

**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

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### Other comments on languages

The use of Catalan is also contemplated

### Use of Languages

Principal working language: spanish (spa)

### Teachers

Mariona Espinet Blanch

Joaquín Gairin Sallan

Gemma Paris Romia

Lurdes Martinez Minguez

Emilee Moore de Luca

Joanna Genevieve E. Empain

### 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

Specific cognitive objectives

- Know the basic components and processes of an educational reserach.
- Know the theoretical-practical implications of the research
- Know the main methodologies and research methods in education
- Know the main techniques of information production

Specific procedural objectives

- Analyze the methodological context of the educational research
- Identify the elements or components involved in educational research design
- Recognize different procedures and methods of educational research

- Document the research methodologies and methods.
- Design techniques for collecting and producing information.

#### Specific attitudinal objectives

- Recognize the work of others and respect intellectual property
- Respect the ethical principles of the research process

### 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.
- Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
- Continue the learning process, to a large extent autonomously.
- Develop professional values including ethics in educational research, in particular with respect to diversity of opinion and ways of being and doing.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Recognise and evaluate the potential and limitations of the instruments and strategies.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Use ICT in the research process, information search and management, data analysis and the dissemination and communication of results.
- Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
- 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. Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
4. Continue the learning process, to a large extent autonomously.
5. Critically analyze and interpret the data obtained in the investigation.
6. Decide on the appropriate tools for analysis according to the nature of the data.
7. Design strategies for gathering information to enable us to meet the objectives.
8. Develop professional values including ethics in educational research, in particular with respect to diversity of opinion and ways of being and doing.
9. Evaluate the potential and limitations of different types of analysis and the computer programs that allow it to be carried out.
10. Evaluate the potential and limitations of the different instruments and strategies for data collection.
11. Identify and select the most appropriate research strategies to solve real problem situations.
12. Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
13. Relate results in accordance with their origin (sources and instruments).
14. Select or develop the tools for collecting information that will allow us to meet the objectives.
15. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
16. Use ICT in the research process, information search and management, data analysis and the dissemination and communication of results.
17. Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
18. Use research methods, strategies and techniques and design research pertinent to the research problem in context.
19. 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

## Methodology

The teaching methodology will be based on the following dynamics:

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

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Analysis and discussion of the articles	6	0.24	1, 13, 14, 19
Exercise to practice in class	10	0.4	2, 7, 11, 12, 15, 3, 4, 17, 18
Master classes / expositions	60	2.4	9, 8
Oral Presentation	4	0.16	5, 16, 3
Type: Supervised			
Tutorials	60	2.4	9
Type: Autonomous			
Individual work and assignments	55	2.2	10, 9, 6, 12, 15, 3, 4, 14, 17
Reading of articles	30	1.2	1, 13, 19

## 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. In order to obtain a positive final evaluation, students must have attended a minimum of 80% of the classes.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Activities and classroom exercises	20%	0	0	1, 8, 7, 11, 12, 15, 3, 4, 17, 19, 18
Attendance and participation	10%	0	0	3
Individual Final Module Work	40%	0	0	10, 9, 2, 6, 7, 11, 12, 15, 3, 4, 14, 17, 18
Presentation and follow-up work	30%	0	0	5, 16, 3, 13

## Bibliography

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## **Software**

This subject does not need specific programming