



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Clinical Epidemiology

2526-3-I0303D017-I0303D071M

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

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
