics

PPHA/PLSC 40102

Winter 2022

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Time and location: Monday/Wednesday 10:30–11:50, Keller 0021

Office hours: Reserve at <https://calendly.com/gehlbach/office-hours>

Overview

This course presents an overview of formal models of domestic politics. The material, in other words, covers theories of politics *within* (rather than between) countries—those theories having been formalized as game-theoretic models. Some students will take the course intending to use formal theory in their own work. Others will anticipate a more empirical orientation, albeit one that is informed by foundational theories of domestic politics. The course speaks to both audiences.

The material assumes a basic understanding of a) game theory and b) differential and integral calculus. Both prerequisites are important, though some amount of concurrent learning is possible: students who are currently enrolled in Game Theory II in Political Science (and who have a basic understanding of differential and integral calculus) should be able to follow the material.

How to see through the mathematics to the politics

For those still learning the language, it can be challenging to extract the substance from a formal model. I want you to understand the politics behind the math, which means mastering each of the models we discuss. Here is the time-honored formula for doing so:

1. First exposure. Come to class and do the reading.
2. Problem set, take 1. I will assign weekly problem sets, due the following week. You should take a first crack at the problem set after Wednesday's class and before...
3. Office hours. In my experience, some of the best learning takes place in office hours. Even if you don't have questions, you should attend to take advantage of the questions that others have.
4. Problem set, take 2. Finish the problem set after you come to office hours.

Reading

We will use the **second edition** of my textbook, *Formal Models of Domestic Politics*, which is available at the Seminary Co-op Bookstore and the University of Chicago Bookstore.

L^AT_EX

Anybody who plans to use formal theory as a research tool will want to be familiar with L^AT_EX, an open-source document-preparation system widely used for technical writing. I want you to learn it now. Your solutions to all problem sets should be written in L^AT_EX. For those new to L^AT_EX, an excellent point of entry is Overleaf—a free online editor. Overleaf itself provides a good introduction to L^AT_EX, which you can find at https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes.

Cooperation

Most of you will find this course easier if you cooperate with your classmates. Problem sets especially lend themselves to collaboration. A particularly good strategy is to begin work on a problem set yourself, and then to meet with one or more classmates to hash out any remaining issues. The final writeup should be your own.

Grading

The final grade will be based on the following weighting of course requirements:

- 15 percent: problem sets
- 35 percent: midterm exam
- 50 percent: final exam

Grading of problem sets will be “coarse,” that is, we will primarily give checks, with the occasional check-minus to signal the need to buckle down. You should understand that seeking out solutions to problems will do little to improve your problem-set grade (which in any event is worth only 15 percent of the total), but will do much to keep you from knowing the material well enough to receive a good grade on the exams.

Political Economy Workshop

You are strongly encouraged to attend the Political Economy Workshop, where you will have an opportunity to see presentations of papers related to material learned in this course. You can find the workshop schedule at <https://harris.uchicago.edu/academics/design-your-path/workshops/political-economy>.

Schedule

We will cover most of the following topics this semester, which correspond to the nine chapters in the textbook:

- Electoral competition under certainty
- Electoral competition under uncertainty
- Special interest politics
- Veto players
- Delegation
- Coalitions
- Political agency
- Nondemocracy

- Regime change

The sequencing of material will generally follow this outline, with the allocation of time across chapters to be determined.