

Course Unit	Epidemiology	Field of study	Health
Bachelor in	Dietetics and Nutrition	School	School of Health
Academic Year	2019/2020	Year of study	3
Type	Semestral	Semester	1
		Level	1-3
		ECTS credits	5.0
		Code	8149-501-3105-00-19
Workload (hours)	135	Contact hours	T - TP 50 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.
2. Identify the measures of disease frequency and understand their applications.
3. Understand the measures of association and impact and their application in the Epidemiology.
4. Characterize the epidemiologic profile.
5. Acquire knowledge on methodology of the epidemiologic research, 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. Understand epidemiologic issues underlying some of the more prevalent diseases.
8. Acquire skills for critical reflection on the main aspects of the epidemiologic surveillance and its application in planning, assessing 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 and aims Evolution of the epidemiologic thinking. Epidemiological method. The Transitions Health indicators and sources of information Standardization of rates. Epidemiologic Variables. Measures of frequency association. Inference and Causality. Errors Validity Confounding and interaction Epidemiologic studies. The application of the studies to nutritional epidemiology. Epidemiology of infectious and non infectious diseases. Epidemiologic surveillance. Epidemiology and health policies.

Course contents (extended version)

1. Epidemiology: concepts and aims.
2. Evolution of the epidemiologic thinking.
3. Epidemiological method.
4. The Demographic Transition, Epidemiological Transition, and Nutritional Transition.
5. Health indicators.
6. Sources of information in health.
7. Standardization of rates.
8. Epidemiologic Profile. Epidemiologic Variables: Person, Time and Place.
9. Measures of frequency and association of the disease.
10. Inference and causality. Random and systematic errors. External and internal Validity.
11. Confounding and Interação.
12. Epidemiologic Studies: cross-sectional, case-control, cohort, ecological studies and clinical trial.
13. Nutritional epidemiology. The implementation of the epidemiologic studies on nutritional field.
14. Epidemiology of infectious and non-infectious diseases.
15. Epidemiologic Surveillance.
16. Epidemiology and health policies Planning and assessing health care services. Decision-making health
17. Access to the databases.

Recommended reading

1. Hernández-Aguado, I., Miguel, A. G.; Rodríguez, M. D., Monrull, F. B., Benavides, F. G., Serra, M. P et al. (2013). Manual de Epidemiología y Salud Pública (2ª. ed.). Madrid: panamericana.
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. Margarets, B. M. & Nelson, M. (2007). Design Concepts in Nutritional Epidemiology (2ª. ed.). Oxford: University Press. Articles referred throughout the lessons.

Teaching and learning methods

Theoretical lessons (50 hours): Exposition of the concepts selecting images and texts. Laboratorials practical lessons (20 hours): Resolution followed by of application exercises fieldwork. 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. Written test theoretical and practical 70% 30% - (Regular, Student Worker) (Final)
2. Final Written Exam - 100% - (Regular, Student Worker) (Supplementary, Special)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

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30-10-2019	19-11-2019	19-11-2019	19-11-2019