

Información del Plan Docente

Academic Year	2017/18
Faculty / School	104 - Facultad de Medicina
Degree	459 - Master's in Public Health
ECTS	8.0
Year	1
Semester	Annual
Subject Type	Compulsory
Module	---

1.General information**1.1.Introduction****1.2.Recommendations to take this course****1.3.Context and importance of this course in the degree****1.4.Activities and key dates****2.Learning goals****2.1.Learning goals****2.2.Importance of learning goals****3.Aims of the course and competences****3.1.Aims of the course****3.2.Competences****4.Assessment (1st and 2nd call)****4.1.Assessment tasks (description of tasks, marking system and assessment criteria)****5.Methodology, learning tasks, syllabus and resources****5.1.Methodological overview**

Regardless of the diverse students' background, it is assumed they have a basic knowledge of statistics and epidemiology. From that point on, the learning and achievement of the learning goals are consequence of both attendance and participation in face-to-face sessions and the preparation of individual assignments.

5.2.Learning tasks

68702 - Methodology in Public Health I

The course includes the following learning tasks:

- Lectures.
- Study and problem-solving.
- Individual assignment.

5.3.Syllabus

The course will address the following topics:

Section I. Introduction to research methodology.

Session 1.

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

Section II. Statistics

Session 1.

1. Sampling fundamentals.
2. Descriptive statistics.

Session 2.

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

Session 3.

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

Session 4 (practice session).

1. SPSS introduction.
2. Descriptive statistics.

Session 5 (practice session). Parametric and nonparametric inference in quantitative variables.

Session 6 (practice session). Inference in qualitative variables. Regression and correlation.

Section III. Epidemiology

Session 1.

68702 - Methodology in Public Health I

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

Session 2. Epidemiological studies.

Session 3.

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

Session 4.

1. Epidemiologic surveillance.
2. Outbreak study.

Session 5 (practice session).

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

Session 6 (practice session).

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

Session 7 (practice session).

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

5.4.Course planning and calendar

Further information concerning the timetable, classroom, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the Master's website.

5.5.Bibliography and recommended resources

- [Basic manual] Manual de bioestadística aplicada con IBM SPSS/director, Javier Santabábara Serrano [et al.]. Santiago de Compostela: Andavira, 2015.
- Bioestadística amigable / director, Miguel Ángel Martínez -González ; codirectores, Almudena Sánchez-Villegas, Estefanía Toledo Atucha, Javier Faulín Fajardo . - 3ª ed. Ámsterdam ; Barcelona ; Madrid [etc.] : Elsevier, D.L. 2014
- Irala-Estévez, Jokin de.. Epidemiología aplicada / Jokin de Irala-Estévez, Miguel Ángel Martínez-González y Marta Seguí-Gómez. . - 2ª ed. act. Barcelona : Ariel, 2008
- Vigilancia epidemiológica / editor, Ferran Martínez Navarro Madrid [etc.] : McGraw-Hill Interamericana, D.L. 2004
- Milton, Janet Susan. Estadística para biología y ciencias de la salud / J. Susan Milton . - 3ª ed. amp. Madrid [etc.] : McGraw-Hill Interamericana, D.L. 2007
- [Basic manual] - Manual de epidemiología y salud pública para grados en ciencias de la salud / directores, Ildelfonso Hernández- Aguado ... [et al.] ; coordinadora de la edición, Blanca Lumbreras Lacarra . 2ª ed. Buenos Aires ; Madrid [etc.] : Editorial Médica Panamericana, D.L. 2011
- Irala-Estévez, Jokin de.. Epidemiología aplicada / Jokin de Irala-Estévez, Miguel Ángel Martínez-González y Marta Seguí-Gómez. . - 2ª ed. act. Barcelona : Ariel, 2008
- Medicina preventiva y salud pública / directores, Antonio Sierra López ... [et al.] ; directores asociados, Fernando

68702 - Methodology in Public Health I

Rodríguez Artalejo ... [et al.]. 11^a ed. Ámsterdam ; Barcelona ; Madrid [etc.] : Masson, 2008 [Precede al tí:
PIÉDROLA GIL]