



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Epidemiologia Clinica

2425-3-I0303D017-I0303D071M

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#### Aims

Students will be able to know the statistical tools for planning activities of research, by appraising the best evidence-based scientific literature and use of epidemiological data to evaluate the rehabilitation programs (Statistical sciences)

#### Contents

The goal of the course is to provide the student with the cultural basis for the acquisition of full professional competence, according to regulation of the specific professional title

#### Detailed program

##### Monza

Introduction to statistical inference: estimation and testing of hypotheses.

Point and interval sample estimation: the sampling distribution (of the mean) and the confidence intervals.

Introduction to statistical testing: the logic of the test, the system of hypotheses, the p-value, the first and second type errors, the power of the test and the relationship between the statistical test and the confidence interval.

Different types of statistical tests: tests on means and proportions, tests for paired data, tests of association.

Measurements of effect for binary variables and time to event.

##### Bergamo

Definition of Epidemiology: historical notes

Sources of statistical-epidemiological data

Event frequency measurements

Measurements of association and cause-effect relationship  
Introduction to statistical inference: estimation and testing of hypotheses.  
Introduction to statistical testing: the logic of the test, the system of hypotheses, the p-value  
Different types of statistical tests: the test on means and proportions  
Diagnostic tests and screening campaigns  
Epidemiological studies: prevalence, case-control, cohort.  
Analysis of the results.

## **Prerequisites**

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## **Teaching form**

8 frontal lessons of 2 hours carried out in attendance

## **Textbook and teaching resource**

Teaching material provided by the teacher.  
In addition, for Bergamo students: Epidemiologia per la clinica e Sanità pubblica. A. Mele. Il pensiero scientifico Editore.

## **Semester**

Second semester

## **Assessment method**

### **Monza**

9 open questions with numerical exercises and 9 multiple choice questions

### **Bergamo**

Written and oral exam. The written test will consist of 31 multiple choice questions.

## **Office hours**

By appointment required by mail

## Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

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