Universidad Zaragoza

Academic Year/course: 2024/25

63130 - Theoretical framwork for scientific knowledge production

Syllabus Information

Academic year: 2024/25
Subject: 63130 - Theoretical framwork for scientific knowledge production
Faculty / School: 107 - Facultad de Educación
Degree: 330 - Complementos de formación Máster/Doctorado
573 - Master's in Lifelong Lerning: Introduction to Research
ECTS: 6.0
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 aim of this subject is to help students to assess the scientificity of educational research, its credibility, rigor, foundation, relevance and usefulness, distinguishing between the generation of quality scientific knowledge and other forms of knowledge. The subject allows students to be initiated in the evaluation of specific research, assessing its strengths and limitations, as well as in the foundation of their own research work in a theoretical, methodological and ethical sense.

2. Learning results

1.To know the basic concepts of epistemology applied to educational research.

2. To analyse the epistemological models of a given educational research.

3. To transfer epistemological models to an educational research project.

4. To apply the models to the choice of the pertinent type of research design in each case.

5. To value the specificity of research in education compared to other scientific fields and to act accordingly.

3. Syllabus

I. Scientific theories and scientific-educational knowledge
I.1. The epistemological evolution of science: the historicist school
I.2. The philosophy of science: the meaning of scientific-social and educational knowledge
I.3. The current state of scientific-educational knowledge: complexity and educational research
II. Scientific communities: production and dissemination of scientific-educational knowledge
II.1. Educational research designs
II.2. The criteria of scientificity in educational research
II.3. The assessment of educational research

4. Academic activities

Face-to-face activities
- Participation in theoretical and practical activities: 35 hours
- Problem solving and case studies: 25 hours
- Assessment tests: 5 hours
Non-face-to-face activities
- Work completion: 20 hours
- Autonomous study and work (individual and in work teams): 65 hours
The activities will explore affinities with other optional and compulsory subjects of the degree, establishing synergies that allow a greater sustainability of the students' workloads. Likewise, the activities will be aligned with the Sustainable Development Goals to the extent that the foundation of educational research guarantees processes of knowledge production and transfer for quality education (goal 4), in an ethical and programmatic sense (goals 3 and 10). The activities will encourage a critical analysis of the meaning of educational research, its possibilities and limitations within today's society from the imperative of sustainability, working transversally on the rest of the learning outcomes and the entire program content.

5. Assessment system

Continuous assessment
It will consist of two assessment instruments:
A) Written test. It will deal with the conceptual contents of the subject´s syllabus and the compulsory readings [weighting 40%]. The assessment criteria will be correctness, relevance and conceptual rigor.

B) Assessment portfolio. Made up of the learning products [weighting 50%] and a self-assessment report documenting the learning processes [weighting 10%]. The products will be linked to a critical reflection on the Sustainable Development Goals (SDGs). The portfolio will be accompanied by a rubric to ensure the degree of performance of its products. The general assessment criteria will be formal correctness, rigor, adequacy, coherence, relevance, openness and multi-referentiality.

The portfolio products will be submitted during the development of the subject. The presentation of the portfolio and the written test will take place at the end of the continuous assessment period. In all cases, there are minimum levels to be met: completion of all tasks, delivery on time and adequacy to the training demands.
It is compulsory to pass both assessment instruments in order to pass the subject.
Global assessment
Students who do not opt for continuous assessment, do not pass the subject by this method or who would like to improve their grade, are entitled to take the global test, according to the Regulations of the Learning Assessment Standards of the University of Zaragoza.
It will consist of a written exam divided into two parts:
A) test similar to the continuous assessment written test and with the same assessment criteria [weighting 50%].
B) Practical case or case study. Its typology and degree of development will be adapted to the demands of the continuous assessment portfolio and will have the same general evaluation criteria [weighting 50%].
Students must pass the two parts of the exam in order to pass the subject. In case students have passed the continuous assessment portfolio, they will only have to write the first part of the exam.
The second call will follow the global assessment method.
Fifth and sixth calls
The students involved must be aware that their assessment will take place before a board of examiners. They may also choose to write the test together with the rest of the reference group. In all cases, the same general subject requirements and assessment criteria will apply.

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

3 - Good Health & Well-Being
4 - Quality Education
10 - Reduction of Inequalities