



## Study Plan

**School:** School of Social Sciences  
**Degree:** Master  
**Course:** Preschool Education and Primary Education (cód. 536)

### 1st Year - 1st Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PSI11398M	Psychology of Child Education	Psychology	6	Semester	156
LLT11399M	Issues of Portuguese	Portuguese	3	Semester	78
PED11400M	Art Education in Early Childhood	Artistic Education	3	Semester	78
PED11401M	Play and Physical Development in Childhood	Physical Education	3	Semester	78
PED11445M	Social and Natural Sciences Teaching	Education Sciences	6	Semester	156
MAT11446M	Issues of Mathematics	Mathematics	3	Semester	78

### Group of Options

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
HIS11452M	Issues of History	History	3	Semester	78
GEO11453M	Issues of Geography	Geography	3	Semester	78
BIO11454M	Issues of Biology	Biological Sciences	3	Semester	78
QUI11455M	Issues of Chemistry	Chemistry	3	Semester	78
FIS11456M	Issues of Physics	Physics	3	Semester	78
PAO11457M	Issues of Environmental Sciences	Environment and Ecology Sciences	3	Semester	78

### 1st Year - 2nd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED11406M	Research in Childhood (0-12)	Education Sciences	3	Semester	78
PED11407M	Arts, Humanities, Sciences and Technologies Integrated Project	Education Sciences	6	Semester	156
PED11447M	Mathematics Teaching	Education Sciences	6	Semester	156
PED11448M	Mother-Tongue (Portuguese) Teaching	Education Sciences	6	Semester	156
PED11449M	Pre-scholl and Primary School Pedagogy	Education Sciences	6	Semester	156



### 1st Year - 2nd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
<b>Group of Options</b>					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED11413M	Values and Education	Education Sciences	3	Semester	78
FIL11414M	Philosophy for Children	Philosophy	3	Semester	78
PED11415M	Contemporary Pedagogical Trends	Education Sciences	3	Semester	78
PED11416M	Family, Community and Children's Education	Education Sciences	3	Semester	78
ENF11417M	Children's Health	Health Sciences	3	Semester	78
PED11418M	Mediation in Early Childhood Educational Contexts	Education Sciences	3	Semester	78

### 2nd Year - 3rd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
<b>Group of Options</b>					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED11410M	Laboratory of Projective Techniques of Dramatic Expression	Artistic Education	3	Semester	78
PED11411M	Education and Visual Culture	Artistic Education	3	Semester	78
MUS11412M	Musical Cultures	Music	3	Semester	78
<b>Group of Options</b>					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED11413M	Values and Education	Education Sciences	3	Semester	78
FIL11414M	Philosophy for Children	Philosophy	3	Semester	78
PED11415M	Contemporary Pedagogical Trends	Education Sciences	3	Semester	78
PED11416M	Family, Community and Children's Education	Education Sciences	3	Semester	78
ENF11417M	Children's Health	Health Sciences	3	Semester	78
PED11418M	Mediation in Early Childhood Educational Contexts	Education Sciences	3	Semester	78
PED11450M	Teaching Practice in Primary School	Education Sciences	24	Semester	624



## 2nd Year - 4th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
<b>Group of Options</b>					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
HIS11452M	Issues of History	History	3	Semester	78
GEO11453M	Issues of Geography	Geography	3	Semester	78
BIO11454M	Issues of Biology	Biological Sciences	3	Semester	78
QUI11455M	Issues of Chemistry	Chemistry	3	Semester	78
FIS11456M	Issues of Physics	Physics	3	Semester	78
PAO11457M	Issues of Environmental Sciences	Environment and Ecology Sciences	3	Semester	78
PED11451M	Issues in Childhood Pedagogy	Education Sciences	3	Semester	78
PED11409M	Supervised Pre-School Practice	Education Sciences	24	Semester	624

### Conditions for obtaining the Degree:

\*\*\* TRANSLATE ME: ara aprovação na componente curricular nesta área de especialização é necessário a aprovação (através de avaliação ou creditação) das seguintes unidades curriculares: { \ }newline

