

Politics and the Theory of Games
POS4715-01
Fall 2008

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Course Description

This is an upper-division course focusing on the theory of games (i.e. game theory) and their application to matters of political importance. Equal time will be given to developing tools of strategic thinking that are generally applicable, and exploring the role of strategy in understanding political phenomena such as campaigns and elections, war and deterrence, legislative and judicial behavior, and the provision of public goods.

Course Format

The course will be taught with an emphasis on student participation, both in and out of class. For the first half of the course, we will focus on learning the tools necessary to understand the basics of game theory. Each new topic will be introduced by playing relevant games in class, and before moving on to the next topic we will test our learning by playing the games again in class. In between we'll discuss the nuts and bolts of the topic, and a variety of real-world situations to which the topic and associated games might be relevant; some of these will be outside the realm of politics. After each topic you will post thoughts on the games played to the forums on the discussion board on Blackboard.

In the second half of the course, we will turn more directly to the study of strategic behavior in political systems. Our focus here will largely be on institutions and the manner in which the rules they induce limits and direct the actions of those within the institution. For example, we have largely have single-member districts operating under plurality rule in this country. Does that promote certain types of party systems? Change expected turnout? Alter the types of candidates that run? That win? Questions like this will be addressed using the tools developed during the first part of the class.

Throughout, on-line, open book problem sets will track progress. A midterm and a final will end each part of the class; the final will be cumulative.

Course Requirements

1. **Participation (20%):** Game theory is very much a subject where one learns by doing. While no formal attendance will be taken, coming to class is very much encouraged. Not only will it be more difficult to follow the material, which will be cumulative throughout the course, but your forum posts will be far less interesting without any in-class experiences to discuss. A subset of these posts will be graded throughout the course, with the grade itself being determined by the care and insight you put into them. All forum posts will be due by the next class session after the class in which we finish a topic, and late posts will not be accepted. (Typically each topic ends on a Friday, so the posts would be due before class on Monday, but extra time may be granted if we get behind. This will be made clear in class.)
2. **Problem Sets (40%):** There will be five problem sets throughout the course, each worth an equal amount. You will complete these on-line, and are free to use any source you desire in doing so, as long as you do your own work. Each will be posted on the first date listed in the course schedule below (always a Wednesday), and you must complete them by the second date (always by midnight the next Wednesday). As we will promptly discuss the answers in class, late problem sets will not be accepted.

3. **Midterm exam (15%):** There will be a multiple choice test after the first part of the class.
4. **Final exam (25%):** There will be a multiple-choice exam at the end of the class, during exam week. This is presently scheduled for Friday, Dec 12th, from 10 am-12 noon. While this exam will be focused on the latter part of the class, you will be expected to utilize theories from the first part in your answers.

Grading

Grading Scale

A 93-100	A- 90-92		
B+ 87-89	B 83-86	B- 80-82	
C+ 77-79	C 73-76	C- 70-72	
D+ 67-69	D 63-66	D- 60-62	F 60 or below

Course Policies

Attendance is not mandatory, but it is encouraged. Neither late problem sets nor late forum posts will be accepted. Those who believe internet access will be a consistent problem for them should contact the instructor in the first two weeks of class to discuss alternatives. Make-up exams for the midterm and final are possible, but only with prior notice and proper documentation.

Academic Honor Code

Students are expected to uphold the Academic Honor Code published in The Florida State University Bulletin and the Student Handbook. The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility: (1) to uphold the highest standards of academic integrity in the student's own work, (2) to refuse to tolerate violations of academic integrity in the university community, and (3) to foster a high sense of integrity and social responsibility on the part of the university community.

Please see the following web site for a complete explanation of the Academic Honor Code.

