



Visiting Professor Program Academic Year 2023/2024

TEACHING COMMITMENT: 24 hours

COURSE TITLE

Probability and Statistics

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

Probability and Statistics

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

The course aims at consolidating the student's toolkit on probabilistic and statistical methods by means of an advanced treatment of these topics.

LEARNING OBJECTIVES

- Knowledge of the main probabilistic models for discrete and continuous random variables (including bivariate models)
- Ability to describe experiments with random outcomes by using the appropriate probabilistic model
- Ability to compute moments of various distributions and limits of random variables
- Ability to construct estimators, confidence intervals and hypothesis tests in common parametric statistical models

- Understanding of the theoretical properties of the derived statistical methods (in particular, in the asymptotic setting)
- Knowledge of the Bayesian framework and ability to apply Bayesian methods in various inference problems
- Ability to present in written form the mathematical models addressed during the course, their range of applicability and their intuitive meaning

TUTORSHIP ACTIVITIES

N/A

LAB ACTIVITIES

N/A

OTHER ACTIVITIES BESIDES THE COURSE

N/A

VISITING PROFESSOR PROFILE

The visiting professor will be an expert in the area of statistics with teaching experience in statistics at the undergraduate level.

CONTACT REFERENT

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