



Study Plan

School: School of Social Sciences
Degree: Bachelor
Course: Basic Education (cód. 529)

1st Year - 1st Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
MAT1645	Numbers and Operations	Mathematics	5	Semester	130
LLT1638	Portuguese Language I	Linguistics	5	Semester	130
FIS1635	Introduction to Physics	Physics	5	Semester	130
BIO1600	Introduction to Biology	Biological Sciences	5	Semester	130
PED1620	Education, Expression and Drama Games	Artistic Education	5	Semester	130
PED1603	Elementary Education and its Contexts	Education Sciences	2.5	Trimester	65
SOC1654	Elements of Sociology of Education	Sociology	2.5	Trimester	65

1st Year - 2nd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
MAT1646	Arithmetic and Algebra	Mathematics	5	Semester	130
LLT1639	Portuguese Language II	Linguistics	5	Semester	130
QUI1653	Topics of Chemistry	Chemistry	5	Semester	130
PAO1601	Fundamentals of Environmental Sciences	Environment and Ecology Sciences	5	Semester	130
PED1621	Education and Visual and Artistic Expression	Artistic Education	5	Semester	130
PSI1651	Child Development Psychology	Psychology	5	Semester	130

2nd Year - 3rd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
MAT1647	Elements of Statistics and Probability I	Mathematics	5	Semester	130
LLT1640	Analysis and Text Production	Linguistics	5	Semester	130
GEO1636	Elements of Portuguese Geography	Geography	5	Semester	130
PED1630	Education and Physical/Motor Expression	Physical Education	5	Semester	130
PED1622	Education, Expression and Music Culture	Artistic Education	5	Semester	130
FIL1633	Introduction to Ethics and Education Deontology	Philosophy	2.5	Trimester	65
PED1606	School Organization and Administration	Education Sciences	2.5	Trimester	65

2nd Year - 4th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
MAT1648	Elementary Geometry	Mathematics	5	Semester	130
LLT1641	Acquisition of Portuguese as a Native Language	Linguistics	5	Semester	130
HIS1637	History of Portugal	History	5	Semester	130
PED1604	Intervention Projects in Non Formal Educational Contexts	Education Sciences	5	Semester	130
PED2693	Introduction into Education Investigation	Education Sciences	5	Semester	130



2nd Year - 4th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Group of Options					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED1627	Advanced Topics in Education and Dramatic Expression	Artistic Education	2.5	Trimester	65
PED1628	Advanced Topics in Education and Plastic Expression	Artistic Education	2.5	Trimester	65
PED1629	Advanced Topics in Education and Musical Expression	Artistic Education	2.5	Trimester	65
PED1632	Advanced Topics in Education and Physical and Motor Expression	Physical Education	2.5	Trimester	65

3rd Year - 6th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
MAT1650	Geometry and Applications	Mathematics	5	Semester	130
LLT1642	Portuguese Culture	Undefined	5	Semester	130
PED1623	Workshop on Integration of Expressions	Artistic Education	5	Semester	130
PED1610	Teaching of Physical and Social Environment	Education Sciences	5	Semester	130
PED11420	Education and Technology	Education Sciences	2.5	Semester	65
Group of Options					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED1611	Education for Sustainability	Education Sciences	2.5	Trimester	65
PED1602	History of Educational Ideas	Education Sciences	2.5	Trimester	65
FIL1634	Philosophy for Children	Philosophy	2.5	Trimester	65
PED1612	Education, Culture and Citizenship	Education Sciences	2.5	Trimester	65
PED1613	Community Education Principles	Education Sciences	2.5	Trimester	65
PED1614	Education for Literacy	Education Sciences	2.5	Trimester	65
PED1615	Promotion and Health Education	Education Sciences	2.5	Trimester	65
PSI1652	Special Needs of Education	Psychology	2.5	Trimester	65
Group of Options					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED1616	Pedagogical Practise at Nursery School	Education Sciences	5	Semester	130
PED1617	Pedagogical Practise at Kindergarten	Education Sciences	5	Semester	130
PED1618	Pedagogical Practise at Key Stage 1 of Primary School	Education Sciences	5	Semester	130
PED1619	Pedagogical Practise at Key Stage 2 of Primary School	Education Sciences	5	Semester	130
PED2694	*** TRANSLATE ME: Práticas Educativas em Contextos Não Formais ***	Education Sciences	5	Semester	130



