

# TOPICS IN MICROECONOMICS

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This course will consist of two parts. The first will be an introduction to the theory of aggregation. The second part will focus on strategic group formation. The assignment of topics to instructors is given below:

Part I: Arunava Sen.

Part II : Bhaskar Dutta.

A brief outline is given below. Please note that time constraints may prevent all topics from being covered.

Part I.

1. The aggregation problem: The Arrow impossibility Theorem.
2. Single-peaked preferences: The Median Voter Theorem.
3. Enriched information structures: Welfarism, axiomatizations of Rawlsian and utilitarian welfare functionals.
4. Probabilistic aggregation: The Barberà-Sonnenschein Theorem.
5. Algebraic aggregation: The Rubinstein-Fishburn Theorem.
6. Voting with interdependent values: The Condorcet Jury Theorem.
7. Topics in cooperative game theory: The Core, Nucleolus and Shapley Value in TU games.

## Part II

1. One stage models of group formation.
  - (a) A unified framework for coalitional and network formation.
  - (b) Stability.
  - (c) Some applications.
2. Farsightedness in static and dynamic settings.
  - (a) vN-M sets and Chwe's largest consistent set.
  - (b) Dynamic group formation in real time.
3. General Tension between Efficiency and Stability
  - (a) Examples illustrating the tension between efficiency and stability.
  - (b) Resolving the tension.
    - (i) Restricting the value function.
    - (ii) The Mechanism Design Approach.
    - (iii) Bargaining.
    - (iv) Pigovian taxes and transfers.