Department of Biomedical Sciences Physiotherapy Degree Programme Statistics Syllabus

Academic year 2020-2021. Academic term: first and second semester of the first year. Course coordinator: Dr Emanuela Morenghi

MEDICAL STATISTICS AND EPIDEMIOLOGY (6 ECTS)

Dr Emanuela Morenghi Degree in Mathematics from the University of Milan. PhD in Medical Statistics at the University of Milan Adjunct professor at Humanitas University since 2016

Biostatistician at Istituto Clinico

7. The Gaussian distribution

8. Statistical tests

characteristics of a statistical test definition Type I and Type II errors, and sample size definition of p-value

9.

special characters.

PubMed: structure and main features, how to use it, search strategies: free-word search or using index terms.

Thesaurus. PubMed: MeSH

3) Using Pubmed. Source retrieval.

PubMed: simple and advanced search functions, managing results, My NCBI. How to read and write a bibliographic citation.

Retrieving sources: searching and downloading a full text from PubMed, the Document Delivery services, searching and downloading a full text from the Humanitas OPAC.

4) Resources for clinical practice and bibliographic managers

PEDro: structure and main features, how to use it.

Cochrane Library and UpToDate: structure and main features.

How to manage information: bibliography managers

5) Practical application on clinical cases

Design and development of a literature search on PubMed based on clinical questions proposed by the lecturer.

Analysis and oral presentation of an article selected from the literature search.

Examination for the Statistics course. Written examination with both statistics exercises and multiple-choice questions on how to keep up to date with science. Oral examination of statistics for those who pass the written part and presentation of a bibliographical research carried out by consulting the main biomedical databases regarding a clinical question posed by the lecturer. (Chairman of the Examination Committee: Dr Manuela Morenghi)