28910 - Statistics

Syllabus Information

Academic Year: 2019/20
Subject: 28910 - Statistics
Faculty / School: 201 - Escuela Politécnica Superior
Degree: 437 - Degree in Rural and Agri-Food Engineering
        583 - Degree in Rural and Agri-Food Engineering
ECTS: 6.0
Year: 2
Semester: First semester
Subject Type: Basic Education
Module: ---

1.General information

1.1.Aims of the course

The subject and its expected results respond to the following approaches and objectives:

It is intended, with the teaching of this subject, to provide tools that serve as a basis to build and / or study certain statistical models related to the Degree.

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

Theory classes are expository. It will be developed according to the theoretical program. In the classes of problems, the methodology is fully participatory. For its realization is helpful consultation recommended both basic and additional bibliography.

Classes in group work practices for which implementation problems are solved is enhanced.

Autonomous and individual work is essential for the student.

4.2.Learning tasks

The course includes the following learning tasks:

- Lectures and practice sessions solving problems in the classroom.

At the beginning of the semester, it provides the student teaching material for proper development of the classes.

4.3.Syllabus

The course will address the following topics:

- Exploratory data analysis.
- Calculation of probabilities.
- Models of discrete and continuous distribution.
- Sampling and estimation.
- Confidence intervals.
- Hypothesis testing.
- Variance analysis.

4.4.Course planning and calendar

Schedule sessions and presentation of works

Type of activity / Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
In-class activity																*60*
Theory	3	3	3	3	3	3	3	2	1	1	1	1	1	1	1	**30**
Problems	1	1	1	1	1	1	1	2	3	3	3	3	3	3		**27**
Practice															3	**3**
Exámenes																
Evaluation																
Not in-class Actividad																
Individual task	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	**90**
Group work																
TOTAL	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	*150*

4.5.Bibliography and recommended resources

BB   Johnson, Richard Arnold. Probabilidad y estadística para ingenieros de Miller y Freund / Richard A. Johnson ; traducción, José de la Cera Alonso ; revisión técnica, Juan Antonio Torre Marina . - [3a. ed. en español] México [etc.] : Prentice-Hall Hispanoamericana, cop. 1997

BB   Mendenhall, William. Probabilidad y estadística : para ingeniería y ciencias / William Mendenhall, Terry Sincich ; traducción Roberto Escalona ; revisión técnica Marcial Gil Rico Rico . - [1ª ed. en español] México [etc.] : Prentice Hall Hispanoamericana, cop. 1997

BB   Peña Sánchez de Rivera, Daniel. Estadística : modelos y métodos. Vol. 2, Modelos lineales y series temporales / Daniel Peña Sánchez de Rivera . - 2a. ed. Madrid : Alianza, 1989

BB   Peña Sánchez de Rivera, Daniel. Estadística : modelos y métodos. vol.1, Fundamentos / Daniel Peña Sánchez de Rivera . - 1a. ed., 2a. reimp. Madrid : Alianza, 1988

BB   Walpole, Ronald E.. Probabilidad y estadística / Ronald E. Walpole, Raymond H. Myers . - 3a. ed. en español México, D. F. : McGraw-Hill/Interamericana, cop. 1992 (imp. 1999)

The updated recommended bibliography can be consulted in:
http://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=28910&Identificador=13119