

Teaching guide

IDENTIFICATION DETAILS

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|--------------------------------------|---|---------------|------|
| Academic year: | 2025-2026 | | |
| Degree: | University Master's Degree in Bilingual Education | | |
| Scope | Educational sciences | | |
| Faculty/School: | Postgraduate and Lifelong Learning School | | |
| Course: | METODOLOGÍA DE INVESTIGACIÓN | | |
| Type: | Optional | ECTS credits: | 4 |
| Year: | 1 | Code: | 8390 |
| Teaching period: | Second semester | | |
| Subject: | Research Orientation | | |
| Module: | | | |
| Teaching type: | Virtual | | |
| Language: | English | | |
| Total number of student study hours: | 100 | | |

| Teaching staff | E-mail |
|----------------------------|-----------------------|
| María José González Dávila | maria.gonzalez@ufv.es |

SUBJECT DESCRIPTION

Students will have sufficient tools to design rigorous research educational projects, knowing different methodologies and being able to adapt them to diverse contexts. To do this, students will study all the phases of educational research, reviewing the bases of the processes of research and the various methods with which we

approach it and delving into techniques qualitative and quantitative information collection. The process of analysis of the information collected, as well as the use and dissemination of it.

GOAL

The objective of the course is the acquisition of methodology designs applied to bilingual teaching.

PRIOR KNOWLEDGE

No specific theoretical requirements for this course. Good command of English is expected.

COURSE SYLLABUS

UNIT 1. Introduction to scientific research

1. What is Research?

- Theoretical Research
- Empirical Research
- Basic research vs. Applied research
- Qualitative research vs. Quantitative Research
- Cross - sectional research vs. Longitudinal Research
- Hypothesis - generating research (exploratory) vs. Hypothesis - testing research (confirmatory)

2. Empirical Research: Funda Mental Elements

3. Empirical Research: Steps

UNIT 2. Ethics and Good Practices for Scientific Research

1. Ethical Considerations for Educational Research

2. Ethical Considerations in Times of Artificial Intelligence

3. Good Practices for Educational Research

UNIT 3. Quantitative approach

1. Theoretical underpinnings of quantitative research

1.1. The importance of theory in quantitative research

1.2 Advantages and Limitations of quantitative research

2. Approaches to quantitative research

2.1. Experimental designs

2.2. Non - experimental designs

2.3. Survey Research

3. Collecting and Analysing Quantitative Data

3.1. Quantitative data collection methods

3.2. Reliability and Validity

3.3. The Quantitative Research Cycle

UNIT 4. Qualitative Approach

1. Theoretical underpinnings of qualitative research

1.1. The importance of theory in qualitative research

- 1.2 Advantages and Limitations of Qualitative Research
2. Approaches to Qualitative Research
3. Collecting and Analysing Qualitative Data
 - 3.1. Here are the active data collection methods
 - 3.2. Qualitative data analysis
4. Mixed methods

EDUCATION ACTIVITIES

The subject is developed with distance methodology through the Virtual Classroom where the student will have:

- Synchronous online classes taught by the teacher in which theoretical and practical aspects will be worked on in which the student can participate during them.
- In them the contents will be reviewed and the student's doubts will be answered live. These classes will be recorded on the platform.
- Tutorials to resolve doubts.
- Study material for the required reading subject: Teaching units, presentations with the summary of the classes and other material selected by the teacher (articles, videos and audios).
- Work and activities to be carried out by the student and debate and participation forums that aim to deepen the subject.

DISTRIBUTION OF WORK TIME

| TEACHER-LED TRAINING ACTIVITIES | INDIVIDUAL WORK |
|---------------------------------|-----------------|
| 20 Hours | 80 Hours |

LEARNING RESULTS

Be able to design and carry out qualitative and quantitative research and educational innovations in the field of foreign languages.

Apply different tools for educational research.

Identify the elements of the research process.

To know the methodologies of innovation and research in education in the field of foreign languages.

Analyze the results of different research in education in the field of foreign languages.

SPECIFIC LEARNING RESULTS

Formulate a problem in a logical, coherent and objective way.

Adjust the different research methodologies to the problem posed by applying the necessary knowledge acquired.

Design of replicable research.

Communicate and justify the results obtained with respect to existing theories in the field of early care. It generates new theoretical frameworks and educational intervention programs in the field of bilingual teaching.

Use the different tools needed to carry out an investigation.

LEARNING APPRAISAL SYSTEM

ORDINARY CALL EXAM.

EXAM. Multiple choice test 50% (5 points).

- It will be necessary to take the exam to pass the subject.

ACTIVITIES. Works with theoretical and practical questions: 40% (4 points).

- Activity 1:2 points
- Activity 2:2 points

PARTICIPATION. Active participation: 10% (1 point).

