Universitat Autònoma de Barcelona

2020/2021

Paediatrics

Code: 102935
ECTS Credits: 11

Degree	Type	Year	Semester
2502442 Medicine	OB	5	0

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

Teachers

Isabel Badell Serra
Maria Soledad Angeles Gallego Melcon
Josefa Rivera Lujan

Prerequisites

The student has had to acquire basic skills in all preclinical subjects.

The student will acquire the commitment to preserve the confidentiality and professional secrecy of the data to which he / she may have access as a consequence of the learning in the assistance services. He will also maintain an attitude of professional ethics in all his actions.

Objectives and Contextualisation

This subject is programmed in the 5th year of the Degree in Medicine when the student has already acquired the basic knowledge about the structure and function of the human body, on the physiopathological bases of health and disease and has also known certain aspects of the pathology of the human body. adult in its medical and surgical aspects, particularly those related to obstetrics.

The general objective is to know the development and the nutritional, affective and social needs of the child from birth to adulthood, emphasizing the different stages of evolution: newborn, lactating, school and adolescent.

The specific objectives are to know the physical examination of the child as well as the incidence of the various pathologies, forms of clinical presentation and treatment in each of the stages discussed above.

Competences

- Accept one's role in actions to prevent or protect against diseases, injuries or accidents and to maintain and promote health, on both personal and community-wide levels.
- Convey knowledge and techniques to professionals working in other fields.
- Demonstrate understanding of the manifestations of the illness in the structure and function of the human body.
- Demonstrate understanding of the structure and function of the human organism in illness, at different stages in life and in both sexes.
- Empathise and establish efficient interpersonal communication with patients, family-members, accompanying persons, doctors and other healthcare professionals.
- Establish a diagnostic approach and a well thought-out strategy for action, taking account of the results of the anamnesis and the physical examination, and the results of the appropriate complementary tests carried out subsequently.
- Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- Indicate the basic diagnosis techniques and procedures and analyse and interpret the results so as to better pinpoint the nature of the problems.
- Indicate the most suitable treatment for the most prevalent acute and chronic processes, and for the terminally ill.
- Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- Obtain and prepare a patient record that contains all important information and is structured and patient-centred, taking into account all age and gender groups and cultural, social and ethnic factors.
- Organise and plan time and workload in professional activity.
- Perform a general and a system-by-system physical examination appropriate to the patient's age and sex, in complete and systematic way, and a mental evaluation.
- Recognise the effects of growth, development and ageing on individuals and their social environment.
- Use information and communication technologies in professional practice.

Learning Outcomes

1. Convey knowledge and techniques to professionals working in other fields.
2. Convey medical information appropriately.
3. Differential diagnosis of major diseases affecting children in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
4. Distinguish specific clinical manifestations of the most common diseases in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
5. Explain the diagnostic and therapeutic procedures of the most common diseases in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
6. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
7. Identify normal patterns of growth and development from birth to adulthood.
8. Identify the main actors and insults causing disease in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
9. Identify the preventive aspects of the most common diseases in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
10. Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
11. Make medical history and diagnostic orientation of the major diseases affecting children in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
12. Organise and plan time and workload in professional activity.
13. Organize nutrition and child dietary.
14. Perform physical examination and diagnostic orientation of the major diseases affecting children in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
15. Perform physical examination of the healthy child in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.

16. Perform well-child medical history in each of the different stages of development: newborn (premature and term), breastfeeding, childhood, puberty and adolescence.
17. Use information and communication technologies in professional practice.

Content

A. Growth and development, Nutrition, Social Pediatrics

1. Growth regulating factors. Growth in several stages. Puberal development
2. Psychomotor development.
3. Nutritional needs during childhood and adolescence
4. Social Pediatrics: Accidents and poisonings. Sudden death.
5. Social pediatrics Abused child.

