Course Unit	Epidemiology			Field of study	Health								
Bachelor in	Gerontology			School	School of Health								
Academic Year	2023/2024	Year of study	3	Level	1-3	ECTS credits	5.0						
Type	Semestral	Semester	1	Code	9833-346-3102-00-23								
Workload (hours)	135	Contact hours	T 50	TP -	PL 20	TC -	S -	E -	OT 3	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. Describe basic concepts that base the epidemiologic practice.
2. Understand the epidemiological method in investigating the determinants of health and disease, phases of the method.
3. Identify the measures of disease frequency and understand their applications.
4. Understand the measures of association and impact and their application in the Epidemiology.
5. Acquire knowledge on methodology of the epidemiologicresearch, aiming the development of abilities for the critical scientific article analysis and the conception of epidemiologic studies.
6. Describe the process of infectious and non-infectious diseases, as well as, understanding the research and measures of control towards to foodborn diseases.
7. Analyze the problems related with demographic, population and social questions of the aging. Understand epidemiologic issues underlying some of the more prevalent diseases.
8. Acquire skills for critical reflection on the main aspects of theepidemiologic surveillance and its application in planning, assesing and engaging in decision-making process in health.

Prerequisites

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

Course contents

Concepts/aimsEpidemiological method The transitions Health indicators and Sources of information in health Standardization of ratesEpidemiologic Profile Measures of frequency /association Inference/causalidity Random and systematic errors Validity Confunding/interaction Analytical descriptive epidemiology Epidemiologic studies. Epidemiology of infectious and noninfectious diseases Epidemiology of the aging Epidemiologic surveillance Epidemiology and health policies Access data

Course contents (extended version)

1. Epidemiology: concepts, subject and aims.
2. Epidemiological method in investigating the determinants of health and disease and their phases
3. The transitions: Epidemiological, Demographic and Nutritional.
4. Health indicators.
5. Standardization of rates.
6. Sources of information in health.
7. Epidemiologic Profile. Epidemiologic Variables: Person, Time and Place.
8. Measures of frequency of disease. Measures of association and impact: RR, OR and Atributtable risk.
9. Inference and causalidity. Random and systematic errors. External and internal Validity.
10. Confunding and interaction.
11. Epidemiologic Studies: cross-sectional, case-control, cohort, ecological studies and clinical trial.
12. Epidemiology of infectious and non-infectious diseases.
13. Epidemiology of aging.
14. Epidemiologic Surveillance.
15. Planning and assessing health care services. Decision-making process in health.
16. Access to the databases.

Recommended reading

1. Hernández-Aguado, I. , Miguel, A. G. , Rodriguez, M. D. , Montrull, F. B. , Benavides, F. G. , Serra, M. P. et al. (2013). Manual de Epidemiología y Salud Pública (2ª. ed.). Madrid: panamerica.
2. Campos, G. W. S. , Bonfin, J. R. A. , Minayo, M. C. S. , Akerman, M. , Júnior, M. D. & Carvalho, Y. M. Tratado de Saúde Coletiva. (2013). (2ª. ed.). São Paulo: Hucitec.
3. Oliveira, A. G. (2009). Bioestatística, Epidemiologia e Investigação: Teoria e Aplicações. Lisboa: LIDEL.
4. Artigos disponibilizados nas aula.

Teaching and learning methods

The oretical lessons (50 hours): Exposition of the concepts selecting images and texts. Laboratorials practical lessons (20 hours): Resolution followed by of application exercises. Study guided through cases analysis to answer. Method used in the lessons of tutorials orientation (3) and as individual work of the pupil (without presence -58 hours).

Assessment methods

1. Continuous assessment - (Regular, Student Worker) (Final)
   - Intermediate Written Test - 70% (T Component Evaluation)
   - Practical Work - 30% (P Component Evaluation)
2. Resource Exam - (Regular, Student Worker) (Supplementary, Special)
   - Final Written Exam - 70% (T Component Evaluation)
   - Practical Work - 30% (P Component Evaluation)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

Teresa Isaltina Gomes Correia	Hélder Jaime Fernandes	Ana Maria Nunes Português Galvão	Adília Maria Pires da Silva Fernandes
16-11-2023	16-11-2023	16-11-2023	21-11-2023