

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# **Medical Statistics**

2324-1-I0202D005-I0202D015M

## Aims

Basic knowledge of the most important statistical-methodological tools of basic study design and descriptive statistics through practical implementation.

The student will be able to: understand the main concepts of study design, implement descriptive statistical analyses, undestand descriptive statistical analyses.

#### Contents

Basic tools of descriptive statistics and inferential

#### **Detailed program**

Basic definition of probability calculus: random experiment, sample space, simple events, compound events Probability with classical approach, Probability with Frequentist approach

Incompatible events

Two or more events (simple and/or compound) are incompatible if it is not possible to observe them simultaneously.

Independent, dependent, compatible, incompatible events

Probability of union and intersection

Conditional probability

Estimation of probability from censorship data (outline of Italian school open data)

Confidence interval: genesis, calculation, interpretation, simulation

# Prerequisites

Listed in the syllabus of the whole course.

# **Teaching form**

Listed in the syllabus of the whole course.

### Textbook and teaching resource

#### Semester

Listed in the syllabus of the whole course.

#### **Assessment method**

Listed in the syllabus of the whole course.

#### Office hours

Listed in the syllabus of the whole course.

## **Sustainable Development Goals**