3rd Year - 5th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
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3rd Year - 5th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
MAT1649	Elements of Statistics and Probability II	Mathematics	5	Semester	130
PED1608	Teaching of Mathematics	Education Sciences	5	Semester	130
PED1609	Mother Tongue Teaching	Education Sciences	5	Semester	130
LLT11419	Literature and Culture	Literature	5	Semester	130

Group of Options

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
LLT1643	Children's Literature	Literature	5	Semester	130
LLT1644	Reading and Book Promotion	Literature	5	Semester	130

Group of Options

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
PED1616	Pedagogical Practise at Nursery School	Education Sciences	5	Semester	130
PED1617	Pedagogical Practise at Kindergarten	Education Sciences	5	Semester	130
PED1618	Pedagogical Practise at Key Stage 1 of Primary School	Education Sciences	5	Semester	130
PED1619	Pedagogical Practise at Key Stage 2 of Primary School	Education Sciences	5	Semester	130
PED2694	*** TRANSLATE ME: Práticas Educativas em Contextos Não Formais ***	Education Sciences	5	Semester	130

Conditions for obtaining the Degree:

*** TRANSLATE ME: Para obtenção do grau de licenciado em Educação Básica é necessário obter aprovação a 157,5 ECTS em unidades curriculares obrigatórias e 22,5 ECTS em unidades curriculares optativas

(através de avaliação ou creditação) distribuídas da seguinte forma:

1º Ano

1º Semestre:

7 UC obrigatórias num total de 30 ECTS

2º Semestre:

6 UC obrigatórias num Total de 30 ECTS

2º Ano

3º Semestre

7 UC obrigatórias num total de 30 ECTS

4º Semestre

5 UC obrigatórias num total de 25 ECTS

2 UC optativa num total de 5 ECTS

3º Ano

5º Semestre

5 UC obrigatórias num total de 20 ECTS

1 UC optativa num total de 10 ECTS

6º Semestre

5 UC Obrigatórias num total de 22,5 ECTS

UC optativas num total de 7,5 ECTS ***

Program Contents



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Numbers and Operations (MAT1645)

1. Problems solving: procedures and strategies.
2. Positive integers as collections of finite cardinal. Operations with sets. Cardinal operations in natural numbers and their properties. Order.
3. Integers. Mental calculation. Algorithms of operations. Counting principles, and combinatorial enumeration.
4. Fractions and operations with fractions. Decimal representation. Ratios and proportions.
5. The mathematical language. Nominations conditions and propositions. Logical operations and their interpretation. Validity and consequence. Principles and rules of logic remarkable

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Portuguese Language I (LLT1638)

The teacher responsible for this curricular unit has not provided the Commission of course the translation of this curricular unit file.

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Introduction to Physics (FIS1635)

From the movement on the earth to the movement of the stars:

The universality of laws of motion.

What is energy? Energy conservation and energy crisis. Energy conversions using different devices

From the electric motor to solar energy:

Electricity and Magnetism.

The discovery of electromagnetic induction.

The electric motor.

The birth of the tungsten lamp.

The electromagnetic spectrum.

The photovoltaic panels.

From the rainbow to the composition of the stars:

White light and the solar spectrum - the colors are in the light!

The absorption spectra - signatures of substances - and knowledge of the chemical composition of the stars.

Optical phenomena.

From the atom to the electron:

Stories of the atom. X-rays, the discovery and development of radioactivity, electrical discharges in cathode ray tubes. The atom is not indivisible - nucleus and electrons. Electrical discharges and thunderstorms.



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Introduction to Biology (BIO1600)

Origin of life

Plants: Form and function of plant organs, diversity and adaptive features.

Animals: Morphological diversity and adaptive features.

Microbes: Microbial diversity. The importance of microbial activity to the mankind.

The biology and society.

Human Body

Digestion: Digestive system. Operation and regulation, feeding as a factor in health.

Blood circulation: The circulatory system. Operation and regulation.

Respiration: The respiratory system. Operation and regulation.

