BACHELOR OF PHYSIOTHERAPY **PAPER CODE - 03060501** GENERAL MEDICINE WITH PEDIATRICS-I

Periods/Week Credits **TEACHING HOURS:**

64

T: 4 4 MAX. MARKS:

100

INTERNAL: 40 EXTERNAL: 60 TIME: 3 Hrs

BACHELOR OF PHYSIOTHERAPY PAPER CODE - 03060501 GENERAL MEDICINE WITH PEDIATRICS-I (PRACTICAL)

Periods/Week Credits

TEACHING HOURS: 64

P: 4 2

MAX.

MARKS: 50

INTERNAL: 20 EXTERNAL: 30

Course Description:

It covers relevant aspects of General Medicine and Pediatrics conditions in which Physiotherapy play a significant role

This course is designed to develop the basic knowledge of Pediatrics and to understand a pediatric patient, its special needs in relation to physical therapy which will help them provide good rehabilitation.

Course Objectives:

The objective of this course is that after 128 hours of lectures, demonstrations, in addition to clinics the student will be able to demonstrate a general understanding of the diseases that therapists would encounter in their practice. They should have a brief idea of the etiology and pathology, what the patient's symptoms and the resultant functional disability. This would help the candidates to understand the limitation imposed by the diseases on any therapy that may be prescribed.

The objective of this course is to achieve the clinical competencies and theoretical knowledge of Pediatrics to incorporate for providing physiotherapeutic management. Demonstrating advanced knowledge and understanding of the epidemiology, aetiology and patho physiology of selected congenital, acute, chronic musculoskeletal conditions, growth developmental disorders and neurological disorders.

Course Outcomes:

The student will be able to

- A. To understand the pathophysiological changes in infectious and metabolic disorders with their treatment.
- B. To understand the pathophysiological changes in respiratory disorders with their treatment.
- C. To understand the pathophysiological changes in cardiovascular disorders with their treatment.
- D. To understand the pathophysiological changes in hematological conditions with their treatment.
- E. Knowledge and understanding of subject will help the students to plan a good rehabilitation of a pediatric patient along with thorough assessment of a pediatric case.
- F. The student will be able to differentiate pediatric cases and handling the cases will become easier as they can relate theoretical knowledge with practical learning

Date	Theme/ Topic	Duration	Learning Experiences	Learning Objectives
	Outline of Infectious and Metabolic disorders	16 hrs	& Learning Resources SIS, Visit to IPD and OPD for case discussion Davidson principle and practice of medicine. Clinical methods of medicine by Hutchinson	Describe the etiology, classification, symptoms & its management of Tuberculosis, Tetanus, Typhoid fever, bacillary dysentery, amoebiasis, HIV Infection, AIDS, mumps, Measles& Nosocomial infection. Discuss etiology, classification, symptoms & its management of metabolic disorders & deficiency disease
	Diseases of Respiratory System	16 hrs	SIS Visit to IPD and OPD for case discussion Davidson principle and practice of medicine. Clinical methods of medicine by Hutchinson	Describe the etiology, classification, symptoms & management of Diseases of Respiratory System-Asthma, Bronchitis, Collapse, Bronchiectasis, pneumonia, lung abscess, Empyema, Pleural effusion COPD (Chronic bronchitis & Emphysema), Intercostal drainage tube

