

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

Fall, 2005  
T 2:00-4:40  
Harkness 112

Professor: John Duggan  
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Hours: by appointment

*Course Description:* We will take up several foundational topics in theoretical political economy. We begin with the analysis of fundamental concepts used throughout the course: binary relations, preferences, and choice. We then study 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 will prove Arrow's impossibility theorem and others, which inform us of inherent limitations on the rationality of collective decisions. We then change perspective, viewing collective decisions as outcomes of a game played by individual decision-makers. We will consider game-theoretic models of static elections, sequential voting, bargaining, and repeated elections, with a special focus on connections to social choice.

*Textbooks:* Lectures will be based primarily on three sources, which may be supplemented by journal articles as well.

- [D] Duggan (2004) *Theoretical Foundations of Political Economy*, lecture notes. (Distributed.)
- [AB1] Austen-Smith and Banks (1999) *Positive Political Theory 1: Collective Preference*, Ann Arbor: University of Michigan Press. (Available in bookstore.)
- [AB2] Austen-Smith and Banks (2004) *Positive Political Theory 2: Strategy and Structure*, Ann Arbor: University of Michigan Press. (Available in bookstore.)

*Course Requirements:* Class attendance is mandatory, homeworks will be assigned, and a final exam will be given. In addition, there may be a midterm exam and class presentations.

*Course Topics:* We will cover the following topics.

1. Binary relations, preference, and maximality:
  - [D, 1.1–1.3]
  - [AB1, Chapter 1]
2. Top cycles and uncovered sets:
  - [D, 1.4, 1.5]
3. Collective choice, preference aggregation, and the core:
  - [D, 2.1–2.4]
  - [AB1, Chapter 2]
4. Arrow's theorem:
  - [D, 2.5]
  - [AB1, Chapter 2]
5. Single-peakedness and the median voter theorem:
  - [D, 2.6]
  - [AB1, Chapter 4]
6. The multidimensional spatial model: core, top cycle, and uncovered set:
  - [D, 2.7–2.10]
  - [AB1, Chapters 5 and 6]
7. Downsian elections:
  - [AB2, Chapter 7]
8. Committee Decision-making
  - [AB2, Chapters 4 and 5]
9. Legislative Bargaining
  - [AB2, Chapter 6]