Excretory systems and processes: urinary system, skin and sweat. Operation and regulation.

The skeleton and muscles: Its components, factors affecting its development.

Reproductive system, female reproductive apparatus. Operation and regulation.

Male reproductive system. Operation and regulation.

The nervous system: central and peripheral. Operation and regulation.

Determinants of health and disease.

Introduction to First Aid.

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Education, Expression and Drama Games (PED1620)

1 Operating practice to know be content discovery itself and other creative expression and Playfulness of Drama

- Drama Instruments

Body

Voice

Listen, expression, artistic discipline

- Communication fundamentals:

Action

Time

Space

- Resources

Creativity

Imagination

Emotions

- Senses of creativity:

Creative Analogies

divergent Thinking

mindmaps

- evolution of children's game:

imitation

symbolic

dramatic play

spontaneous dramatic

- Inductors:

Of creativity: image; Object; Sound; Text; Character.

Dramatization

Improvisation-oriented scripts

- Resources

pedagogical Repertoire



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Elementary Education and its Contexts (PED1603)

1. Basic Education for the XXI century
 - Childhood, education and the main challenges of today's world
 - The role of BE in the world today
2. Learning and its contexts:
 - Bronfenbrenner's ecological theory of development;
 - Learning in a socio-cultural perspective
3. The educational systems in Portugal and Europe
 - Educational Policies for children aged 0 to 12 years
 - Organization of BE: state / private , education and care, (dis) continuity between cycles
 - Educational System Act: principles and learning objectives
4. The participants involved in BE (children, families and professionals)
 - Roles, functions and participation
 - The Teachers (Pre-school and Primary) professional profile
5. Types of services (0-12) and its organization
 - The Schools Educational Project and the organization of institutional contexts
 - Curricular management and organization: space, time, culture and activities
 - The institutional ethos.

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Elements of Sociology of Education (SOC1654)

1. A Sociologia da Educação no Contexto das Ciências Sociais (objeto, métodos e delimitação epistemológica);
2. Educação, Família e Sociedade (perspetivas funcionalista, conflitual e da Nova Sociologia da Educação);
3. Génesis e desenvolvimento da "Escola de Massas";
4. Crítica da educação escolar;
5. A dimensão espacial da educação (espaços sociais, espaços educativos e espaços escolares);
6. Educação e Exclusão Social (jovens e adultos pouco escolarizados; escolarização de minorias étnicas);
7. Educação e Género (escolarização das raparigas; cultura da (des)igualdade de género);
8. Educação, Família e Comunidade (socialização e família; relações com a escola e estratégias educativas das famílias; relações escola-comunidade).
9. As organizações escolares (à luz da sociologia);
10. Desafios para a educação [escolar e não escolar].

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Arithmetic and Algebra (MAT1646)

1. Severability. Primes. Fundamental theorem of arithmetic. Euclidean algorithm. Greatest common divisor and least common multiple. Notable numbers and sequences: Fibonacci numbers, the golden section.
2. Fractions and operations with fractions. Decimal representation. Ratios and proportions.
3. Rational numbers. Real numbers. Functions and their graphs. Polynomials and rational expressions.
4. Notion of the group. Symmetric groups. Elements of linear algebra: linear spaces, linear systems, matrices, determinants.



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Portuguese Language II (LLT1639)

1. Aspects of lexical and morfological nature.
 - 1.1 Word constituents
 - 1.2 Word classes and respective inflexional and distributional properties
 - 1.3 Word formation processes
2. Aspects of syntactic nature
 - 2.1 Syntactic categories
 - 2.2 Syntactic fuctions
 - 2.3 From the simple to the complex sentence
 - 2.3.1 Coordination
 - 2.3.2 Subordination
 - 2.4 Word order changing processes of grammatical and stylistic natures
 - 2.5 Analysis practice on how to detect and correct sintactic malformations

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Topics of Chemistry (QUI1653)

- The World in Action:
Structure and properties of substances.
Substances and mixtures. Solutions. Measures of concentration.
Chemical elements and Periodic Table.
States of aggregation of matter, changes of state.
Unit operations in chemistry.
- The World in transformation:
Precipitation reactions. Solubility of salts.
Chemical reactions
Acid-base reactions.
Redox reactions. Electrochemistry. Corrosion.
Energy, heat and thermochemistry.
Rate of chemical reactions.

