

| Course Unit      |   |               |   | Field of study |  |              |                                       |
|------------------|---|---------------|---|----------------|--|--------------|---------------------------------------|
| Master in        | Teaching of the First Cycle, Mathematics and Natural Sciences in the Second Cycle |               |   | School         | School of Education                        |              |                                       |
| Academic Year    | 2023/2024   | Year of study | 1 | Level          | 2-1  | ECTS credits | 4.0                                   |
| Туре             | Semestral   | Semester      | 1 | Code           | 5044-763-1106-00-23                        |              |                                       |
| Workload (hours) | 108   | Contact hours |   | 28 PL - T      | C - S - Solving, project or laboratory; TC | E - OT       | 8 O - ement; OT - Tutorial; O - Other |

Name(s) of lecturer(s) Adorinda Maria Rodrigues Pereira S. Gonçalves, Maria Cristina do Espírito Santo Martins, Maria do Céu Ribeiro

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

- 1. Understand the processes of research and reflection in education.
  2. Analyze documentation and problems/questions related to intervention and research processes in educational contexts.
  3. Identify problems/questions on which to focus intervention, reflection and research processes in educational contexts.
  4. Design intervention and research projects appropriate to different educational contexts.
  5. Select techniques and tools for collecting and analyzing information of a diverse nature.
  6. Develop sequences of procedures in intervention and research projects.
  7. Mobility a scientific pedagogical and didactic knowledge to support a reflexive and research professional attitude.

- 7. Mobilize scientific, pedagogical and didactic knowledge to support a reflexive and research professional attitude.

#### Prerequisites

Before the course unit the learner is expected to be able to:

- Relate and use concepts related to science education.
   Relate and use concepts and procedures related to disciplinary knowledges.

#### Course contents

1. The intervention and research project to be developed in supervised teaching practice, 2. Research in education, 3. Reflection in education,

#### Course contents (extended version)

- 1. The intervention and research project to be developed in supervised teaching practice.
  - Dimensions and structure.
     Integrator theme.
- From the project to the final internship report.Research in education.

- Research in education.
   Ethical issues, general principles and documentation.
   Phases and components of an investigation.
   Theoretical framework.
   Methodological framework and data collection and analysis process.
- Reflection in education.
   General principles and documentation.
  - Content of reflection.
    Depth of reflection.

## Recommended reading

- Amado, J. (Coord.). (2018). Manual de investigação qualitativa em educação. Imprensa da Universidade de Coimbra.
   Bogdan, R., & Biklen, S. (2013). Investigação qualitativa em educação. Porto Editora.
   Creswell, J. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. SAGE Publication Ltd.
   Coutinho, C. P. (2020). Metodologia de investigação em ciências sociais e humanas. Teoria e prática. Edições Almedina.
   E. Mesquita, M. C. Roldão, & J. Machado (Orgs.) (2019). Prática supervisionada e construção do conhecimento profissional. Fundação Manuel Leão.

## Teaching and learning methods

1. Active methodologies, promoting the research work and the elaboration of a portfolio, centered on the registration, description, analysis and reflection on the diverse information collected. 2. Analysis and discussion of documentation related to intervention and research processes in educational contexts. 3. Tutorial sessions focus on supporting the preparation of projects.

# Assessment methods

- Continuous assessment (Regular, Student Worker) (Final)
   Portfolio 50% (Portfolio: writing (40%) and oral presentations (10%).)
   Projects 50% (Project (preliminary version): writing (40%) and oral presentation (10%).)
   Assessment by examination (Regular, Student Worker) (Supplementary, Special)
   Portfolio 50% (Portfolio: assigned in continuous assessment.)
   Projects 50% (Project (new version): written (40%) and oral presentation (10%).)

## Language of instruction

Portuguese

| Electronic validation   |                             |  |                              |  |  |  |  |
|---|-----------------------------|--|------------------------------|--|--|--|--|
| Adorinda Maria Rodrigues Pereira S.<br>Gonçalves, Maria Cristina do Espírito<br>Santo Martins, Maria do Céu Ribeiro | Manuel Celestino Vara Pires | Adorinda Maria Rodrigues Pereira S.<br>Gonçalves | Carlos Manuel Costa Teixeira |  |  |  |  |
| 02-01-2024  | 13-01-2024                  | 14-02-2024                                       | 18-02-2024                   |  |  |  |  |