B. Neonatology, Metabolopathies, Genetics

6. Newborn assessment. Prematurity Intrauterine growth retardation. Post-term. Cardiorespiratory adaptation in extrauterine life
7. Neonatal infection.
8. Digestive obstruction of the newborn. Necrotizing enterocolitis. Hirschprung's disease.
9. Obstetric trauma.
10. Neonatal respiratory distress.
11. Neonatal jaundice.
12. Metabolic disorders of the NN. Son of a mother addicted to drugs.
13. Congenital metabolopathies
14. Congenital malformations. Chromosomal alterations. Genetic advice

C. Immunity, Infections, Rheumatology

15. Congenital and acquired immunodeficiencies
16. Rash diseases. Herpesvirus infections.
17. Enterovirus infections
18. Infections due to mycobacteria.
19. Meningitis in childhood
20. Respiratory infections.
21. Rheumatic diseases.
22. Rheumatic fever. Vasculitis

D. Cardiology, Digestive, Respiratory, Nephro - Urology, Hematology and Oncology, Neurology, Endocrinology

23. Generalities of congenital heart disease. Functional murmur. Congenital heart disease without cyanosis.
24. Congenital heart disease with cyanosis.
25. Cardiomyopathies. Endocarditis. Arrhythmias Heart failure
26. Nutritional disorders. Malnutrition and poor nutrition.
27. Obesity
28. Celiac disease. Inflammatory chronic intestinal disease in childhood.
29. Vomiting. Gastroesophageal reflux . Pyloric stenosis.
30. Acute gastroenteritis. Dehydration
31. Acute and chronic liver diseases. Biliary pathology.
32.Chronic pneumopathies. Strange body.
33. Cystic fibrosis.
34. Respiratory allergy. Asthma.
35. Urinary infection. Congenital pathology kidney and urinary tract.
36. Glomerulopathies. Nephrotic syndrome.
37. Renal tubular alterations.
38. Acute and chronic renal failure. Hemolytic - uremic syndrome. Arterial hypertension.
39. Anemic syndrome. Causes of anemia. Iron-deficiency anemia in childhood.
40. Alterations of the blood count in the child.

41. Coagulopathies and alterations of platelets.
42. Leukemias in childhood. Transplantation of hematopoietic progenitors.
43. Lymphomas. Diseases of the monocytic - macrophagic system.
44. Solid childhood tumors.
45. Convulsive syndrome.
46. Malformations of the Central Nervous System. Intracranial hypertension.
47. Eat. Cranio-encephalic trauma.
48. Mental retardation. Neurodegenerative diseases.
49. Neuromuscular and peripheral nervous system diseases.
50. Pituitary pathology.
51. Precocious puberty. Pubertal delay.
52. Hypoglycemia. Diabetes.
53. Sex differentiation disorders
54. Thyroid pathology in childhood.
55. Congenital adrenal hyperplasia. Suprarrenal insufficiency. Hypercortisolisms.

Specialized seminars. Sessions scheduled: 10 sessions, 1 hour each.

1. Weight-statural delay.
2. Feeding in childhood
3. Neonatal cyanosis
4. Streptococcal and staphylococcal infections. Toxic shock syndrome.
5. Abdominal pain. Acute abdomen. Digestive hemorrhage
6. Acute febrile syndrome.
7. Prolonged febrile syndrome.
8. Meningeal syndrome.
9. Respiratory insufficiency.
10. Immunizations in pediatrics

Clinical practices

Clinical care practices. They will be done in groups of 2 students. Total: 58.75 hours (3 hours x 19 days, 1.75 hours x 1 day). The students will go to the facilities of the hospitalization rooms, external consultations or examination cabinets.

Week 1:
Practical introduction seminar
0.75 hours
Classroom Service

Week 1 (1 hour x 1 Day + 3 hours x 4 Days): Neonatology and General Pediatrics
13 hours
Pediatric Hospitalization Room

Week 2 (3 hours x 5 Days): General Pediatrics
15 hours
Hospitalization room pediatric. Unit of Pediatric External Consultations

Week 3 (3 hours x 5 Days): General Pediatrics and Emergencies

15 hours
Hospitalization room pediatric.