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Diseases of	16 hrs	SIS 1 OPP 6	Describe the etiology, classification,
cardiovascular		Visit to IPD and OPD for case	symptoms & its management of
system		discussion	diseases of cardiovascular system -
		Davidson principle and	Hypertension, Congestive Heart
		practice of medicine.	Failure, rheumatic fever, infective
		Clinical methods of medicine	endocarditis.
		by Hutchinson	Pericarditis, Valaular heart diseases
			(mitral stenosis, mitral regurgitation,
			aortic stenosis, aortic regurgitation).
			Congenial heart disease (Atrial
			Septal Defect, Ventricular Septal
			Defect, Patent Ductus Arteriosus,
			tetra logy of Failot), Eisenmenger
			syndrome.
			Ischemic heart diseases.
			Myocardial infarction.
			Deep vein thrombosis & pulmonary
			embolism. 4. Hematology:
Diseases of	16 hrs	SIS	Describe the etiology, classification,
Hematological		Visit to IPD and OPD for case	symptoms & its management of
conditions		discussion	Diseases of Hematological
		Davidson principle and	conditions- Anemia,
		practice of medicine.	Thrombocytopenia, Leukemia,
		Clinical methods of medicine	Hemophilia
		by Hutchinson	
Introduction to	2 Hr	SIS	Learn about importance of
Pediatrics		Nelson text book of pediatrics-	pediatrics to handle paediatrics
		Behraman & varghan.	patients for physiotherapy
		Essential pediatric by O.P	management.
		Ghai	
Growth and	4 hrs	SIS	Learn about Importance of growth
Development		Nelson text book of pediatrics-	and development and abnormal
1		Behraman & varghan.	growth disorders.
		Essential pediatric by O.P	
		Ghai	
Developmental	4 hrs	SIS	Learn about normal developmental
milestone		Nelson text book of pediatrics-	milestone Identify the clinical
		Behraman & varghan.	implications of motor, adaptive and
		Essential pediatric by O.P	social milestones.
		Ghai	
Congenital	4 hrs	SIS	Learn about various congenital
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deformities		Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	deformities in pediatrics- Cleft lip, cleft palate, chondatresia, imperforate. Discuss the etiology, clinical presentation, diagnosis and management of given deformities.
Acquired Deformities	4 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about various acquired deformities in pediatrics- Club foot, Flat foot, Knock knees, Bow legs. Discuss the etiology, clinical presentation, diagnosis and management of given deformities
Spina Bifida, meningocele	4 hrs	SIS Case discussion in Paed OPD. Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about various congenital deformities of spine. Discuss the etiology, clinical presentation, diagnosis and management of given deformities
Scoliosis.	4 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about postural deformity in pediatrics. Discuss the etiology, clinical presentation, diagnosis and management of Scoliosis
Congenital dysplasia Hip	2hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Discuss the etiology, clinical presentation, diagnosis and management of Congenital dysplasia of Hip
Cerebral Palsy	6 hrs	SIS Case discussion in Pediatrics OPD. Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about cerebral palsy in detail and learn to handle cases. Discuss the etiology, clinical presentation, diagnosis and management of Cerebral Palsy
Rickets	2 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Discuss the etiology, clinical presentation, diagnosis and management of Rickets
Scurvy	2 hr	SIS Nelson text book of pediatrics-	Discuss the etiology, clinical presentation, diagnosis and management of Scurvy

		Behraman & varghan. Essential pediatric by O.P Ghai	
PEM	4 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about protein energy malnutrition and nutritional therapy for managing cases.
Muscular Dystrophy	6 hrs	SIS Case Presentation Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Discuss the etiology, clinical presentation, diagnosis and management of Muscular Dystrophy in detail.
Down Syndrome	2 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Discuss the etiology, clinical presentation, diagnosis and management of Down syndrome in detail.
Epilepsy.	4 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Discuss the etiology, clinical presentation, diagnosis and management of Epilepsy.
Worm Infestation	2 hr	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about various methods of worm infestation.
Rheumatic fever	2 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about Rheumatic fever in detail.
Pneumonia	4 hrs	SIS Nelson text book of pediatrics- Behraman & varghan. Essential pediatric by O.P Ghai	Learn about Pneumonia in detail. Discuss Cause, sign, symptom and treatment

BACHELOR OF PHYSIOTHERAPY PAPER CODE – 03060502

GENERAL SURGERY WITH OBS. & GYNECOLOGY-I (THEORY)

Periods/Week Credits

TEACHING HOURS: 64

T: 4

MAX.

