COURSE DATA

Data Subject	
Code	36321
Name	Paediatric Emergencies
Cycle	Grade
ECTS Credits	4.5
Academic year	2024 - 2025

Study (s)

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

Subject-matter

Degree	Subject-matter	Character
1204 - Degree in Medicine	18 - Optional subjects	Optional

Coordination

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

SUMMARY

The subject has as the goal that the student knows the characteristics of the pediatric affections that must de diagnosed and treated urgently, for they represent a vital risk for the patient. To do that, the situations that frequently can endanger the child’s life are reviewed.

It complements the subjects taught in the terms 9 and 10, called Pediatrics I and Pediatrics II.

The practical part includes stays in pediatric emergencies units of the university hospitals involved in the teaching.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

It is advisable for students to avoid studying this subject before the fifth course, when Pediatrics I begins.

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

1204 - Degree in Medicine

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Understand and recognise the effects, mechanisms and manifestations of diseases over the structure and function of the human body.
- Understand and recognise source agents and risk factors which determine health status and the development of diseases.
- Proper organisation and planning of the workload and timing in professional activities.
- Team-working skills and engaging with other people in the same line of work or different.
- 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.

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

The expected learning results are:

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

1. Fever.
2. Shock.
3. Vital emergencies.
4. Sudden death.
5. Cardiac insufficiency.
6. Arrhythmia.

7. Acute blood pressure.
8. Hemoptysis
9. Toxic gases inhalation.
10. Asthmatic crisis.
11. Strange body aspiration.
12. Pneumothorax and pleural effusion.
13. Acute laryngitis.
14. Drowning.
15. Intracranial hypertension.
16. Acute motor disorder.
17. Brain vascular accident.
18. Convulsion and epileptic condition.
19. Consciousness disorder.
20. Meningitis and encephalitis.
21. Hydro-electrolytic disorders and acid-base.
22. Acute renal failure.
23. Hematuria.
24. Intestinal obstruction.
25. Digestive hemorrhage.
26. Caustic and strange bodies intake.
27. Acute abdomen.
28. Acute hepatic failure.
29. Acute pancreatitis.
30. Vomits.
31. Acute gastroenteritis.
32. Acute anemia.
33. Hemostasis disorders.

34. Fever and Neutropenia.
35. Hypoglucemia.
36. Acute metabolic crisis of the newborn.
37. Diabetic ketoacidosis.
38. Androgenital crisis.
39. Thyrotoxicosis.
40. Hives and anaphylaxis.
41. Bites and stings.
42. Ocular traumatisms.
43. Vertigo and acute auditory loss.
44. Tonsillitis, otitis and sinusitis.
45. Accidents and politraumatisms.
46. Intoxications.
47. Apnea and newborn bradycardia.
48. Newborn respiratory distress.

The student will know the most relevant aspects of:

Organization of the pediatric emergencies.

Epidemiology of the pediatric emergencies.

Pediatric cardiopulmonary reanimation.

Newborn cardiopulmonary reanimation.

Emergency attention of behaviour disorders.

The student will acquire competence in a variable degree about:

Anamnesis in pediatric emergencies.

Evaluation of the vital condition in the pediatric patient in the different childhood stages (newborn, breastfed, school-age) and during the adolescence.

Obtaining Vital signs.

Evaluation of the nutritional and hydration condition.

Basic cardiopulmonary reanimation.

Healings. First measures in a lesion. Epistaxis. Insolation preventive measures.

Evaluation of the hematological and biochemical parameters in the pediatric age.

Dosage of the main drugs of pediatric use.

Obtaining and extracting biological samples.

Nasogastric catheterization.

Bladder catheterization.

Lumbar puncture.

Trachea intubation.

Bladder puncture.

Thoracentesis.

Enteral and parenteral nutrition.

DESCRIPTION OF CONTENTS

1. UNITS TAUGHT IN THE THEORETICAL LESSONS

1. Introduction. Epidemiology. Organization of the pediatric emergencies.

2. Emergencies by cardiovascular system disorders.

3. Emergencies by respiratory disorders.

4. Emergencies by the nervous system disorders.

5. Emergencies by hydro-electrolytic affections and acid-base disorders.

6. Emergencies by renal disorders.

7. Emergencies by gastrointestinal diseases.

8. Haematologic and oncologic emergencies.

9. Metabolic emergencies.

10. Emergencies by endocrine diseases.

11. Emergencies by skin diseases.

12. Neonatal and paediatric transport.

13. Emergencies by affections of the throat, nose, ear and auditory.

14. Accidents. Poisoning.

15. Child abuse.

16. Infectious emergencies.

17. Newborn emergencies.

2. CLINICAL PRACTICES

Students' clinical stays in the emergencies services in university hospitals.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	19,00	100
Clinical practice	26,01	100
Attendance at events and external activities	14,00	0
Development of group work	8,50	0
Study and independent work	20,00	0
Preparation of evaluation activities	25,00	0
TOTAL	**112,51**	

TEACHING METHODOLOGY

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. The teaching materials used by the professor will be available, if he considers it appropriate, through the electronic resource Aula Virtual.

Clinical practices: students' clinical stays in healthcare services of the different university hospitals in order to learn how to perform an anamnesis and a basic clinical exploration, with a first contact with patient, being supervised by the professor.

The gender perspective, the respect for diversity, and the sustainable development goals (SDGs) will be incorporated into teaching, whenever possible.

EVALUATION

Theory exam: 50% of the final grade. It will be a written test that will deal with the contents of the theoretical syllabus and will aim to evaluate the acquisition of knowledge. The test will consist of 40 multiple-choice questions with 5 options and a single valid answer with the following grading: correct 1 point, blank 0 points and incorrect -0.2 points. The exam will last 40 minutes.

Practical exam: 50% of the final grade. It will be performed by evaluating management, involvement and participation in emergency departments.

The final grade will be the sum of both theory and practical exams at 50% each. Both parts (theory and practice) are to be passed separately, so that to average the final grade, they must both have been passed with the minimum required (5 points). Both parts,theory and practice, must be passed in order to be added together.

The maximum grade will be 10 and 5 will be a pass.

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 at practical activities is mandatory. The student is considered to meet this requirement if he or she has attended a minimum of 80% of these activities and has adequately justified the impossibility of attending the remaining sessions due to the occurrence of a cause of force majeure. It will be essential to comply with this requirement to pass the subject.

Students are reminded of the importance of carrying out evaluation surveys on all the teaching staff of the degree subjects.

REFERENCES

Basic

- ROBERT M KLIEGMAN, BONITA STANTON, JOSEPH ST GEME, NINA F SCHOR (2016). Nelson. Tratado de Pediatría. 20ª ed. S.A. Elsevier España.
ISBN: 9788491130154.
- FLEISHER & LUDWIG'S. Textbook of Pediatric Emergency Medicine. Richard G Bachur MD, Kathy N, Shaw MD, MSCE.7ª ed. Lippincott Williams &Wilkins 2015. ISBN: 9781451193954.
- MORO M, MALAGA S, MADERO L. (2014). Cruz. Tratado de Pediatría. 11ª Ed. Editorial médica Panamericana. ISBN: 9788498357257.

- RECURSOS e-Salut:
ClinicalKey Student Medicina, Odontologia y Enfermería [https://uv-es.libguides.com/RecursosSalut]
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