Forums: 0.5 points

- Forum 1:0.25 points
- Forum 2:0.25 points

- The comment to each of the forums must contain between 60 and 120 words to be taken into account.

Class participation: 0.5 points Participation will be valued through proactive participation in the class sessions.

PARTICIPATION CAN NEVER BE EVALUATED BY THE CONNECTION TO THE CLASS SESSIONS, but the students must participate in them and justify it by means of a screenshot that they must upload to the platform.

Those students who cannot connect to the class sessions will have the possibility to visualize the session and make a SUMMARY to obtain that participation note.

- The summary must contain between 120 and 240 words, summarize the content of the class session and the practical activities carried out.

EXTRAORDINARY CALL EXAM. Multiple choice test 50% (5 points).

- It will be necessary to take the exam to pass the subject.

ACTIVITIES. Works with theoretical and practical questions: 40% (4 points).

- Activity 1:2 points
- Activity 2:2 points

PARTICIPATION. Active participation: 10% (1 point).

Forums: 0.5 points

- Forum 1:0.25 points
- Forum 2:0.25 points

- The comment to each of the forums must contain between 60 and 120 words to be taken into account.

Attendance and participation: it is necessary to carry out the attendance and participation in the class sessions in the ordinary call in order to obtain this score. It will not be possible to get the score for class attendance and

participation if it is not done during the ordinary call.

SECOND AND FOLLOWING CALLS. For these students, the ordinary and extraordinary call system will remain the same.

ADDITIONAL INFORMATION DELIVERY OF ACTIVITIES. The student must deliver the exercises on the date and channels indicated. The student is responsible for being aware of the Virtual Classroom to check these deliveries and deadlines. The work will be delivered on the date indicated by the teacher, in PDF format, in the space designated for this purpose in the Virtual Classroom of the subject, not being the teacher's responsibility that the Virtual Classroom system collapses minutes before delivery. Delivery of activities will not be accepted by email to the teacher. All those works presented out of date or by other means will count as not presented works.

EVALUATION REGULATIONS All the tests that can be evaluated will be subject to what is established in the UFV Graduate School and Permanent Training Evaluation Regulations and the University's Coexistence Regulations. Plagiarism behaviors, as well as the use of illegitimate means in the assessment tests, will be sanctioned in accordance with what is established in these regulations. Teachers have at their disposal an anti-plagiarism computer tool that they can use as they deem necessary. The student will be obliged to accept the permissions for the use of the tool in order for that activity to be qualified. The use of artificial intelligence to perform any of the requested deliveries that are part of the evaluation system is not allowed.

SCORES The final grade will be based on a total score of 10 points obtained by the student, according to the following scale: Failure (suspended): 0-4.99/Pass (approved): 5-6.99/Remarkable (notable): 7-8.99/Excellent (outstanding): 9-10 and Matriculation of Honor (enrollment of honor), which will imply having obtained outstanding, in addition to a special mention.

Those absences that are due, solely, to these three cases will be justified (requesting documentation for said justification):

- Writ of summons.
- Hospitalization.
- Death of direct family member.

ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:

- a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.
- b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.
- c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be consulted on the Library website(https://www.ufv.es/gestion-de-la-informacion_biblioteca/).
- d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.

2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the [Guide for the Responsible Use of Artificial Intelligence in Studies at UFV](#). Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.

3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

Arnoldo, A.-M., Javier, C., Lázaro, E., & Óscar, D. castillo-A. (2024). Research methodology in physical education and sport teacher education: systematic review. *Retos: Nuevas Perspectivas de Educación Física, Deporte y Recreación*, 59, 803–813 2024

Gómez-Pintado, A. How to integrate qualitative research in the design of educational projects. A proposal for the improvement of Final Degree Projects in education. *European Public and Social Innovation Review*, 9. <https://doi.org/10.31637/epsir-2024-797> 2024

Sandín, M. P., & e-libro, C. Investigación cualitativa en educación [recurso electrónico]: fundamentos y tradiciones / Ma Paz Sandín Esteban. McGraw-Hill Interamericana de España. 2003

Machado, R. N. S., Boakari, F. M., & da Silva, F. B. Qualitative research in Education: weaving mesh post-critical analysis networks. *Acta Scientiarum - Education*, 46(1). <https://doi.org/10.4025/actascieduc.v46i1.65623> 2024

Salamanca, O. Cómo escribir un artículo científico. *CES Medicina*, 34 (2), 169-176. 2020

León, O. G., & Montero García-Celay, I. Métodos de investigación en psicología y educación: las tradiciones cuantitativa y cualitativa / Orfelio G. León, Ignacio Montero. McGraw-Hill España. 2015

Additional

Booth, Wayne C. *The Craft of Research* 2016
University of Chicago

Creswell, John W. *Research Design: Qualitative and Quantitative Approaches* 1994
Sage Publications.