



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Pediatrics

2223-6-H4102D039-H4102D170M

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#### Aims

Gain knowledge about the specificities of the physical examination of the growing child at different age, in order to promptly detect pathological findings in the child.

Provide general advice about the management of uncomplicated clinical conditions frequently affecting the child and identify pathological disorders that prompt specialized referral for further assessment or treatment.

Acquire knowledge and understanding about growth, cognitive development and nutrition from the newborn stage to adolescence.

Acquire skills in collecting medical history with specific regard to perinatal period, cognitive and somatic development, exanthematic childhood diseases, immunization and pubertal attainments.

Promote health in childhood and adolescence by encouraging precocious immunization, systematic screening programs (dried blood spot screening at birth, hearing and sight evaluations at fixed timepoints) and supporting healthy diet.

#### Contents

The course will provide students with basic concepts about the physiology of the growing child, from the newborn stage to adolescence. In addition, the student will be taken through the typical and atypical clinical presentations of the commonest pediatric diseases and the specificities of the diagnostic-therapeutic workflows that should guide clinicians in approaching the sick child. Finally, the course will address the foremost health-promoting programs, including immunization and newborn screenings.

#### Detailed program

Principles of growth, nutrition and neurodevelopment of the healthy child

The physiology of the newborn and the foremost diseases involving either the preterm or the term newborn  
Genetic disorders: principles of dysmorphology and diagnostic techniques in the field of human genetics  
Inborn errors of metabolism: the role of neonatal screening and the red flags for suspecting a metabolic disorder  
Infectious diseases: specificities of pediatric epidemiology, clinical presentation and treatment solutions. The preemptive role of immunization  
Gastroenterology and hepatology: problem-based approach to the most frequent gastrointestinal symptoms and signs reported in childhood; epidemiology, clinical presentation and treatment specificities of hepato-gastric disorders of the child and adolescent  
Respiratory-tract disorders  
Hemato- and hemato-oncological diseases of childhood: practical approach to abnormal full blood count findings; epidemiology, clinical presentation and treatment specificities of liquid and solid tumors in childhood.  
Rheumatologic disorders of the child.  
Endocrinological diseases: problem-based approach to the most frequent auxological complaints; epidemiology, clinical presentation and treatment specificities of endocrine disorders occurring in childhood and adolescence.  
Nephrology: specificity of urinary and renal disorders of the child  
Principles for an integrated approach to the specific needs of pediatric patients with physical and/or cognitive disability  
Emergency in pediatrics: diagnostic and therapeutic workflows

## **Prerequisites**

Fundamentals of the physiology and pathology of fetal development  
Fundamentals of fetus-to-newborn period transition: the physiology and its deviations

## **Teaching form**

Frontal lectures  
Problem based learning  
Simulation activities  
Clerkship and bedside activity

## **Textbook and teaching resource**

Nelson's Essentials of Pediatrics, 21st Edition

## **Semester**

First

## **Assessment method**

Student reviews on selected topics

Written examination:

- multiple choice tests
  - open questions
- Common discussion of tests upon results

## **Office hours**

At the end of each teaching class

By appointment - by e-mail request

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING

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