



FISICA STATISTICA E INFORMATICA - channel 2

6 CFU - 1° Semester

Teaching Staff

FRANCESCO CAPPUZZELLO - Module FISICA MEDICA - FIS/07 - 2 CFU

Email: cappuzzello@lns.infn.it

Office: Dipartimento di Fisica e Astronomia e/o Laboratori Nazionali del Sud

Phone: 095542384

Office Hours: Martedì ore 16-17

LORENZO LUPO - Module Medical Statistics - MED/01 - 2 CFU

Email: l.lupo@policlinico.unict.it

Office: edificio 6 Policlinico G. Rodolico

Phone: 0953781818- 3293178093

Office Hours: su appuntamento

SALVATORE FAVITTA - Module Computer Technology - INF/01 - 2 CFU

Email: sfavitta@unict.it

Office: Padiglione 16 - Ospedale Vittorio Emanuele

Phone: 095 7435405

Office Hours: per appuntamento

LEARNING OBJECTIVES

▪ Medical Statistics

The course will provide basic elements to let the student be able to describe individual and population based biological events through synthetic indexes. Moreover, the student should be able to identify and use elementary methodologies of analysis of numerical data

▪ Computer Technology

The objectives of this module are focused on learning and the conception of the logic that regulates basic computing, elaboration data, structure, classification and typology of networks.

COURSE STRUCTURE

▪ Medical Statistics

Classroom lecturers using blackboard and tracing papers

▪ Computer Technology

Lectures

DETAILED COURSE CONTENT

▪ **Medical Statistics**

1. Measurers: numerical, ordinal and nominal
2. Descriptive measurers: central tendency and variability
3. Probability and Bayes Theorem
4. Probability distributions: binomial, Poisson and gaussian
5. Hypothesis tests and their meaning
6. Epidemiology: sensitivity, specificity, predictive values, incidence and prevalence rates

▪ **Computer Technology**

- Information processing systems;
- Hardware, software and their stratification;
- Operating Systems: fundamental functions and their evolutions;
- Bits, Bytes and numbers connected to them;
- Database;
- Classification, Type and Network Levels;
- E-mail & Protocol;

TEXTBOOK INFORMATION

▪ **Medical Statistics**

J. Fowler, P. Jarvis, M. Chevannes "Statistica per le professioni sanitarie" Ed. EdiSES

Other elementary statistic textbooks

▪ **Computer Technology**

Teaching Handouts