{ \ }newline

1º Semestre: { \ }newline

6 UC obrigatórias num total de 24 Ects

2 UC optativas da ADII num total de 6 Ects { \ }newline

{ \ }newline

2º Semestre: { \ }newline

5 UC obrigatórias num Total de 27 Ects { \ }newline

1 UC optativa da AEG num total de 3 Ects { \ }newline

{ \ }newline

3º Semestre: { \ }newline

UC de Prática de Ensino Supervisionada num total de 24 Ects

1 UC optativa da ADI num total de 3 Ects

1 UC optativa da AEG num total de 3 Ects

4º Semestre

1 UC obrigatória num total de 3 Ects

1 UC optativa da ADII

UC de Prática de Ensino Supervisionada num total de 24 Ects { \ }newline

{ \ }newline

É necessário também a aprovação no acto público de defesa do relatório da unidade curricular relativa à prática de ensino supervisionada. \*\*\*

## Program Contents



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### **Psychology of Child Education (PS111398M)**

1. Introduction - Psychology and Education of the Child
2. Perspectives on Human Development
  - 2.1. Theoretical models of human development
  - 2.2. Constructivist and socio-constructivist perspectives of development
  - 2.3. Bio-ecological model of human development
3. Ecology of Childhood - Education and Development in Context
  - 3.1. The child as social person
  - 3.2. Development contexts and educational processes
  - 3.3. The child and microsystems: educational interactions (family, peers and school)
  - 3.4. The child and the broader social systems
4. Prospects for an Intervention in the Dynamics of Educational Relationships
  - 4.1. Risk and Resilience
  - 4.2. Engagement of children in formal educational settings
  - 4.3. Educational interactions and conflict management
  - 4.4. School transitions, processes of adaptation and development
  - 4.5. Diversity in educational settings

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### **Issues of Portuguese (LLT11399M)**

From Morpho-syntax to Syntax

1. Propose problems for specific aspects of word classes (especially pronouns and adverbs); syntactic functioning of word classes; personal pronouns in Portuguese.
  - 1.1. Syntax of the verbal system; agreement aspects; coordination, subordination and prepositional connectors.
2. Syntactic aspects:
  - 2.1. Coordination: review of concepts and nomenclatures; restrictions on coordination; analysis of sentences with coordination problems.
  - 2.2. Subordination: review of concepts and nomenclatures; analysis of sentences with subordination problems.
  - 2.3. Punctuation: syntactic uses and general rules.
  - 2.4. Morphological and non-morphological processes of word formation; lexicon enrichment (improper derivation, acronym formation, abbreviations, ...).
  - 2.5. Accentuation: word classification; basic rules of accentuation in Portuguese.

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### **Art Education in Early Childhood (PED11400M)**

- 1 - The area of Plastic Expression: a) theories and models of Artistic Education. b) creative and expressive world of children.
- 2 - Visual Language and Plastic Expression of childhood: the representation of the world, of active knowledge and of imaginary world.
- 3 - Children design: didactic resources, technical and material.
- 4 - The Dramatic knowledge: Models and principles; Organization and Methodological approaches in the context of the classroom; Creation projects.
- 5 - The Drama as articulation of knowledge,. Understanding, Interpretation and reflection of the world
- 6 - The symbolic and metaphorical dimension provided by the body that acts and thinks



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### **Play and Physical Development in Childhood (PED11401M)**

#### 1. The infant motor development (IMD)

Systemic and ecological approach to IMD

Phases of motor development

Individual and sociocultural factors that influence the IMD

Perceptual-motor development

Development of motor skills

Development of physical qualities

Observation and assessment of the IMD

#### 2 The game, the routines of life of children and the IMD

Importance of play in child development

Sociocultural aspects of the daily lives of children

The playful practices and sports activities in children's lives

The quality and safety of spaces and recreational motor-playful equipments

#### 3. Playful-motor practices, child health and education for health

Active lifestyles and health

Determinants (individual and sociocultural) of participation in physical activities (PA)

Effects of PA practice on child health

The education for health and the role of playful motor practices in educational settings

Intervention strategies in education for health within the PA

#### 4 Trends of research on play and IMD

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### **Social and Natural Sciences Teaching (PED11445M)**