Pediatric Emergency Unit

Week 4 (3 hours x 5 days): Pediatric specialties
15 hours
Hospitalization room pediatric. Unit of Pediatric External Consultations

AUTONOMOUS ACTIVITIES

Comprehensive reading of texts and articles, study and realization of schemes, summary and conceptual assimilation of the contents. 100 hours

Preparation of Seminars and clinical cases. 37.5 hours

Methodology

This Guide describes the framework, contents, methodology and general rules of the subject, in accordance with the current curriculum. The final organization of the subject in terms of the number and size of the groups, distribution in the calendar and dates of examinations, specific evaluation criteria and review of exams, will be specified in each of the Hospital Teaching Units (UDH), which they will make explicit through their web pages and the first day of class of each subject through the professors responsible for the subject at the UDH.

For this course, the professors appointed by the Departments as responsible for the subject at the Faculty and the UDH level are:

Department responsible: Departament de Pediatria, de Obstetricia i Ginecologia i de Medicina Preventiva

Faculty responsible: carlos Rodrigo Gonzalo de Liria carlos.rodrigo@uab.cat

Responsible UDH

Responsible UDHSP: Isabel Badell (ibadell@santpau.cat)
Responsible UDHVH: Soledad Gallego melcon (sgallego@vhebron.net)
Responsible UDGTiP: Carlos Rodrigo Gonzalo de Liria
(carlos.rodrigo@uab.cat)
Responsible UDHPT: Josefa Rivera (Jrivera@tauli.cat)

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
CLINICAL ASSISTANCE PRACTICES	58.75	2.35	
SPECIALIZED SEMINARS	10	0.4	
THEORY	55	2.2	
Type: Autonomous			
WORK PREPARATION / PERSONAL STUDY	137.5	5.5	

Assessment

The relative weight of the practical and theoretical evaluation is 30% and 70% respectively

1. - Evaluation of the practices. It includes:

a) Elaboration of the clinical history

b) physical examination

c) complementary explorations

d) interpretation of clinical cases

The maximum number of absences allowed not justified in order to evaluate the competences acquired during practical teaching is 2. Any other absence must be justified.

2.- Evaluation of the theory and seminars. It includes:

a) Theoretical knowledge: short questions and / or test type

b) In the partial exams to be released, 60% or more of the grade will be required.

3.- Final qualification

Weighted sum of the practical evaluation (30%) and the theoretical knowledge (70%)

Students who have not passed the course through the continuous assessment may be submitted to a recovery exam.

4.- Examination review system

The review of the exams will be done individually with the student in the established terms.

5.- The students who do not perform the theoretical and practical assessment tests will be considered as not evaluable, exhausting the rights to the registration of the subject

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Assessments written through objective tests: Multiple choice items / Tests of restricted questions	Evaluations written by means of objective tests: Multiple choice items / Essay tests: of restricted questions	9.65	0.39	4, 5, 6, 9, 7, 8, 13, 3
Practical type evaluations: Objective and structured clinical evaluation	30%	4.1	0.16	2, 1, 6, 10, 12, 15, 14, 16, 11, 3, 17

Bibliography

- Nelson Textbook of Pediatrics. 21 ed.. Elsevier Science 2019

- Nelson Tratado de Pediatría, 21 ed. Elsevier 2020

- Nelson Essentials of Pediatrics 8th ed. 2018

- Nelson Pediatría Esencial 2018

- Cruz. Tratado de Pediatría. 11ª edición. Editorial médica panamericana 2018

Internet

- http://www.aeped.es/protocolos/index.htm
- http://www.ncbi.nlm.nih.gov/omim/ (base de dades de malalties genètiques)