INSTITUTO POLITÉCNICO DE BRAGANÇA

Course Unit	Epidemiology			Field of study	Health	
Bachelor in	Pharmacy			School	School of Health	
Academic Year	2022/2023	Year of study	3	Level	1-3	ECTS credits	5.0
Type	Semestral	Semester	1	Code	9549-644-3203-00-22	

Workload (hours)	135	Contact hours	T	-	TP	50	PL	10	TC	-	S	-	E	-	OT	7,5	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 describe the process of diseases infectious and non-infectious diseases and know research and control measures.
5. To understand the surveillance systems and their role in the health fields.

Prerequisites

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

Course contents

Evolution of the thought epidemiologic. Aims of epidemiology. Epidemiological approach. Measures of occurrence and association and impact. Health indicators and sources of information in health. Measures of frequency and association. Inference and Causality. Validity. Confunding and interaction Study design. Strengths and limitations. Pharmacoepidemiology. Epidemiology of the diseases infectious and non-infectious diseases Epidemiologic surveillance systems. Epidemiology and politics of health

Course contents (extended version)

1. Epidemiology: concepts, subject , aims and method.
2. Health indicators.
3. Standardization of rates.
4. Sources of information in health.
5. Measures of association and measures of impact. RR, OR, RA, RAP.
6. Inference and causalidity Methodological errors. Validity: External and intern.
7. Bias; confounding and interaction.
8. Study Ecological cross sectional. cohort. case-control, clinical trial. Strengths and limitations
9. Pharmacoepidemiology
10. Epidemiology of the diseases infectious and non-infectious diseases.
11. The epidemiologic surveillance
12. Epidemiology and health policies Planning and assessing health care services. Decision-making health

Recommended reading

1. 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.
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. JeKel J. , Katz, D. l. & Elmore, J. G. (2006). Epidemiologia, Bioestatística e Medicina Preventiva, (2ª. Ed.). Porto Alegre: Artmed.

Teaching and learning methods

Theoretical classes (50 hours): expositive and interactive classes. Practical laboratory classes (10hours): preparation of practical sheets to the calculation and interpretation of measures of disease quantification, association and impact, and study design. Cases analysis to answer. Method used in the lessons of tutorials orientation (7, 5) and as individual work of the student.

Assessment methods

1. Theoretical exam+pratical exam- 100% - (Regular, Student Worker) (Final)
    - Intermediate Written Test - 70% (Theory test)
    - Intermediate Written Test - 30% (Practical sheets)
2. Final written exam - (Regular, Student Worker) (Supplementary, Special)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

Teresa Isaltina Gomes Correia	Olívia Rodrigues Pereira	Ana Maria Nunes Português Galvão	Adília Maria Pires da Silva Fernandes
20-03-2023	27-03-2023	28-03-2023	28-03-2023