

Syllabus

Syllabus is divided in 5 themes as follows:

1. **Theme I:** Basic sciences as applied to Pediatrics, Respiratory system, Hematology, oncology, Endocrinology.
2. **Theme II:** Neonatology and community Pediatrics
3. **Theme III** – Cardiovascular, Emergency, Critical Care, Accidents and Poisoning, Eye, ENT, Orthopedics, skin diseases, Behavioral, developmental and psychiatric disorders
4. **Theme IV:** Infections, Immunology and Rheumatology
5. **Theme V:** Neurologic disorders and disabilities, Nephrologic and Urologic disorders, Gastrointestinal and liver disease

The details of syllabus are as follows:

Theme I: Basic sciences as applied to Pediatrics, Respiratory system, Hematology, oncology, Endocrinology.

Basic Sciences

- Principles of inheritance, chromosomal disorders, single gene disorders, multifactorial / polygenic disorders, genetic diagnosis and prenatal diagnosis, pedigree drawing.
- Genetics: Genetic syndromes and their inheritance. Role of genetics in different systemic diseases.
- Embryogenesis of different organ systems especially heart, genitourinary system, gastro-intestinal tract. Applied anatomy and functions of different organ systems.
- Vitamins and their functions.
- Growth and development at different ages, growth charts; puberty and its regulation.
 - principles of growth and development
 - normal growth and development,
 - normal growth and development
 - sexual maturation and its disturbances
 - failure to thrive and short stature
 - Autism
- Immunisation
- Basic immunology.
- Nutrition
 1. maternal nutritional disorders;
 2. nutrition for the low birth weight impact on fetal outcome
 3. breast feeding
 4. infant feeding including
 5. vitamin and mineral deficiencies complementary feeding
 6. protein energy malnutrition
 7. obesity
 8. adolescent nutrition
 9. parenteral and enteral nutrition
 10. nutritional management of systemic illness (GI, hepatic, renal illness)

- **Immunization-**

- Bacterial, viral, killed, live attenuated, sub unit , recombinant vaccines with their schedule doses and route of administration, other new vaccines.

Respiratory

- congenital and acquired disorders of nose
- infections of upper respiratory tract tonsils and adenoids
- obstructive sleep apnea
- congenital anomalies of lower respiratory tract
- acute upper airway obstruction
- foreign body in larynx trachea and bronchus
- trauma to larynx
- subglottic stenosis (acute, chronic)
- neoplasm of larynx and trachea
- bronchial asthma
- bronchiolitis
- acute pneumonia, bronchiolitis
- aspiration pneumonia, GER
- recurrent, interstitial pneumonia
- suppurative lung disease
- atelectasis
- lung cysts, mediastinal mass
- pleural effusion

Hematology and Oncology

- Deficiency anemias
- hemolytic anemias
- Aplastic anemia
- pancytopenia
- Thrombocytopenia
- disorders of hemostasis

- Blood component therapy
- transfusion related infections
- Bone marrow transplant/stem cell transplant
- acute and chronic leukemia
- Myelodysplastic syndrome
- lymphoma
- Neuroblastoma
- hypercoagulable states

Endocrinology

- Hypopituitarism/hyperpituitarism
- diabetes insipidus
- Pubertal disorders
- hypo – and hyper-thyroidism
- adrenal insufficiency
- cushing's syndrome
- Adrenogenital syndromes
- diabetes mellitus
- Hypoglycemia
- short stature
- Gonadal dysfunction and intersexuality
- obesity

Theme II: Neonatology and community Pediatrics

Neonatology

- perinatal care
- low birth weight
- care in the labor room and resuscitation
- newborn feeding
- prematurity
- respiratory distress
- common transient phenomena

- apnea
- infections
- anemia and bleeding disorders
- jaundice
- gastrointestinal disorders
- neurologic disorders
- malformations
- renal disorders
- understanding of perinatal medicine
- thermoregulation and its disorders

Social/Community Pediatrics

- national health programs related to child health
- IMNCI
- Vaccines: constituents, efficacy, storage, contraindications and adverse reactions and adverse events following immunization (AEFI)
- Rationale and methodology of pulse polio immunization
- child labor, abuse, neglect,
- Protection of children against sexual abuse
- disability and rehabilitation
- rights of the child
- National policy of child health and population
- juvenile delinquency
- Adoption
- Principles of prevention, control of infections (food, water, soil, vector borne)