#### 1. From the Educational System to World Knowledge and Environment Study.

1.1. Science education and citizenship: implications of their interrelationship in lifelong learning;

1.2. Critical analysis of the proposed curriculum and structure of those two areas.

#### 2. From science teacher to the students' construction of knowledge.

2.1. The importance of children conceptions and language in their learning.

2.2. Why teach science to children from Pre-School and Primary Education?

2.3. The development of attitudes of experimental practices.

2.4. The importance of assessing student learning.

#### 3. The current purposes of science education and education for citizenship and responsibility.

3.1. The interrelationships between Science, Technology, Society and Environment.

3.2. Environmental education and sustainable development: children's education for sustainability and for transmission of common heritage;

#### 4. Didactic approach of some of the themes of the World Knowledge and Environmental Studies.

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### **Issues of Mathematics (MAT11446M)**

The student chooses one of the following options:

- Small monograph on a topic: geometry, calculus from a historical point of view, arithmetic's and cryptography, history of mathematics.

- Small monograph containing a set of suggestive statistical activities to develop in the classroom.

- Development of an application-oriented on mathematics (or statistics): Present problems and methods of applied mathematics (or statistics), showing the interconnection between these and the world around us, through practical problems.



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### **Issues of History (HIS11452M)**

1. Some milestones in the cultural construction of Europe, into the international context: Romanization; Islam-Arab culture; Gothic; Humanism; Renaissance; Enlightenment; Positivism ...
2. The religious framework: Catholicism; Protestantism; religious minorities.
3. Political contexts: from the Feudalism to the construction of the Early Modern State. Absolutism and Liberalism; Monarchy and Republic; Democracy and Decolonization.
4. The economic and social contexts: from a society of orders to a class society. Capitalism, Socialism, Industrialization, Globalization. The end of the welfare state?

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### **Issues of Geography (GEO11453M)**

Some topics that may be studied:

- Physical characteristics of the territory (weather studies, water and land in local environment)
- Organization of urban space
- Demographic aspects of the population
- The economic activities of the population
- Graphics and cartographical representations
- Studying ways to describe the landscape, identify their functions, to understand their organization.

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### **Issues of Biology (BIO11454M)**

Cell and Molecular Biology: DNA; Genetically modified organisms.

- Microorganisms: their role in natural systems and importance to humans.
- Fauna and flora - methods of study. Endangered species.
- Biodiversity and Conservation. Understanding environmental education.
- The Evolution of Man - decisive steps.
- Hygiene and Health: Understanding first aid - how to prevent and act. Allergies and pollution.

Other issues may be addressed at the suggestion of students.

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### **Issues of Chemistry (QUI11455M)**

The contents of the address should allow exploitation of situations from a theoretical point of view and practical, leading to the understanding of the physical world, including:

- The Chemistry of Water
- The chemistry of the atmosphere
- Soil Chemistry
- Physical Transformations
- Chemical Transformations

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### **Issues of Physics (FIS11456M)**

Themes: The Conservation Laws; Light and Electromagnetism; The Universe and the Atom in Modern Physics.

Objects that talk about the themes: steam engine; Newton's prism; photovoltaic panels; X-rays, lasers; electron microscope; telescope; diagrams and photographs.



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### **Issues of Environmental Sciences (PAO11457M)**

The contents should allow the students to use scientific foundation in order to understand the multiple environmental problems and to evaluate possible solutions to them.

Man and Biodiversity  
Man and Natural Resources  
Pollution and Environmental Quality  
Health and Environment  
Earth and Man Sustainability

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### **Research in Childhood (0-12) (PED11406M)**

1. Research in education
  - The importance and the role of research
  - The nature of the knowledge
2. Paradigms and approaches in Education:
  - From a positivist paradigm to an interpretative one
  - Quantitative and qualitative approaches
3. Designs of research in Education
  - Experimental studies, descriptive studies (survey), case studies, teaching experience, action research.
4. Planning and doing research:
  - Formulating the problem /objective;
  - The role of theory;
  - The participants;
  - Data collection
  - Data Analysis
5. The writing of scientific text: reports and articles
6. Recent research in Educação de Infância: focus and methodologies
7. Research as strategy: improving the practice and professional development.

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### **Arts, Humanities, Sciences and Technologies Integrated Project (PED11407M)**

- Project work as an axial didactic and pedagogical design.
- Cross-disciplinary practices and institutional cooperation,
- Design and production of teaching materials transdisciplinary in nature, applicable in the real world.



