

Political Science 546: Modern Political Economy A

Room: Harkness 329

University of Rochester Spring 2026

Instructor: Scott A. Tyson

Email: styson2@ur.rochester.edu Office: Harkness 109C

Office Hours:

Course Description: In this graduate seminar we will study recent theoretical research and methods in political economy. We place particular emphasis on developing an understanding of foundational concepts and models that are prominent in modern political economy applications, such as the principal-agent model and contract theory, models of collective action, dynamic models with an emphasis on commitment problems, models of persuasion, and models of signaling and signal jamming, among others. This course complements Modern Political Economy B, which approaches similar topics from an empirical perspective, and it is strongly recommended that students take this course and Modern Political Economy B.

Prerequisites: A familiarity with Nash equilibrium, Perfect Bayesian equilibrium, the potential outcomes model, as well as key concepts of research design such as the selection and use of an instrument will be helpful but is not required. Students enrolling in this course ideally would have taken PSCI 407, 408, and 584.

Structure of the Course: Each week will be comprised of a short lecture followed by class discussion. There will also be a final project comprised of the proposal of a research paper. I do not necessarily expect every student to complete a fully polished research paper by the end of the course. I do, however, expect students to be able to complete a detailed, yet brief (about 20 pages), proposal of a research project. For example, the student might present an argument in words, situate their argument within the existing literature, provide a detailed description of their empirical strategy or model, and finally, describe how their potential findings would contribute to the literature.

Grades: Your grade in the course will ultimately be determined by performance in (1) class presentations, (2) class discussions, and (3) a final project. The grading scheme is as follows:

Problem Sets (35%)

Class Discussion (25%)

Final paper (40%)

Methodological Background: This course will rely on concepts from game theory as well as causal inference and statistics. Useful background references are:

- Game Theory: Robert Gibbons. An introduction to applicable game theory. 11(1):127–149, 1997
- Research Design: Joshua D Angrist and Alan B Krueger. Empirical strategies in labor economics. *Handbook of labor economics*, 3:1277–1366, 1999

Schedule:

- Introduction (January 21, 2026)
- Signal Structures and Uncertainty (January 28, 2026):
 - (a) Paul R Milgrom. Good news and bad news: Representation theorems and applications. *The Bell Journal of Economics*, pages 380–391, 1981
 - (b) Michael Rothschild and Joseph E Stiglitz. Increasing risk: I. a definition. *Journal of Economic Theory*, 2(3):225–243, 1970
 - (c) Michael Rothschild and Joseph E Stiglitz. Increasing risk ii: Its economic consequences. *Journal of Economic theory*, 3(1):66–84, 1971
- Monotone Comparative Statics (February 4, 2026):
 - (a) Paul Milgrom and Chris Shannon. Monotone comparative statics. *Econometrica: Journal of the Econometric Society*, pages 157–180, 1994
 - (b) Susan Athey. Monotone comparative statics under uncertainty. *The Quarterly Journal of Economics*, 117(1):187–223, 2002
- The Principal Agent Model—Moral Hazard (February 11, 2026):
 - (a) Bengt Hölmstrom. Moral hazard and observability. *The Bell journal of economics*, pages 74–91, 1979
 - (b) Bengt Holmstrom. Moral hazard in teams. *The Bell journal of economics*, pages 324–340, 1982
 - (c) Ian Jewitt. Justifying the first-order approach to principal-agent problems. *Econometrica: Journal of the Econometric Society*, pages 1177–1190, 1988
- The Principal Agent Model—Adverse Selection (February 18, 2026):
 - (a) Michael Spence. Job market signaling. *The Quarterly Journal of Economics*, 87(3):355–374, 1973
 - (b) Joseph E Stiglitz. The theory of “screening,” education, and the distribution of income. *The American economic review*, 65(3):283–300, 1975
- The Principal Agent Model—Career Concerns (February 25, 2026):
 - (a) Bengt Holmström. Managerial incentive problems: A dynamic perspective. *The review of Economic studies*, 66(1):169–182, 1999
 - (b) Mathias Dewatripont, Ian Jewitt, and Jean Tirole. The economics of career concerns, part i: Comparing information structures. *The Review of Economic Studies*, 66(1):183–198, 1999a
 - (c) Mathias Dewatripont, Ian Jewitt, and Jean Tirole. The economics of career concerns, part ii: Application to missions and accountability of government agencies. *The Review of Economic Studies*, 66(1):199–217, 1999b

