



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Medical Statistics

2021-1-I0202D005-I0202D015M

Aims

Basic knowledge of the most important statistical-methodological tools of the descriptive statistics and basic study design. The student will be able to: understand the main concepts of study design and implement descriptive statistical analyses.

Contents

The goal of the course is to contribute to the education of the student in order to be able to:

- 1) understand the principles of the experimental design in medicine
- 2) understand the basic statistical techniques for descriptive data analysis
- 3) use a software for data analysis

Detailed program

The module is organized in two parts: part one is on descriptive statistics from the theoretical view point, part two is on practical implementation through the software STATA.

Part one - Descriptive statistics, data collection, frequency table representations, graphical representations, distributional indicators, Gaussian distribution, basics on probability theory.

- 2) are thought using motivating examples from the applied literature
- 3) involves the STATA package

Part one – Basic descriptive statistics, graphical representation of quantitative and qualitative variables, indicators of position and variability, Gaussian distribution, concepts of probability.

Part two– Basics on the use of the STATA software through dedicated functions and production/modification of code.

Prerequisites

The student is expected to have a basic knowledge on the use of personal computer.

Teaching form

Audio-Video clip, Webex meetings (little groups).

Textbook and teaching resource

- 1) M.M. Triola, M.F. Triola, Fondamenti di statistica per le discipline biomediche
- 2) Notes written by the teacher

Semester

First semester.

Assessment method

Written exam with multiple choice quiz.

Office hours

To be defined with the student by email contact.
