This is a nine-week course, focusing primarily on formal social choice and voting models. As the title suggests, I expect to be quite analytical. This means that we will be as mathematically rigorous as possible in exploring ideas.

There is one required text for this course:

- David Austen-Smith and Jeffrey Banks: “Positive Political Theory I: Collective Preference.”

There are other books that will be useful to have. One such book is the following:


To get an understanding of the foundations of social choice, I also recommend:

- K. Arrow “Social Choice and Individual Values.”

We will primarily follow Austen-Smith and Banks. However, there are results not in the book that you should know. Some of these will be listed below; others I will assign as they occur to me.

The mathematics involved is (as always) very geometric. However, everybody should be competent and proficient at rigorous analytical proofs.

Each week I will assign homework. You are allowed to work in groups, but everybody should hand in their own assignment. If you have worked with others, please list the names of the other students you have worked with. There will also be a final exam.

Below is a tentative list of readings. Some of the topics you will probably be pretty familiar with already (for example, choice theory) so I will move through these quickly. Due to time constraints, there is zero probability that we will get through the entire syllabus in class. I have put a (*) next to readings that might be considered “less important” and which I probably will not teach in class but which may be helpful for homeworks, and which you may be interested in anyway.

**Abstract choice theory and binary relations**

- Austen-Smith & Banks, Chapter 1
• McKelvey, Chapter 1

Abstract social choice, the binary model and classical results
• Austen-Smith & Banks, Chapter 2-3.
• K. Arrow, Social choice and individual values.

Social choice rules and implementation
• Gibbard-Satterthwaite theorem
• (*) H. Moulin, “Dominance solvable voting schemes


Preference restrictions, spatial competition, and “resolving” impossibilities

• Austen-Smith and Banks, Chapters 4-5

• McKelvey, Chapter 5.


Cycles and chains in spatial models, “chaos” results, the topcycle and uncovered sets

• Austen-Smith and Banks, Chapter 6


Agendas and manipulation