

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

Code	34413
Name	Informatics for sociological research
Cycle	Grade
ECTS Credits	9.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
1310 - Degree in Sociology	Faculty of Social Sciences	1	Annual
1924 - D.D. in Political and Public Admin. Sciences-Sociology	Faculty of Law	1	Annual
1925 - D.D. in Sociology-Political and Public Admin. Sciences	Faculty of Social Sciences	1	Annual
1931 - D.D. in Sociology-Political and Public Adminis. Sciences	Faculty of Social Sciences	1	Annual

Subject-matter

Degree	Subject-matter	Character
1310 - Degree in Sociology	6 - Information technology	Obligatory
1924 - D.D. in Political and Public Admin. Sciences-Sociology	1 - Year 1 compulsory subjects	Obligatory
1925 - D.D. in Sociology-Political and Public Admin. Sciences	1 - Year 1 compulsory subjects	Obligatory
1931 - D.D. in Sociology-Political and Public Adminis. Sciences	1 - Asignaturas obligatorias de primer curso	Obligatory

Coordination

Name	Department
BENLLOCH DOMENECH, CRISTINA	330 - Sociology and Social Anthropology



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.

OUTCOMES

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.
- Clearly communicate theories, problems and proposals of a sociological nature, both orally and in writing, using new information and communication technologies.
- Respect and promote the principles of fundamental rights, gender equality, equal opportunities and non-discrimination, democratic values and sustainability.
- Manage documentary sources and statistics referring to social reality.
- Learn independently and develop initiative in the field of sociology.
- Analyse empirical data on social structure, change and problems.
- Know and apply statistical techniques for the analysis of social reality.
- Know and use secondary data sources useful for sociology.
- Relate and integrate information on social phenomena from primary and/or secondary sources.
- Use software and computer applications useful for sociology.

LEARNING OUTCOMES

Upon successful completion of the subject, students will be able to:

- Understand the different computer user operations applicable to qualitative and quantitative data.
- Differentiate the different processes of transformation of operational data formats for analysis.
- Distinguish the properties, characteristics and quality of data and the processes of information production.
- Perform computer operations of a statistical nature.
- Perform computer operations content analysis.
- Produce computer-data describing processes and sociological phenomena.
- Develop work habits with ICT.
- Identify, collect, process and interpret data and creatively relevant to the analysis of social phenomena and processes information from various sources.
- Distancing from previous trials that organize social experience in everyday life.
- Develop attitudes and values that ensure a commitment to outcomes research sociologist with the requirements of rigor, reliability and accuracy.



DESCRIPTION OF CONTENTS

1. Free software tools for sociological research.

1. Course overview. Proprietary software (Microsoft Office) and free software (Open Office).
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 formulae. Data overview and data analysis.
4. Presentations. Introduction to text transformation and support in order to make communication with the audience easier. Creation of presentations from notes and documents. Working with graphs, diagrams and images.

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, alternative websites).

3. IT tools for qualitative analysis.

1. Introduction to qualitative analysis of discourses. Recording audio/video and transcribing.
2. Introduction to apps for qualitative discourse analysis (QDA): Atlas.ti. Working with real transcriptions, coding texts, exporting results and presenting 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 SPSS and R. Data matrix. Transformation operations and creation of variables. Introduction to univariate and bivariate analysis. Exporting tables and graphics.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	90,00	100
Attendance at events and external activities	5,00	0
Development of group work	30,00	0
Development of individual work	30,00	0
Study and independent work	30,00	0
Preparing lectures	20,00	0
Preparation of practical classes and problem	20,00	0
TOTAL	225,00	

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 the theoretical activities-practical: resolution of exercises and problems, studies of case, preparation of signposts-poster, essays and articles, oral presentations, reports, projects, work of field and instruments of register, practices of laboratory: 50%



- Assessment of the regular assistance and the active participation of the and the students in the face-to-face sessions in the classroom, tutorships and complementary activities (workshops, seminars, conferences...): 10%.

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 announcement only practical activities will be delivered. It will not be necessary to repeat the practices approved, neither the final examination, in the case to be approved in the first announcement.

REFERENCES

Basic

- DELGADO, J.M. (2019). Office 2019. Madrid: Anaya.
- FRIESE, S. (2019). Qualitative data analysis with Atlas.ti. Londres: Sage.
- PÉREZ, C. (2012). Estadística aplicada a través de Excel. Madrid: Garceta.
- PÉREZ, C. (2013). IBM SPSS. Estadística aplicada. Conceptos y ejercicios resueltos. Madrid: Garceta.
- PERÓ, M. ET AL. (2012). Estadística aplicada a las ciencias sociales mediante R y R-Commander. Madrid: Garceta.