

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	2
Type	Annual	Level	2-2
	Semester	ECTS credits	42.0
	-	Code	5044-763-2001-00-23
Workload (hours)	1 134	Contact hours	T - - TP - - PL - - TC - - S 36 E 407 OT 36 O -

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; 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. Be acquainted with the schools and its surrounding community.
2. Problematize situations and behaviors observed in the school context.
3. Apply, in an integrated and interdisciplinary way, the knowledge acquired in the different training components.
4. Select and use teaching and learning methods and techniques.
5. Conceive and use resources for teaching and learning adapted to the disciplinary areas of the 1st CBE and to the areas of mathematics and natural sciences of the 2nd CBE.
6. Evaluate and reflect on teaching and learning situations in the educational context.
7. Express a reflective, critical and investigative attitude of the educational practices, enhancing action research, in a perspective of personal and professional development throughout life.

#### Prerequisites

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

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

#### Course contents

1. Development of the teaching cycle in context.
2. Reflection on the developed teaching and learning process.
3. Organization of the Supervised Teaching Practice's Dossier.
4. Construction of the Final Internship Report supported in an action research perspective and in the scientific, pedagogical and research reference literature.

#### Course contents (extended version)

1. Development of the teaching cycle in context.
  - Planning of teaching and learning sequences.
  - Conduction of teaching and learning sequences.
  - Reflection on teaching and learning sequences.
  - Assessment of students' learning.
  - Reflection on students' assessment.
2. Reflection on the developed teaching and learning process.
3. Organization of the Supervised Teaching Practice's Dossier.
4. Construction of the Final Internship Report.
  - Supported in an action research perspective.
  - Supported in the scientific, pedagogical and research reference literature.

#### Recommended reading

1. Amado, J. (Coord.) (2018). Manual de investigação qualitativa em educação. Universidade de Coimbra.
2. Bogdan, R., & Biklen, S. (2013). Investigação qualitativa em educação. Porto Editora.
3. Grupo de Trabalho de Investigação. (Org.) (2017). A prática dos professores: Planificação e discussão coletiva na sala de aula. Associação de Professores de Matemática.
4. Martins, I. et al. (2006). Educação em ciências e ensino experimental. DGIDC, Ministério da Educação.
5. Máximo-Esteves, L. (2008). Visão panorâmica da investigação-ação. Porto Editora.

#### Teaching and learning methods

1. Tutorial guidance activities.
2. Searching and preparation of teaching and learning topics.
3. Discussion and application of teaching strategies and activities to develop in the 1st and 2nd cycle schools.
4. Reflection on the pupils' learning assessment and on classroom performance.

#### Assessment methods

1. Continuous assessment [formula (3xPD+2xFIR): 5] - (Regular, Student Worker) (Final)
  - Reports and Guides - 60% (PD - Professional Development, including the Supervised Teaching Practice's Dossier.)
  - Reports and Guides - 40% (FIR - Final Internship Report, including the public defense.)
2. Assessment by examination [not applicable] - (Regular, Student Worker) (Supplementary, Special)

#### Language of instruction

Portuguese

#### Electronic validation

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