Natural Science and Social Science
Degree in Early Childhood Education

UNIVERSIDAD NEBRIJA

TEACHING GUIDE

Subject : Natural Science and Social Science Learning

Qualification: Degree in Early Childhood Education

Character: Mandatory

Language: Spanish/ English

Modality: In-person/Remote

Credits: 4

Course: 3rd

Semester: 6th

Teachers / Teaching Staff: Dr. Mr. Francisco Javier Benitez Verguizas; Dr. Mrs. Noelia Pelicano Piris; Mr. Alejandro Galan Marin; Dr. Mrs. María Victoria Hernández Riquer

1. COMPETENCES AND LEARNING OUTCOMES

1.1. Competencies

Basic skills

CB1 Students are able to possess and understand the knowledge in an area of study that is based on general secondary education, and is usually found at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study.
CB2 Students know how to apply their knowledge to their work or vocation in a professional manner and possess the skills that are usually demonstrated through the development and defense of arguments and the resolution of problems within their area of study.
CB3 Students should have the ability to gather and interpret relevant data (normally within their area of study) to make judgments that include a reflection on relevant issues of a social, scientific or ethical nature.
CB4 Students can transmit information, ideas, problems and solutions to both specialized and non-specialized audiences.
CB5 Students have developed the learning skills necessary to undertake further studies with a high degree of autonomy.

General skills

CG1 Understand and relate the general and specialized knowledge of the profession, taking into account both its epistemological singularity and the specificity of its teaching.
CG3 Understand the complexity of educational processes in general and teaching-learning processes in particular.
CG5 Knowledge of the profession.
CG6 Ability to analyze and synthesize.
CG7 Oral and written communication in the mother tongue and in a second language.
CG8 Ability to manage information and use advanced technological means.
CG15 Ability, initiative and motivation to learn, research and work independently.
CG16 Promote creativity or the ability to generate new ideas, as well as the entrepreneurial spirit.
CG18 Ability to design and manage projects.

Specific skills

CEC1 Know the objectives, curricular contents and evaluation criteria of Early Childhood Education.
CEC2 Promote and facilitate learning in early childhood, from a globalizing and integrative perspective of the different cognitive, emotional, psychomotor and volitional dimensions.
CEC5 Know the educational implications of information and communication technologies and, in particular, of television in early childhood.

CEC9 Reflect on classroom practices to innovate and improve teaching. Acquire habits and skills for autonomous and cooperative learning and promote it in students.
CEM32 Know the scientific, mathematical and technological foundations of the curriculum for this stage, as well as the theories on the acquisition and development of the corresponding learning.
CEM33 Know teaching strategies to develop numerical representations and spatial, geometric and logical development notions.
CEM34 Understand mathematics as sociocultural knowledge.
CEM35 Know the scientific methodology and promote scientific thinking and experimentation.
CEM36 Acquire knowledge about the evolution of thought, customs, beliefs and social and political movements throughout history.
CEM37 Know the most outstanding moments in the history of science and technology and their significance.
CEM38 Develop teaching proposals related to the interaction between science, technology, society and sustainable development.
CEM39 Promote interest and respect for the natural, social and cultural environment through appropriate educational projects.
CEM40 Promote introductory experiences in information and communication technologies.

1.2. Learning outcomes

- Know the context of social sciences, natural sciences and mathematics in the context of the area of knowledge of the early childhood education environment.
- Know the basic processes in the learning area of children aged 0-6 years in relation to the relevant natural, social and mathematical content.
- Understand and know how to apply the desirable methodological guidelines for teaching this area of knowledge.
- Create activity sequence designs that give rise to teaching proposals that can be experimented with in the classroom.
- Know the logical-mathematical abilities of children aged 0-6 years.
- Know the foundations and purpose of mathematics in early childhood education.
- Know the development of the social sciences, natural sciences and mathematics curriculum for early childhood education, with the ability to select and contribute activities.

2. CONTENTS

2.1. Prerequisites

None.

2.2. Description of content

- Description of the natural, social and cultural environments. Experimentation of the environment in the 0-6 years old stage.
- Science, Social Science and Mathematics in the Early Childhood Education Curriculum
- Teaching strategies to promote scientific thought and experimentation. Teaching strategies for the development of numerical, geometrical and logical representations.

2.3. Training activities

In-person mode:

TRAINING ACTIVITY	HOURS	PERCENTAGE OF PRESENCE
AF1. Synchronous theoretical classes	14.6	100%
AF3. Practical classes. Seminars and workshops	11.6	100%

AF4. Tutorials	9.2	100%
AF5. Working in small groups	4.8	100%
AF6. Individual study and independent work	56.4	0%
AF7. Assessment activities	3.4	100%
TOTAL NUMBER OF HOURS	**100**	

Distance learning mode:

TRAINING ACTIVITY	HOURS	PERCENTAGE OF PRESENCE
AF2. Asynchronous theoretical classes.	9.4	0%
AF3. Practical classes. Seminars and workshops	6.6	0%
AF 4. Tutorials	8	0%
AF6. Individual study and independent work	74.6	0%
AF7. Assessment activities	1.4	100%
TOTAL NUMBER OF HOURS	**250**	

2.4. Teaching methodologies

The teaching staff may choose between one or more of the following methodologies detailed in the verified degree report:

Code	Teaching methodologies	Description
MD1	Expository method. Master class	Structured presentation of the topic by the teacher in order to provide information to students, transmit knowledge and activate cognitive processes. Active student participation is encouraged through debate activities, case discussions, questions and presentations.
MD2	Individual study	Independent and reflective work by the student, in order to deepen the acquisition of associated skills (preparation of classes and exams; use of information sources; completion of assignments, presentations; use of ICT; participation in discussion forums, etc.)
MD3	Collaborative learning	Develop active and meaningful learning in a cooperative manner.

