

Eco 3016: Topics in Microeconomics

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1 Overview

This is a course in economic theory based on the axiomatic method. It will cover classical topics in preference aggregation, strategic voting, matching, bargaining and resource allocation. Specific topics, in the rough order that we will discuss them, are the following.

- Voting Methods and the Aggregation of Preferences: The Arrow Impossibility Theorem.
- Strategic Voting: The Gibbard-Satterthwaite Theorem.
- Restricted Domains and Single-Peaked Preferences: Generalized Median Voter Theorems.
- Matching: (i) One-sided matching: Priority and Top-Trading Cycle Rules (ii) Two-sided matching: the Gale-Shapley Deferred Acceptance Algorithm.
- Axiomatic Bargaining: The Nash Bargaining and the Egalitarian Solution.

2 Requirements

There is no textbook. References will be made to notes and papers.

3 Learning Outcomes

The course will emphasise concepts. The content will be formal though we will not require knowledge of any specific concepts in economics or any mathematical results. Whatever is required will be motivated and introduced in class. The only requirement is a basic level of comfort with abstract argumentation. We will do some lengthy proofs but I do not expect students to memorize and reproduce them in exams. I am happy to adjust the pace of the lectures in accordance with student preferences. This will be first-principles course and will be fun for all those who want to learn new things.

4 Grading Policy

The final grade will be based on the following:

1. Homework assignments (20 marks). Students can consult while discussing homework problems. However they must write answers individually. Copying from each other is easily detected and will be penalized.
2. Mid-term examination (40 marks). This will be an in-class closed book exam.
3. Paper (40 marks). I will suggest a topic and a set of readings to each student (student suggestions are also welcome). The topic will be connected to material covered in the course and is an opportunity to formulate and develop a research question. Every student will write a short paper due after the end of the semester.

The final grade will be based on absolute scores according to the following distribution.

- A: 90 and above.
- A-: 80-89.
- B+: 70-79.
- B: 60-69.
- B-: 50-59.
- C: 40-49.
- F: below 40.

5 Attendance

Attendance is strongly encouraged but will not be marked.