

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

Code	34489
Name	Paediatrics II
Cycle	Grade
ECTS Credits	4.5
Academic year	2020 - 2021

Study (s)

Degree	Center	Acad. year	Period
1204 - Degree in Medicine	Faculty of Medicine and Odontology	5	Second term

Subject-matter

Degree	Subject-matter	Character
1204 - Degree in Medicine	16 - Human clinical training V	Obligatory

Coordination

Name	Department
AGUILAR BACALLADO, FRANCISCO JOSE	290 - Pediatrics, Obstetrics and Gynaecology
LURBE FERRER, MARIA DESAMPARADOS	290 - Pediatrics, Obstetrics and Gynaecology

SUMMARY

In this subject, a program destined to allow students to recognize the main aspects of health and disease in the childhood is proposed, highlighting the preventive and healing aspects of the pediatric affections. Along with the subject Pediatrics I, from a theoretical-practical perspective, the main health problems that can appear during childhood are approached, and it allows the student to know how to treat them and collaborate with the full development of the child. In this second part, the student will revise the problems related with the respiratory, hematological, renal, endocrine, neurological and infectious pathology and with the preventive activities.

PREVIOUS KNOWLEDGE



Relationship to other subjects of the same degree

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

Other requirements

To course this subject, it is advisable that the students have passed the modules of Morphology, Structure and Function of the Human Body: Skills in Social Medicine and Diagnostic-Therapeutic Procedures.

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

1204 - Degree in Medicine

- Obtain and elaborate a clinical history with relevant information.
- Perform a physical examination and a mental health assessment.
- Have the capacity to make an initial diagnosis and establish a reasonable strategy of diagnosis.
- Establish the diagnosis, prognosis and treatment, applying principles based on the best information available and on conditions of clinical safety.
- Indicate the most accurate therapy in acute and chronic processes prevailing, as well as for terminally ill patients.
- Plan and propose appropriate preventive measures for each clinical situation.
- Acquire proper clinical experience in hospitals, health care centres and other health institutions, under supervision, as well as basic knowledge of clinical management focused on the patient and the correct use of tests, medicines and other resources available in the health care system.
- Know how to use the sources of clinical and biomedical information available, and value them critically in order to obtain, organise, interpret and communicate scientific and sanitary information.
- Know how to use IT in clinical, therapeutic and preventive activities, and those of research.
- Understand the importance and the limitations of scientific thinking in the study, prevention and management of diseases.
- Organizar y planificar adecuadamente la carga de trabajo y el tiempo en las actividades profesionales.
- Capacidad para trabajar en equipo y para relacionarse con otras personas del mismo o distinto ámbito profesional.
- Criticism and self-criticism skills.
- Capacity for communicating with professional circles from other domains.
- Acknowledge diversity and multiculturality.
- Consideration of ethics as a fundamental value in the professional practise.



- Working capacity to function in an international context.
- Knows the morphofunctional characteristics of newborns, children and adolescents, as well as the characteristics of growth, and of preterm infants.
- Recognises, diagnoses and guides the management of the main paediatric pathologies.
- Understands the characteristics of child nutrition.
- Recognises, diagnoses, and guides the management of vital risk situations.
- Knows how to perform a complete anamnesis, focused on the patient and orientated to various pathologies, interpreting its meaning.
- Knows how to carry out manoeuvres of basic and advanced life support.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

a) The student will know how to recognise, diagnose and guide the management in the children and teenagers population:

1. Febrile syndrome.
2. Most common child infectious processes.
3. Child common exanthemas.
4. Upper and medium airways infections: pharynx-tonsillitis. Otitis. Sinusitis. Laryngitis.
5. Bronchiolitis. Pneumonia.
6. Asthma. Respiratory insufficiency.
7. Meningeal syndrome. Meningitis. Child encephalitis.
8. Convulsive and/or epileptic crisis.
9. Most frequent intoxications.
10. Urinary infections.
11. Hematuria and Proteinuria.
12. Adenopathies. Splenomegaly.
13. Anemias. Leukemias.
14. Backbone deviations. Kyphosis and scoliosis.
15. Health control and prophylactic tests in children.