MARKS: 100

INTERNAL: 40 EXTERNAL: 60 TIME: 3 Hrs

BACHELOR OF PHYSIOTHERAPY PAPER CODE – 03060502

GENERAL SURGERY WITH OBS. & GYNECOLOGY-I (PRACTICAL)

Periods/Week Credits

TEACHING HOURS: 64

P: 4 2

MAX.

MARKS: 50

INTERNAL: 20 EXTERNAL: 30

Course Description:

This course is designed to develop the basic science subjects which will help to provide the basic knowledge about relevant aspects of General Surgery. This will help student gain better understanding of various surgical conditions a therapist encounters during their practice. It will help them understand common surgical conditions and procedures so that implication of rehabilitation to surgical patients become easy.

This course is designed for students to appreciate the clinical concepts and principles of obstetrics and gynaecology helps them to acquire knowledge about normal and high risk pregnant women during antenatal, natal and postnatal periods in hospital and community settings.

Course Objectives:

The objective of this course is that after 128 hours of lectures, demonstrations, in addition to

clinics the student will be able to demonstrate a general understanding of the surgical procedures that therapists would encounter in their practice. They should have a brief idea of the surgical procedures, what the patient's symptoms and the resultant functional disability. This would help the candidates to understand the limitation imposed by the diseases on any therapy that may be prescribed.

Appreciate the historical perspectives, trends and issues in obstetric and gynaecology Identify the anatomical, physiological and psychosocial changes take place during pregnancy. Render comprehensive care to mother during antenatal, natal and post partum periods. Identify and manage abnormalities and complications of pregnancy, labour and puerperium. Describe the pharmacological agents, their effects during, pregnancy, childbirth, puerperium, lactation.

Course Outcomes:

The student will be able to

- 1. List the indications for surgery, etiology, clinical features and surgical methods for various conditions.
- 2. Plan a better rehabilitation care for the patients pre and post surgically
- 3. Clinical decision making ability & management expertise
- 4. Diagnose conditions from history taking clinical evaluation and investigations in antenatal and post natal cases

Date	Theme/	Durati	Learning Experiences	Learning Objectives
	Topic	on	& Learning Resources	
	General	10 hrs	SIS	Describe the principle and procedures of
	principles of		Visit to IPD and OPD for	surgeries
	surgeries		case discussion	Discuss the different events accompanying in
	_		Textbook of Surgery: Bailey	general anesthesia
			&Love	Describe the principles of procedure, blood transfusion
			Textbook of Surgery: S Das	Explain the body response to surgeries, anesthesia and blood trans fusion
				Discuss the Different types of anesthesia,
				complication and their management
	Resuscitation	10 hrs	SIS	Describe the Resuscitation & support
	& support		Visit to IPD and OPD for case	Discuss the Shock: types, clinical features,
			discussion	pathogenesis & treatment
			Touthealt of Summany Dailor	Explain Hemorrhage: types, clinical features
			Textbook of Surgery: Bailey	& management.
			&Love	Describe Fluid & electrolyte balances.
			Textbook of Surgery: S Das	Discuss Blood transfusion: Indications &
				management
	Wounds &	10 hrs	SIS	Describe the Wounds & ulcer

ulcer		Visit to IPD and OPD for case discussion Textbook of Surgery: Bailey &Love Textbook of Surgery: S Das	Explain Healing by 1 st & 2 nd intention Discuss the Factors influencing would healing Explain Pathogenesis of healing Discuss the Scars: Hypertrophic scar & Keloid.
Venous Disorders	8 hrs	SIS Visit to IPD and OPD for case discussion Textbook of Surgery: Bailey &Love Textbook of Surgery: S Das	Describe the Venous Disorders Explain Varicose veins & Deep vein thrombosis.
Lymphatics & Lymph Nodes	10 hrs	SIS Visit to IPD and OPD for case discussion Textbook of Surgery: Bailey &Love Textbook of Surgery: S Das	Describe the Lymphatics & Lymph Nodes Discuss about Lymphomas, Filariasis, Lymphangitis, Lymphoedema & Cystichygroma
Arterial Disoder	10 hrs	SIS Visit to IPD and OPD for case discussion Textbook of Surgery: Bailey &Love Textbook of Surgery: S Das	Describe the Arterial Disorders Explain the Acute & Chronic arterial obstruction with investigations & management - embolism and thrombi Discuss the Amputations: types, Indications and decision Making, surgical procedures, Complications and their management. Describe the Gangrene - types, etiology, pathogenesis and management
Cardio- thoracic Surgery	20 hrs	SIS Visit to IPD and OPD for case discussion General surgery operations by R.M Kirk & R.C.N Williston Standard surgrical techniques- Shriram Bhatt	Describe the Type of incision, General principles of surgery, Outline indications, Contraindication, site of incision, pre and post operative Assessment, management and complications of Cardiothoracic Surgery and their management Explain Valvotomy and Valve Replacement, Open Heart Surgery/Cardiac Bypass Surgery, Surgery on Pericardium, Operations in congenital disorders, Heart

