

**Education Research II: Methodology, Instruments  
and Strategies for the Collection and Analysis of  
Data**

Code: 43227  
ECTS Credits: 9

Degree	Type	Year	Semester
4313815 Research in Education	OB	0	A

## Contact

Name: José Tejada Fernández

Email: Jose.Tejada@uab.cat

## Use of Languages

Principal working language: spanish (spa)

## Prerequisites

This is a mandatory module in the master's programme

## Objectives and Contextualisation

This module seeks to introduce students in the methodology of research in education

## Competences

- Analyse data according to its nature and present results in accordance with the research proposals.
- Collect research data coherently in accordance with the chosen method.
- Develop professional values including ethics in educational research, in particular with respect to diversity of opinion and ways of being and doing.
- Recognise and evaluate the potential and limitations of the instruments and strategies.
- Use ICT in the research process, information search and management, data analysis and the dissemination and communication of results.
- Work in teams and with teams in the same or interdisciplinary fields.

## Learning Outcomes

1. Apply the emptying process information, categorization and coding it as a source of information, documentation and research indispensable means of socio-educational field.
2. Build and validate instruments consistent with the methodological option chosen.
3. Critically analyze and interpret the data obtained in the investigation.
4. Decide on the appropriate tools for analysis according to the nature of the data.
5. Design strategies for gathering information to enable us to meet the objectives.
6. Develop professional values including ethics in educational research, in particular with respect to diversity of opinion and ways of being and doing.
7. Evaluate the potential and limitations of different types of analysis and the computer programs that allow it to be carried out.
8. Evaluate the potential and limitations of the different instruments and strategies for data collection.
9. Identify and select the most appropriate research strategies to solve real problem situations.
10. Relate results in accordance with their origin (sources and instruments).
11. Select or develop the tools for collecting information that will allow us to meet the objectives.

12. Use ICT in the research process, information search and management, data analysis and the dissemination and communication of results.
13. Use research methods, strategies and techniques and design research pertinent to the research problem in context.
14. Work in teams and with teams in the same or interdisciplinary fields.

## Content

1. Methods and designs of research in education

1.1. Quantitative research

1.2. Qualitative research

1.3. Other methods: design based research and evaluation research

2. Instruments and strategies to collect information

2.1. Type of instruments: observation, interviews and questionnaires

2.2. Design, development and validation of the instruments

3. Procedures for data analysis

3.1. Content analysis and discourse analysis for textual data

3.2. Statistical analysis for quantitative data

## Methodology

The teaching methodology will be based on the following dynamics:

- Lectures
- Reading of research articles
- Analysis and discussion of those articles
- Exercise to practice in class
- Oral presentations
- Tutorials

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Analysis and discussion of the articles	6	0.24	1, 10, 11, 14
Exercise to practice in class	10	0.4	2, 5, 9, 13
Master classes / expositions	60	2.4	7, 6
Oral Presentation	4	0.16	3, 12
Type: Supervised			
Tutorials	60	2.4	7

Type: Autonomous

Individual work and assignments	55	2.2	8, 7, 4, 11
Reading of articles	30	1.2	1, 10, 14

## Assessment

The evaluation of the module will be done through different activities. The final mark will be an average of the different activities. A minimum of 4 out of 10 needs to be obtained in each activity for it to count towards the final mark. A minimum of 80% of attendance must be obtained.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Activities during the module	20% - 25%	0	0	1, 6, 5, 9, 14, 13
Individual work	45% - 50%	0	0	8, 7, 2, 4, 5, 9, 11, 13
Oral Presentation	20% - 25%	0	0	3, 12, 10

## Bibliography

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