

POL 290B: Advanced Formal Models
Spring 2005
Friday 9:00am-11:50am
1261 Social Sciences Building

James Fowler, 1265 Social Science, 2-1649
Office Hours: Thursday 9am-12pm, or by appointment
jhfowler@ucdavis.edu
<http://jhfowler.ucdavis.edu>

Course description

This course provides an opportunity to extend your training in reading, interpreting, and writing your own formal theoretic models. There are no required texts. I have selected some readings for the first two classes, but after that the syllabus will be driven by student demand. Each student will be responsible for selecting 10 journal articles with formal models in them for inclusion on the syllabus. I will select from these and try to organize them by topic. The final class students will present their own work in progress for their final papers.

Requirements

Your evaluation will depend on your understanding of formal theory and your ability to apply it to problems in political science. Your grade for this course will consist of three parts:

1. Participation

You should plan to do all of the readings prior to the class for which they are assigned. Failure to do this will make the seminar boring and useless for everyone. Well-prepared students will get full credit on the participation portion of their grade.

2. Weekly Presentations

Each student will be assigned one of the papers to present for each class. You should be prepared to show the model on the board, an overhead slide, or a powerpoint slide. You should also be able to explain the propositions and how they were proven.

3. Final Paper

There will be a final paper due **4pm on June 8th**. This paper should contain an original formal model applies to a problem in social science with propositions and proofs (or results and simulations).

Grades

You will be graded on each of the requirements and your final grade will be weighted as follows:

1. Participation in class (10%)
2. Weekly presentations (40%)
3. Final Paper (50%)

I will not give incompletes. Late assignments will be marked down the equivalent of a full letter grade for each 24 hour period they are late. I will only make an exception to this policy if 1) you contact me a week in advance to discuss a conflict, or 2) you provide documentation of a severe illness or family emergency that prevented you from completing the assignment on time.

Tentative Schedule

Week 1

Kenneth Shepsle, "Institutional Arrangements and Equilibrium Institutions," *American Journal of Political Science* 23:1 (1979): 27-59.

Gary W. Cox "Electoral Equilibrium under Alternative Voting Institutions," *American Journal of Political Science* 31 (1987): 82-108.

David P. Baron and John A. Ferejohn. 1989. "Bargaining in Legislatures" *American Political Science Review*, Vol. 83, No. 4. (Dec., 1989), pp. 1181-1206.

James Fearon and David Laitin, "Explaining Interethnic Cooperation" *American Political Science Review* 90 (4): 715-735 DEC 1996

Week 2

Roger B. Myerson "Nash Equilibrium and the History of Economic Theory" *Journal of Economic Literature*, Vol. 37, No. 3. (Sep., 1999), pp. 1067-1082.

Ehud Kalai and Ehud Lehrer, "Rational Learning Leads to Nash Equilibrium." *Econometrica*, Vol. 61, No. 5. (Sep., 1993), pp. 1019-1045.

John Ledyard and Theodore Groves, "Optimal Allocation of Public Goods: A Solution to the "Free Rider" Problem"; *Econometrica*, Vol. 45, No. 4. (May, 1977), pp. 783-810

Ethan Bueno de Mesquita and Scott Ashworth "Monotone Comparative Statics in Models of Politics: A Method for Simplifying Analysis and Enhancing Empirical Content"

<http://bdm.wustl.edu/PDF/mcs.pdf>

Week 3+

TBA