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### **Mathematics Teaching (PED11447M)**

1. Curricular recommendations for mathematics teaching:
  - 1.1. Recommendations for pre-school
  - 1.2. Syllabus for 1st cycle of basic education
2. Mathematics topics and present emphasis:
  - 2.1. Numbers (Number sense and arithmetic fluency)
  - 2.2. Geometry and Measure (Spatial sense and process of measure)
  - 2.3. Data analysis (Statistical literacy)
  - 2.4. Algebra (algebraic reasoning)
3. Mathematical processes:
  - 3.1. Problem solving
  - 3.2. Mathematical reasoning
  - 3.3. Mathematical communication
4. Planning mathematics teaching:
  - 5.1. Sequences of teaching
  - 5.2. Mathematical tasks
  - 5.3. Lesson organization
5. Mathematics lesson:
  - 5.1. Teacher and students roles
  - 5.2. Sociomathematical rules
  - 5.3. Mathematical productions of the students
6. Reflecting on mathematics teaching:
  - 6.1. Learning difficulties of students
  - 6.2. Analysis and regulation of the practice

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### **Mother-Tongue (Portuguese) Teaching (PED11448M)**

1. Reflection about the Syllabus of Portuguese Language.
2. The formative dimension of the subject Portuguese Language.
3. Communicative Competence.
4. Oral communication.
5. The teaching and learning of reading and writing.
6. Perspectives of text analysis and production.
7. From text grammar to sentence grammar - an integrated approach.
8. The promotion of a literary education.
9. Portuguese Language evaluation: kinds and techniques.
10. Critical analysis of textbooks.





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### **Pre-scholl and Primary School Pedagogy (PED11449M)**

1. The teacher Professional Performance Profile (general and specific)
2. The Classroom Curricular Project - development and management
  - 2.1. Aims, structure, contents
3. Curriculum Guidelines
  - 3.1. Curriculum Guidelines for Preschool Education
  - 3.2. Curricular organization and program for Primary school
  - 3.3. The UK curriculum (0-11)
  - 3.4. The curriculum of Australia (0 to 10)
  - 3.5. Learning goals for pre-school and primary
4. Pedagogical models for ECE:
  - 4.1. Modern School Movement
  - 4.2. High-scope
  - 4.3. Reggio-Emilia 936504404
  - 4.4. The Waldorf pedagogy
5. Curriculum development: Observing, Planning, Acting and evaluating.
  - 5.1. Observation, evaluation and planning the children's learning: processes and tools
  - 5.2. Evaluation and planning teaching practice: processes and tools.
6. The Project Work on ECE
7. The role of play in children's learning

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### **Values and Education (PED11413M)**

1. Introduction to the issue of values:
  - 1.1. What are the values?
  - 1.2. ways of knowing the values
  - 1.3. ways to teach and learn values.
  - 1.4. Worldview, values and education
2. Educating in values:
  - 2.1. The project of life: the dignity of human life
  - 2.2. Equal but different
  - 2.3. Freedom and its limits
  - 2.4. Share responsibilities
  - 2.5. Justice and solidarity
  - 2.6. The duty to live in peace

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### **Philosophy for Children (FIL11414M)**



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### **Contemporary Pedagogical Trends (PED11415M)**

1. Traditional Education versus Modern Education.
2. Rousseau, Pestalozzi and Froebel, at the origins of modern pedagogy.
3. The "École Nouvelle" and the New Education Movement.
4. The pedagogy of Celestin Freinet and the Modern School.
5. The libertarian pedagogy: from Lasnaia Pollyanna to Summerhill.
6. American pedagogy, from Dewey to Rogers.
7. The des-schooling society: Goodman, Illich and Reimer.
8. The Marxist pedagogy.
9. Paulo Freire and the Pedagogy of the Oppressed.
10. Techno-pedagogy: Skinner, the "pedagogy by objectives," Theory of the Curriculum.
11. Education and Pedagogy in Portugal (XVIII-XXI century).

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### **Family, Community and Children's Education (PED11416M)**

1. Family, Parenting and social transformations;
2. The community recognized as an educational context: concept of "Educating Cities- (Barcelona Declaration);
3. Parental education: concepts and praxis;
4. Strategies for interaction and cooperation with families in the education of children;
5. Frequent problems in the participation of families in early childhood education institutions
6. Listening to children: the radical ethical, political and pedagogical assumption of the child as citizen with similar rights.

