

# UNIVERSIDAD DE CASTILLA - LA MANCHA GUÍA DOCENTE

Code: 47312

ECTS credits: 6

English Friendly: Y

Academic year: 2022-23

Duration: C2

Group(s): 26 24

## 1. General information

Course: PRESCHOOL BIOLOGY, HEALTH AND NOURISHMENT

Type: CORE COURSE

Degree: 302 - UNDERGRADUATE DEGREE IN EARLY CHILDHOOD EDUCATION

Center: 102 - FACULTY OF EDUCATION OF CIUDAD REAL

Year: 2

Main language: Spanish Second language: English

Use of additional

languages:

Web site:

Bilingual: N

Lecturer: BEATRIZ GARCIA FERNANDEZ - Group(s): 24 26

Building/Office Department Phone number Email Office hours

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#### 2. Pre-Requisites

This subject does not have previous requirements. Neverthless, it is advisable that the students:

- Know basic biological issues as the main constituents of the 6 kingdoms of life, and basis of human anatomy and vital functions.
- Understand the basic biological terms.

Besides, to increase the prospect of success in learning and to pass the course, it is advisable that students attend to lessons and participate in the proposed activities.

## 3. Justification in the curriculum, relation to other subjects and to the profession

The knowledge of the human body and its functions is essential for a teacher. It is in the first stages of infant development that children become conscious of their anatomy, being a crucial moment to iniciate them in their anatomy knowledge, and in the numerous relationships that are stablished with the environment.

The future teachers must also know the main illnesses that affect children in the early childhood, so they can implemet some measures to avoid, for instance, massive infections in the classroom. The subject is the only one in the degree related to science focused to acquire a basic training to allow teachers to work issues in the classroom like nutrition for health and the prevention of overweight and obesity.

Nutrition, included in the Universal Declaration of Human Rights, includes to educate for a correct nutrition, what contributes to reach social equity in terms of child health. Spain is one of the european countries with more obesity and overweight, so these disorders have been considered of prior interest by these autorities. Thus, this training for teachers is more necessary than ever, because it is in the early childhood that children acquire the main nutrition habits, and school is key to reach this goal.

Other contents are also included, like those related to the origin of life, the diversity of the living beings, evolution and clasification, as the main percentage of our students come from non scientific itineraries and could translate misconceptions to children in this key education stage.

The subject is complemented with others related to pshychology and physical education of the same module, that support and complement the study of healthy habits, like "Psychology of health in childhood education", and " Motor abilities and health in childhood education".

## 4. Degree competences achieved in this course

## Course competences

Code Description

1.1.4.II.01 Know the basic principles of healthy development and behaviour.

1.1.4.II.02 Identify disorders in sleep, eating, psychomotor development, attention, and auditory and visual perception.

CB01 Prove that they have acquired and understood knowledge in a subject area that derives from general secondary education and is

appropriate to a level based on advanced course books, and includes updated and cutting-edge aspects of their field of knowledge.

Be able to gather and process relevant information (usually within their subject area) to give opinions, including reflections on relevant

social, scientific or ethical issues.

## 5. Objectives or Learning Outcomes

## Course learning outcomes

Description

CB03

Identify the types of nutrients and their prinicipal vital functions.

Identify disorders as they relate to eating, and auditory and visual perception.

Be able to explain the origin and evolution of human beings

Discuss the relationship between nutrients, diet, energy, and health.

Design preventative measures and promote health.

Design activities related to healthy eating and sensorial education in the stage of early childhood (smells, colours, flavours, sounds, textures).

Know the anatomy and physiology of the human body.

Recognize the principal illnesses in the stage of early childhood.

## 6. Units / Contents

Unit 1: The living beings: Main aspects.

Unit 2: Anatomy, nutrition and physiology (The human body and its functions).

Unit 3: Infant health: Nutrition, health and relation with the environment (Basis of education for health, food and nutrition in early childhood, didactic applications, healthy habits and prevention of scholar risks, health and environment).)

