68706 - Advanced statistics

Información del Plan Docente

Academic Year	2018/19
Subject	68706 - Advanced statistics
Faculty / School	104 - Facultad de Medicina
Degree	459 - Master's in Public Health
ECTS	2.0
Year	1
Semester	Second semester
Subject Type	Optional
Module	---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The students enrolled in this course should have passed the courses Methodology in Public Health I and II.

The course has a fundamentally applied orientation with face-to-face sessions. This sessions consist of a brief review of theoretical concepts and the solving of a practical case. Cases are commented and the obtained results interpreted by means of statistical packages. Then each student solves a research problem that needs any of the statistical techniques discussed in class. The teacher will correct the problem and students discuss the doubts and difficulties that they have encountered.

Tutorials can be in group or individual, depending on the students' desires, in which doubts are solved and unclear

concepts may be explained.

Classroom materials will be available via Moodle. These include a repository of the lecture notes used in class, the course syllabus, as well as other course-specific learning materials.

It is recommended to study the course bibliography.

4.2.Learning tasks

The course includes the following learning tasks:

- Theory and practice classes
- Practice sessions
- indiviual work
- autonomous study

4.3.Syllabus

The course will address the following topics:

- Topic 1. COR curves.
- Topic 2. Sample size estimation for different epidemiological study designs.
- Topic 3. Exploratory Factor Analysis.
- Topic 4. Survival analysis.
- Topic 5. Cox regression.

4.4.Course planning and calendar

Provisional course planning:

Lecture-practice sessions	Date	Time	Professor
Topic 1. ROC Curves	Session 1	16:30-21	E. Rubio
Topic 2. Sample size estimation for different epidemiological study designs. Topic 3. Exploratory Factor Analysis.	Session 2	16:30-18:30 19-21	C. Feja T. Martínez
Topic 4. Survival analysis. Topic 5. Cox regression.	Session 3	16:30-18:30 19-21	J. Santabárbara
Assignment submission	See generally Master's calendar		All teachers

The start and deadline for delivery of the evaluation papers wil be published in the oficial Master's calendar. The usually take place during the first/second week of march

4.5.Bibliography and recommended resources