

## Allievi Program

# ECONOMIC PRINCIPLES Spring 2023

### Instructor: Lorenzo Maria Stanca

#### **Contact Information**

Collegio Carlo Alberto office. mail. website Office Hours: TBD.

#### Introduction

The course will provide a rigorous survey of microeconomic theory. In the first half of the course we will examine the economic behavior of consumers and firms. The second half will be devoted to the study of selected topics: general and partial equilibrium game theory, market failures and information economics.

#### Prerequisites

The course requires familiarity with standard mathematical techniques used in formal undergraduate courses such as multivariate calculus, constrained optimization. All the necessary concepts will be reviewed when necessary.

#### **Requirements and Grading**

The grades will be determined as follows: midterm 40%, final exam 60%. There will be (non-graded) problem sets once a week.

#### Textbooks

The main text for the course will be:

• Geoffrey Jehle and Philip Reny [JR]: Advanced Microeconomic Theory, 3rd edition.

I will distribute additional material and lecture notes when needed.

#### Tentative course schedule

- I Introduction.
- II Choice Under Certainty.

Preferences and Utility; The Consumer's Problem; Indirect Utility and Expenditure Functions; Properties of Consumer Demand; Revealed Preference.

- III Choice Under Uncertainty. Objective Probability and Expected Utility; Subjective Probability; Risk Aversion.
- IV Theory of the Firm. Production Functions; Cost Functions; Profit Maximization.
- V Partial Equilibrium. Perfect Competition; Equilibrium and Welfare.
- VI General Equilibrium. The Edgeworth Box Exchange Economy; Exchange Economies; The Efficiency of Competitive Equilibria; General Equilibrium with Production; The Core.
- VII Asymmetric Information and Market Failures. Information Economics; Externalities and Public Goods.
- VIII Game Theory and Imperfect Competition. Monopoly; Game Theory: Static Games; Game Theory: Dynamic Games; Oligopoly; Auctions.