Course Unit	Epidemiology and Public Health				Field of study	Health	
Bachelor in	Nursing				School	School of Health	
Academic Year	2022/2023	Year of study	1		Level	1-1	ECTS credits	5.0
Type	Semestral	Semester	2		Code	9500-698-1204-00-22	

Workload (hours)	135	Contact hours	T	-	TP	45	PL	15	TC	-	S	-	E	-	OT	-	O	-

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s)	Teresa Isaltina Gomes Correia

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. To understand the role of the epidemiology as a set of methods that aim to know the determinants of health and disease within specific populations.
2. To estimate and to read measures of occurrence of disease, as well as, the measures of association and measures of impact.
3. To describe the design of epidemiologic studies foreseeing their application, their strengths and their limitations.
4. To understand the history and the scope of public health as a multidisciplinary science that aims the higher level of community health according to the available resources.
5. To estimate and to read the main community health indicators.
6. To understand the surveillance systems and their role in the public health fields.
7. To understand the role of public health within the National Health Service in Portugal.

Prerequisites

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

Course contents

Aims of epidemiology. Epidemiological approach seeking the determinants of health and disease in the population. Measures of occurrence and association and impact. of disease. Study design. Strengths and limitations. Bias. History and scope of public health. The epidemiology as the main tool in the practice of public health. The role of epidemiologic surveillance systems. Assessing the magnitude of health problems. Health Planning. Public health in the National Health System in Portugal.

Course contents (extended version)

1. Aims of epidemiology. Epidemiological approach seeking the determinants of health and disease.
2. Measures of occurrence of disease. Prevalence. Incidence. Risk. Standardized mortality rates.
3. Measures of association and measures of impact. Estimating the potential for prevention.
4. Study design. Ecological, cross-sectiona, cohort, case - control studies. Strengths and limitations.
5. Deriving inferences. Bias; confounding and interaction .
6. Validity and reliability of screening and diagnostic tests. Sensitivity and specificity.
7. History and scope of public health. The epidemiology as the in tool in the practice of public health
8. The role of epidemiologic surveillance systems. Assessing the magnitude of health problems.
9. HealthPlanning. Assessing health programs.
10. Public health in the National Health System in Portugal

Recommended reading

1. Martinez-Gonzalez, M. A. (2013). Conceptos de Salud Publica y Estrategias Preventivas. Elsevier.
2. Hernández-Agudo, A. Gil, M. Delgado, F. Bolúmar, F. G. Benavides, M. Porta, C. Álvarez-Dardet, J. Vioque, B. Lumbreras & Aguado, I. (2011). Manual de Epidemiología y Salud Pública. Madrid: panamerica.
3. Oliveira, A. G. (2009). Bioestatística, Epidemiologia e Investigação: Teoria e Aplicações. Lisboa: Lidel.

Teaching and learning methods

Theoretical classes (45 hours): expositive and interactive classes. Practical laboratory classes (15 hours): preparation of practical sheets to encourage the calculation and interpretation of measures of disease quantification, association and impact, and study design.

Assessment methods

1. Theoretical exam + practical exam - 100% - (Regular, Student Worker) (Final)
   - Intermediate Written Test - 30% (Development of practical form)
   - Intermediate Written Test - 70% (theoretical written test)
2. Final written exam - 100% - (Regular, Student Worker) (Supplementary, Special)

Language of instruction

1. Portuguese
2. Portuguese, with additional English support for foreign students.

Electronic validation

Teresa Isaltina Gomes Correia	Andre Filipe Morais Pinto Novo	Maria Eugénia Rodrigues Mendes	Adília Maria Pires da Silva Fernandes
20-03-2023	22-03-2023	23-03-2023	26-03-2023