Professor: John Duggan
Office: Harkness 320b, x34999
Hours: TTh 3:45-5:00

Course Description: We will take up several foundational topics in theoretical political economy. We begin with social choice theory, where we view collective decisions as arising from a social preference relation determined in some arbitrary way by the preferences of individuals. We’ll prove Arrow’s impossibility theorem and others, which inform us of inherent limitations on the rationality of collective decisions. We then consider the possibility that collective decisions are specifically the outcomes of a game played by individual decision-makers. We will explore the main findings in the theory of implementation, where we impose little or no structure on the kind of game that might be played, and we will consider games of a more “political” nature: we will investigate the strategic aspects of voting, of position-taking by candidates in elections, and of legislative policy-making.

Textbook: The only textbook for the class is


Course Requirements: In addition to class attendance, homeworks will be assigned and a midterm and final will be given.

Outline: Below is an outline of the topics we will cover and the readings we will use.
Collective Rationality and Social Choice

- individual and social choice – ASB, Chapter 1.
- impossibility theorems – ASB, Sections 2.1-2.3.
- acyclicity and simple rules – ASB, Sections 3.1-3.3.
- single-peakedness – ASB, Sections 4.1-4.4.
- acyclicity and multiple dimensions – ASB, Sections 5.1-5.3.
- core instability – ASB, Section 5.4.
- the topcycle set
- the uncovered set
- other solutions: von Neumann-Morgenstern stable set, bargaining solution, competitive solution

Implementation

- dominant strategy and Nash implementation

• refinements and virtual implementation

• Bayesian incentive compatibility and implementation


**Strategic Voting**

• strategy-proofness and preference revelation


• sophisticated voting and agendas


• incomplete information


Two-candidate Competition


Legislatures and Parliaments

- structure-induced equilibrium
- bargaining