



## COURSE DATA

### DATA SUBJECT

**Code:** 43475  
**Name:** Methods of educational research  
**Cycle:** Master's Degree / Doctorate  
**ECTS Credits:** 6  
**Academic year:** 2026-27

### STUDY (S)

Degree	Center	Acad. year	Period
2157 - Master's degree in Research in Subject Didactics	Facultat de Formació del Professorat	1	First quarter, Second quarter
3112 - PhD in Specific Didactics	Escola de Doctorat		
3112 - PhD in Specific Didactics	Escola de Doctorat		

### SUBJECT-MATTER

Degree	Subject-matter	Character
2157 - Master's degree in Research in Subject Didactics	Methods of educational research	COMPULSORY
3112 - PhD in Specific Didactics		
3112 - PhD in Specific Didactics		

### COORDINATION

PEIRO VELERT CARMEN

## SUMMARY

The subject of Didactic Research Methods aims to provide future researchers with the criteria, methods and techniques of scientific research in the various disciplinary fields of specific Didactics. In addition, its objectives include introducing students to the culture of rigour, empirical testing, evaluating the quality of research, etc. Scientific research requires the development of certain competencies, associated with the formulation of questions of interest, the general description of phenomena and their scientific analysis. For this purpose, the students of this master's degree need to know and manage qualitative and quantitative methodological techniques that are frequently used for the design and development of research in Specific Didactics.

## PREVIOUS KNOWLEDGE

### RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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



## OTHER REQUIREMENTS

This subject does not require specific previous knowledge

## COMPETENCES / LEARNING OUTCOMES

### 2157 - Master's degree in Research in Subject Didactics

Apply the methodological resources necessary to develop research in accordance with the current criteria of quality, validity and reliability of Specific Didactics.

Communicate, exchange and transfer the results of one's own research with other actors in the education system, for the benefit of society.

Decide, with objective criteria, which methodological paradigm quantitative, qualitative or mixed best fits the objectives of your own research.

Design and validate reliable tools for data collection in qualitative or quantitative research in Specific Didactics.

Design a research project by defining the problem and its scientific field, the research questions, the appropriate theoretical framework, the necessary methodological tools, and specifying its limitations.

Engage in research tasks within scientific groups, showing capacity for learning, collaboration, initiative and communication.

Evaluate the relevance of a research project, its quality and future projection, with scientific criteria appropriate to the international standards of the studied speciality.

Integrate ethical values and responsibility associated with research tasks into one's own research.

Submit one's own research in a rigorous manner that is appropriate to the context or means of communication of the presentation (scientific or informative publication, congress, course aimed at researchers or teachers, etc.), respecting the criteria of quality and validity.

Use a computer programme for the appropriate processing of data obtained in a research.

## DESCRIPTION OF CONTENTS

### 1. Paradigms and research methodologies in Specific Didactics.

### 2. The research process

-Phases of the research process.



-Instrument design for data collection and analysis: design, verification and reliability.

### 3. Quantitative designs and statistical techniques

- Contextualised examples of the use of quantitative methodologies.
- Experimental research methodologies with diverse groups of participants.
- Methods of representation and quantitative analysis of information on students and/or teachers' knowledge of the discipline.
- Quality criteria for quantitative research.

### 4. Qualitative designs and associated methods

- Contextualized examples of the use of qualitative methodologies.
- Research methodologies with diverse groups of participants.
- Methods of representation and qualitative analysis of data.
- Quality criteria for qualitative research.
- Introduction to qualitative data analysis programmes.

## WORKLOAD

### PRESENCIAL ACTIVITIES

Activity	Hours
Theory	24,00
Computer classroom practice	24,00
<b>Total hours</b>	<b>48,00</b>

### NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	50,00
Independent study and work	0,00
Preparation of lessons	30,00
Preparation for assessment activities	25,00
Resolution of case studies	0,00
<b>Total hours</b>	<b>105,00</b>

## TEACHING METHODOLOGY

Various methodologies for teaching and students' work will be applied, depending on the type of activity to be carried out:

- Lectures on the content given by teaching staff (usually in theory classes).