			transplantation, Pacemaker, Coronary Angioplasty.
			Discuss the Vascular Surgery (Outline
			surgery of Artery and veins). Explain the thoracic surgeries- Lobectomy,
			Pneumonectomy, Segmentectomy,
			Pleurectomy, Thoracoplasty, Decortication
			Discuss the Tracheostomy, Clinical features
			and management of the following: Fracture
			of ribs, Flail chest, stove-in chest,
			Pneumothorax, Lung Contusion and
			Laceration and injury to Vessels,
			Haemothorax, and Pulmonary embolism
			Describe in detail the following procedures:
			Endotracheal tubing, Tracheal suction,
			weaning the patient from ventilator, Extubation and Post-extubation care.
			Describe the principles of Cardio-pulmonary
			Resuscitation, Cardiac massage, Artificial
			Respiration, Defibrillators and their uses
Anatomy of female reproductive system	4hrs	SIS OBG Textbook of Obstetrics by DC Dutta	Learn about the anatomy of the female reproductive system. Explain the blood and nerve supply of genital organs
Physiology of Pregnancy	4 hrs	SIS OBG Textbook of Obstetrics by DC Dutta Textbook of Obstetrics by JB Sharma	In the end student will be able to learn about the physiology of pregnancy, mensural cycle and various changes in the systems during the cycle. Explain the Physiological changes in various maternal system and organs Discuss the endocrine system in pregnancy.
АРН &РРН	4hrs	SIS OBG Textbook of Obstetrics by DC Dutta Textbook of Obstetrics by JB Sharma	Learn about managing cases with APH & PPH.
Antenatal and post natal cases	6 hrs	SIS OBG Textbook of Obstetrics by DC Dutta Textbook of Obstetrics by JB Sharma Textbook of Physiotherapy: Tidy	Learn about managing the antenatal and postnatal cases and plan their physiotherapy management. Discuss the Normal pregnancy-symptoms, signs, investigations, immunization, nutrition and supplements, Normal delivery. Post natal care & Normal Puerperium

Common gynecologica l problems and role of physiotherap y	6 hrs	SIS OBG Textbook of Gynecology by DC Dutta Textbook of Physiotherapy: Polden	Learn about various gynaecology conditions and the role of physiotherapy in these conditions. Explain Disorders of menstruation, menorrhagia, DUB menopause, menarche, Pelvic inflammatory disease, Fibroid uterus, Stress incontinent, Prolapse uterus
Common obstetrics and gynecologic al problems	6hrs	SIS OBG Textbook of Obstetrics by DC Dutta Textbook of Physiotherapy: Polden	Learn about common obstetrics and gynecology problems. Explain about Caesarean section, Hysterectomy, D&E, MTP, Tubectomy, Prevention of thrombo embolism & Post operative care

BACHELOR OF PHYSIOTHERAPY PAPER CODE – 03060503 GENERAL ORTHOPAEDICS-I (THEORY)

Periods/Week Credits

TEACHING HOURS: 64

T: 4

MAX. MARKS: 100 INTERNAL: 40 EXTERNAL: 60 TIME: 3 Hrs

BACHELOR OF PHYSIOTHERAPY PAPER CODE – 03060503 GENERAL ORTHOPAEDICS-I (PRACTICAL)

Periods/Week Credits

TEACHING HOURS: 64

P: 4 2

MAX.

