

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

Code	43475
Name	Methods of educational research
Cycle	Master's degree
ECTS Credits	6.0
Academic year	2023 - 2024

Study (s)

Degree	Center	Acad. year	Period
2157 - M.D. in Research in Subject Didactics	Faculty of Teacher Training	1	First term
3112 - Specific Didactics	Doctoral School	0	Annual

Subject-matter

Degree	Subject-matter	Character
2157 - M.D. in Research in Subject Didactics	2 - Methods of educational research	Obligatory
3112 - Specific Didactics	1 - Complementos de Formación	Optional

Coordination

Name	Department
PEIRO VELERT, CARMEN	95 - Didactics of Physical, Artistic and Music Education

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

No enrolment restrictions with other subjects in the curriculum have been specified.

Other types of requirements

This subject does not require specific previous knowledge

OUTCOMES

2157 - M.D. in Research in Subject Didactics

- Design and validate reliable tools for data collection in qualitative or quantitative research in Specific Didactics.
- 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.
- 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.
- Use a computer programme for the appropriate processing of data obtained in a research.
- Engage in research tasks within scientific groups, showing capacity for learning, collaboration, initiative and communication.
- Communicate, exchange and transfer the results of one's own research with other actors in the education system, for the benefit of society.
- Integrate ethical values and responsibility associated with research tasks into one's own research.
- Evaluate the relevance of a research project, its quality and future projection, with scientific criteria appropriate to the international standards of the studied speciality.
- Decide, with objective criteria, which methodological paradigm quantitative, qualitative or mixed best fits the objectives of your own research.
- Apply the methodological resources necessary to develop research in accordance with the current criteria of quality, validity and reliability of Specific Didactics.

LEARNING OUTCOMES

The subject of *Didactic Research Methods* must provide students with the necessary methodological basis to be able to confidently approach the design and development of didactic research projects within their specialisation. At the end of the course and always in relation to their specialisation, students of this subject are expected to have achieved the following results:



- Know ways to analyse current teaching and learning problems associated with specific fields of knowledge and the solutions to which are being investigated by scientific communities.
- Know the historical, epistemological and ontological aspects associated with the emergence and evolution of different methodologies of didactic research.
- Critically analyse the performance of teaching, good practice and guidance using didactic research tools.
- Develop and implement research projects in their field of specialisation.
- Know and use basic didactic research procedures.
- Know the current instruments and procedures for obtaining conclusions from didactic 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.
- Experimental 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**

ACTIVITY	Hours	% To be attended
Theory classes	27,00	100
Computer classroom practice	18,00	100
Development of group work	30,00	0
Development of individual work	20,00	0
Preparation of evaluation activities	25,00	0
Preparing lectures	30,00	0
TOTAL	150,00	

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 two parts (quantitative methods and techniques and qualitative methods and techniques) 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.



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Additional

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