

Bachelor in Physiotherapy School School of Health Academic Year 2022/2023 Year of study 1 Level 1-1 ECTS credits 4.0	
Academic Year 2022/2023 Year of study 1 Level 1-1 ECTS credits 4.0	
Type Semestral Semester 1 Code 9504-770-1103-00-22	
Workload (hours) 108 Contact hours T 15 TP PL 30 TC · E · OT 20 O T - Lectures: TP - Lectures and problem-solving: PL - Problem-solving, project or laboratory: TC - Fieldwork: S - Seminar: E - Placement; OT - Tutorial: C	- O - Other

Alcina Maria Almeida Rodrigues Nunes, Vitor Manuel Teixeira Machado Name(s) of lecturer(s)

Learning outcomes and competences

- At the end of the course unit the learner is expected to be able to:
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 1. Understand the role of epidemiology as a set of methods that aim to know the determinants of health and disease within specific populations.
 2. Describe the design of epidemiologic studies foreseeing their application, their strengths, and their limitations
 3. Estimate and read measures of occurrence of disease, as well as, the measures of association and measures of impact
 4. Understand the approach for the analysis of data from surveillance systems
 5. Know basic statistical methods applied to univariate or bivariate data analysis
 6. Manage statistical software for data analysis

Prerequisites

Before the course unit the learner is expected to be able to: Not applicable

Course contents

Epidemiology: concepts and objectives; Steps of the epidemiologic method; Demographic transition, epidemiologic transition; Measures of disease frequency and mortality; Standardization of rates; Epidemiologic studies type and limitations; Epidemiologic surveillance. Descriptive statistics; Statistical inference. Use of statistical programs for data analysis.

Course contents (extended version)

- Epidemiology: concepts and objectives
 Steps in the epidemiological method
 Demographic transition, epidemiological transition
 Measures of disease frequency and mortality
- Health indicators
- Sources of health information 5. Standardization of rates
- 6. Epidemiological studies: type and limitations
- Epidemiological studies, type and immu- Inference and causality Measures of association and impact Confounding and interaction 7. Epidemiological surveillance 8. Descriptive statistics
- - Categorical variables: absolute, relative and cumulative frequency
 Quantitative variables: measures of central tendency and dispersion
 - Graphs and tables for the presentation of results
- Graphs and tables for the prostructure of the distribution
 Use of statistical programs for data analysis
 Database construction in Excel

Recommended reading

- Cunha, G., Eiras, M., & Teixeira, N. (2011). Bioestatística e Qualidade na Saúde. LIDEL.
- Gordis, L. (2010). Epidemiologia. Lusodidacta
 JacGerstman, B. (2003). Epidemiology Kept Simple. Wiley-Liss.
 Motulsky, H. (2017). Intuitive Biostatistics: A Nonmathematical Guide to Statistical Thinking (4th Ed.). Oxford University Press.
 Oliveira, A. G. (2014). Bioestatistica Descodificada (2^a ed.). LIDEL.

Teaching and learning methods

The unit is taught combining from exhibition classes, interactive classes with application of theoretical knowledge in practical situations and self-learning guided by the teacher. There will be an elaboration of practice sheets to encourage the calculation and interpretation of measures of quantification of disease, association, and impact and to apply the concepts of biostatistics.

Assessment methods

- 1. Option 1 (Regular, Student Worker) (Final, Supplementary) Practical Work 50%
- Intermediate Written Test 50%
 Option 2 (Regular, Student Worker) (Supplementary, Special)
 Final Written Exam 100%

Language of instruction

Portuguese

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Electronic validation			
Alcina Maria Almeida Rodrigues Nunes, Vitor Manuel Teixeira Machado	Maria Cristina Martins Teixeira	Ana Maria Nunes Português Galvão	Adília Maria Pires da Silva Fernandes
07-11-2022	09-11-2022	09-11-2022	09-11-2022