MARKS: 50

INTERNAL: 20 EXTERNAL: 30

Course Description:

Following the basic science course, this course introduces the student to the orthopedic conditions which commonly cause disability. Particular effort is made in this course to avoid burdening the student with any detail pertaining to diagnosis which will not contribute to their

understanding of the limitation imposed by orthopedic pathology on the functioning of the individual

Course Objectives:

The objective of this course is that after 128 hours of lectures and demonstrations, in addition to clinics, the student will be able to demonstrate an understanding of orthopedic conditions causing disability and their management.

Course Outcomes:

- 1. To understand traumatology of Upper and lower limb fractures, with their treatment protocols.
- 2. To understand the pathophysiology of various musculoskeletal conditions including congenital and acquired anomalies with its treatment protocol.
- 3. To understand the pathophysiology of various inflammatory and infective conditions of musculoskeletal system with its treatment protocol

Date	Theme/ Topic	Duratio n	Learning Experiences & Learning Resources	Learning Objectives
	Traumatology	48	SIS Visit to IPD and OPD for case discussion Orthopedics & Traumatology - Natrajan Outline of Fracture by Adams Outline of Orthopedics- Adams	Describe traumatology fracture of upper limb lower limb spine Explain Fractures (General) & Dislocations, classification, healing of fracture, factors affecting healing, early& late complications, and general principles of management. Discuss Specific: Types, Complications, Management of the following fractures. a. Upper limb Fractures: Clavicle, Scapula, Humerus, Ulna, Radius, Carpals, phalanges, Crush injuries of Hand. b. Lower limb Fractures: Pelvis, Femur, Patella, tibia, Fibula, tarsals, Metatarsals. C. Spine: Cervical, Thoracic, Lumbar
	Inflammatory and Infective Conditions	40	SIS Visit to IPD and OPD for case discussion	Describe the inflammatory and infective conditions Explain Etiology, pathology, clinical features, operative and non operative management of

		Traumatology Natrajan Outline Orthopedics- Adams Textbook Orthopedics Kalava Physiotherapy Orthopedics Alkinsons	of By of - in -	Describe Etiology, pathology, clinical features, Investigations, Operative and non operative management of Rheumatoid Arthritis, tuberculosis arthritis, pyogenic arthritis, ankylosing spondylitis, gouty arthritis, Neuropathic Joints, Hemophilic joints. Explain Poliomyelitis, etiology, Classification, pathology, clinical presentation, Post polio residual paralysis, non operative and operative management. Describe Synovitis, capsulitis.
Deformities:	40	SIS Visit to IPD OPD for discussion Outline Orthopedics- Adams Orthopedics Physical Assessment- ma Textbook Orthopedics Kalava	of By	Describe the various deformity such as CTEV, CDH etc Explain Etiology, epidemiology, Clinical Presentation, investigations, management of the following: Torticolis, Cervical rib, CTEV, CDH, Pes Cavus, Pes Planus, spina Bifida, Klippelfeil Syndrome, Goucher's diseases, scoliosis, Kyphosis, Increased lumbar lordosis, coxavara, Genu varum, Genu valgum, genu recurvatum, hallux valgus, hammer toe.

BACHELOR OF PHYSIOTHERAPY PAPER CODE – 03060504 NEUROLOGY-I (THEORY)

Periods/Week Credits

TEACHING HOURS: 64

T: 4

MAX.

MARKS: 100

INTERNAL: 40 EXTERNAL: 60 TIME: 3 Hrs

BACHELOR OF PHYSIOTHERAPY PAPER CODE – 03060504 NEUROLOGY-I (PRACTICAL)

Periods/Week Credits

TEACHING HOURS: 64

P: 4

MAX.

INTERNAL: 20
EXTERNAL: 30

Course Description:

Following the basic science and clinical science course, this course introduces the student to the neurological conditions which commonly cause disability.