Theme III – Cardiovascular, Emergency, Critical Care, Accidents and Poisoning, Eye, ENT, Orthopedics, skin diseases, Behavioral, developmental and psychiatric disorders

Cardiovascular

- congenital heart diseases (cyanotic and acyanotic)
- rheumatic fever and rheumatic heart disease

- infective endocarditis
 - arrhythmia
 - disease of myocardium
 - diseases of pericardium (cardiomyopathy, myocarditis)
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- systemic hypertension
 - hyperlipidemia in children

Emergency, Critical Care, Accidents and Poisoning

- Emergency care of shock
- cardio-respiratory arrest
- Respiratory failure
- acute renal failure
- Status epilepticus
- acute severe asthma
- Fluid and electrolyte disturbances
- acid-base disturbances
- Poisoning
- accidents
- Scorpion and snake bites

ENT

- Acute and chronic otitis media
- hearing loss
- Post-diphtheritic palatal palsy
- acute/chronic tonsillitis/adenoids
- Allergic rhinitis/sinusitis
- foreign body

Skin diseases

- Exanthematous illnesses
- vascular lesions
- Pigment disorders

- vesicobullous disorders
- Infections
- Steven – johnson syndrome
- Atopic, seborrheic dermatitis
- drug rash
- Alopecia
- ichthyosis

Eye problems

- Refraction and accommodation
- partial/total loss of vision
- Cataract
- night blindness
- Strabismus
- conjunctival and corneal disorders
- Disorders of retina, including tumors

Orthopedics

- Major congenital orthopedic deformities
- bone and joint infections
- Common bone tumors

Behavioral, developmental and psychiatric disorders

- Rumination, pica
- enuresis, encopresis
- Sleep disorders
- habit disorders
- Breath holding spells
- anxiety disorders
- Mood disorders
- temper tantrums
- Attention deficit hyperactivity disorders
- autism

Theme IV: Infections, Immunology and Rheumatology

Infections

- Bacterial (including tuberculosis)
- viral (including HIV)
- Fungal
- parasitic
- Rickettsial
- mycoplasma
- Protozoal and parasitic
- nosocomial infections
- Control of epidemics and infection prevention
- safe disposal of infective material

Immunology and Rheumatology

- Arthritis (acute and chronic)
- vasculitides
- Immunodeficiency syndromes
- systemic lupus erythematosus
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Theme V: Neurologic disorders and disabilities, Nephrologic and Urologic disorders, Gastrointestinal and liver disease

Neurologic disorders and disabilities

- Seizure and non-seizure paroxysmal events
- epilepsy, epileptic syndromes
- Meningitis, encephalitis
- brain abscess
- Febrile encephalopathies
- Guillain-Barre syndrome

- Neurocysticercosis and other neuroinfestations
- HIV encephalopathy
- SSPE
- Cerebral palsy
- Neurometabolic disorders
- Neurodegenerative disorders
- Neuromuscular disorders
- Mental retardation
- Learning disabilities
- Muscular dystrophies
- Acute flaccid paralysis and afp surveillance
- Malformations
- Movement disorders
- Tumors

Nephrologic and Urologic disorders

- Acute and chronic glomerulonephritis
- xanthema syndrome
- Hemolytic uremic syndrome
- urinary tract infection
- VUR and renal scarring
- involvement in systemic diseases
- Renal tubular disorders
- neurogenic bladder, voiding dysfunction
- Congenital and hereditary renal disorders
- renal and bladder stones
- Posterior urethral valves
- hydronephrosis
- Undescended testis, hernia, hydrocoele
- Wilms tumor

Gastrointestinal and liver disease

- disease of oral cavity

- disorders of deglutition and esophagus
- peptic ulcer disease
- congenital pyloric stenosis
- intestinal obstruction
- acute and chronic pancreatic disorders
- malabsorption syndrome
- acute and chronic diarrhea
- irritable bowel syndrome
- inflammatory bowel disease
- Hirschsprung disease
- anorectal malformations
- hepatitis
- hepatic failure
- chronic liver disease
- Budd-Chiari syndrome
- metabolic diseases of liver
- cirrhosis and portal hypertension