



Research
Education
Outreach

CCA

Allievi Program, Master in Economics, and Ph.D. in Economics

INTRODUCTORY STATISTICS

Fall 2022

Instructor: Lorien Sabatino

Contact Information

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Course Description

The course provides a formal introduction to some basic concepts of probability and statistics which are useful in economics and social sciences

Exam

There will be a written exam at the end of the course

Textbooks

Introduction to the Theory of Statistics - Mood, Graybill, and Boes

Introductory Statistics - Wonnacott and Wonnacott

Program

- **Part 1**

- Introduction to set theory
- Introduction to probability
- Random variables
- Expectation
- Some families of univariate discrete distributions
- Some families of univariate continuous distributions
- Multivariate random variables
- Conditional Probability and Independence

- **Part 2**

- Sampling
- Sample moments
- Weak law of large numbers
- Central limit theorem
- Point Estimation
- Consistency of estimators
- Hypothesis testing and confidence interval