Course Objectives:

The objective of this course is that after 128 hours of lectures & demonstrations. In adding to clinics, the students will be able to demonstrate an understanding of neurological conditions causing disability and their management in addition, the student will be able to fulfill with 75% accuracy (as measured by written, oral& practical, internal evaluation) the following objectives of the course.

An understanding of the approach of neurologists to the health care of people with neurologic conditions.

Begin to understand an educational plan for continuous learning throughout the professional career.

An understanding of the influence of family, community, and society in the care of people with neurological

Course Outcomes:

Acquisition of the clinical application of basic knowledge of the nervous system.

- Development of communication skills that will facilitate the clinical interaction with patients with neurologic disorders and their families and thus ensure that complete, accurate data are obtained.
- Development of competency in the single system neurological examination.
- Acquisition of the knowledge necessary for the diagnosis and initial management of common acute and chronic neurological conditions.
- Development of clinical problem-solving skills.
- Development of strategies for health promotion and prevention of neurological damage.
- Development of the attitudes and professional behaviors appropriate for clinical practice.

Date	Theme/ Topic	Duratio	Learning Experiences	Learning Objectives
		n	& Learning Resources	
	Review the	20 hrs	SIS	Describe the Basic Anatomy of
	Anatomy of		Students seminar	Spinal Cord & brain
	Nervous		Neurology & Neurosurgery	Explain Blood supply of the brain
	System		Illustrated By Kenneth W.	and spinal cord,
			Lindsay & Ian Bone	Describe anatomy of the visual
			Linusay & Ian Done	pathway

Review the	20 hrs	SIS	Discuss the connections of the cerebellum, and extra pyramidal system, Explain the relationship of the spinal nerves to the spinal cord segments, long tracts of the spinal cord Describe the brachial and lumbar plexuses, and cranial nerves Describe the Basics Physiology
physiology of nervous system		Group discussion Students seminar Neurology & Neurosurgery Illustrated By Kenneth W. Lindsay & Ian Bone	of Spinal Cord & brain Explain the Neurophysiologic basic of disorder of tone posture, bladder control, muscle contraction, movement control and pain
Infectious disorders of Nervous system	8 hrs	SIS Practical demonstration Group discussion Neurology & Neurosurgery Illustrated By Kenneth W. Lindsay & Ian Bone	Discuss the infectious disorders of nervous system Explain Definition, classification, etiology, symptomatology & management of Pyogenic Meningitis sequel, Tuberculosis
Diseases of the muscle: management	20 hrs	SIS Practical demonstration Group discussion Neurology & Neurosurgery Illustrated By Kenneth W. Lindsay & Ian Bone Blue Book of Practical neurology- Movement Disorder By CD Marsden & S. Fahn	Describe the Muscular Dystrophy, Myasthenia Gravis, Myopathy Explain the classification, course and management of disease of muscles
Peripheral nerve disorders.	20 hrs	SIS Practical demonstration Group discussion Neurology & Neurosurgery Illustrated By Kenneth W. Lindsay & Ian Bone Blue Book of Practical neurology- Movement Disorder By CD Marsden & S. Fahn	Describe Peripheral nerve injuries, Entrapment neuropathies, Peripheral neuropathies. Explain the causes, classification, localization and their management
Assessment of neurological system	20 hrs	SIS Practical demonstration Group discussion	Clinical assessment of neurological function includes history taking, sensory & motor

Patient assessment	system
Neurology & Neurosurgery	Assess higher mental function such
Illustrated By Kenneth W.	as orientation, memory, attention,
Lindsay & Ian Bone	speech and language
Blue Book of Practical neurology-	Assess of cranial nerves.
Movement Disorder By CD	Assess of motor power.
Marsden & S. Fahn	Assess of sensory function:
	touch, pain and position.
	Assess tone: spasticity, rigidity
	and hypotonia.
	Assess cerebellar function.
	Assess higher cortical function:
	apraxia, etc.
	Assess of gait abnormalities.