

PEC/ECO/PSC 575 POLITICAL ECONOMY 1:
SOCIAL CHOICE AND POLITICAL THEORY

Fall, 1999
MW 3:45-5:00
Harkness 112

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

Austen-Smith and Banks (1999) *Positive Political Theory 1: Collective Preference*, Ann Arbor: University of Michigan Press,

referred to below as simply "ASB." Other readings will be from journal articles and book chapters, to be made available for copying.

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
 - Moulin (1986) “Choosing from a Tournament,” *Social Choice and Welfare*, 3:271-291, Sections 1 & 2.
 - McKelvey (1976) “Intransitivities in Multidimensional Voting Models and Some Implications for Agenda Control,” *Journal of Economic Theory*, 12:472-482.
- the uncovered set
 - Moulin (1986) “Choosing from a Tournament,” *Social Choice and Welfare*, 3:271-291, Sections 3 & 4.
 - McKelvey (1986) “Covering, Dominance, and Institution-free Properties of Social Choice,” *American Journal of Political Science*, 24:68-96.
- other solutions: von Neumann-Morgenstern stable set, bargaining solution, competitive solution

Implementation

- dominant strategy and Nash implementation
 - Dasgupta, Hammond, and Maskin (1979) “The Implementation of Social Choice Rules: Some General Results on Incentive Compatibility,” *Review of Economic Studies*, 46:185-216.

- Moore (1992) “Implementation, Contracts, and Renegotiation in Environments with Complete Information,” in, J.-J. Laffont ed., *Advances in Economic Theory, Sixth World Congress, Vol. 1*, Cambridge.
- refinements and virtual implementation
- Bayesian incentive compatibility and implementation
 - D’Aspremont and Gerard-Varet (1979) “Incentives and Incomplete Information,” *Journal of Public Economics*, 11:25-45.
 - Palfrey (1992) “Implementation in Bayesian Equilibrium: the Multiple Equilibrium Problem in Mechanism Design,” in, J.-J. Laffont ed., *Advances in Economic Theory, Sixth World Congress, Vol. 1*, Cambridge.

Strategic Voting

- strategy-proofness and preference revelation
 - Duggan and Schwartz (1999) “Strategic Manipulability without Resoluteness or Shared Beliefs: Gibbard-Satterthwaite Generalized,” *Social Choice and Welfare*, forthcoming.
- sophisticated voting and agendas
 - Moulin (1983) *The Strategy of Social Choice*, North-Holland, Chapters 5 & 6.
 - Moulin (1986) “Choosing from a Tournament,” *Social Choice and Welfare*, 3:271-291, Sections 6 & 7.
- incomplete information
 - Palfrey and Rosenthal (1985) “Voter Participation and Strategic Uncertainty,” *American Political Science Review*, 79:62-79.
 - Austen-Smith and Banks (1996) “Information Aggregation, Rationality, and the Condorcet Jury Theorem,” *American Political Science Review*, 90:34-45.

Two-candidate Competition

- – Banks and Duggan (1999) “A Theory of Probabilistic Voting in the Spatial Model of Elections,” mimeo.
- Ledyard (1984) “The Pure Theory of Large Two-candidate Elections,” *Public Choice*, 44:7-41.

Legislatures and Parliaments

- structure-induced equilibrium
 - Ordeshook (1986) *Game Theory and Political Theory*, Cambridge, Sections 6.1-6.3.
- bargaining
 - Baron and Ferejohn (1989) “Bargaining in Legislatures,” *American Political Science Review*, 83:1181-1206.
 - Banks and Duggan (1999) “A Bargaining Model of Collective Choice,” mimeo.