UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Statistica per la Ricerca - 1

2526-2-I0102D012-I0102D039M-T1

Aims

Acquisition of foundational knowledge of the main statistical and methodological tools for study design and descriptive statistics, along with their practical implementation.

Contents

Foundations of probability calculus
Frequentist estimation of probability

Detailed program

1. Understand and correctly use the fundamental concepts of probability.
2. Identify events, sample spaces, and relationships between events (compatibility, disjointness, independence).
3. Calculate simple, compound, conditional, and joint probabilities.
4. Estimate a probability using classical, empirical, and subjective methods.
5. Construct and interpret point estimates and confidence intervals for proportions.
6. Understand and calculate the main performance measures of a diagnostic test (sensitivity, specificity).
7. Apply statistical concepts to clinically relevant examples in obstetrics (type of delivery, complications, blood loss, diagnostic tests).

Prerequisites

None

Teaching form

8 hours of Lectures and 5 hours of interactive lessons with exercises.

Textbook and teaching resource

Slides shown during lectures.

Textbook (not mandatory): Fowler J, Jarvis P, Chevannes, Statistica per le professioni sanitarie , Edises 2006.

Semester

II semester

Assessment method

Written exam with exercises and multiple choice questions.

There are no examinations in progress.

Office hours

On appointment upon e-mail request.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING