



COURSE DATA

DATA SUBJECT

Code: 34415
Name: Quantitative techniques for social research
Cycle: Undergraduate Studies
ECTS Credits: 9
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1310 - Degree in Sociology	Facultat de Ciències Socials	2	Annual
1925 - Double Degree Prog. Sociology-Political and Public Administration Sciences	Facultat de Dret	2	
1931 - Double Degree Program in Sociology-Political Sciences and Public Administr.	Facultat de Dret	2	Annual

SUBJECT-MATTER

Degree	Subject-matter	Character
1310 - Degree in Sociology	Research techniques in social sciences	COMPULSORY
1925 - Double Degree Prog. Sociology-Political and Public Administration Sciences	Year 2 compulsory subjects	COMPULSORY
1931 - Double Degree Program in Sociology-Political Sciences and Public Administr.	Asignaturas obligatorias de segundo curso	COMPULSORY

COORDINATION

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SUMMARY

The subject is part of the degree in Sociology and it is included in the module Methods and Techniques in Social Research. It is worth 9 ECTS credits and it takes place in the second academic year of the degree. It is compulsory and its workload is of approximately 225 hours.

The quantitative techniques of social Research are closely linked to most of the subjects included in the module mentioned above and especially with *IT Applied to Social Research* and *Social Statistics*.

IT Applied to Social Research is a complementary subject since it provides the basis for the later and simultaneous use of IT applications used for social Research, essentially quantitative but also of support for quantitative analysis.



Social Statistics is the basis for *Quantitative Techniques in Social Research*.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

Relationship with other subjects of the same degree.
No enrolment restrictions have been specified.
Other types of prerequisites.
Completion of Social Statistics advisable.

COMPETENCES / LEARNING OUTCOMES

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Analyse empirical data on social structure, change and problems.

Apply the principles of the professional code of ethics of sociology and develop a commitment to social problems.

Apply the quantitative and qualitative techniques of sociological data collection.

Describe and explain social inequalities based on social theories and indicators and detect emerging processes.

Design and implement plans and programmes aimed at addressing social problems and evaluating their results.

Identify and measure social vulnerability factors.

Know and apply statistical techniques for the analysis of social reality.

Know and use secondary data sources useful for sociology.

Know the tools needed to create, implement and evaluate public policy programmes and social intervention projects.

Learn independently and develop initiative in the field of sociology.

Manage documentary sources and statistics referring to social reality.

Propose, design and develop a sociological research project.

Relate and integrate information on social phenomena from primary and/or secondary sources.



Respect and promote the principles of fundamental rights, gender equality, equal opportunities and non-discrimination, democratic values and sustainability.

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 be able to communicate information, ideas, problems and solutions to both expert and lay audiences.

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 have developed the learning skills needed to undertake further study with a high degree of autonomy.

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.

Use software and computer applications useful for sociology.

Work in a team with a multidisciplinary perspective.

Write reports and diagnoses on social problems.

DESCRIPTION OF CONTENTS

1. Organization and design of quantitative Research

1. Quantitative empirical research.

- Structured design of quantitative research.
- Organization and stages of Research.

2. Research problema, research question, and hypothesis

3. The process of operationalization: from concepts to indicators

2. Techniques of quantitative Research

4. Technique of data production.

- Secondary sources. Diversity of sources. Exploitation of databases.
- Experimental designs. Quasiexperiments.
- Surveys. Basic sampling concepts.
- Non-probabilistic sampling
- Probabilistic sampling



5. Surveys

- The three central elements of a sampling survey: the questionnaire, the field of work and the simple design.
- Design of the questionnaire. Administration of the questionnaire.
- Field of work. Organization of data collection

6. Index and typologies

3. Data matrix.

7. Data matrix.

4. Data analysis

The aim of this subject is to apply the corresponding knowledge of socio-statistics, studied the previous year, advancing towards the analysis and explanation of social facts, placing the emphasis on the proper use and interpretation of the statistics obtained with the SPSS software. Its application will involve the use of different real cases and databases.

8. Unidimensional analysis.

9. Bidimensional analysis.

10 Multivariable analysis.

Dependence and interdependence techniques.

5. The report of Research

11 Writing a quantitative report of Research.

From the project to the final report.

Structuring the parts of the Research in a comprehensive design.

Final report and presentation of the essential elements of the Research.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theoretical and practical classes	90,00
Total hours	90,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	5,00



Individual or group project	60,00
Independent study and work	30,00
Preparation of lessons	40,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	135,00

TEACHING METHODOLOGY

1. The teacher will present the most relevant concepts of each unit and will hand out diagrams and ask questions for students to answer in class. Students must prepare the lessons by:

- a. Reading the materials specified by the teacher.
- b. Extracting the basic concepts.
- c. Elaborating files corresponding to each unit.

2. The practical activities will use participation to improve communication between the teacher and the students and among students, and encourage co-responsibility in the teaching-learning method.

Practical activities will be carried out both in group and individually in order to motivate research, analysis and assimilation processes and to encourage personal relationships and share problems and solutions.

Statistic programmes will be used throughout the course as an important part of the activities.

3. Reading. The teacher will hand out articles and texts to read and carry out activities related to them. Texts will also be used to complete the information given by the teacher.

4. Tutorials. Apart from personal tutorials for doubts and questions, there will be periodical group tutorials in order to monitor the assignments.

5) Skills and Bibliographical Information session, intermediate level, by the technical staff of the Library of Ciències Socials - Gregori Maians.

EVALUATION



The final grade will be the result of the combination of the final exam plus the grade of the exercises and activities submitted throughout the course. A partial and a final exam will be used to evaluate the knowledge acquired.

The partial (midterm) exam will take place between the end of the first semester and the beginning of the second semester.

The final exam will take place at the end of the second semester.

The final exam will account for 50% of the final grade. Students must pass the partial exam and must obtain a minimum grade of 5 (over 10) in order to pass the course.

Practical activities (in group and individual) will account for 50% of the final grade. In assessing the practical activities will take into account the Informational Skills performed during the course.

Individual and group assignments, attendance and participation in class will be graded. In order to pass the subject, students must submit all of the practical activities. Late assignments will be subject to penalization.

Conditions for resits will be the same. Assignments do not need to be repeated if already submitted.

REFERENCES

- GARCIA FERRANDO, Manuel; ALVIRA, Francisco; ALONSO, Luis E.; y ESCOBAR, Modesto; comps (2015). El análisis de la realidad social. Métodos y técnicas de investigación. Madrid: Alianza editorial. 4ª Edición. Apoyo y fundamento de metodología y técnicas de investigación social.
- CORBETA, P. (2007): Metodología y técnicas de investigación social. Madrid, McGraw-Hill.
- DÍAZ DE RADA, V. (2009): Análisis de datos de encuesta. Desarrollo de una investigación completa utilizando SPSS. Barcelona, Editorial UOC.
- CALLEJO, J. y VIEDMA A. (2006): Proyectos y Estrategias de Investigación Social: la perspectiva de intervención. Madrid, McGraw Hill.
- BABBIE, Earl (2000). Fundamentos de la investigación social. México, D.F. : Thompson. Temas de 1 a 10.



- RITCHEY, Ferris J. (2008) Estadística para las ciencias sociales. México: McGraw-Hill . Apoyo y fundamentos de estadística.
- QUIVY, Raymond; y CAMPENHOUDT, Luc Van (2005). Manual de recerca en ciències socials. Barcelona: Herder. Temes de 1 a 5.