

CdS Medicine and Surgery

V year (2 semester)
A.Y. 2026-27

	COD:	Scientific Field : PEDIATRIC SCIENCES	TUTOR - Docente	ECTS -CFU
		Modules		
	MEDS14/B	Pediatric Surgery	Castagnetti Marco	1
	MEDS20/A	General and Specialized Pediatrics	Cianfarani Stefano	1
COORDINATOR-Coordinatore:	MEDS20/A	General and Specialized Pediatrics	Villani Alberto	1
CIANFARANI STEFANO	MEDS20/A	General and Specialized Pediatrics	Palma Paolo	1
	MEDS20/A	General and Specialized Pediatrics	Cotugno Nicola	1
	MEDS20/B	Neuropsychiatry	Mazzone Luigi	1
			TOT	6

SPECIFIC AIMS :

EN: The primary goal of the pediatric curriculum is to ensure that all students have a foundation of core pediatric knowledge about common clinical conditions of childhood as well as less common but important disorders. The aim is to equip students with the necessary clinical skills that will allow them to provide proficient, developmentally appropriate and compassionate care for pediatric patients.

The course will cover aspects of growth, morbidity-mortality in Pediatrics, nutrition, fluid balance, acute diseases, immune disorders, infectious diseases, allergic disorders, rheumatic diseases, gastroenterology, respiratory system, nephrology, neurology and endocrinology.

The course comprises 50 hours of lectures flanking modules, problem-based learning, tutorials and a variety of small group clinical teaching. Each student will spend 1 to 4 weeks in in both in- and out-patients clinics at 'Bambino Gesù' Children's Hospital in order to maximize clinical learning.

OBIETTIVI FORMATIVI:

IT: Obiettivo Primario: Fornire una base di conoscenze pediatriche fondamentali sulle condizioni cliniche comuni dell'infanzia e sui disturbi meno comuni ma rilevanti.

Competenze Cliniche: Equipaggiare gli studenti con le abilità necessarie per fornire cure competenti, adeguate allo sviluppo e compassionevoli.

Metodologia Didattica: Il corso comprende 50 ore di lezioni frontali, moduli, apprendimento basato su problemi (PBL), tutorial e insegnamento clinico in piccoli gruppi.

PROGRAM - PROGRAMMA

Modulo : General and Specialized Pediatrics

EN: The newborn infant and common diseases in the newborn period - Physical examination of the child - Growth and development (principles of anthropometry) - Pathophysiology of body fluids - Principles of pediatric immunology - Approach to the child with recurrent infections - Congenital immunodeficiency - Acquired immunodeficiency - Allergic disorders - Rheumatic diseases of childhood - Management of the child with sepsis - Shock - Infections of central nervous system - Measles and rubella - Mumps - Varicella-zoster - Parvovirus and herpes virus infections - Epstein-Barr virus - Cytomegalovirus - Gastroenteritis (viral and bacterial) - Pneumonia - Tuberculosis - Vaccines - Gastroesophageal reflux - Acute diseases of the digestive tract - Chronic diseases of the digestive tract - Disorders of liver - Disorders of exocrine pancreas - Diseases of upper respiratory tract - Diseases of lower respiratory tract - Congenital heart diseases - Acquired heart diseases - Anemias - Bleeding disorders - Leukemia - Lymphoma - Solid tumors - Glomerulonephritis - Nephrotic syndrome - Urinary tract infections - Hypopituitarism - Diabetes insipidus - Diabetes mellitus - Disorders of thyroid gland - Disorders of adrenal gland - Disorders of puberty - Disorders of calcium homeostasis - Seizures - Neurocutaneous syndrome

IT: Il neonato e le malattie comuni nel periodo neonatale - Esame fisico del bambino - Crescita e sviluppo (principi di antropometria) - Fisiopatologia dei fluidi corporei - Principi di immunologia pediatrica - Approccio al bambino con infezioni ricorrenti - Immunodeficienza congenita - Immunodeficienza acquisita - Disturbi allergici - Malattie reumatiche dell'infanzia - Gestione del bambino con sepsi - Shock - Infezioni del sistema nervoso centrale - Morbillo e rosolia - Parotite - Varicella-zoster - Infezioni da parvovirus e herpes virus - Virus di Epstein-Barr - Citomegalovirus - Gastroenterite (virale e batterica) - Polmonite - Tubercolosi - Vaccini - Reflusso gastroesofageo - Malattie acute del tratto digerente - Malattie croniche del tratto digerente - Patologie del fegato - Patologie del pancreas esocrino - Malattie delle vie respiratorie superiori - Malattie delle vie respiratorie inferiori - Cardiopatie congenite - Cardiopatie acquisite - Anemie - Disturbi della coagulazione - Leucemia - Linfoma - Tumori solidi - Glomerulonefrite - Sindrome nefrosica - Infezioni del tratto urinario - Ipopituitarismo - Diabete insipido - Diabete mellito - Patologie della tiroide - Patologie delle ghiandole surrenali - Disturbi della pubertà - Disturbi dell'omeostasi del calcio - Convulsioni - Sindrome neurocutanea

PROGRAM- PROGRAMMA
Modulo : Neuropsichiatria

EN: · Neurodevelopmental disorders (e.g. ADHD, autism spectrum) · Anxiety disorders · Mood disorders (depression, bipolar) · Sleep disorders