16. Child social-familiar integration. Mistreatment.

b) The student will know the most relevant aspects of:

1. Most frequent immunodeficiencies.
2. Child hypotonia.
3. Chronic diseases. Disabilities.
4. Hypothyroidism.
5. Most frequent congenital cardiopathies.
6. Nephrotic syndrome.
7. Transplantation.
8. Child rights.
9. Adolescence. Biological, psychological and social aspects.
10. Attention disorders: hyperactivity and inattention. Secondary pathology for the information and communication techniques.
11. Environmental pollution. Newborn aggression and impact in the child and adult health.

c) The student will acquire competence in variable degree about:

1. Exploration of the inguinal canal.
2. Otoscopy.
3. Rhinoscopy.
4. Obtaining and extracting biological samples.
5. Nasogastric catheterization.
6. Bladder catheterization.
7. Lumbar puncture.
8. Trachea intubation.
9. Bladder puncture.



10. Thoracentesis.
11. Neurodevelopment evaluation.
12. Echographic exploration.
13. Healthcare for the child patient critically ill (newborn UCI and pediatrics).

DESCRIPTION OF CONTENTS

1. THEORY

RESPIRATORY SYSTEM

1. Pathology. Infections of the upper and middle airways.
2. Bronchiolitis. Bronchial asthma.
3. Concept of the acute pulmonary inflammations.

CIRCULATORY SYSTEM

4. Cardiopathies. Cardiac insufficiency.

HEMATOLOGY

5. Anemias. Classification. Anemias study by deficiencies in the red cells formation. Anemias by red cells hyperdestruction. Main types of hemolytic anemias. Post-hemorrhage anemias.
6. Child leukemias. Classification. Clinical syndromes. Therapeutic.
7. Hemostasis disorders. Angiopathy purpura. Platelets purpura. Disorders of the coagulation factors: coagulopathies.

ENDOCRINE SYSTEM

8. Hypothalamus-hypophysis pathology. Thyroid pathology.
9. Supra-renal pathology: Sexual development pathology.

URINARY SYSTEM

10. Malformation of the kidney and urinary ducts. Urinary infection.
11. Glomerular-nephritis. Nephrotic syndrome.

NERVOUS SYSTEM

12. Connatal encephalopathies. Infant cerebral palsy. Epilepsy.
13. CNS infections.

INFECTIOUS DISEASES

14. Streptococcal infection. Special study of the scarlet fever. Staphylococcal infection.
15. Tuberculosis.
16. Less frequent infections of vaccine prevention (diphtheria, whooping cough, mumps, poliomyelitis). Other infectious diseases.

PREVENTIVE AND SOCIAL PEDIATRICS



17. Child health promotion. Preventive activities. Vaccine calendar.

2. PRACTICES

SEMINAR PRACTICES

Semiology of the nervous system.
Nephrourological semiology.
Cardio-circulatory semiology.
Endocrine semiology.
Main malignant diseases.
Most frequent infections.
Interpretation of the most frequent analytical determinations.
Accidents and poisonings.

CLINICAL CASES

Chronic respiratory disease.
Arterial hypertension.
Allergy.
Exanthema disease.
Abdominal tumorations.
Adenopathies.
Auto-immune disease.
Cardiac murmur.

CLINICAL PRACTICES

Stay in a hospital for 4 days, in the mornings.

WORKLOAD

ACTIVITY	Hours	% To be attended
Seminars	24,00	100
Theory classes	19,00	100
Clinical practice	13,02	100
Study and independent work	20,00	0
Readings supplementary material	20,00	0
Preparation of evaluation activities	16,25	0
TOTAL	112,27	



TEACHING METHODOLOGY

The ECTS credits have been arranged according the current laws about the distribution between attending (50%) and non-attending (50%) activities.