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Fundamentals of Environmental Sciences (PAO1601)

- Life and the physical environment.
Structure and function of ecosystems; Biogeochemical cycles: global and local, impacts of human activities; Population and Community; Ecological relations between organisms; Evolution of ecosystem; Biodiversity; The great ecosystems; Natural and Semi-Natural Habitats; European ecologic network (Natura 2000 network)
Environmental Quality
Water quality; Air quality; Noise pollution; Pollution and soil; Environmental quality and health; Introduction of environmental monitoring
Great environmental problems.

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Education and Visual and Artistic Expression (PED1621)

- 1 - The basic elements of visual language (point, line, color, texture, volume);
- 2 - Basic techniques of artistic expression;
- 3 - Characterization of the steps of children graphic-expressive development;
- 4 ? Contemporary theories and methodologies of visual art education;
- 5 - Digital technologies for support creativity (creating stop motion digital animation and designing an individual digital portfolio of learning);
- 6 - Bibliographies and Web sources for self-education and research foundation project.



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Child Development Psychology (PSI1651)

1. Introduction to theory and research in human development
 - 1.1. Fundamental concepts and questions
 - 1.2. Developmental questions
 - 1.3. Theoretical perspectives
 - 1.4. Research methods
2. Developmental bases
 - 2.1. Hereditary vs environment
 - 2.2. Prenatal development and newborn child
3. Motor development
 - 3.1. Motor competences in childhood, in pre-school age and in school age
4. Cognitive development
 - 4.1. Main theories and models
 - 4.2. Child's thought characteristics
 - 4.3. Language development
5. Psychosocial development
 - 5.1. Emotional development
 - 5.2. Social development
 - 5.3. Identity, self concept and self esteem development
 - 5.4. Gender development
6. Developmental contexts
 - 6.1. Socialization process: family, daycare, preschool, school and other interactional contexts

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Elements of Statistics and Probability I (MAT1647)

1-Data analysis. Experimental planning. Graphical representation. Basic distributions of univariate data. 2-Descriptive statistics. Measures of localization and dispersion. Linear regression. 3- Probability - concepts. Combinatorial analysis. Axioms. Conditional probability. Theorem of total probability. Theorem of Bayes.

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Analysis and Text Production (LLT1640)

1. The reading and textual analysis:
 - 1.1. Elements of the text
 - 1.1.1 Cohesion of the text: the words in the text and processes cohesion (agreement, word order, cohesion, temporal parallelism, lexical cohesion, referential cohesion);
 - 1.1.2 Textual Coherence: coherent link of ideas and processes logical link.
 2. The textual production (taking into account levels of argument):
 - 2.1 Elements of the text: coherence and cohesion, the phrase -length, order, qualities; paragraph; the period, the score.
 - 2.2 Techniques for the production of text: inventio (finding ideas), the dispositio (plan) - a base structure, the elocutio (write) -correction, readability and communicative efficacy.
 - 2.3 Types of text: expository-argumentative and expository
 - 2.3.1 Speeches that are based on a paraphrase, summary, report, record, etc..
 - 2.3.2 Types of argumentative texts: review, critical essay, recension, etc..



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Elements of Portuguese Geography (GEO1636)

Geographic space: spaces and scales.

The importance of cartography in Geography

Time and space.

Man and the transformations of the space

The portuguese territory and its position

Physical characteristics of the territory.

Physical conditionings and historical evolution of the supports of economic activities.

The population

The settlement.

The cities.

Portuguese geographic regions.

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Education and Physical/Motor Expression (PED1630)

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Education, Expression and Music Culture (PED1622)

Fundamental concepts in music theory.

Foundations of music education in the general education program.

The body as a musical instrument: the voice/singing.

Musical practice: singing, playing, creating/composing.

Musical project.