MD4	Troubleshooting	Active methodology that allows you to exercise, rehearse and put into practice previous knowledge.
MD5	Case study	Analysis of a real or simulated case with the aim of understanding it, interpreting it, solving it, generating hypotheses, contrasting data, reflecting, completing knowledge, etc.
MD6	Project-oriented learning	Carry out a project to solve a problem, applying acquired skills and knowledge.
MD7	Tutoring (individual and/or group)	Methodology based on the teacher as a guide for student learning. In person or through the use of technological tools such as forums, email or videoconferences .
MD8	Apprenticeship contract	Develop autonomous learning.
MD9	Self-assessment	Assessment of one's own knowledge, skills and acquisition of competencies.
MD10	Teacher assessment	Student evaluation by the teacher

3. EVALUATION SYSTEM

3.1. Grading system

The final grading system will be expressed numerically, in accordance with the provisions of art. 5 of Royal Decree 1125/2003, of 5 September (BOE, 18 September), which establishes the European Credit System and the Grading System for official university degrees and their validity throughout the national territory.

0 - 4.9 Fail (SS)
5.0 - 6.9 Pass (AP)
7.0 - 8.9 Excellent (NT)
9.0 - 10 Outstanding (SB)

The mention of "honorable honours" may be awarded to students who have obtained a grade equal to or greater than 9.0.

The number of honors may not exceed 5% of the students enrolled in a subject in the corresponding academic year, unless the number of students enrolled is less than 20, in which case only one Honors may be awarded.

3.2. Evaluation criteria

Ordinary call

Modality: In person

Evaluation systems	Percentage
Partial evaluation	20%
Activities	20%
Participation	10%
Final exam	50%

Modality: Distance learning

Evaluation systems	Percentage
Activities	30%

Participation	10%
Final exam	60%

Extraordinary call

Modality: In person

Evaluation systems	Percentage
Activities	40%
Final exam	60%

Modality: Distance learning

Evaluation systems	Percentage
Activities	40%
Final exam	60%

3.3. Restrictions

Minimum rating
In order for there to be an adequate average with the previous weights, it is necessary to obtain at least a grade of 5 on the final test.

Attendance
The student who, unjustificably, stops attending more than 25% of the face-to-face classes may be deprived of the right to take the exam in the ordinary call.

Writing rules
Special attention will be paid to the presentation and content of written assignments, practical exercises and projects, as well as to exams, taking into account grammar and spelling. Failure to comply with the minimum acceptable standards may result in points being deducted from said assignment.

3.4. Warning about plagiarism

Antonio de Nebrija University will not tolerate plagiarism or copying in any case. The reprodicution of paragraphs from audit texts other than that of the student (Internet, books, articles, works of colleagues …) will be considered plagiarism, when the original source from which they come is not cited . *The use of citations cannot be indiscriminate. Plagiarism is a crime.*

In case of being detected of this type of practice, it will be considered a Serious Fault and the sanction provided for in the Student Regulations may be applied.

4. LITERATURE

Basic bibliography

Aranda, A.M. (2003). *Didáctica del conocimiento del medio social y cultural en educación infantil*. Síntesis educación.
Domínguez Garrido, M.C. (2004). *Didáctica de las Ciencias Sociales*. Pearson Educación.
Oliver, A. (2006). C*reative Teaching: Science in the Early Years and Primary Classroom*. Fulton Publisher

Real Decreto 95/2022, de 1 de febrero, por el que se establece la ordenación y las enseñanzas mínimas de la Educación Infantil. Boletín Oficial del Estado, núm. 28. https://www.boe.es/eli/es/rd/2022/02/01/95/con

Recommended bibliography

Bernardo Carrasco, L. (2009). *Una didáctica para hoy. Como enseñar mejor.* Rialp.
Escribano-Miralles, A., y Molina, S. (2015). La importancia de salidas escolares y museos en la enseñanza de las ciencias sociales en Educación Infantil. Análisis de un caso a partir del modelo CIPP. *CLIO. History and History teaching*, *41*, 1-31.
Escriche, M. M. (2021). El conocimiento del entorno en Educación Infantil. Teoría y práctica desde las Ciencias Sociales y su didáctica. *Didáctica de las ciencias experimentales y sociales*, (40), 3-20.
García Medina, R., y Parra Ortiz, J. M. (2010). *Didáctica e innovación curricular*. Catarata.
Jiménez Rodríguez, M.A. (2004). *Proyectos para educar.* Ed. PPC.
Parra, J. M. (2009). U*n modelo didáctico para la enseñanza de las Ciencias Sociales.* Grupo Editorial Universitario.
PUIG, J. Mª (Coord.) (2009). *Aprendizaje servicio. Educación y compromiso cívico*. Graó.

5. TEACHING STAFF DATA

You can consult the teachers' email and the academic and professional profile of the teaching team at: https://www.nebrija.com/carreras-universitarias/grado-educacion-infantil/#masInfo#container3