7. Activities, Units/Modules and M	Methodology								
Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description		
Class Attendance (theory) [ON-SITE]	Combination of methods	1.1.4.II.01 1.1.4.II.02 CB01 CB03	2.32	58	Υ	N	Lessons to explain the main concepts by the teacher, with active participation of the students. 2. Individual or in group guided work.3. Resolution of problems, readings, discussions, and/or progress tests.		
Study and Exam Preparation [OFF-SITE]	Combination of methods	1.1.4.II.01 1.1.4.II.02 CB01 CB03	3.6	90	Y	N	Elaboration of works, didactic applications, or practical activities about the addressed themes. Products derived from the classroom or laboratory activities, and/or progress tests. It includes the study to prepare assessment activities (included the final test and possible questionnaires), and/or assessment activities out of the classroom.		
Final test [ON-SITE]		1.1.4.II.01 1.1.4.II.02 CB01 CB03	0.08	2	Υ	ΙY	Final individual test. Recoverable in the extraordinary convocatory.		
	Total:								
	Total credits of in-class work: 2.4								
Total credits of out of class work: 3.6							Total hours of out of class work: 90		

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System						
Evaluation System	Continuous assessment	Non- continuous evaluation*	Description			
Final test	70.00%	70.00%	Writen test of final assessment of the subject.			
Projects	30.00%	30.00%	Different methods are considered: individual or in group works, analysis and resolution of cases, practical activities, classroom activities, reading articles, elaboration of informs, and/or questionnaires. It will be detailed during the subject.  Recoverable.			
Total:	100.00%	100.00%				

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

## Evaluation criteria for the final exam:

## Continuous assessment:

The student reaches the learning outcomes of the subject:

Identify the types of nutrients and their principal vital functions.

Identify disorders as they relate to eating, and auditory and visual perception.

Be able to explain the origin and evolution of human beings.

Discuss the relationship between nutrients, diet, energy, and health.

Design preventative measures and promote health.

Design activities related to healthy eating and sensorial education in the stage of early childhood (smells, colours, flavours, sounds, textures).

Know the anatomy and physiology of the human body.

Recognize the principal illnesses in the stage of early childhood.

Recognize the principal groups of living beings, identifying those with pathogenic potential.

The students should demonstrate have reached the competences of the subject through the different systems of assessment described, the final test and other assessment activities that will be described during the teaching.

The assessment will be about any aspect addressed in class, even if it does not appear in the materials in the Moodle platform. The materials available in the Moodle platform are a guide to address the different contents in the classroom, but they are not the entire contents of the subject. It is a presential subject.

To pass the subject it is necessary to obtain at least 4 about 10 points in the compulsory assessment activities. Besides, the student will only pass the subject with the obtention of 5 points out of 10 minimum in the global of the assessment activities according to the percentages established in the assessment criteria.

Oral and written expression will be considered for the assessment, according to the general competence 6 of the Degree: ¿Written and oral expression and the domain of different forms of expression¿.

Plagiarism is academic fraud, and if it detected, actions will be taken accordingly. The fraud committed will imply a fail, with a final calification of cero (0) in the corresponding convocatory of the subject (see art.8 of the ¿rules of student assessment of the UCLM¿ [2022/4952]).

#### Non-continuous evaluation:

The student reaches the learning outcomes of the subject:

Identify the types of nutrients and their principal vital functions.

Identify disorders as they relate to eating, and auditory and visual perception.

Be able to explain the origin and evolution of human beings.

Discuss the relationship between nutrients, diet, energy, and health.

Design preventative measures and promote health.

Design activities related to healthy eating and sensorial education in the stage of early childhood (smells, colours, flavours, sounds, textures).

Know the anatomy and physiology of the human body.

Recognize the principal illnesses in the stage of early childhood.

Recognize the principal groups of living beings, identifying those with pathogenic potential.

The students should demonstrate have reached the competences of the subject through the different systems of assessment described, the final test and other assessment activities that will be described during the teaching.

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## Specifications for the resit/retake exam:

The requirements are the same asfor the ordinary convocatory, with the exception of those elements with particular monitoring in the classroom.

## Specifications for the second resit / retake exam:

Those indicated by the corresponding regulation.

