# Universida<sub>de</sub>Vigo

Subject Guide 2024 / 2025

IDENTIFYIN	G DATA			
	e Methods of Social Research			
Subject	Quantitative Methods of Social Research			
Code	P07G095V01309			
Study programme	Grado en Dirección y Gestión Pública			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	3rd	2nd
Teaching	Spanish Galician			
language Department	Galician			
Coordinator	Vidal Puga, Juan José			
Lecturers	Vidal Puga, Juan José			
E-mail	vidalpuga@uvigo.gal			
Web	http://moovi.uvigo.gal			
General	This course aims to provide students an understand	ding of the methodo	ology and tech	nniques for quantitative

#### **Training and Learning Results**

Code

description

- A1 Students will have shown they have sufficient knowledge and understanding of an area of study, starting after completion of general secondary education, and normally reaching a level of proficiency that, being mostly based on advanced textbooks, will also include familiarity with some cutting-edge developments within the relevant field of study.
- A2 Students will be able to apply their knowledge and skills in their professional practice or vocation and they will show they have the required expertise through the construction and discussion of arguments and the resolution of problems within the relevant area of study.
- A3 Students will be able to gather and interpret relevant data (normally within their field of study) that will allow them to have a reflection-based considered opinion on important issues of social, scientific and ethical nature.
- A4 Students will be able to present information, ideas, problems and solutions both to specialist and non-specialist audiences.
- A5 Students will acquire the learning skills that are required to pursue further studies with a high degree of independence.
- B1 Analysis, synthesis, problem-solving, decision-making, information- and time-management skills.
- B4 Commitment to ethical values and public service vocation.

research applied to Public Administration.

- B5 Critical thinking skills.
- B6 To put their knowledge on public management and administration into practice.
- C13 To apply the social policies and research methods and techniques and to be able to use quantitative and qualitative research methods.
- C14 Ability to use the information and communication technologies (ICT) that can be applied in public management.
- D2 To be able to communicate, both orally and in writing, in the two official languages (Spanish and Galician) and in a foreign language.
- D3 Raising awareness about environmental issues.
- D4 To master the specific ICT techniques in their respective academic and professional fields.
- D5 To acquire independent learning skills.
- D6 To acquire independent learning skills.

Expected results from this subject	
Expected results from this subject	Training and Learning
	Results

Understand the processes and criteria for quality research and critically evaluate others' research		В4		D2
findings.	A2	B5		D3
	Α3			D5
	A4			D6
	A5			
Correctly interpret the meaning of the results of quantitative analyses.	A1	B1	C13	D4
	A2	B5		D5
	А3			
	A4			
	A5			
Use computing tools that allow the application of the studied methods and techniques.	A5	В6	C13	D4
			C14	D5
				D6

Contents	
Topic	
Scientific research	Empirical translation of the theory. Scales techniques. Research design. Causality.
Data Collection	Sampling. Quality of the sources of information. Official statistical sources. Ethics in data collection.
Parameter estimation	Normal populations. Confidence intervals. Sample size. Multiple linear regression.
Hypothesis tests and diffusion of results	Test of hypothesis. Ethical in the analysis of data. Diffusion of results.
Computing applied to the resolution of practical cases	Use of spreadsheets for the application of the concepts and quantitative techniques to the resolution of exercises and practical cases.

Planning			
	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Lecturing	15	34	49
Discussion Forum	0	3	3
Practices through ICT	12	0	12
Problem and/or exercise solving	8	16	24
Problem and/or exercise solving	8	16	24
Problem and/or exercise solving	8	16	24
Objective questions exam	0	12	12
Objective questions exam	1	0	1
			1. 6.1

<sup>\*</sup>The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
	Description
Introductory activities	Introductory activities.
Lecturing	Basic contents and theory.
Discussion Forum	Clarification of questions and collaborative work using the forums in the learning platform.
Practices through ICT	Students will have the chance to apply the theory presented in the lectures.

# Personalized assistance

# **Methodologies Description**

Discussion Forum Communication between readers and students via forums for general queries and internal chat for particular questions.

Assessment						
	Description	Qualificatio	n T		and Le Results	arning
Problem and/or exercise solving	Problem resolution and individual exercises are proposed in the theoretical and practical parts.	20	A1 A2 A3 A4 A5	B1 B5 B6	C13 C14	D4 D5

Problem and/or exercise solving	Official data collection and analysis.	20	A1 A2 A3 A4 A5	B1 B5 B6	C13 C14	D4 D5
Problem and/or exercise solving	Resolution of problems of data analysis.	20	A1 A2 A3 A4 A5	B1 B5 B6	C13 C14	D4 D5
Objective questions exam	Evaluation, in the partial and final exams, of the theoretical knowledge.	40	A1	B5		D5

#### Other comments on the Evaluation

An essay and several practical activities will be assigned throughout the course. Moreover, an additional final activity and exam with objective questions will take place on official dates.

There are two ways to pass this subject:

- 1. Continuous assessments include practical activities (90% of the final grade) and the final test exam (10% of the final grade).
- 2. A final exercise includes the final test exam (50% of the final grade) and several practical activities (50% of the final grade).

Students are expected to follow the first option ("continous assesments").

Exceptionally, and always by previous request, students may do the final examination during tutoring hours.

**Second call**: The second call will be a single exercise, including a test exam (50% of the final grade) and several practical activities (50% of the final grade).

Warning: No grades will be saved for future calls.

## Sources of information

#### **Basic Bibliography**

# **Complementary Bibliography**

Cea D'Ancona, María Ángeles, **Metodología cuantitativa: estrategias y técnicas de investigación social**, 84-7738-420-7, Síntesis, 1996

Callejo Gallego, Javier; Del Val Cid, C.; Gutiérrez, J.; Viedma, A.,, Introducción a las técnicas de investigación social,, Centro de Estudios Ramón Areces, 2010

Ritchey, F.J., Estadística para las ciencias sociales, 978-970-10-6699-7, McGraw-Hill, 2008

Scheaffer, Richard L.; MendejallIII, William; Lyman Ott, R., Elementos de muestreo, Elementos de muestreo, 2006

Carlberg, Conrad George, **Análisis estadístico con Excel**, Anaya Multimedia, 2012

#### Recommendations

### Subjects that it is recommended to have taken before

Administration Statistics/P07G095V01202

#### Other comments

It will be necessary for the development of the course that the lecturer has an up-to-date photograph of the students who will need to access the platform at the beginning of the course, and always before September 30th. The sole purpose of handling this data is to allow the professor to verify the identity of the students enrolled in the course.

The legal basis for processing this data lies in Article 6.1and) of the RXPD, where the processing is deemed necessary for the exercise of public power granted to the data controller under Article 9 of Law 39/2015, dated October 1st, concerning the common administrative procedure of public administrations, and under Article 25.7 of RD 1791/2010, dated December 30th, which approves the Statute of the University Student.

Access to the images and personal data of the students is restricted to the respective subject professor for the purpose of conducting the academic activities outlined in this educational guide. This information must not be used or shared for any other purpose and must be kept confidential.

For more information, visit: https://www.uvigo.gal/proteccion-Data