The attending activity will be divided into a 15% focused on the theoretical lessons, using the expositive methodology/master class, a 33% focused on the practical teaching through seminars, clinical cases, hospitals visits and tutorials and, finally, a 2% focused on the final exam.

In the **theoretical lessons**, the teacher will expose, through master class, the most important concepts and contents in a structured way, to obtain the knowledge and skills that the students must acquire. The students' participation will be encouraged.

Classroom practices: **seminars**. In reduced groups, the professor will set specialized topics in depth, cases studies, bibliography management, current topics... the group work and the oral presentation will be encouraged. It could be understood as "cooperative learning".

In the theory classes and seminars, voluntary participation of the students will be encouraged by means of questions prompting quick answers. The teachers, through the Virtual Classroom, will offer sufficient bibliographic material for learning.

Clinical practices: students' clinical practices in sanitary services in the different university hospitals, primary health centres, mental health centres, public health areas, in order to learn how to perform an anamnesis and basic clinical explorations, with a first contact with patients, supervised by the professor.

In addition, complementary activities, of a voluntary nature, will be offered to students who wish to broaden their vision of the problems of child health and its overall approach.

EVALUATION

a) Theoretical teaching: childhood characteristics and different stages. Study of the growth, maturation and biological, psychological and social development. Most frequent diseases at this stage. Written exam (50% of the global mark).

Exam with 40 questions based on the 17 topics exposed in the lessons, multiple-choice, with 5 possible answers, but only one correct. The right answer will add 1 point and the wrong answer will subtract 0,2 points ,blank answers do not have a value.

b) Practical teaching: clinical cases in the classroom, hospital seminars and stay for 4 days in contact with the clinic. Written test and attendance assessment (50% of the global mark).

1. Written exam (represents the 30% of this section) and will consist on:



- Seminars: 16 multiple-choice questions (2 per taught seminar).
- One or more clinical cases referred to cases exposed in class, with 9 multiple-choice questions.

Every question (25) will have 5 possible answers, but only one correct. The right answer will add 1 point and the wrong answer will subtract 0,2 points,

blank answers do not have a value.

2. Assessment of the practice attendance (represents the 20% of this section):

Daily attendance control in the corresponding Hospital.

Classroom questions and complementary activities will have a positive evaluation until 2 points of the final score.

Students can pass the subject with a score of 5 or higher, by summing the results from the theoretical and practical parts.

In order to access to an advance on the call of this subject, it is a requirement that the student has coursed all his/her practices.

Attendance of practices will be compulsory.

REFERENCES

Basic

- Kliegman, R. M. et als. (2016). Nelson, tratado de pediatría. 20ª ed., Elsevier
- Cruz M., Brines, J. et als. (2013). Manual de pediatría: para médicos de atención primaria. 3ª ed, Ergon.
- Cruz, M. (2014). Tratado de pediatría. 11ª ed., Panamericana
- Meneghello, J. R. (2013). Pediatría. 6ª ed., Panamericana
- Rudolph, A. M. (2018). Rudolphs pediatrics. 23ª ed., McGraw-Hill

ADDENDUM COVID-19

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



Siguiendo las recomendaciones del Ministerio, la Consellería y el Rectorado de nuestra Universidad, para el período de la "nueva normalidad", la organización de la docencia para el segundo cuatrimestre del curso 2020-21, seguirá un modelo híbrido, donde tanto la docencia teórica como práctica se ajustará a los horarios aprobados por la CAT pero siguiendo un modelo de Presencialidad / No presencialidad en la medida en que las circunstancias sanitarias y la normativa lo permitan y teniendo en cuenta el aforo de las aulas y laboratorios docentes. Se procurará la máxima presencialidad posible y la modalidad no presencial se podrá realizar mediante videoconferencia cuando el número de estudiantes supere el coeficiente de ocupación requerido por las medidas sanitarias. De manera rotatoria y equilibrada los estudiantes que no puedan entrar en las aulas por las limitaciones de aforo asistirán a las clases de manera no presencial mediante la transmisión de las mismas de manera síncrona/asíncrona via "on line".