9. Assignments, course calendar and important dates							
Not related to the syllabus/contents							
Hours	hours						
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	90						
Final test [PRESENCIAL][]	2						
Unit 1 (de 3): The living beings: Main aspects.							
Activities	Hours						
Class Attendance (theory) [PRESENCIAL][Combination of methods]	20						
Unit 2 (de 3): Anatomy, nutrition and physiology (The human body and its functions).							
Activities	Hours						
Class Attendance (theory) [PRESENCIAL][Combination of methods]	19						
Unit 3 (de 3): Infant health: Nutrition, health and relation with the environment (Basis of education)	ion for health, food and nutrition in early childhood, didactic						
applications, healthy habits and prevention of scholar risks, health and environment).)							
Activities	Hours						
Class Attendance (theory) [PRESENCIAL][Combination of methods]	19						
Global activity							
Activities	hours						
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	90						
Final test [PRESENCIAL][]	2						
Class Attendance (theory) [PRESENCIAL][Combination of methods]	58						
	Total horas: 150						

10. Bibliography and Sources							
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description	
Beatriz García Fernández & José- Reyes Ruiz-Gallardo	Diagram production in Biology: comparing children and pre- service teachers' performance	Routledge. Taylor & Francis Group.			2021	Beatriz García Fernández & José-Reyes Ruiz-Gallardo (2021): Diagram production in Biology: comparing children and pre- service teachers' performance, Journal of Biological Education, DOI: 10.1080/00219266.2021.1979625	
Beatriz García Fernández & Antonio Mateos Jiménez	Beatriz García Fernánd Comparación entre la realización de maquetas y la visualización para mejorar la alfabetización visual	dez & José-Reye	es Ruiz-Ga	llardo	2018	García Fernández, B., Mateos Jiménez, A. (2018). Comparación entre la realización de maquetas y la visualización para mejorar la alfabetización visual en anatomía humana en futuros docentes. Revista Eureka sobre Enseñanza y Divulgación de las Ciencias 15(3), 3605.	

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Banet Hernández, Enrique	Los procesos de nutrición humana	Síntesis		84-7738-820- 2	2001	
Curtis, Helena	Biología c / Helena Curtis[et al.]; [directoras] Adriana	Médica Panamericana		978-950-06- 0334-8	2008	
Del Rey Calero, J. y Calvo, J.R.	Cómo cuidar la salud : su educación y promoción	Harcourt Brace		84-8174-311- 9	1997	
García Arias, M.T. y García Fernández, M.C.	Nutrición y dietética.	Ser. Public. Univer. León	León		2002	
Garrido, J.M.; Perales, F.J. Galdón, M.	Ciencia para educadores.	Pearson	Madrid		2007	
Karlson, P.	Manual de Bioquímica	Marín	Madrid		1967	
Mataix, J. y Caranzo, E.	Nutrición para educadores.	Díaz de Santos.	Madrid		2005	
Mateos, A.	Nutrición y salud en la formación de docentes: la gastronomía como propuesta para una enseñanza motivadora.	Aljibe	Málaga	978-84-9700- 817-4	2016	Páginas 315-340
Rigolfas, R. Padró, L. y Cervera, IP.	Educar en nutrición y alimentación	Tibidabo	Barcelona	ı	2010	
Ville, C.	Biología	Interamericana	Madrid		1999	
Wardlaw, G.D.	Perspectivas sobre nutrición	Paidotribo	Madrid		2008	
Beatriz García Fernández, Carlos Emeterio Sobrino Costoso & José Reyes Ruiz Gallardo	Teachers' and Their Pupils' Performance on Plant Nutrition: a Comparative Case	Springer Nature.			2021	García-Fernández, B., Sobrino-Costoso, C. E., & Ruiz-Gallardo, J. R. (2021). Teachers' and Their Pupils' Performance on Plant Nutrition: a Comparative Case. Research in Science Education, 1-21.
	https://doi.org/10.1007	/s11165-020-099	987-x			
António Almeida, Beatriz García Fernández & Orlando Strecht- Ribeiro	Children ¿s knowledge and contact with native fauna: a comparative study between Portugal and Spain	Routledge.			2020	António Almeida, Beatriz García Fernández & Orlando Strecht-Ribeiro (2020). Children's knowledge and contact with native fauna: a comparative study between Portugal and Spain, Journal of Biological Education, 54:1, 17-32, DOI: 10.1080/00219266.2018.1538017
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