

PE I: Formal Models of Domestic Politics

Public Policy / Political Science 40102

Winter 2021

DRAFT SYLLABUS

Instructor: Scott Gehlbach, gehlbach@uchicago.edu

Time and location: Monday/Wednesday 9:10–10:30, remote via Zoom

Office hours: Friday 9:00–11:00 (sign-up at <https://scottgehlbach.net/contact/>)

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 game theory and differential and integral calculus. Harris Ph.D. students will have satisfied these prerequisites through their coursework in the fall quarter. Political Science Ph.D. students will have satisfied these prerequisites if they a) have taken Mathematical Foundations of Political Methodology and Game Theory I, and b) have taken or are currently enrolled in Game Theory II.

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. We will try to find a time when we can meet as a group.
4. Problem set, take 2. Finish the problem set after you come to office hours.

Reading

We will use a draft of the second edition of my textbook, *Formal Models of Domestic Politics*. There is no need to purchase the first edition.

Written assignment

In addition to problem sets and exams, I ask that you complete one written assignment for this course. For this assignment, which is due **TBD**, please discuss a model that is the textbook (first or second edition). How does the version of the model in the textbook differ from that in the original research paper? What, if anything, is lost in the typically simpler textbook presentation? The assignment should not exceed 3 pages, single-spaced. I expect your essay to be written in clear prose and to be free of grammatical and punctuation errors.

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. Beginning with the second problem set, I expect all solutions to be written in L^AT_EX. You may find the following books useful:

- George Grätzer, *First Steps in L^AT_EX*.
- Helmut Kopka and Patrick W. Daly, *Guide to L^AT_EX: Fourth Edition*.

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. Students who are not native English speakers may also find it useful to consult on written assignments with those who are.

Grading

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

- 15 percent: problem sets
- 15 percent: written assignment
- 30 percent: midterm exam
- 40 percent: final exam

Grading of problem sets will be “coarse,” that is, I 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/programs-degrees/workshops/political-economy>.

Schedule

We will cover most of the following topics this semester, which correspond to the nine chapters in the second edition of 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.