

**COURSE DATA****Data Subject**

Code	33626
Name	Teaching natural sciences at nursery school
Cycle	Grade
ECTS Credits	6.0
Academic year	2021 - 2022

Study (s)

Degree	Center	Acad. year	Period
1304 - Degree in Preschool Education	Faculty of Teacher Training	4	First term
1324 - Degree in Preschool Education (Ontinyent)	Faculty of Teacher Training	4	First term

Subject-matter

Degree	Subject-matter	Character
1304 - Degree in Preschool Education	21 - Teaching natural sciences in preschool education	Obligatory
1324 - Degree in Preschool Education (Ontinyent)	21 - TEACHING NATURAL SCIENCES IN PRESCHOOL EDUCATION	Obligatory

Coordination

Name	Department
CANTO DOMENECH, JOSE RAFAEL	90 - Methodology of experimental and social sciences
LOZANO LUCIA, OSCAR RAUL	90 - Methodology of experimental and social sciences
SENDRA MOCHOLI, CRISTINA	90 - Methodology of experimental and social sciences



SUMMARY

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Esta asignatura es obligatoria del título de Maestro/a de Educación Infantil. Tiene carácter cuatrimestral (6 créditos) y se imparte en el primer cuatrimestre del 4º curso.

Su objetivo fundamental es conseguir que los futuros docentes conozcan y utilicen herramientas didácticas específicas para la enseñanza de las ciencias naturales de una manera innovadora y adaptada a la etapa de educación infantil.

Esta asignatura está relacionada con:

- Ciencias Naturales para Maestros de 2º curso.
- Prácticas escolares II de 3º

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

No existen

OUTCOMES

1304 - Degree in Preschool Education

- Express oneself orally and in writing correctly and appropriately in the official languages of the autonomous region.
- Use information and communication technologies effectively as usual working tools.
- Analyse critically the most relevant issues in today's society that affect family and school education: social and educational impact of audiovisual languages and of screens; changes in gender and inter-gender relations; multiculturalism and interculturalism; discrimination and social inclusion and sustainable development. Also, carry out educational actions aimed at preparing active and democratic citizens, committed to equality, especially between men and women.
- Promote cooperative work and individual work and effort.
- Assume that teaching must be perfected and adapted to scientific, pedagogical and social changes throughout life.



- Know the processes of interaction and communication in the classroom.
- Recognise the identity of each educational stage and their cognitive, psychomotor, communicative, social and affective characteristics.
- Design, plan and evaluate teaching and learning classroom activities in multicultural and co-educational contexts.
- Know how to work as a team with other professionals within and outside the school to attend to each student, to plan the learning sequences and to organise work in the classroom and in the play space.
- Know and apply basic educational research methodologies and techniques and be able to design innovation projects identifying evaluation indicators.
- Understand that systematic observation is a basic tool that can be used to reflect on practice and reality, and to contribute to innovation and improvement in education.
- Identify and plan the resolution of educational situations that affect students with different abilities and different learning rates, and acquire resources to favour their integration.
- Know the scientific and technological principles of the curriculum of this stage as well as the theories on the acquisition and development of the corresponding learning. Know the scientific and technological principles of the curriculum of this stage as well as the theories on the acquisition and development of the corresponding learning.
- Know the scientific methodology and promote scientific thinking and experimentation.
- Know the most outstanding moments in the history of science and technology and their significance.
- Create teaching proposals in relation to the interaction between science, technology, society and sustainable development.
- Promote interest in and respect for the natural environment through appropriate educational projects.
- Promote experiences of initiation into information and communication technologies, value their contribution to improving learning and understand their implications for children's education.
- Design, plan and evaluate teaching and learning processes, both individually and in collaboration with other teachers.
- Stimulate sensory perception through multiple experiences with one's own body and in the natural environment as a basis for learning.
- Awaken interest in and curiosity for one's own body and for others' bodies, respecting differences. Develop autonomy, body care and awareness of gender differences.

1324 - Degree in Preschool Education (Ontinyent)

- Express oneself orally and in writing correctly and appropriately in the official languages of the autonomous region.
- Use information and communication technologies effectively as usual working tools.
- Analyse critically the most relevant issues in today's society that affect family and school education: social and educational impact of audiovisual languages and of screens; changes in gender and inter-gender relations; multiculturalism and interculturalism; discrimination and social inclusion and sustainable development. Also, carry out educational actions aimed at preparing active and democratic citizens, committed to equality, especially between men and women.



- Promote cooperative work and individual work and effort.
- Assume that teaching must be perfected and adapted to scientific, pedagogical and social changes throughout life.
- Know the processes of interaction and communication in the classroom.
- Recognise the identity of each educational stage and their cognitive, psychomotor, communicative, social and affective characteristics.
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- Know how to work as a team with other professionals within and outside the school to attend to each student, to plan the learning sequences and to organise work in the classroom and in the play space.
- Know and apply basic educational research methodologies and techniques and be able to design innovation projects identifying evaluation indicators.
- Understand that systematic observation is a basic tool that can be used to reflect on practice and reality, and to contribute to innovation and improvement in education.
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- Know the scientific and technological principles of the curriculum of this stage as well as the theories on the acquisition and development of the corresponding learning. Know the scientific and technological principles of the curriculum of this stage as well as the theories on the acquisition and development of the corresponding learning.
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**LEARNING OUTCOMES****English version is not available****WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	60,00	100
Study and independent work	90,00	0
TOTAL	150,00	

TEACHING METHODOLOGY**English version is not available****EVALUATION****English version is not available****REFERENCES****Basic**

