68402 - Biostatistics. Epidemiology

Información del Plan Docente

Academic Year	2016/17
Academic center	104 - Facultad de Medicina
Degree	530 - Master's in Introduction to Medical Research
ECTS	6.0
Course	1
Period	Indeterminate
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

English

Theoretical and practical classroom face-to-face sessions

The subject has a fundamentally applied orientation. One presents in classes theoretically - practices. The theoretical concepts are exposed and later, across a practical case are commented 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 object of the exposed develop.

Tutorships are realized in group and individuals to demand of the pupils in which are solved the doubts and concepts that have not remained clear.

All the information stays at the disposal of the pupil in the Digital Educational Ring.

5.2.Learning activities

1. Theoretical Practical classes
2. Critical review of scientific articles.
3. Interpretation of outputs of statistical packages used in social sciences

5.3.Program

Lesson 1. Collecting information. Sampling. Surveys.

Lesson 2. Hypothesis testing for two or more samples.

Lesson 3. Multiple regression and correlation. Logistic regression.

Lesson 4. Crosstabs . Correspondence analysis

Lesson 5. Survival analysis.

Lesson 6. Epidemiological studies design: epidemiological measurements.

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

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

5.4.Planning and scheduling

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Lessons	Date	Time	Professor
Lesson 1. Collecting information . Sampling. Surveys.	2-11-2017	16-20	E. Sánchez
Lesson 2. Hypothesis testing for two or more samples	3-11-2017	16-20	T. Martínez
Lesson 3. Multiple regression and correlation. Logistic regression.	7-11-2017	16-20	E. Rubio
Lesson4 Crosstabs. Correspondence analysis	8-11-2017	16-20	A. García
Lesson 5. Survival analysis.	9-11-2017	16-20	J. Santabárbara
Lesson 6. Epidemiological studies design: epidemiological measurements.	10-11-2017	16-20	S. Malo
Lesson 7. Analytic Epidemiology: Experimental designs. Observational designs. Presentation of activity of evaluation	11-11-2017	16-18 18-20	I. Aguilar
Lesson 8 Analytic Epidemiology: Experimental designs. Observational designs. Time work	15-11-2017	16-18 18-20	E. Lobo

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Workshop on design study of investigation clinical epidemiological	16-11-2017		S. Malo, I. Aguilar, E. Lobo
Exam and presentation of papers	17-11-2017		All

5.5.Bibliography and recomended resources

- Álvarez Cáceres, R. Estadística aplicada a Ciencias de la Salud. Ed: Díaz Santos. Madrid. 2007

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- Begg C, Cho M, Eastwood S, Horton R, Moher D, Olkin I, Pitkin R. Mejora de la calidad de los informes de los ensayos clínicos aleatorios controlados. Recomendaciones del grupo de trabajo CONSORT. Rev Esp Salud Pública 1998; 72: 5-11

- Berra S, Elorza Ricart JM, estrada MD, Sánchez E. Instrumento para la lectura crítica y la evaluación de estudios epidemiológicos transversales. Gac Sanit 2008;22(5): 492-7

- Hopewell S, Clarke M, Moher D, Wager E, Middleton P, et al. (2008) CONSORT for Reporting Randomized Controlled Trials in Journal and Conference Abstracts: Explanation and Elaboration. PloS Med 5(1): e20. doi:10.1371/journal.pmed.0050020 available in: http://medicine.plosjournals.org/archive/1549 1676/5/1/pdf/10.1371_journal.pmed.0050020-S.pdf

- Kleinbaum DG.; Kupper LL.; Nizan A. Rosenberg E. Applied regression analysis and other multivariable methods (3ª ed). Ed Nelson Education. California. 2013- Martín Andrés, A., Luna Del Castillo, JD: Bioestadística para las ciencias de la salud. 5ª ed. Madrid, Ed: Norma, 2004- Martínez González, MA.; Sánchez-Villegas, A; Faulín Fajardo, J. Bioestadística amigable (3ª ed). Ed: Díaz Santos. Madrid 2009- Milton JS. Estadística para Biología y Ciencias de la Salud. 3ª ed ampliada McGraw Hill 2007.- Pardo Merino A. y Ruiz Díaz M.A. Análisis de datos con SPSS13 base Ed. Mc Graw Hill. 2005.- Rothman KJ, Greenland S. Modern epidemiology.2nd ed. Philadelphia: Lippincott-Raven, 1998.- Santabarbara J, Rubio E, Ceja C, Martínez T. Manual de bioestadística aplicada con IBM SPSS. Ed: Andavira. Santiago de Compostela 2015.- Silva LC. Excursión a la regresión logística en Ciencias de la Salud. Ediciones Díaz de Santos SA. Madrid 1995.

- von Elm E, Altman DG, Egger M, Pocock SJ, Gotzsche PC, Vandenbroucke JP, en nombre de la iniciativa STROBE. Declaración de la Iniciativa STROBE (Strengthening the Reporting of Observational studies in Epidemiology): directrices para la comunicación de estudios observacionales. Gac Sanit. 2008;22(2):144-50