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Introduction to Ethics and Education Deontology (FIL1633)

ETHICS AS PHILOSOPHICAL DISCIPLINE

- The subject matter and methodology of investigation in Ethics

II. ETHICAL VALUES AND PRINCIPLES OF CONDUCT

- From the relevance of fundamental ethical values recognition to the experience of acting by duty

III. PROFESSIONAL ETHICS AS PART OF ETHICS

- Questioning the importance of a theory of duties, in general, and responsibilities of educators, in particular

IV. THE PROBLEMS OF FREEDOM AND RESPONSIBILITY

- Its formulation and its presence in the processes of the human person education

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School Organization and Administration (PED1606)

1-Subject of study of Educational Organization and Administration

2-Educational system, and organization structures

3-Administration and educational policies

4- Educational policies, autonomy and development of school



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Elementary Geometry (MAT1648)

Plane geometry: Geometry without distance. Figures in the plane and its properties. Plane curves, the conics. Ruler and compass constructions.

Geometry in space: Poliedros, conics again. Knots. Brief speculation on non-euclidean geometries. Combinatorial geometry. Paper folding. Flexagons.

Geometry - Physics: The point, the line, the plane, the space. The ruler, the measure. The clock. Measuring systems. Units. The space-time. Notions of kinematics and dynamics.

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Acquisition of Portuguese as a Native Language (LLT1641)

1. Communication and language: the particularities of the human language

a. Language acquisition

i. Biological, cognitive and social standards on acquisition

ii. Interpretative theories

iii. Verbal interaction

b. Language and cognition

i. Linguistic and cognitive development

ii. Language properties (and the use of language)

iii. Language and learning

iv. Nuclear competencies

2. Pre-verbal communication

a. Characterization of the communicative changes during this period

b. The importance of communication to the verbal acquisition

3. Verbal communication

a. Comprehension and production on the mother tongue

b. Phonological development

c. Lexical and semantical development

d. Morphological and syntactical development

e. Pragmatical development

f. The written language

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History of Portugal (HIS1637)

THE FORMATION OF PORTUGAL TO THE END OF THE MIDDLE AGES

THE EMERGENCE OF THE EARLY MODERN STATE- 15TH - 17TH c.

FROM THE LIBERALISM TO THE REVOLUTION OF 1974



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Intervention Projects in Non Formal Educational Contexts (PED1604)

1. The systemic and interactive dimension of the intervention in education.
2. Concepts and practices of community education. The "educating cities".
3. The Pedagogy of the Project.
4. Emerge specific contents of the projects to develop:
 - 4.1. Environmental Education Projects
 - 4.2. Educational activities in libraries
 - 4.3. Museum activities: The Museum as an educational space
 - 4.4. The discovery of the patrimonial heritage by children
 - 4.5. Activities in Childhood: artistic and playful exploration of public spaces.
 - 4.6. Organization and activities of toy libraries
 - 4.7. Community intervention projects
 - 4.8. Others

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Introduction into Education Investigation (PED2693)

1. Research as an essential dimension of professionalism
 - 1.1. Relationship between scientific knowledge and professional practice
 - 1.2. The research as a mean to support the educational action
2. Epistemology and research methodology
 - 2.1. Construction of scientific knowledge
 - 2.2. Fundamentals of scientific knowledge
 - 2.3. Research paradigms: scientific / positivist and naturalist / interpretive
3. Steps in research
 - 3.1. Identifying the problem
 - 3.2. Review of literature
 - 3.3. Population and sample
 - 3.4. Research designs: experimental, case study, action research
 - 3.5. Construction of instruments for data collection: observation, interviews, questionnaires.
 - 3.6. Data Collection
 - 3.7. Data Analysis
4. The writing of scientific reports.
5. The Ethics of Research

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Advanced Topics in Education and Dramatic Expression (PED1627)

- Artistic research approaches: Some studies on dramatic activities in education
- Concepts common both to the theatre and drama
- Field of intervention: educational and experiential focus
- Role of different perspectives in drama education: aesthetic Development/Strategy for learning/educational Attitude
- Educational planning and defining learning goals
- The importance of assessment in art education
- Teacher Performance: features and profiles
- Themes of in-depth reflection activities emerging from the analysis of training needs of learners: intercultural Drama Approach;



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Advanced Topics in Education and Plastic Expression (PED1628)

- Reviewing and detailed study of models and practices of contemporary visual arts education (creative self-expression; DBAE; Education for Visual Culture Understanding, etc..)
- Deepening techniques of artistic expression (3D, abrasive, paintings, mixed medias and digital); Application to specific work projects chosen by students.
- Deeper understanding and characterization of children graphic-plastic expression.
- Characterization of the art of a group of modernist artists (Picasso, Miró, Matisse, Klee, Miró, Chagal etc..). Identification of features and common languages with children ways of seeing and representing.
- Analysis of didactics specific bibliographies for teaching of artistic expressions and its contextualized applications.