- Carson, R. (2012). El sentido del asombro. Madrid, Encuentro.
- Decreto 37/2008, de 28 de marzo, del Consell, por el que se establecen los contenidos educativos del primer ciclo de la Educación Infantil en la Comunitat Valenciana (DOCV 03/04/2008).
- Decreto 38/2008, de 28 de marzo, del Consell, por el que se establece el currículo del segundo ciclo de la Educación Infantil en la Comunitat Valenciana (DOCV 03/04/2008).
- Freire, H. (2011). Educar en verd. Idees per apropar els nens i les nenes a la natura. Barcelona, Graó.
- Hecker, J. (2008). La casa de los pequeños exploradores. Barcelona, Ariel.
- Kaufman, M. (1999). Caracterización de los modelos didácticos en el nivel inicial. In M. Kaufman & L. Fumagalli (eds.), Enseñanza de Ciencias Naturales. Reflexiones y propuestas didácticas (pp. 65-107). Barcelona, Paidós.
- Lovell, K. (1999). Desarrollo de los conceptos básicos matemáticos y científicos en los niños. Madrid, Morata.
- Lozano, O.R. y Solbes, J. (2014). 85 experimentos de física cotidiana. Barcelona, Graó.



- Ritscher, P. (2013). El jardí dels secrets. Organitzar i viure els espais exteriors a les escoles. 3^a ed. Barcelona, Associació de Mestres Rosa Sensat
- Vega, S. (2006). Ciencia 0-3. Laboratorios de ciencias en la escuela infantil. Barcelona, Graó.
- Vega, S. (2006). Ciencia 3-6. Laboratorios de ciencias en la escuela infantil. Barcelona, Graó.

Additional

- Dahlberg, G.; Moss, P.; Pence, A. (2005). Más allá de la calidad en educación infantil. Perspectivas posmodernas. Barcelona, Graó.
- Díez, M.C. (1995). La oreja verde de la escuela: trabajo por preguntas y vida cotidiana en la escuela infantil. Madrid, Ediciones de la Torre.
- Díez, C. (2007). Mi escuela sabe a naranja. Estar y ser en la escuela infantil. Barcelona, Graó.
- Díez, M.C. (2011). Les arracades de la mestra. Barcelona, Graó.
- Escoles Bressol i Parvularis Municipals de Reggio Emilia (2005). Els cent llenguatges dels infants. Barcelona, Associació de Mestres Rosa Sensat.
- Majem, T. y Odena, P. (2007). Descubrir jugando. Barcelona, Octaedro.
- Majoral, S. (2004). Veig tot el món! Créixer junts tot fet projectes. Barcelona, Associació de Mestres Rosa Sensat.
- Ritscher, P. (2013). Escola slow. Pedagogia del quotidià. Barcelona, Associació de Mestres Rosa Sensat.
- Sugrañes, E.; Alós, M.; Andrés, N.; Casal, S.; Castrillo, C; Medina, N. y Yuste, M. (2012). Observar para interpretar. Actividades de la vida cotidiana para la educación infantil. Barcelona, Graó.
- Vila, B. y Cardo, C. (2005). Material sensorial (0-3). Manipulación y experimentación. Barcelona, Graó.

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

English version is not available

1. Contenidos

Se mantienen los contenidos inicialmente recogidos en la guía docente. Además, se tendrá en cuenta las dificultades derivadas del desarrollo de la docencia no presencial.

2. Volumen de trabajo y planificación temporal de la docencia



Se mantiene el volumen de trabajo inicialmente marcado en la guía docente. Siempre que la situación sanitaria lo permita, la planificación de las clases teórico-prácticas se basará en el modelo establecido por la Facultad de Magisterio en base a la reducción de la presencialidad del 50% acordada para toda la Universitat de València y serán sustituidas por diferentes propuestas de actividades de estudio y trabajo autónomo.

3. Metodología docente

El instrumento básico para compartir materiales, entregar tareas y realizar cuestionarios u otro tipo de pruebas será el Aula Virtual. En este sentido:

- Se podrán proporcionar materiales diversos (elaborados por el profesorado, textos y enlaces a diferentes publicaciones y webs...) relacionados con los contenidos de la asignatura.
- Se podrán programar algunas sesiones virtuales específicas para resolver dudas colectivamente (chat y/o videoconferencias).
- Se podrán proporcionar una serie de tareas individuales y/o en grupo que aborden diferentes aspectos teórico-prácticos de la asignatura como, por ejemplo: lecturas seleccionadas, definición de conceptos básicos, comentarios críticos de texto y artículos, talleres de exploración con materiales disponibles en casa, diseño de propuestas didácticas propias, análisis crítico de propuestas didácticas, entrevistas a maestros, niños, niñas, etc. Se intentará siempre preparar documentos con orientaciones y pautas para facilitar la realización de estas tareas.
- Se mantiene la vía de comunicación habitual con los estudiantes a través del correo electrónico oficial de la UV.

4. Evaluación

Como hasta ahora, la evaluación de la asignatura será continua. Se valorarán todas las actividades teórico-prácticas individuales y/o realizadas, de las realizadas en el apartado 3.

Cuando algún alumno o alumna no supere suficientes tareas par poder seguir una evaluación continua, el profesorado comunicará al estudiante la obligación de realizar, para poder superar la materia, un informe final debidamente argumentado con referencias bibliográficas, que recoja todo el temario previsto en la guía docente y contemple todos los aprendizajes de carácter teórico-práctico impartidos durante este cuatrimestre.

Con carácter excepcional, el profesorado podrá pedir la realización de una prueba final (oral o escrita) en los casos que considere oportuno.

5. Bibliografía

La bibliografía básica de referencia se mantiene. Se podrán proporcionar enlaces a diferentes publicaciones y webs para facilitar la consulta de bibliografía y otras referencias. Además, se tendrá en cuenta la dificultad de acceder a determinadas publicaciones que no sean accesibles en línea.