

## Voting Theory

**Niveau** : Master, 2<sup>nd</sup> year (M2)

**Cursus** : Master Political Engineering

**Semestre** : 1st semester

**Volume horaire** : 9 heures de cours (CM)

**Intervenant** : Federica CERON

**Contact** : [federica.ceron@univ-st-etienne.fr](mailto:federica.ceron@univ-st-etienne.fr)

### Objectifs du cours :

This is an introductory course in voting theory. We will ask what is a good voting procedure and whether we can develop simple voting procedures that guarantee that elected officials represent the “will of the people”. Our approach will be axiomatic. We will start by discussing the most fundamental impossibility theorems in social choice theory. Then, we will move to the discussion of ballot information and we will analyze in detail the Approval voting method.

### Plan de cours :

The course is split in four 1.5-hour long lectures.

- Lectures 1 and 2 are an introduction to voting theory and to its fundamental results.
- Lecture 3 and 4 discuss the approval voting method.

### Compétences développées :

Students learn the methodological and technical aspects of the economic modeling of social choice.

### Modalités d'évaluation :

The final grade will be determined by a written exam at the end of the course. A bonus may be awarded to students who actively participate in class.

### Prérequis (à mentionner uniquement s'il y en a) :

A basic understanding of logical and mathematical reasoning is required.

### Bibliographie / références :

- Handbook of Computational social choice – chapter 1
- Approval Voting under Dichotomous Preferences: A Catalogue of Characterizations (Florian Brandl and Dominik Peters, working paper 2021)
- Approval voting without ballot restrictions (Federica Ceron and Stéphane Gonzalez, Theoretical Economics 2021)