Instructor: Scott Gehlbach, gehlbach@polisci.wisc.edu
Time and location: Thursday 10:00–12:00, 422 North Hall
Office hours: Tuesday 1:00–3:00

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 try to 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 my textbook, *Formal Models of Domestic Politics*, published in 2013 with Cambridge University Press.
Written assignments

I ask that you complete two written assignments for this course. For the first assignment, which is due November 2, please discuss a model that is not in the textbook but should be. Why does this model belong in the text? How might it be simplified for textbook presentation? For the second assignment, which is due the last day of class, please discuss how a model in the text or elsewhere might be modified to address a question that is a) important, and b) not addressed or clearly answered by the model which you propose be modified. Each written assignment should not exceed 3 pages, single-spaced. I expect essays to be written in clear prose and to be free of grammatical and punctuation errors.

\TeX

Anybody who plans to use formal theory as a research tool will want to be familiar with \TeX, an open-source document-preparation system widely used for technical writing. I want you to learn it now. By September 21 (i.e., when you turn in the second problem set), I expect all problem sets to be written in \TeX. You may find the following books useful:

- George Grätzer, First Steps in \TeX.

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

Special accommodations

The University of Wisconsin–Madison, and I personally, support the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Please inform me by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized, if you need instructional accommodations. I will work either directly with you or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student’s educational record, is confidential and protected under FERPA.

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.

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. Some topics may include models not in the textbook, in which case I will distribute additional readings. In addition, we will cover material in my recent *Annual Review of Political Science* review article (joint with Konstantin Sonin and Milan Svolik) on “Formal Models of Nondemocratic Politics,” available on my website.

The midterm exam will be held in class on October 12. The date and time of the final exam will be announced at a later date.