

Academic Year/course: 2024/25

# 63131 - Design of Educational Research I

### **Syllabus Information**

Academic year: 2024/25

Subject: 63131 - Design of Educational Research I Faculty / School: 107 - Facultad de Educación

Degree: 330 - Complementos de formación Máster/Doctorado

573 - Master's in Lifelong Lerning: Introduction to Research

**ECTS:** 7.0

Year: 573 - Master's in Lifelong Lerning: Introduction to Research: 1

330 - Complementos de formación Máster/Doctorado: XX

Semester: Annual

Subject type: 330 - ENG/Complementos de Formación

573 - Compulsory

Module:

#### 1. General information

The annual subject Educational Research Designs I aims to train students in the application of the scientific method to guide their research activity. It will also help them to acquire knowledge about planning, designing, and selecting relevant methodologies. The subject includes information on how to approach the analysis, treatment and interpretation of quantitative and qualitative data with the ultimate goal of leading and designing research projects in the context of the social sciences. It is divided into different content blocks. There are no previous recommendations to take this subject and it is advised to follow up on each of the blocks that make it up.

## 2. Learning results

Upon completion of this subject, the student will be able to:

- 1. To plan a research topic using high, medium and/or low intervention methodologies (experimental, selective, observational).
- 2. To understand the strengths and weaknesses of high, medium and low intervention designs used in different research methodologies.
- 3. To identify and adequately justify the research design used in different studies.
- 4. To calculate and justify the quality of the data in a research according to the parameters required in each type of research design (reliability, validity, etc.).
- 5. To justify the choice of data analysis procedures and techniques based on the research design, objectives, hypotheses if any, research variables, etc.
- 6. To interpret the results of the different data analysis techniques applied and draw conclusions from them.

## 3. Syllabus

### Introduction.

Contextualized overview of applied research design with high, medium and low intervention methodologies.

### **Block 1. Experimental and selective methodology**

- 1.1- Experimental and quasi-experimental designs
- 1.2- Selective designs

### **Block 2. Observational methodology**

Observational designs

### **Block 3. Quantitative data analysis**

3.4. Basic data analysis techniques in the different methodological designs.

#### 4. Academic activities

The working methodology of the subject combines the explanation of the general theoretical and practical contents by the teaching staff. It includes practical sessions and directed work in large groups, small groups, and for individuals to enable a knowledge and management of the contents on research designs and appropriate data analysis techniques in each case.

The subject is structured in three blocks throughout the academic year: (1) Block 1: Experimental, quasi-experimental and selective methodologies (3.5 ECTS), (2) Block 2: Observational methodology (2.5 ECTS) and, (3) Block 3: Quantitative data analysis (1 ECTS).

The learning activities of the teaching-learning process in the different blocks of the subject are: (1) expository sessions, (2) active learning methodologies, (3) problem solving and case studies in the classroom, (4) production of works, (5) oral presentation and discussion of works, and (6) tutorials.

The documents available in Moodle are used to guide the study and production of theoretical and practical learning activities. The calendar of face-to-face sessions and the presentation of works is available on the Digital Teaching Ring -Anillo Digital Docente- (ADD) at the beginning of the term. Exam dates are available on the Faculty of Education's website.

#### 5. Assessment system

The student must demonstrate achievement of the intended learning results through the following assessment activities:

Assessment activities (continuous assessment):

- 1. **Research report (40% of the final grade).**Three reports associated with each of the blocks of the subject. The weighting in the grade of each block corresponds to the weight that each of them have in the subject: (1) block 1. Experimental, quasi-experimental and selective methodology (50%), (2) observational methodology (35.71%) and (3) quantitative data analysis (14.28%). Students must obtain a minimum grade of 5.0 in the report for each subject block. The reports to be assessed are carried out in groups.
- 2. Written exam (50% of the final grade). Three written exams associated to each of the blocks of the subject. The written exam includes open-ended questions and/or practical exercises. The weighting in the grade of each block corresponds to the weight that each of them have in the subject: (1) block 1. Experimental, quasi-experimental and selective methodology (50%), (2) observational methodology (35.71%) and (3) quantitative data analysis (14.28%). Students must obtain a minimum grade of 5.0 in each of the written exams for each subject block.
- 3. Self-assessment report (10% of the final grade).

### Grading criteria and requirements to pass the subject.

In order to pass the subject, students must obtain a minimum grade of 5 in: (1) the research report of each block and, (2) each of the written exams belonging to the blocks of the subject. Research reports and self-assessment reports must be submitted within the deadlines set by the faculty, announced at the beginning of the term, through the Digital Teaching Ring -Anillo Digital Docente- (ADD), following the instructions of the faculty.

The specific characteristics of the assessment activities (research reports and self-reports) are communicated through specific documents (script and specific assessment criteria) available in the Digital Teaching Ring -Anillo Digital Docente- (ADD), at the beginning of the teaching period of each block of the subject. On the first day of class, the schedule for the delivery of these activities is presented in order to favour the strategic planning of the students' follow-up of the subject.

#### **Overall test**

The overall test can be taken by students who do not choose or have not passed the subject by the continuous assessment method or who wish to improve the grade. It will comply with the assessment regulations of the UZ (ordinary call).

Students who opt directly for the global assessment must take a written exam (official date of the ordinary call will be available on the website of the Faculty of Education) for each of the subject's blocks and submit the assessment reports of each block, following the presentation instructions given by the faculty.

Students who have not passed the subject by the continuous assessment procedure, are entitled to the ordinary (overall) call to write the exam of the blocks not passed, and/or to submit the failed assessment reports, as long as the exams and reports have been taken and/or submitted on time and comply with the guidelines established during the continuous assessment process.

It is also possible for students to apply for a higher grade. In this case, the best of the grades obtained will prevail.

To pass the subject by this overall test, it will be necessary to obtain a grade of 5 in the written exam, with the weighted average of the different blocks. It will be necessary to obtain at least a grade of 4 in each of them, and also to have passed the part regarding the research reports.

### Second call

All student who have not passed the subject are entitled to participate in the second call for assessment. This call entails a global assessment, as previously described, in the same terms as that of the ordinary call. In case the student has passed the assessment reports submitted during the term (continuous assessment) or the exam in the ordinary call (overall), the grade obtained is saved to be added once the written exam is passed, within the same academic year.

## Notice

It should be noted that the University of Zaragoza's Rules of Coexistence will apply to irregularities in the assessment tests through academic fraud, and article 30 of the Rules of Learning Assessment will also apply to irregular practices other than academic fraud.

# 6. Sustainable Development Goals

4 - Quality Education