



FISICA STATISTICA E INFORMATICA - channel 1

6 CFU - 1° Semester

Teaching Staff

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LEARNING OBJECTIVES

▪ Physics

The course has the stated goal of providing adequate knowledge and understanding of fundamental physical laws that govern biomedical processes, and skills in applying knowledge

▪ medical statistics

The course objectives are:

- 1) Understand the basic concepts and methods of Medical Statistics for students to analyze data observed in the field of health phenomena. The study deals with the theoretical aspect and the practical application of these methods.
- 2) Train the student's ability to collect, process, interpret, and evaluate quantitative and qualitative data.
- 3) Develop the student's ability to communicate with others, with technical language skills, information and ratings related to data distribution related to health phenomena.
- 4) To increase the student's ability to independently study medical statistics.

DETAILED COURSE CONTENT

- **medical statistics**

Background: variables, constants, measurement scales, summations, products, percentages, ratios, combinatorial analysis. Collecting and organizing data. Indices of central tendency. Indices of dispersion. Graphical representation of data. Probability and probability distributions. Sampling and statistical inference. Comparison of samples and analysis of the dependence. Rates and proportions. Epidemiological statistics.

TEXTBOOK INFORMATION

- **medical statistics**

P. B. Lantieri, D. Risso, G. Ravera - Elementi di Statistica Medica - McGraw-Hill, 2007