- Discussions in small groups and with the class group.
- Supervised or independent work, either individually or in small groups, to carry out projects, prepare materials, search for information, etc.
- Supervised or independent individual study time.
- Presentation of the work carried out in front of the teaching staff and class group.
- One-to-one meetings with teaching staff to track the student's progress.

## EVALUATION

This module or subject of the University Master's Degree in Specific Didactics consists of two parts dedicated to (a) quantitative methods and techniques, and (b) qualitative methods and techniques, each with its corresponding tasks. These two parts (a) and (b) can be taught by several members of the teaching staff and in any order, since the training they offer is complementary.

To pass the subject, it is necessary to: 1) hand in all the compulsory assignments requested; 2) obtain a minimum grade of 4.0 points out of 10 in each of the compulsory essays and, in addition, 3) obtain an average of 5.0 or more out of 10 points. Both parts (quantitative and qualitative) will have the same relative weight for the calculation of this average

Plagiarism or the improper use of artificial intelligence tools may be sanctioned in accordance with article 15 of the University of Valencia's assessment and qualification regulations.

## REFERENCES

- Calvo, F. (1992). Estadística Aplicada. Deusto. - Coffey, A. y Atkinson, P. (2005). Encontrar el sentido a los datos cualitativos. Universidad de Alicante - Cohen, L., Manion, L. y Morrison, K. (2011). Research Methods in Education (7th ed.) Routledge. - Delamont, S. (2011). Ethnographic Methods in Education. Sage. - Denzin, N.K. y Lincoln, I.S. (2012). Manual de investigación cualitativa. Gedisa. - Edwards, J. y Lampert, M.(eds) (1993). Talking Data: Transcription and Coding in Discourse Research. Lawrence Erlbaum. - Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage. - Green, J., Franquiz, M. y Dixon C. (1997). The myth of the objective transcript: Transcribing as a situated act, TESOL Quarterly 31(1):172-176. - Kvale, S. y Brinkmann, S. (2015) Interviews: Learning the Craft of Qualitative Research Interviewing. Sage. - Krippendorff, K. (2012). Content Analysis: An Introduction to its Methodology (3rd Ed.). Sage. - Krueger, R.A. (2008) Focus Groups. A Practical Guide for Applied Research (3rd Ed.). Sage.
- Morgan, D.L. (1988). Focus Groups as Qualitative Research. Sage - Muthén, L.K. y Muthén, B.O.



(2017). Mplus users guide (8th Ed.) Muthén & Muthén. - Ochs, E. (1979). Transcription as theory. En E. Ochs y B. Schieffelin (eds) *Developmental Pragmatics* (pp. 43-72). Academic Press. - Roberts, C. (1997). Transcribing talk: Issues of representation, *TESOL Quarterly* 31(1):167-172. - Sabirón, F. (2007). *Métodos de investigación etnográfica en Ciencias Sociales*. Mira Editores. - Sahin, M. D. y Aybek, E. C. (2019). Jamovi: an easy to use statistical software for the social scientists. *International Journal of Assessment Tools in Education*, 6(4), 670-692. - Stake, R.E. (2010). *Qualitative Research. Studying how things work*. Guilford - Sun, J. (2005). Assessing goodness of fit in confirmatory factor analysis. *Measurement and evaluation in counseling and development*, 37(4), 240-256. - Taylor, S.J. y Bodgan, R. (2000) (3ª Ed.). *Introducción a los métodos cualitativos de investigación*. Paidós

- Baxter, Leslie A. (1990). Content Analysis. En B. Montgomery y S. Duck (eds) *Studying Interpersonal Interaction* (pp. 239-254). The Guilford Press. - Cook, G. (1990). Transcribing infinity: Problems of context interpretation, *Journal of Pragmatics*, 14(1):1-24. - Gail, J. (1984). Transcript Notation. En M.J. Atkinson, y J. Heritage (eds) *Structures of Social Action: Studies in Conversation Analysis* Cambridge University Press. - Latorre, A., del Rincón, D. y Arnal, J. (1997). *Bases Metodológicas de la Investigación Educativa*. Hurtado. - Vasilachis, I. (coord.) (2008). *Estrategia de investigación cualitativa*. Gedisa.