

POLI 7964: Introduction to Rational Choice and Formal Modeling in the Social Sciences

Mondays 1:30-4:20pm Spring 2017
210 Stubbs Hall

Instructor

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Office Hours: Tuesdays 1:30-3:30pm, or by appointment

Course Description: This course will introduce students to the basic principles and theories of rational choice theory and formal modeling, familiarize them with examples of their use in social science research, and also address criticisms and defenses of their role in the discipline. It is intended for students who possess no prior experience with either of these concepts, although familiarity with algebra, statistics and calculus will be beneficial. By the end of the course students are expected to be able to identify the foundational concepts and theories relating to both rational choice and formal modeling, construct and analyze basic models, provide constructive feedback on models used in the contemporary discipline of political science, and be knowledgeable of seminal works in the field utilizing these approaches.

General Statement on Academic Integrity:

Louisiana State University adopted the Commitment to Community in 1995 to set forth guidelines for student behavior both inside and outside of the classroom. The Commitment to Community charges students to maintain high standards of academic and personal integrity. All students are expected to read and be familiar with the LSU Code of Student Conduct and Commitment to Community, found online at www.lsu.edu/saa. It is your responsibility as a student at LSU to know and understand the academic standards for our community.

Students who are suspected of violating the Code of Conduct will be referred to the Office of Student Advocacy and Accountability. For undergraduate students, a first academic violation could result in a zero grade on the assignment or failing the class and disciplinary probation until graduation. For a second academic violation, the result could be suspension from LSU. For graduate students, suspension is the appropriate outcome for the first offense.

Plagiarism and Citation Method:

As a student at LSU, it is your responsibility to refrain from plagiarizing the academic property of another and to utilize appropriate citation method for all coursework. Ignorance of the citation method is not an excuse for academic misconduct. Remember there is a difference between paraphrasing and quoting and how to properly cite each respectively. If you have questions regarding what is appropriate, please consult with the library's tutorials on avoiding plagiarism and proper citation formats (links are also provided on the course *Moodle* page).

Group work and unauthorized assistance: All work must be completed without assistance unless explicit permission for group or partner work is given by the faculty member. This is critical so that the professor can assess your performance on each assignment. If a group/partner project is assigned, the student may still have individual work to complete. Read the syllabus and assignment directions carefully. You might have a project with group work and a follow up report that is independently written. When in doubt, e-mail the faculty member or ask during a class session. Seeking clarification is your responsibility as a student. Assuming group/partner work is okay without permission constitutes a violation of the LSU Code of Student Conduct.

Students requiring special accommodation: Louisiana State University is committed to providing reasonable accommodations for all persons with disabilities. Any student with a documented disability needing academic adjustments is requested to speak with the Disability Services and the instructor, as early in the semester as possible. All discussions will remain confidential. This publication/material is available in alternative formats upon request. Please contact the Disability Services, 115 Johnston Hall, (225) 578-5919.

Course Expectations:

A few notes on participation:

1. All students are expected to participate in class discussions. Students are therefore

Additional Course Readings:

- Axelrod, Robert. 1984. *The Evolution of Cooperation*. Basic Books.
 Gilboa, Itzhak. 2010. *Rational Choice*. Cambridge, MA: MIT Press.
 Green, Donald and Ian Shapiro. 1996. *Pathologies of Rational Choice Theory*. New Haven, CT : Yale University Press.
 Schelling, Thomas C. 1980. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press (Reprint)

Letter Grades and Percentages

A+: 97-100	B+: 87-89	C+: 77-79	D+: 67-69	F: 59 or below
A: 93-96	B: 83-86	C: 73-76	D: 63-66	
A-: 90-92	B-: 80-82	C-: 70-72	D-: 60-62	

Attendance 10%

Class Participation: 10%

Part I Discussion & Analysis Paper: 20%

Weekly Assignments: 25%

Final Exam: 35%

Notes on Grading:

- Students will be allowed one excused absence. Each absence beyond the first will result in a 10 percentage point reduction in the student's attendance grade. Arriving to class more than 5 minutes after the scheduled start time or leaving prior to its end will result in a half-absence.
- Class participation will be evaluated based on student contributions which 1) demonstrate that he or she has prepared for class by reading the necessary materials and 2) show that the student is engaged in the classroom discussion. Non-class related laptop usage, inattentiveness, or other disruptions to the classroom environment will reduce the class participation grade.
- Weekly assignments will be given during Part II of the course. These will jointly constitute 25% of the student's course grade. Students may work collaboratively on these assignments with any other student enrolled in the course, given the following conditions:
 - Only one submission per group will be accepted
 - Each student who participated in the collaborative effort must be listed on the submission
 - There is no limit to group size, but group homework submissions will be subject to a scoring adjustment wherein each incorrect point will be multiplied by 1.26^n , where n represents the number of group members and $n > 1$.
 - Any utilization of online solution sets (or similar resources) or assistance from individuals not enrolled in the course will result in a grade of zero for the assignment.

- Munck, Gerardo L. 2001. Game Theory and Comparative Politics. *World Politics* 53: 173-204.
- Smelser, Neil J. 1992. The Rational Choice Perspective: A Theoretical Assessment. *Rationality and Society* 4(4): 381-410.
- Snidal, Duncan. 1985. The Game Theory of International Politics. *World Politic* 38(1): 25-57.

Week 6: February 13 – Rationalism and Its Discontents: A Cautionary Tale

Green, Donald and Ian Shapiro. 1996. *Pathologies of Rational Choice Theory*. New Haven,

Week 12: March 27 - Extensive Games with Perfect Information: Illustrations
Osborne, Chapter 6

III. Examples from the Literature

Week 13: April 3 - Contemporary Examples of Formal Models

Bapat, Navin A. 2010. A Game Theoretic Analysis of the Afghan Surge. *Foreign Policy Analysis* 6: 217-236

Erlingsson, Gissur Ó. 2005. Modelling Secessions from Municipalities.

Part I Discussion & Analysis Paper

Each student enrolled in the course will submit a paper which addresses the material discussed in the first part of the course. In this paper, the student will utilize assigned readings and those not included on the syllabus to discuss their conceptualization of what is it to be rational and the benefits and drawbacks of using rationality in the social sciences. The student will then use the framework he or she has constructed to identify and critique the use of a rational choice approach in three published works within his or her field. As part of this critique, the student will assess:

- How the author(s) construct and utilize rationality in their work
- How this approach comports with the student's own understanding of rationality
- How the use of rational choice adds to the findings or argument, and where its use may introduce questions regarding the validity of the argument or findings
- What alternative approach, if any, could be used to strengthen the argument or