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Advanced Topics in Education and Musical Expression (PED1629)

To deepen and broaden the contents addressed in the course "Musical Education, Expression and Culture", namely: Fundamental concepts in music theory.

Foundations of music education in the general education program.

The body as a musical instrument: the voice/singing.

Musical practice: singing, playing, creating/composing.

Collective Musical project.

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Advanced Topics in Education and Physical and Motor Expression (PED1632)

- 1 The curricular contents of Physical Education (PE): characterization, objectives and methodological guidelines for their teaching.
- 2 Pedagogical criteria for selection, prioritization and adaptation of motor tasks to different levels of perceptual-motor performance.
- 3 Factors of pedagogical effectiveness in the teaching of physical activities.
- 4 The PE lesson : Structure and its pedagogical functions.
- 5 The management of space, materials and learning activities: typical forms of organization in the teaching of PE, the management of time, in particular the motor engagement time; control of practice; security issues.
- 6 Fundamental characteristics of the educational intervention at critical moments of PE lesson: moments of information, organization, monitoring and control of practice and diagnosis and prescription/ adaptation of learning activities.
- 7 The climate of classroom, social interactions and pedagogical interactions.
- 8 The playfulness and interdisciplinarity in EEFM.

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Geometry and Applications (MAT1650)

Geometrical transformations: in the plane and in space. Transformations groups. Simetries. Tiling, regular and aperiodical. Geometry, statics and architecture. The geometry and nature - the experimental method.

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Portuguese Culture (LLT1642)

The Faces of Culture and National Identity

1. The notion of culture, etymology, history, anthropology, nature and religion. Culture and Civilization.
2. Natural conditions of the Portuguese culture: geographical situation of the Portuguese territory; specificity of the western Atlantic Iberian, Iberian context and continuity (climate, hydrology, and topography). The question of frontiers and cultural boundaries.
3. The power of history: a contribution to national culture.
4. The symbolic nature of cultural representations: universalism of the Portuguese culture: language, diversity factor and against.
5. That Portuguese culture? Examples of the Lusitanian identity: literature, cinema, music, art, science, food.



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Workshop on Integration of Expressions (PED1623)

Artistic expressions as human activities of free expression of self sensitive.

Body and oral Communication.

Construction of bi and tri-dimensional objects, as referential of the creative expressions process.

The dramatic game while structuring axis of inter-group dynamics.

The body as an expressive instrument.

Music Practice: sing, play, create/compose.

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Teaching of Physical and Social Environment (PED1610)

1. From the nature of knowledge to the knowledge of the world.

1.1. Science education and citizenship: an approach from the Natural Sciences and Humanities.

1.2. Relationship between curricular areas of "Knowledge of the World" and the "Environmental Studies".

2. The knowledge of the educator / teacher and the knowledge of children.

2.1. The importance of knowing and considerer children views.

2.2. The discovery of the natural world and the questioning of the world.

2.3. The notions of time and space.

3. Working methods in the areas of "Knowledge of the World" and "Environmental Studies".

3.1. The organization of materials, activities and times.

3.2. The physical and social environment as a resource: the preparation and conducting field work.

4. The Knowledge of the World and education for citizenship and responsibility.

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

4.2. Environmental education / equity and sustainable development

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Education and Technology (PED11420)

1. Society, Education and Technology

1.1. The School and the Individual in the Information and Knowledge Society: Opportunities, challenges and problems.

1.2. Smart Computers, internet, mobile devices, robotics and assistive technologies

1.3. The interest of the child: the digital versus paper.

2. Children, Learning and Technologies

2.1. Curricular transversality and pedagogical strategies using technologies in elementary education.

2.2 Design and plan teaching and learning activities using technologies.

2.3. Principles of multimedia learning

2.4. Technology appropriate to the development of children and young people

3. Learning and Computing

3.1. Theoretical and practical reference for Basic Education: Computing and Computers, Robotics (from blocks to robots), data representation, Initiation to programming and information and communication technologies.