- Signal Jamming (March 4, 2026):
 - (a) Drew Fudenberg and Jean Tirole. A “signal-jamming” theory of predation. *The RAND Journal of Economics*, pages 366–376, 1986
- Mechanism Design (March 25, 2026):
 - (a) Roger B Myerson. Mechanism design by an informed principal. *Econometrica: Journal of the Econometric Society*, pages 1767–1797, 1983
 - (b) David P Baron and Roger B Myerson. Regulating a monopolist with unknown costs. *Econometrica: Journal of the Econometric Society*, pages 911–930, 1982
 - (c) Jeffrey S Banks. Equilibrium behavior in crisis bargaining games. *American Journal of Political Science*, pages 599–614, 1990
- Coordination (April 1, 2026):
 - (a) Christian Hellwig. Public information, private information, and the multiplicity of equilibria in coordination games. *Journal of Economic Theory*, 107(2):191–222, 2002
 - (b) George-Marios Angeletos, Christian Hellwig, and Alessandro Pavan. Signaling in a global game: Coordination and policy traps. *Journal of Political economy*, 114(3):452–484, 2006
- Bayesian Persuasion (April 8, 2026):
 - (a) Emir Kamenica and Matthew Gentzkow. Bayesian persuasion. *American Economic Review*, 101(6):2590–2615, 2011
 - (b) Emir Kamenica. Bayesian persuasion and information design. *Annual Review of Economics*, 11(1):249–272, 2019
- Dynamic Models—Dynamic Programming I (April 15, 2026):
 - (a) J Adda. *Dynamic Economics: Quantitative Methods and Applications*. The MIT Press, 2003
- Dynamic Models—Dynamic Programming II (April 22, 2026):
 - (a) Daron Acemoglu and James A Robinson. A theory of political transitions. *American Economic Review*, 91(4):938–963, 2001
 - (b) Daron Acemoglu and James A Robinson. *Economic origins of dictatorship and democracy*. Cambridge university press, 2005
 - (c) Robert Powell. The inefficient use of power: Costly conflict with complete information. *American Political science review*, 98(2):231–241, 2004
- Cushion Week (April 29, 2025):

Accommodations for Students with Disabilities: If you think you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way

the course is usually taught may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work with the Services for Students with Disabilities (SSD) office to help us determine appropriate academic accommodations.

Religious and Academic Conflicts: Although the University of Rochester, as an institution, does not observe religious holidays, it has long been the University's policy that every reasonable effort should be made to help students avoid negative academic consequences when their religious obligations conflict with academic requirements. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who expect to miss classes, examinations, or other assignments as a consequence of their religious observance shall be provided with a reasonable alternative opportunity to complete such academic responsibilities.

It is the obligation of students to provide faculty with reasonable notice of the dates of religious holidays on which they will be absent. Such notice must be given by the drop/add deadline of the given term. Students who are absent on days of examinations or class assignments shall be offered an opportunity to make up the work, without penalty, unless it can be demonstrated that a make-up opportunity would interfere unreasonably with the delivery of the course. Should disagreement arise over any aspect of this policy, the parties involved should contact the Director of Undergraduate Studies/Director of Graduate Studies. Final appeals will be resolved by the Provost.

Students Representing the University of Rochester: There may be instances when students must miss class due to their commitment to officially represent the University. These students may be involved in the performing arts, scientific or artistic endeavors, or intercollegiate athletics. Absence from classes while representing the University does not relieve students from responsibility for any part of the course missed during the period of absence. Students should provide reasonable notice for dates of anticipated absences and submit an individualized class excuse form.

Student Mental Health and Wellbeing: University of Rochester is committed to advancing the mental health and wellbeing of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact the University Counseling Center at UHS at (585) 275-3113 and <http://www.rochester.edu/uhs/ucc/> during and after hours, on weekends and holidays, or through its counselors physically located in schools on River Campus.

Academic Integrity: General University policies and guidelines regarding academic honesty apply. The academic community, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. The University holds all members of its community to high standards of scholarship and integrity. To accomplish its mission of providing an optimal educational environment and developing leaders of society, the University promotes the assumption of personal responsibility and integrity and prohibits all forms of academic dishonesty and misconduct. Academic dishonesty may

be understood as any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community. Conduct, without regard to motive, that violates the academic integrity and ethical standards of the College community cannot be tolerated. The College seeks vigorously to achieve compliance with its community standards of academic integrity. Violations of the standards will not be tolerated and will result in serious consequences and disciplinary action.

Grade Grievances: If you believe a grade you have received is unfair or in error, you will need to do the following:

1. Wait 24 hours after receiving the grade before approaching your instructor.
2. Provide an explanation in writing for why the grade you received was unfair or in error.
3. If you believe the instructor's response fails to address your claim of unfairness or error, you may petition the department's Director of Undergraduate Studies at the latest within the first five weeks of classes following the completion of the course. You must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating which aspects are in dispute. Within three weeks of the receipt of the petition, the DUS will determine whether to convene the Undergraduate Affairs Committee, the student, and the instructor(s) for a formal hearing. Further details on this process are included on the department website under Advising → Contesting a Grade.