

**COURSE DATA****Data Subject**

Code	34430
Name	Sampling and statistical inference
Cycle	Grade
ECTS Credits	6.0
Academic year	2023 - 2024

Study (s)

Degree	Center	Acad. Period
1310 - Degree in Sociology	Faculty of Social Sciences	4 First term

Subject-matter

Degree	Subject-matter	Character
1310 - Degree in Sociology	22 - Sampling and statistical inference	Optional

Coordination

Name	Department
AYBAR ARIAS, CRISTINA	110 - Applied Economics

SUMMARY

The "Sampling techniques and statistical inference" course will enable the student to enter the fabulous world of survey research, one of the tools used in social research, delve into technical features to meet all research to provide representative results and know the problems that can arise during fieldwork and biases to which our inferences may be subjected.

- The "Sampling techniques and statistical inference" assignatura is an elective that is offered within the module "Sociology and Social Studies."

- Studying this course students will learn to distinguish between a thorough investigation and sampling, will know the main types of sample designs available (simple random, stratified, cluster sampling, two-stage, ...), learn to interpret survey data (such as the CIS), to know the limitations of the approach, and will delve into estimation methods based on auxiliary information. The contents of the course are part of the core of any educational sociologist and are essential to practice within the studies reviewed and / or market.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

No prerequisites are required to take the course. However, in order to successfully pass the subject it is advisable to have some previous knowledge of "Socio-statistics", a certain familiarity in searching data on the network, at least at the basic level provided in the subject "Incorporation to the degree and introduction to the methods and techniques of social research" and, above all, to have enthusiasm for learning. The subject is eminently applied, and therefore CLASS ATTENDANCE is very important as most of the sessions are worked on with a computer, specifically with the Excel spreadsheet, the proper use of which is one of the objectives of the subject.

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

1310 - Degree in Sociology

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

Specifically, the successful completion of the course "Sampling techniques and statistical inference " the / student will have acquired the tools to:

- Plan and design of statistical sampling in order to develop jobs that require the application of sampling techniques.
- Know and understand the importance of random selection and problems you may encounter during fieldwork and to develop strategies for resolution or mitigation.
- Interpret the meaning of basic statistical indicators used to measure the reality under study.
- Know the limitations of the tool and instrument, with a reasonable cost, approach the knowledge of social reality.
- Analyze survey data and calculate the errors associated with any statistical.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	60,00	100
Attendance at events and external activities	15,00	0
Development of group work	20,00	0
Development of individual work	5,00	0
Study and independent work	10,00	0
Readings supplementary material	15,00	0
Preparation of evaluation activities	5,00	0
Preparing lectures	5,00	0
Preparation of practical classes and problem	5,00	0
Resolution of case studies	10,00	0
TOTAL	150,00	

TEACHING METHODOLOGY

The teaching methodology will be varied and will use different approaches:

- Expository sessions by the lecturer for each of the topics in the programme. These sessions will be based on case studies from the analysis of which the concepts, analytical interdependencies and key empirical data that students must learn to handle will be explained.
- Group discussion and analysis sessions based on different materials with the aim of raising new questions about the contents of the course programme and deepening students' understanding of the contents of the subject.
- Carrying out team work to conduct a survey research. The specific guidelines for carrying out the work will be specified by the teacher in class in accordance with the concerns and interests of the students and will be explained in detail in class. This work will be guided, monitored and supervised by the lecturer.
- Possible attendance and active participation in conferences organised as complementary activities or related to the subject throughout the term.

EVALUATION

- 90% of the grade will be for the ongoing evaluation of the theoretical and practical activities and problem solving exercises, case studies, panels, poster preparation, essays and articles, oral presentations, reports, projects, fieldwork and recording instruments, laboratory ...
- 10% of regular attendance and active participation of the students both face classroom sessions, and tutorials, and supplementary activities.



The specific criteria and processes to be used for the evaluation as well as its numerical realization, will depend on the number of students enrolled and eventually be publicized in the detailed teaching guide / student can be found in the virtual classroom course

REFERENCES

Basic

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- Díaz de Rada, Vidal (2001): Tipos de encuestas y diseños de investigación, Pamplona: Universidad Pública de Navarra.
- Rodríguez Osuna, Jacinto (1991): Métodos de Muestreo. Madrid: Centro de Investigaciones Sociológicas, colección Cuadernos Metodológicos, número 1.
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Additional

- Centro de Investigaciones Sociológicas, <http://www.cis.es>
- Alvira, F. (2011): La encuesta. Una perspectiva general metodológica, Madrid: Centro de Investigaciones Sociológicas, colección Cuadernos Metodológicos, número 35
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- Manzano Arrondo, V.; Rojas, A.J. y Fernández, J.S. (1996): Manual para encuestadores, Madrid: Alianza.



- Lynn, P. (2009): Methodology of Longitudinal Surveys, Chichester: Wiley.
- Pérez, C. (2009): Técnicas de Muestreo Estadístico, Madrid: Garceta.
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