COMPETENCES AND SKILLS THAT WILL BE ACQUIRED AND LEARNING RESULTS.
* To know exploratory data analysis.
* To know concepts and properties of probability calculus and random variables.
* To know the estimates construction methods and the estimates properties.
* To understand the concept of confidence interval and its applications.
* To know hypotheses testing, including the notion of p-value.

DESCRIPTION OF CONTENTS: PROGRAMME
1. Exploratory data analysis (EDO)
   1.1 Descriptive measures.
   1.2 Graphics and diagrams
2 Introduction to Probability calculus
   2.1 Bases of Probability theory
   2.2 Random variables.
   2.3 Distributions.
   2.4 Independence and transformations.
   2.5 Expectation.
3 Point estimation and interval estimation.
   3.1 Introduction: Estimation problems.
   3.2 Examples.
   3.3 Properties of estimators.
   3.4 Construction of estimators.
4. Hypothesis tests
   4.1 Introduction: hipothesis, errors and function of power.
   4.2 Wald contrast. Fisher test.
   4.3 p-value
   4.4 Ratio of likelihood test.

ASSESSMENT SYSTEM
Final exam.
Homework: particular analysis of real data (by groups of students)
Midterm exam.

% end-of-term-examination: 50
% of continuous assessment (assignments, laboratory, practicals...): 50

BASIC BIBLIOGRAPHY

ADDITIONAL BIBLIOGRAPHY
Francisco.