3.2. Programming languages ​​for children: Scratch and other visual programming environments.

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Education for Sustainability (PED1611)

Sustainable development as a global and a local environmental strategy. The genesis of the concept, its evolution and its current importance.

Education for sustainability, as a global perspective in the environmental education domain.

Education for the reduction of production and consumption, reuse and recycling.

Development of projects, within the education for sustainability domain, in the school context.



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History of Educational Ideas (PED1602)

I Introduction to the History of Educational Ideas. Definition of concepts

1. THE ENLIGHTENMENT TO THE END OF CENTURY XIX- The Movement of the New Education

1.1 . The Enlightenment

1.2 . Rousseau

1.3 . Pestalozzi and Froebel

1.4 . The Enlightenment in Portugal.

1.5 . The French Revolution

1.6 . The pedagogical ideas of Romanticism: Fichte

1.7 . The Industrial Revolution and its implications in education

1.8 . The education and pedagogy in Portugal, in the 19th Century 1.8.1 . The reforms of liberalism: Herculano and Garrett

2. EDUCATION AND PEDAGOGY IN CONTEMPORARY PORTUGAL

2.1 . The instructive discussions at the end of the Monarchy (1885-1910)

2.2 . The instructive discussions during the First Republic (1910-1926)

2.3 . The instructive discussions during the military dictatorship and the Estado Novo

2.4 . Evolution of women's education - (access and coeducation)

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Education, Culture and Citizenship (PED1612)

1. Introduction: Education, Culture and Citizenship

2. The liberalism on a defense of Public Education and the birth of the citizen

3. The Republic: the construction of the "New Man" the beams of the education (1910-1926)

5. The Estado Novo and education nationalistic and traditional (1933-1945)

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Community Education Principles (PED1613)

The field of formal education;

The field of non formal education;

The field of informal education;

The models of learning in the context of Community;

The learning models of institutional framework;

The learning models of the family;

The models of individual learning;

The intergenerational community learning projects;

The skills management by community learning, social purpose transverse.

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Education for Literacy (PED1614)

Literacy as a transversal and integrating concept across the curriculum.

Delimitation of the concept of critical literacy from the point of view of different theoretical viewpoints.

The approach of 'critical literacy'.

The school community as a collective possibility of building readers beyond schooled literacy - problems and challenges.

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Promotion and Health Education (PED1615)

Module I - Health and Education

Module II - The ABC model: a radical approach to health education

Module III - The model of empowerment in health education

Module IV - Methods and procedures

Module V - Planning for health education



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Special Needs of Education (PSI1652)

- 1 ? Introduction to Special Educational Needs (S.E.N.)
- 2 ? Models and Practices in S.E.N.
 - 2.1 From Exclusion to Integration and Inclusion
 - 2.2 Models of Human Development
 - 2.3 Family, school and community
- 3 ? Person with S.E.N.
 - 3.1 Emotional and Personality Domain

 - 3.2 Communication, Speech and Language Domain

 - 3.3 Cognitive and Motor Domain

 - 3.4 Multiple disabilities

 - 3.5. Autism
 - 3.6 Health Physics
4. Contexts and Methods of Interventions
 - 4.1 Organization of Special Education in Portugal
 - 4.2 Referral, Assessment and Intervention in S.E.N.
- 5 ? Strategies for Intervention in S.E.N.
 - 5.1 Teaching/Educational Support

 - 5.2 Development of personal and social skills
 - 5.3 Adapted Physical Activity
 - 5.4 Alternative and/or Augmented Communication
 - 5.5 Interventions of body mediation

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Pedagogical Practise at Nursery School (PED1616)

1. Of an early childhood education: a typology and organization of educational responses for children under 3 years.
2. The nursery. Objectives and tasks of the nursery: the concept of "educare", the nursery as a place of learning for children and adults (parents and professionals).
 - 2.1. Portuguese documents
 - 2.2. International documents: UK, New Zealand, High / Scope, Italy.
3. The work of the kindergarten teacher in the Nursery:
 - 3.1. The relationship with the families: determinants; communication strategies.
 - 3.2. The adaptation of infant and family daycare; facilitating strategies.
 - 3.3. The organization of the educational environment in the nursery:
 - 3.3.1. Organization of space
 - 3.3.2. Organization of time
 - 3.3.3. Activities and materials
 - 3.4. Basic needs: security, food, hygiene and rest.
 - 3.5. educational relationship
4. Educational practice in Nursery: educational intention: to observe, plan, act, evaluate, communicate.



