Under Graduate:

Paediatrics including Neonatology
The course includes systematic instructions in growth and development, nutritional needs of a child, immunization schedules and management of common diseases of infancy and childhood including scope for Social Paediatrics and counselling.

(i) GOAL:

The broad goal of the teaching of undergraduate students in Paediatrics is to acquire adequate knowledge and appropriate skills for optimally dealing with major health problems of children to ensure their optimal growth and development.

(ii) OBJECTIVES:

(a) KNOWLEDGE:

At the end of the course, the student shall be able to:

1. Describe the normal growth and development during foetal life, neonatal period, childhood and adolescence and outline deviations thereof;
2. Describe the common paediatric disorders and emergencies in terms of Epidemiology, aetiology and pathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation;
3. Age related requirements of calories, nutrients, fluids, drugs etc, in health and disease;
4. Describe preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisonings, accidents and child abuse;
5. Outline national Programmes relating to child health including immunization Programmes.

(b) SKILLS:

At the end of the course, the student shall be able to:

1. Take a detailed paediatric history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures, interpret common laboratory investigation results and plan and institute therapy.
2. Take anthropometric measurements resuscitate newborn infants at birth, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current national programmes, start an intravenous saline and provide nasogastric feeding.
3. Observe diagnostic procedures such as a lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural tap and ascitic tap;
4. Distinguish between normal newborn babies and those requiring special care and institute early care of all newborn babies including care of preterm and low birth weight babies, provide correct guidance and counseling in breast feeding.
5. Provide ambulatory care to all sick children, identify indications for specialised / inpatient care and ensure timely referral of those who require hospitalization.

(C) INTEGRATION:
The training in paediatrics should prepare the student to deliver preventive, promotive, curative and rehabilitative services for care of children both in the community and at hospital as part of team in an integrated form with other disciplines, e.g. Anatomy, Physiology, Forensic Medicine, Community Medicine and Physical Medicine and Rehabilitation.

LIST OF LECTURE/ SEMINARS

Lectures: 3rd / 4th Semester:

1. Introduction of Paediatrics.
3. Examination of Children.
4. Normal Growth
5. Normal Development.
6. Introduction to newborn and normal newborn baby.
7. Temperature regulation in newborn.
8. Breast feeding and lactation management.
9. Infant and child feeding (include complimentary feeding)
11. Immunization.

Lecturers: 7th / 8th / 9th Semester:

1. Birth Asphyxia
2. Low Birth Weight Babies.
4. Jaundice in newborn.
7. PEM and its management.
8. Vitamin and micronutrient deficiencies.
10. Acute diarrhoea.
12. Congestive heart failure - diagnosis and management.
15. Hypertension in children.
17. Bronchial asthma.
18. Nephrotic syndrome
19. Acute glomerulonephritis and hematuria
21. Chronic liver disease including ICC.
22. Haemolytic anaemia including thalassemia.
23. Leukaemias.
24. Bleeding and coagulation disorders.
25. Seizure disorders.
26. Cerebral Palsy.
27. Common exanthematous illness.
28. Childhood tuberculosis

Other Lectures to be covered:

1. Fluid and electrolyte balance - pathophysiology and principles of Management.
2. Acid-base disturbances - pathophysiology and principles of management.
3. Adolescent growth and disorders of puberty.
5. Acute respiratory infections, Measles, Mumps, Chicken pox
6. Other childhood malignancies.
7. Coagulation disorders - Haemophilia
8. Mental retardation.
9. Approach to a handicapped child.
10. Acute flaccid paralysis.
12. Meningitis.
15. HIV infection.
16. Malaria.
17. Neurocysticercosis.
18. Enteric fever.
19. Immunization.
20. Paediatric prescribing.

Integrated Seminar Topics:

1. Convulsions
2. Coma
3. PUO
4. Jaundice
5. Portal hypertension
6. Respiratory failure
7. Shock
8. Rheumatic Heart Disease
9. Hypertension
10. Diabetes mellitus
11. Hypothyroidism
12. Anemia
13. Bleeding
14. Renal failure
15. Tuberculosis
16. Malaria
17. HIV infection
18. Perinatal asphyxia (with obstetrics)
19. Intrauterine growth retardation (with obstetrics)