

27648 - Statistical Methods for Market Research

Información del Plan Docente

Academic Year	2018/19
Subject	27648 - Statistical Methods for Market Research
Faculty / School	109 - Facultad de Economía y Empresa
Degree	450 - Degree in Marketing and Market Research
ECTS	5.0
Year	4
Semester	First 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 methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions, autonomous work, study and assessment tasks.

Students are expected to participate actively in class throughout the semester.

Further information regarding the course will be provided on the first day of class.

4.2.Learning tasks

The course (120 hours) includes the following learning tasks:

- Lectures (8 hours). They are mainly used to explain theoretical concepts of each topic. In some of them (topics 2, 4 and 5) exhibition techniques are used but participation and class discussion are also encouraged.
- Practice sessions (20 hours). Practice sessions are understood as an individualized tutoring session, using the SPSS 22.0 software or R free software. The working method will be individualized, which means that each student will analyze a particular database, detect any anomalies in its development, and will propose the most appropriate model for inference in the study population.
- Individual tutorials (14 hours). The student may attend the tutorials to ask questions about the course and assignments. In the case of those students who cannot attend office hours, they can send an email to make an appointment.
- Assessment tasks (2 hours). Mid-term test.
- Student presentations (6 hours).
- Autonomous work (70 hours).

4.3.Syllabus

The course will address the following topics:

- Topic 1. Projects in the field of Data Analysis in Marketing and Management. Data analysis generating value in the markets. An example in the context of electronic commerce using the survey of ICT in households in Spain. Big Data and data mining: an essential tool in decision-making. The use of ICT business does it generate mark-up? Example from www.ebusiness-watch.org. Analyses on-line: value upward.
- Topic 2. Application of Multivariate Methods in Optimal Design of Surveys. A review of descriptive multivariate methods and application of Analysis of Contingency Tables in samples from a Data Base. Study of specific cases: face surveys versus online surveys: different approaches to obtain information. Sites to fill out online surveys: the case of INE. <https://iria.ine.es>. Problems using the electronic questionnaire. Importance of design and the scales in line with objectives.
- Topic 3. Data Bases in different contexts. Multivariate applications. INTERNET as a source of information. SURVEYS: Use of ICT in households, INE. (2012): Definition of variables and research objectives. Data Cleaning: Study of missing data. Cluster Analysis, profiles and consumption habits study, Radiography of the Spanish Enterprise, INE.(2010). Radiography of Enterprises in several strategic sectors through www.ebusiness-watch.org. Graduate follow-up survey of the University System of Aragón: www.limesurvey.org
- Topic 4. Sampling in finite populations. Sample selection. Random sampling with and without replacement. Determination of the optimum sample size for a given inferential analysis. Other types of sampling: Stratified and systematic. Importance of Quota sampling: Advantages and disadvantages. New trends in the collection of statistical information.
- Topic 5: Regression Models with Qualitative Dependent Variable. Formulation of models with limited response variable: Binomial logit model. Application to the analysis of purchase of certain products / services and selection of options: as is the user of a certain age, education, income, housing. Determining marketing strategies for new products.

4.4.Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the Faculty of Economics and Business website (<https://econz.unizar.es/>)

Provisional course planning

Timetable

TOPIC

METHOD

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1st week	LEARNING OBJETIVES	Presentation
	INTRODUCTION	Presentation
2nd week	Topic 1	Presentation
	Topic 1	Lectures- Practice sessions
3rd week	Topic 2	Lectures- Practice sessions
	Topic 2	Presentation
4th week	Topic 2	Practice session
	Topic 3	Presentation
5th week	Topic 3	Lectures- Practice sessions
	Topic 3	Practice session
6th week	Topic 3	Practice session
	Topic 4	Theoretical class
7th week	Topic 4	Practice session
	Topic 5	Lectures- Practice sessions
8th week	Topic 5	Presentation
	Topic 5	Practice session

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9th week	Topic 5	Practice session
	Topic 5	Practice session
10th week		Practice session
	Assignment	
11th week	Assignment	
		Practice session
12th week	Assignment	
		Practice session
13th week	Student presentation	Practice session
14th week		Speech and discussion
	Student presentation	
15th week		
	Student presentation	Speech and discussion

4.5. Bibliography and recommended resources