Introductory Statistics
Collegio Carlo Alberto

Lorien Sabatino

Academic Year 2019 - 2020

Contact Information

Email: lorien.sabatino@carloalberto.org
Website: https://sites.google.com/carloalberto.org/lorien-sabatino

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.

Program

Part 1

- Introduction to set theory
- Introduction to probability
- Random variables
• Expectation and moment
• 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

Textbooks

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