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Pedagogical Practise at Kindergarten (PED1617)

- 1.1 Functions and objectives of the Preschool Education
- 1.2 Framework Law Pre-School Education
2. The management and organization of the curriculum in the Garden-schools:
 - 2.1. Orientações Curriculum for Preschool Education:
 - 2.1.1 Organization of the educational environment: group, space, materials, time.
 - 2.1.2 Content areas:
 - a) Area of personal and social education
 - b) Area of expression and communication
 - c) Area of knowledge of the world
 - 2.1.3 Articulation and transversality of contents
 - 2.1.4 Continuing education: Family Transition / Kindergarten and Kindergarten / 1st cycle.
 - 2.1.5 The relationship with the families: determinants; communication strategies.
 - 2.1.6 Intentionality education: observe, plan, act, evaluate, communicate
 3. Curriculum Models in Early Childhood Education
 - 3.1 The High-Scope Model
 - 3.2 Pedagogical Model of the Modern School Movement Portuguese
 - 3.3 The Project Reggio Emilia

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Pedagogical Practise at Key Stage 1 of Primary School (PED1618)

1. The 1st cycle of Basic Education
 - 1.1. Functions and objectives of basic education. Profile of Performance of the 1st cycle teacher
 - 1.2. Organization of the educational context:
 - 1.2.1. A single teacher education and the various stakeholders
 - 1.2.2. Spaces and materials, time and group
 - 1.3. National Curriculum and core competencies
 - 1.2.1. The content areas
 - 1.2.2. Coordination and transversality of contents
2. The relationship with the families and the community: determinants; communication strategies.
3. Educational intention: observe, plan, act, evaluate, communicate and learn.

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Pedagogical Practise at Key Stage 2 of Primary School (PED1619)

1. The 2nd cycle of Basic Education
 - 1.1. Functions and objectives of basic education. Profile of Performance of the 2nd cycle teacher
 - 1.2. Organization of the educational context:
 - 1.2.1. A single teacher education and the various stakeholders
 - 1.2.2. Spaces and materials, time and group
 - 1.3. The official documents
 - 1.2.1. The content areas
 - 1.2.2. Coordination and transversality of contents
2. The relationship with the families and the community: determinants; communication strategies.
3. Educational intention: observe, plan, act, evaluate, communicate and learn.

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Elements of Statistics and Probability II (MAT1649)

1. Basic notions of random variables discrete and continuous. Basic notions of distributions. Moments. 2. Discrete and continuous models: Bernoulli, binomial, hypergeometric, Poisson distributions. Uniform and normal distributions. 3. Law of large numbers, central limit theorem. 4. Sample distributions 5. Some topics of statistical inference.



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Teaching of Mathematics (PED1608)

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Mother Tongue Teaching (PED1609)

Official programmatic documents for the Portuguese Language - brief perspective.

The promotion of oracy across the curriculum

The promotion of literacy - from emergent literacy to formal learning of written language.

The promotion of a literary education across the curriculum.

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Children's Literature (LLT1643)

- Children literature: reflections on the concept; aesthetic elements; author, reader, illustrator; reading mediator. Readings structuralist, psychoanalytic and anthropological. Brief history of Children's Literature.

- The texts and authors: narrative for children: aspects of narratology. Poetry for children: particularities of poetic discourse. Theatre for children: from text to performance, course of a particular genre. Reading and analysis of some texts of major authors.

- The Formation of Literary Readers: trends for the dissemination of Literature for Children. The role of family, school and society in promoting reading.

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Reading and Book Promotion (LLT1644)

The promotion of literary reading: proposals for activities around authors and works of children's literature and juvenile (in libraries, in family, in society). Working together with several institutions: school libraries, public libraries, bookstores, parents' associations, socio-cultural associations.