Universitat Autònoma de Barcelona

2020/2021

Paediatric Haematology and Oncology

Code: 103646
ECTS Credits: 3

Degree	Type	Year	Semester
2502442 Medicine	OT	5	0
2502442 Medicine	OT	6	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.

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Use of Languages

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

Prerequisites

It is advisable that the student has attained some basic competencies in Anatomy, Physiology and Immunology. It is recommended to have passed or to be enrolled in the Pediatrics subject. The student will acquire the commitment to preserve the confidentiality and professional secret of the data that he can have access due to the learning of health care services. Also it is very important an ethical attitude professional in all its actions.

Objectives and Contextualisation

It is an optional subject that can be taken from the fifth year and that has as general objective that the student becomes familiar with the professional practice in the real context of Hematology and Oncology.

Competences

Medicine

- Communicate clearly, orally and in writing, with other professionals and the media.
- Demonstrate an understanding of the fundamentals of action, indications, efficacy and benefit-risk ratio of therapeutic interventions based on the available scientific evidence.
- Demonstrate understanding of basic statistical methodologies used in biomedical and clinical studies and use the analytic tools of modern computational technology.
- Demonstrate understanding of the causal agents and the risk factors that determine states of health and the progression of illnesses.
- Demonstrate understanding of the mechanisms of alterations to the structure and function of the systems of the organism in illness.
- Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- 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.
- Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- Recognize one's role in multi-professional teams, assuming leadership where appropriate, both for healthcare provision and for promoting health.
- Use information and communication technologies in professional practice.

Learning Outcomes

1. Assess the relationship between efficacy and risk in the main therapeutic interventions.
2. Communicate clearly, orally and in writing, with other professionals and the media.
3. Compare one's own opinions with those of colleagues and other healthcare professionals as a basis for teamwork.
4. Critically assess the results of complementary examinations, taking their limitations into account.
5. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
6. Describe the physical, chemical, environmental, psychological, social and occupational and carcinogenic factors, and the factors associated with food habits and drug use, that determine the development of the disease.
7. Differentiate between situations that require hospitalisation and those that require intensive care.
8. Establish a method for complementary examinations, in accordance with the standard process and the diagnostic expectations.
9. Establish a therapeutic action plan considering the needs of patients and their family and social environment, and involving all members of the healthcare team.
10. Explain the mechanisms by which illness affects the different systems of the human body at different stages in life and in both sexes.
11. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
12. Indicate and interpret the basic techniques and procedures for laboratory diagnosis, diagnostic imaging and others.
13. Indicate suitable therapeutic interventions for the main maternal and infant health problems.
14. Know, critically assess and use clinical and biomedical information sources and technologies.
15. Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
16. Order signs and symptoms to perform a differential syndromic diagnosis.
17. Use information and communication technologies in professional practice.

Content

Contents

Theory

1. Hematological normal values in Pediatrics

2. Diagnosis and treatment of anemia

3. Bone marrow disorder: etiology, diagnosis and treatment

4. Hemorrhagic disorders: diagnosis and treatment

5. Transplantation of hematopoietic progenitors

6. Basis of diagnosis and treatment in Pediatric Oncology

7. Leukemia and Lymphoma

8. Tumors of the Central Nervous System

9. Neuroblastoma and Wilms tumor

10. Bone and soft parts tumors

Seminars of clinical cases

1. Clinical cases of anemia: diagnostic analysis and proposed treatment
2. Clinical cases of thrombopenia: diagnostic analysis and proposed treatment
3. Clinical cases of thrombopenia: diagnostic analysis and proposed treatment
4. Clinical cases of leukemia and lymphoma: discussion and proposals for study and treatment
5. Clinical cases of various solid tumors (1): discussion and proposals for study and treatment
6. Clinical cases of various solid tumors (2): discussion and proposals for study and treatment

Methodology

This Guide describes the framework, contents, methodology and general norms of the subject, in accordance with the plan of current studies. The final organization of the subject with regard to the number and size of groups, distribution in the schedule and dates of examinations, specific criteria for evaluation and review of examinations, will be specified in each one of the Hospital Teaching Units (HTU), who will explain it through their web pages and on the first day class of each subject, through the responsible teacher at each HTU.

For the present year, the professors appointed by the Departments as responsible for the subject at the level of Faculty and HTU are:

Medicine Department: Department of Pediatrics, Obstetrics, Gynecology and Epidemiology and Preventive Medicine

Head of Faculty: Dra. Isabel Badell, mail ibadell@santpau.cat

1.- HTU Sant Pau : Dra. Isabel Badell, mail ibadell@santpau.cat

2.-HTU Valle Hebron: Dra. Soledad Gallego, mail sgallego@vhebron.net

3.-HTU Parc Taulí: Dra Josefa Rivera, mail privera@tauli.cat

In the current exceptional circumstances, at the discretion of the teachers and also depending on the resources available and the public health situation, some of the theoretical classes, practicals and seminars organized by the Teaching Units may be taught either in person or virtually.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Contents given as oral lectures (Theory)	10	0.4	2, 3, 14, 5, 6, 7, 9, 8, 11, 10, 12, 13, 15, 16, 17, 4, 1
Specialized seminars (SEM)	5	0.2	2, 3, 14, 5, 6, 7, 9, 8, 11, 10, 12, 13, 15, 16, 17, 4, 1
Type: Supervised			
External Practices (PEXT)	15	0.6	2, 3, 14, 5, 6, 7, 9, 8, 11, 10, 12, 13, 15, 16, 17, 4, 1
Type: Autonomous			
Reading articles/reports of interest	41.25	1.65	2, 3, 14, 5, 6, 7, 9, 8, 11, 10, 12, 13, 15, 16, 17, 4, 1

Assessment

- Theory module: 50% of the grade. Multiple answer objective test
- Attendance and participation in internships and seminars: 30% of the grade. It is necessary to attend at least 80%.
of the practices and seminars to obtain the score in this section.
- Presentation of observed clinical cases: 20% of the mark
Students who do not pass have the right to a final recovery exam.
Students who do not pass the tests of both theoretical and practical assessment lose will be considered as not evaluated exhausting the rights to the registration of the subject..

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Oral defense of written works	20%	1	0.04	3, 9, 12, 13, 16, 4
Practical Evaluations: Objective and structured clinical examination	30%	1	0.04	2, 3, 14, 5, 6, 7, 9, 8, 11, 10, 12, 13, 15, 16, 17, 4, 1
Written evaluation: objective tests, multiple choice questions, easy test of restricted questions	50%	1.75	0.07	2, 3, 14, 5, 6, 7, 9, 8, 11, 10, 12, 13, 15, 16, 17, 4, 1

Bibliography

Bibliography

Principles and Practice of Pediatric Oncology (6ª ed). P. Pizzo & D. Poplack. Editorial.Lippincott, 2011
Nathan and Oski's. Hematology of infancy and childhood (7ª ed). S Orkin y cols. Editorial Saunders 2009.
Oncology of infancy and childhood (1ª ed). S Orkin y cols. Editorial Saunders 2009
Pediatric Hematology and Oncology. E.Estlin y cols. Editorial Wiley-Blackwell 2010.
Manual práctico de Hematología y Oncología Pediatricas. J. Sanchez de Toledo, JJ Ortega. Editorial Ergon, 2010
Manual formativo en Hematología pediátrica. J. Sánchez de Toledo Codina y C. Diaz de Heredia. Editorial Permanyer 2011.
Manual formativo en Oncología pediátrica. J. Sánchez de Toledo Codina y S. Gallego Melcón. Editorial Permanyer 2012.