<http://www.fsu.edu/Books/Student-Handbook/codes/honor.html>

Americans with Disabilities Act:

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

For more information about services available to FSU students with disabilities, contact the

Student Disability Resource Center
 97 Woodward Avenue, South
 Florida State University
 Tallahassee, FL 32306-4167
 (850) 644-9566 (voice)
 (850) 644-8504 (TDD)
sdrc@admin.fsu.edu
<http://www.fsu.edu/~staffair/dean/StudentDisability/>

Syllabus Change Policy:

This syllabus is a guide for the course and is subject to change with advance notice.

Course Materials:

There are two required books available for purchase at the FSU bookstore, and one optional one. All readings not posted separated on Blackboard will be from the required books only. The optional book is for those who want to delve more deeply into game theory; in particular those who want to go further in political science or economics. All topics from the optional book that we will discuss in class will also appear in lectures that will be posted to Blackboard by the day **after** the lecture.

Required

- Dixit, Avinash, and Barry Nalebuff, *Thinking Strategically: The Competitive Edge in Business, Politics, and Everyday Life* (New York: W. W. Norton & Company, 1991)
- Shepsle, Kenneth A. and Mark S. Bonchek. 1997. *Analyzing Politics*. Norton.

Optional

- Osborne, Martin J. *An Introduction to Game Theory*. 2004. Oxford University Press.

Class Schedule

(Note: All Readings are intended to be done *before* the class for which they are assigned.)

Week 0 (Aug 25): Syllabus, procedures, etc.

NO CLASS W Aug 27 through M Sep 1

No readings assigned for this week.

Week 1 (Sep 3, 5): Preliminaries/What is Rational Choice Theory?

Dixit and Nalebuff, Ch 1, Shepsle and Bonchek, Ch 1-2.

Week 2 (Sep 8, 10, 12): Sequential (Extensive Form) Games

Dixit and Nalebuff, Ch 2.

Week 3 (Sep 15, 17, 19): Simultaneous (Strategic/Normal Form) Games

Dixit and Nalebuff, Ch 3.

W Sep 17: PS 1 Posted

Week 4 (Sep 22, 24, 26): Repeated Games and Bargaining

Dixit and Nalebuff, Ch 4, 11.

W Sep 24: PS 1 Due

Week 5 (Sep 29, Oct 1, 3): Uncertainty

Dixit and Nalebuff, Ch 7.

W Oct 1: PS 2 Posted

Week 6 (Oct 6, 8, 10): Changing the Game

Dixit and Nalebuff, Ch 5,6,8.

W Oct 8: PS 2 Due

Week 7 (Oct 13, 15, 17): Group Choice and Majority Rule

M Oct 13: Midterm Exam (Bring a Pencil!)

Shepsle and Bonchek, Ch 3-4.

Week 8 (Oct 20, 22, 24): The Spatial Model

Shepsle and Bonchek, Ch 5.

W Oct 22: PS 3 Posted

Week 9 (Oct 27, 29, 31): Strategic Voting

Dixit and Nalebuff, Ch 10, Shepsle and Bonchek, Ch 6.

W Oct 29: PS 3 Due

Week 10 (Nov 3, 5, 7): Cooperation, Coordination, and Public Goods

Dixit and Nalebuff, Ch 9, Shepsle and Bonchek, Ch 8-10.

W Nov 5: PS 4 Posted

Week 11 (Nov 10, 12, 14): Strategy in Institutions I: Legislatures

Shepsle and Bonchek, Ch 11-12.

W Nov 12: PS 4 Due

Week 12 (Nov 17, 19, 21): Strategy in Institutions II: Bureaucracy and the Executive

Dixit and Nalebuff, Ch 12, Shepsle and Bonchek, Ch 13-14.

W Nov 19: PS 5 Posted

Week 13 (Nov 24): Strategy in Institutions III: Voting Rules

NO CLASS W Nov 26, F Nov 28 (Happy Thanksgiving!)

Shepsle and Bonchek, Ch 7.

Week 14 (Dec 3, 5, 7): Strategy in Institutions IV: Judiciary, and Review

Shepsle and Bonchek, Ch 15.

W Dec 5: PS 5 Due

F Dec 12, 10 am-12 noon: Final Exam (Bring a pencil!)