



## COURSE DATA

### DATA SUBJECT

**Code:** 34413  
**Name:** Informatics for sociological 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	1	Annual
1925 - Double Degree Prog. Sociology-Political and Public Administration Sciences	Facultat de Dret	1	
1931 - Double Degree Program in Sociology-Political Sciences and Public Administr.	Facultat de Dret	1	Annual

### SUBJECT-MATTER

Degree	Subject-matter	Character
1310 - Degree in Sociology	Information technology	COMPULSORY
1925 - Double Degree Prog. Sociology-Political and Public Administration Sciences	Year 1 compulsory subjects	COMPULSORY
1931 - Double Degree Program in Sociology-Political Sciences and Public Administr.	Asignaturas obligatorias de primer curso	COMPULSORY

### COORDINATION

VIZCAINO ESTEVAN AIDA

## SUMMARY

The subject is included in the module Methods and Techniques of Social Research and is worth 9 ECTS credits (equivalent to a workload of 225 hours).

It is closely linked to all the subjects that use applied IT tools. It provides a common base at the same time that it provides knowledge and develops the skills to use IT tools such as spreadsheets and programmes of statistical analysis among others and apply them adequately to the professional practice.

The aim of the subject is to make students aware of the importance of IT resources in scientific and professional production as well as the importance of fulfilling the scientific requirements through their use.

Students will work with basic IT tools and will learn about quantitative and qualitative analysis through their



use. They will also learn to interpret the results obtained in order to improve understanding and production of the contents covered in class.

## 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

Basic IT knowledge (databases, spreadsheets) advised.

## COMPETENCES / LEARNING OUTCOMES

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Analyse empirical data on social structure, change and problems.

Clearly communicate theories, problems and proposals of a sociological nature, both orally and in writing, using new information and communication technologies.

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

Know and use secondary data sources useful for sociology.

Learn independently and develop initiative in the field of sociology.

Manage documentary sources and statistics referring to social reality.

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.

## DESCRIPTION OF CONTENTS

### **1. Introduction to digital tools for social research.**

1. Course overview.
2. Proprietary software (Microsoft Office) and free software (Open Office).
3. Approach to AI applications
4. Approach to collaborative tools (management and content).

### **2. IT operations with sociological data sources.**

1. Resources. Advanced search and data import (ASCII, CSV, etcetera), both in Libraries (books, magazines) and specific Databases (INE, CIS). Other resources (trade unions, political parties, movements, non-conventional websites).
2. Word processing. Elements for the elaboration of a working document: references, research, indexes, format and automation. Diagrams, tables and graphs.
3. Spreadsheets. General elements and options for the production of data and their incorporation to different working documents. Graphs and diagrams. Creation and application of formulas. Data overview and data analysis.
4. Presentations. Introduction to text transformation and support in order to make communication with the audience easier. Creation of presentation from notes and documents. Working with graphs, diagrams and images.



### 3. IT tools for qualitative analysis.

1. Introduction to qualitative analysis of discourses. Recording audio/video and transcribing.
2. Introduction to computer packages for qualitative research (QDA): Programs for the treatment of qualitative data (Atlas.ti; MAQDA, etc). Work with real transcriptions, text encoding, export and presentation of results.

### 4. IT tools for the quantitative analysis.

1. Introduction to IT tools to analyse quantitative data. Operationalization, tabulation and presenting results.
2. Introduction to quantitative data processing programs. The data matrix. Transformation operations and generation of variables. Introduction to univariate and bivariate analysis. Export of tables and graphs.

## WORKLOAD

### PRESENCIAL ACTIVITIES

Activity	Hours
Theoretical and practical classes	90,00
<b>Total hours</b>	<b>90,00</b>

### 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
<b>Total hours</b>	<b>135,00</b>

## TEACHING METHODOLOGY

**1) Lectures:** Teachers will explain the basic concepts and propose activities.

Students will attend class and read the material indicated by the teacher, available in Aula Virtual.



**2) Practical lessons:** Participation is encouraged in order to establish communication between teacher and students and among fellow students. Practical assignments will be mostly individual. Each unit will be followed by a practical activity that must be submitted in a maximum of 10 days through Aula Virtual. Activities will be defined in Aula Virtual.

**3) Readings:** Teachers will hand out a list of articles related to IT applications for the use of qualitative and quantitative techniques and students must choose one. Readings will be later commented by the teacher and the student in mandatory tutoring lessons. Besides, students must complete the information exposed in class with the information on the texts.

**4) Tutoring lessons:** Apart from individual tutoring lessons for doubts and questions, the teachers will set mandatory tutoring hours in order to monitor the students' activities and skills in detail.

## EVALUATION

The evaluation of the subject depends on three qualifications:

Written examination and/or oral examination: 40%

Continuous evaluation of theoretical-practical activities: solving exercises and problems, case studies, elaboration of panels-posters, essays and articles, oral presentations, reports, projects, field work and recording instruments, laboratory practices, reading books, reviews, participation in activities: 60%

The activities delivered out of term will not be marked with the corresponding maximum note to the delivery in term. It will be necessary to pass all the parts in order to pass the subject.

The students that do not obtain the approved of the subject in the 1st exam, will be able to present to the 2nd following also these criteria.

In the 2nd call, the evaluation form of the first call may be maintained.

## REFERENCES

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