IT: Disturbi del neurosviluppo (ad es. ADHD, disturbi dello spettro autistico) · Disturbi d'ansia · Disturbi dell'umore (depressione, disturbo bipolare) · Disturbi del sonno

PROGRAM- PROGRAMMA	EN: Intestinal malformations and other pediatric conditions: Congenital Diaphragmatic Hernia (CDH); Esophageal Atresia &/Tracheo-esophageal fistula (EA -TEF); Congenital Hypertrophic Pyloric Stenosis (CHPS); Intussuception; Meckel's Diverticulum; Hirschsprung Disease (HSD); Anorectal Malformations (ARM); Intestinal Malrotation; Undescended testis; Inguinal hernia and hydrocele; Testicular torsion; Phimosis; Hypospadias; Pyelo-ureteral junction obstruction; Uretero-vesical junction obstruction; Posterior urethral valves; Duplex system anomalies
Modulo: Pediatric Surgery	IT: Malformazioni intestinali e altre patologie pediatriche: Ernia diaframmatica congenita (CDH); Atresia esofagea e/o fistola tracheo-esofagea (EA-TEF); Stenosi pilorica ipertrofica congenita (CHPS); Intussuscezione; Diverticolo di Meckel; Malattia di Hirschsprung (HSD); Malformazioni anorettali (ARM); Malrotazione intestinale; Testicolo ritenuto; Ernia inguinale e idrocele; Torsione testicolare; Fimosi; Ipospadi; Ostruzione della giunzione pielo-ureterale; Ostruzione della giunzione uretero-vescicale; Valvole uretrali posteriori; Anomalie del sistema duplex

TEXTBOOKS	EN: Nelson
TESTI DI RIFERIMENTO	IT: Nelson

TEACHING METHODS	EN: The teaching methods include a mix of face-to-face and online lectures on a VLE dedicated platform, hands-on practice using mannequins, and clinical experience in the hospital wards
METODI DIDATTICI	IT: lezioni frontali e online su piattaforma dedicata , esercitazioni pratiche su manichino e frequenza in reparto

EXAM METHODS

EN:Oral Exame

MODALITA' DI VALUTAZIONE

IT:Esame Orale

EXAM COMMISSION

EN: The Coordinator, full Professors of the disciplines, Professors of similar disciplines, Specialists of the subject, compose the exam Commission of the Integrated Course.

IT: La commissione d'esame del corso integrato era composta dal coordinatore, da professori ordinari delle discipline, da professori di discipline affini e da specialisti della materia

Cianfarani Stefano
Villani Alberto
Palma Paolo
Cotugno Nicola
Mazzone Luigi
Castagnetti Marco

CONTACTS-CONTATTI

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PREREQUISITES-PREREQUISITI

EN: Previous knowledge and competence in the following subjects: Biology and Genetics, Pharmacology, Systemic Pathology 2, Immunology and Immunopathology, Microbiology, Systematic Pathology 3.

IT: Conoscenze e competenze pregresse nelle seguenti materie: Biologia e Genetica, Farmacologia, Patologia Sistemica 2, Immunologia e Immunopatologia, Microbiologia, Patologia Sistemica 3

The specific learning outcomes of the program are coherent with the general provisions of the Bologna Process and the specific provisions of EC Directive 2005/36/EC. They lie within the European Qualifications Framework (Dublin Descriptors) as follows:

1. Knowledge and Understanding

- Assess the physiologic principles which govern the function of the lymphoematopoietic and immune systems and the alterations induced by functional and structural abnormalities.
- Highlight the main aspects of hematologic, rheumatologic, allergic and infectious disorders focusing on the etiopathogenesis, diagnosis and therapy.
- Recognize the risk factors, populations at risk, relieving or exacerbating factors for any specific clinical case.
- Demonstrate knowledge about established and evolving medicine that is critical to the practice of the clinical and surgical interventions.
- Determine the major indications or contraindications for both medical and surgical therapeutic strategies.
- Identify the incidence and epidemiology of infectious diseases in order to understand their impact worldwide as well as in most affected countries.
- Recognize the importance of preventive medicine and emphasize the role of early intervention.
- Analyze a clinical case and provide an exhaustive explanation of the possible diagnostic hypothesis and appropriate therapeutic approaches.

2. **Applying Knowledge and Understanding**

- Apply the theoretical knowledge to the clinical setting, being able to recognize the general diagnostic aspects of the diseases.
- Evaluate the patient, emphasizing the findings obtained from the history, physical examination, and instrumental tests. If the mechanisms underlying these findings can be identified, the correct etiologic, anatomic, and physiologic diagnoses can usually be deduced.
- Predict a differential diagnosis based on given clinical data and provide suitable explanations of the underlying reasonings.
- Learn to interpret appropriate epidemiologic, laboratory and diagnostic studies.
- Learn the practical aspects of the investigation tests and how to perform them.

3. **Making Judgements**

- Recognize the importance of an in-depth knowledge of the topics consistent with a proper medical education.
- Identify the benefits and adverse effects of any diagnostic and therapeutic interventions.

4. **Communication Skills**

- Present the topics orally in an organized and consistent manner.
- Use of proper scientific language coherent with the topic of discussion.

5. **Learning Skills**

- Identify the possible use of the acknowledged skills in the future career.
- Assess the importance of the acquired knowledge in the overall medical education process.