

68702 - Methodology in Public Health I

Información del Plan Docente

Academic Year	2016/17
Academic center	104 - Facultad de Medicina
Degree	459 - Master's in Public Health
ECTS	8.0
Course	1
Period	Annual
Subject Type	Compulsory
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

Regardless of diverse student background, it is considered that a previous basic knowledge of statistics and epidemiology exist. From that point on, learning and achievement of results are consequence of both attendance and participation in face-to-face classes and the resolution of individual work.

5.2.Learning activities

Programmed activities are:

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- Face-to-face classes.
- Study and problems resolution.
- Individual work.

Program:

In face-to-face classes of theoretical and practical contents, the following programme will be developed:

1. Introduction to research methodology.
2. Statistics.
3. Epidemiology.

1. **Introduction to research methodology.**

Day 1:

1. Science and research.
2. Research question.
3. Research protocol.

1. **Statistics**

A) Theoretical program

Day 1:

1. Sampling fundamentals.
2. Descriptive statistics.

Day 2:

1. Parametric and nonparametric inference in quantitative variables.
2. Parametric inference in qualitative variables.

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Day 3:

1. Linear regression and correlation.
2. Other correlation coefficients.
3. Contingency tables. Chi-square test.

B) Practical program

Day 4:

1. SPSS introduction.
2. Descriptive statistics.

Day 5:

1. Parametric and nonparametric inference in quantitative variables.

Day 6:

1. inference in qualitative variables. Regression and correlation.

3. Epidemiology

A) Theoretical program

Day 1:

1. Epidemiology introduction.
2. Frequency measures.
3. Association and impact measures.

Day 2:

1. Epidemiological studies.

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Day 3:

1. Valid statistical association and causal relationship.
2. Diagnostic tests validity.

Day 4:

1. Epidemiologic surveillance.
2. Outbreak study.

B) Practical program

Day 5:

1. Frequency measures problems.
2. Rate adjustment.
3. Association measures problems.

Day 6:

1. Critical Reading of epidemiologic studies.
2. Statistical association.
3. Selection and information bias.
4. Confounding and effect modification.
5. Causality criteria interpretation.

Day 7:

1. Outbreak research.
2. Critical Reading of outbreak studies.

5.3.Program

5.4.Planning and scheduling

Dates, timetable and place of the activities can be checked in the general Master calendar.

5.5.Bibliography and recommended resources

- [Basic manual] Manual de bioestadística aplicada con IBM SPSS/director, Javier Santabárbara Serrano [et al.]. Santiago de Compostela: Andavira, 2015.
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- Irala-Estévez, Jokin de.. Epidemiología aplicada / Jokin de Irala-Estévez, Miguel Ángel Martínez-González y Marta Seguí-Gómez. . - 2ª ed. act. Barcelona : Ariel, 2008
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- [Basic manual] - Manual de epidemiología y salud pública para grados en ciencias de la salud / directores, Idefonso Hernández- Aguado ... [et al.] ; coordinadora de la edición, Blanca Lumbreras Lacarra . 2ª ed. Buenos Aires ; Madrid [etc.] : Editorial Médica Panamericana, D.L. 2011
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- Medicina preventiva y salud pública / directores, Antonio Sierra López ... [et al.] ; directores asociados, Fernando Rodríguez Artalejo ... [et al.]. 11ª ed. Ámsterdam ; Barcelona ; Madrid [etc.] : Masson, 2008 [Precede al tí: PIÉDROLA GIL]