Universidad Zaragoza

68402 - Biostatistics. Epidemiology

Información del Plan Docente

Academic Year	2018/19
Subject	68402 - Biostatistics. Epidemiology
Faculty / School	104 - Facultad de Medicina
Degree	530 - Master's in Introduction to Medical Research
ECTS	6.0
Year	1
Semester	Indeterminate
Subject Type	Compulsory
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 methodology followed in this course is oriented towards achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as:

- Lectures: The theoretical concepts are complemented with practical cases to comment and interpret the results obtained by means of statistical packages.
- The assimilation of these concepts is reinforced by means of the critical review of articles in which statistical and epidemiological techniques are developed.
- Tutorials can be individual or in small groups, depending on what students need, to solve doubts and unclear concepts of the course contents.
- Individual and group papers, submitted via email.

- Autonomous work and study.

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.

4.2.Learning tasks

The course includes the following learning tasks:

- Theory and practice classes
- Critical review of scientific articles.
- Interpretation of outputs of statistical packages used in the Social Sciences.

4.3.Syllabus

The course will address the following topics:

Topic 1. Collecting information. Sampling. Surveys.

Topic 2. Hypothesis testing for two or more samples.

Topic 3. Multiple regression and correlation. Logistic regression.

Topic 4. Crosstabs. Correspondence analysis.

Topic 5. Survival analysis.

Topic 6. Epidemiological study design: epidemiological measurements.

Topic 7. Analytic Epidemiology: Experimental designs. Observational designs.

Topic 8. Study of cause-effect association: Causal models. Evidence-based medicine. Research protocol.

4.4.Course planning and calendar

Provisional course planning

Topics		Time
Topic 1. Collecting information. Sampling. Surveys.	30-october-2018	16-20
Topic 2. Hypothesis testing for two or more samples	31-october-2018	16-20

Topic 3. Multiple regression and correlation. Logistic regression.	5-november-2018	16-20
Topic 4 Crosstabs. Correspondence analysis	6-november-2018	16-20
Topic 5. Survival analysis.	7-november-2018	16-20
Topic 6. Epidemiological study design: epidemiological measurements.	8-november-2018	16-20
Topic 7. Analytic Epidemiology: Experimental designs. Observational designs. Presentation of activity of evaluation	12-november-2018	16-18 18-20
Topic 8 Analytic Epidemiology: Experimental designs. Observational designs. Group work time.	13-november-2018	16-18 18-20
Exam and presentation of papers	14-november-2018	-

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 Faculty of Medicine https://medicina.unizar.es/.

4.5.Bibliography and recommended resources

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