Instructor: Scott Gehlbach, gehlbach@polisci.wisc.edu
Time and location: Tuesday 4:00–6:00, Van Hise 599
Office hours: TBA

Overview

This course presents an overview of formal models of domestic politics. It builds directly on the material covered in PS 835, which provides the tools used in applied modeling. The course should be of interest to political scientists in various subfields, including comparative politics and American politics, as well as to social scientists from other disciplines with an interest in politics. More generally, the material should be useful to any students who want practice in modeling, whatever their substantive interests.

Students who have not taken PS 835 should have a background in game theory equivalent to what that course offers. In addition, it is important to be familiar at the start of the semester with the basics of differential and integral calculus.

How to see through the mathematics to the politics

For those still learning the language, it can be hard 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 based on that week’s lecture, due the following week. You should take a first crack at the problem set after class and before...

3. Office hours. In my experience as a graduate student and an instructor, some of the best learning takes place in office hours. Even if you don’t have questions, you should come by to take advantage of the questions that others have. We will find a time that works for everybody.

4. Problem set, take 2. Finish the problem set after you come to office hours.

Reading

We will be using the production draft of my textbook, *Formal Models of Domestic Politics*, forthcoming with Cambridge University Press (Analytical Methods for Social Research). You can purchase a copy at the Social Science Copy Center (6120 Social Science).
Written assignments

The text for this course strips down many models, relative to their original presentation in research papers. To get a sense of what a “complete” formal-theory paper looks like, I ask you to write two short essays, each on a model of your choice included in the text. (These need not be models discussed in class.) In your essay, please compare the textbook presentation of the model to the original version. What is missing? What additional insights are gained by the complete formalization? How else might the model have been simplified? I expect essays to be written in clear prose and to be free of grammatical and punctuation errors.

\LaTeX

Anybody who plans to use formal theory as a research tool will want to be familiar with \LaTeX, an open-source document-preparation system widely used for technical writing. I want you to learn it now. By September 18 (i.e., when you turn in the second problem set), I expect all problem sets to be written in \LaTeX. To assist you, a small group of graduate students in political science will be offering a pair of seminars in \LaTeX; details to follow. You may also find the following books useful:

- George Grätzer, First Steps in \LaTeX.

The second book is a standard reference text that you will want to own if you do any work in \LaTeX after this course.

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

Accommodations for students with disabilities

Please let me know as soon as possible if you need any special accommodations to fully participate in this course so that I may make appropriate arrangements. I will make every effort to maintain the confidentiality of any information you share with me. You may also find it helpful to contact the McBurney Disability Resource Center, 1305 Linden Drive, 263-2741, if you have questions about campus policies and services.

Grading

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

- 10 percent: problem sets
- 20 percent: written assignments
- 30 percent: midterm exam
- 40 percent: final exam
Grading of problem sets will be “coarse,” that is, I will give primarily checks, with the occasional check-minus to signal the need to buckle down. With few exceptions, all exercises will have previously been used in prior problem sets or on exams. 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 10 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 Colloquium

You are strongly encouraged to attend the Political Economy Colloquium, where you will have an opportunity to see presentations of papers that use tools developed in this course. You can find the seminar schedule at http://users.polisci.wisc.edu/pec/.

Schedule

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

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

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

The midterm exam will be held in class on October 16. The date and time of the final exam will be announced later.