



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Biostatistics

2122-99R-BS

Title

Fundamentals of Biostatistics

Teacher(s)

Fundamentals of Biostatistics Daniela Besozzi, Università di Milano-Bicocca
Paolo Cazzaniga, Università di Bergamo
Marco S. Nobile, Università di Milano-Bicocca

Language

English

Short description

The fundamental concepts and methods of biostatistics will be presented and critically discussed. Hands-on sessions in computer lab will provide practice on the use of spreadsheets for the statistical analysis of biological data.

Main topics:

- Descriptive statistics
- Probability theory and probability distributions
- Inferential statistics
 - Sampling distributions
 - Correlation and regression
 - Hypothesis testing (p-value)
 - Multisample inference (ANOVA)

Aims:

The course will introduce the basic concepts of statistics for the analysis of biological data. The objectives of the course are the development of critical ability and practical skills concerning:

1. the choice of the proper statistical methods and the interpretation of analysis outcomes;
2. the automatic organization and handling of biological data by means of spreadsheets.

The course is mainly addressed to PhD students of the life sciences area.

Suggested year of attendance: 1 year

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Prerequisites:

participants should have (at least) basic notions in the use of spreadsheets. The teachers will make use of Excel to propose exercises for the hands-on sessions, but participants can use any other spreadsheet application on their personal computers.

CFU / Hours

2 CFU / 16 h

Teaching period

July