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### **Children's Health (ENF11417M)**

- Main stages in their development and health monitoring, aspects that the teacher can identify and address.
- The fundamentals for the monitoring of health and well-being in the infant.
- The relationship between nutrition and development, mainly in those aspects which affect the child's learning.
- Obesity and malnutrition, comorbidities.
- Sleep disorders-influences in child welfare.
- Changes in the most common mental health of children.
- Chronic Disease, constraint on learning and school success.
- Physical abuse of children. Warning Signs. Support networks.
- Emergency situations, some maneuvers for immediate resuscitation of the child.

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### **Mediation in Early Childhood Educational Contexts (PED11418M)**

1. Mediation in theory,
  - 1.1. Conflict: elements, styles and attitudes basic approach to their resolution.
  - 1.2. Alternative means of conflict resolution.
  - 1.3. Communication / Negotiation.
  - 1.4. Mediation: the concept and goals.
  - 1.5. The process of mediation.
2. Mediation in-context
  - 2.1. Knowing the context and the group class.
  - 2.2. From diagnosis to design mediation projects.
  - 2.3. From implementation to evaluation of mediation projects.
  - 2.4. Mediation in educational contexts: nursery and kindergarten



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### **Laboratory of Projective Techniques of Dramatic Expression (PED11410M)**

Animating objects

Shadows

Make-up

Masks

black light

Puppets

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### **Education and Visual Culture (PED11411M)**

1.- Educational value of Visual and Plastic Expression and Education;

2.- The role and the importance of Visual Culture in Artistic Education;

3.- Hegemonic paradigms of Artistic Education;

4.- New perspectives of teaching arts: Visual Culture; Arts Based Research; A/R/Tography; Project Based Work; New Materialisms; Pedagogies of Contact;

5.- Analysis of social representations of childhood, gender, social class... present in children's visual culture (Disney, Pixar, advertising, etc.);

6.- Examples of educational projects from a comprehension of Visual Culture Education.

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### **Musical Cultures (MUS11412M)**

The Traditional Canon

- Terminology and style: Antiquity; baroque, classicism; romanticism; twentieth century

- The perspective of Musicology and Ethnomusicology

- Western and non-Western music

World Music

- Concepts and scope

- Integration of World Music in the field of cultural studies (Cultural Studies)

Popular Music in the West

- Study of Popular Music

- The cultural and social significance of Popular Music

- The Jazz, Rock and Pop

- The industry and the media

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### **Teaching Practice in Primary School (PED11450M)**

1 Functions and Objectives of Basic Education. The National Curriculum of Basic Education. Teacher Profiling of the 1st Cycle

2. Teaching Professionalism: the social and ethical dimensions

3 Development of teaching and learning:

3. 1 Development of the curriculum in the context of an inclusive school

3. 2 Skills in promoting the curriculum;

3. 3 Integration of the curriculum in different areas of knowledge that contribute to the training of students in the 1st cycle of basic education.

4 Participation in school and community relations

5 Lifelong professional development.



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### **Issues in Childhood Pedagogy (PED11451M)**

1. Main goals of education in the twenty-first century and its implications for the organization of the teaching / learning in Pre-school and primary

- Learning to learn (meta-learning, resilience and multiple literacies)
- Learning to live in a democratic society

2. Models of teaching / learning

- Conceptions of student, school, teaching / learning processes and competences to develop (Bruner)
- Different approaches to teaching/learning: teacher-centered models, child-centred models and the participation in a Community of Learners (CL) (Rogoff)

3. The CL as a framework for quality learning

- The focus, social organization, resources and roles in CA

4. The management of learning in a single teacher

- The organization of space / time and materials in Pre-school and primary
- The organization of processes and content of learning:

Planning and assessment for learning

The interactions in the classroom

5. The quality in early childhood education

Frameworks for Quality Assessment in Preschool Education

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### **Supervised Pre-School Practice (PED11409M)**

In this CU we work on the four dimensions of the teacher Professional Performance Profile

I. Professional, social and ethical dimension

II. Teaching and learning dimension, which includes:

Organization of the educational environment

Observation, planning and assessment

Relationships and interactions

Integration of the curriculum

III. Participation in school and contacts with the community dimension

IV. Professional development dimension.

These dimensions are integrated in the context of intervention and its regulation both at the educational contexts and at the University in Seminar sections, calling upon learning from all the CUs of the course