

Name of the Program	Bachelor of Physiotherapy			Year/Semester:	III year/ V sem
Course Name	MEDICINE	Course Code:	BPT-501	Type:	Theory
Credits	04			Total Sessions Hours:	40 Hours
Evaluation Spread	Internal Continuous Assessment:		30 Marks	End Term Exam:	70 Marks
Type of Course	Compulsory		✓ Core	Creative	Life Skill
Course Objectives	1. The course enables the student to have comprehensive understanding of general diseases 2. Students will be able to list the etiology, pathology, clinical features and treatment method for various medical conditions				
Course Outcomes(CO): <i>After the successful course completion ,learners will develop following attributes:</i>					
CO1	Understand pathophysiological changes in infectious and metabolic disorders with their treatment				
CO2	Understand pathophysiological changes in endocrine and hematological disorders with their treatment				
CO3	Understand pathophysiological changes in digestive system disorders with their treatment				
CO4	Understand the physiological changes during aging, diseases related to elderly people and their treatment				
CO5	Understand pathophysiological changes in skin disorders and psychiatric disorders with their treatment				
Pedagogy	Interactive, discussion-based, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks				
Session Details	Topic			Hours	MappedCO
Unit1	1. Infection : Effects of Infection on the body – Pathology – source and spread of infection –vaccinations – generalized infections – rashes and infection – food poisoning and gastroenteritis – sexually transmitted diseases – HIV infections and aids Poisoning : Clinical features – general management – common agents in poisoning –Pharmaceutical agents – drugs of misuse – chemical pesticides – Envenomation .			13	CO1

	<p>Food and Nutrition: Assessment – Nutritional and Energy requirements; Deficiency diseases –Clinical features and treatment; Protein – Energy Malnutrition: Clinical features and treatment; Obesity and its related disorders : Causes – Complications – benefits of weight loss –Management of Obesity – diet, exercise and medications.</p> <p>Nutritional & Metabolic Diseases: Brief description of following diseases along with outline of management: Diabetes Mellitus, Vitamins (A, B, C, D & K) and Minerals (iron, calcium Phosphorus, iodine) deficiencies, and Obesity.</p>		
Unit2	<p>2. Endocrine diseases: Common presenting symptoms of Endocrine disease – common classical Disease presentations, clinical features and its management; Diabetes Mellitus: Etiology and Pathogenesis of diabetes – clinical manifestations of the disease – management of the disease –Complications of diabetes.</p> <p>Diseases of the blood: Examinations of blood disorders – Clinical manifestations of blood Disease; Anemia – signs and symptoms – types and management; Hemophilia - Cause – clinical features severity of disease – management – complications due to repeated heamorrhages – complications due to therapy.</p> <p>3. Diseases of the digestive system : Clinical manifestations of gastrointestinal disease –Aetiology, clinical features, diagnosis, complications and treatment of the following conditions: Reflux Oesophagitis, AchlasiaCardia, Carcinoma of Esophagus, GI bleeding, Peptic Ulcer disease, Carcinoma of Stomach, Pancreatitis, Malabsorption Syndrome, Ulcerative Colitis, Peritonitis, Infections of Alimentary Tract; Clinical manifestations of liver diseases - Aetiology, clinical features, diagnosis, complications and treatment of the following conditions: Viral Hepatitis, Wilson's Disease, Alpha1-antitrypsin deficiency, Tumors of the Liver, Gall stones, Cholecystitis</p>	14	CO2
Unit 3	<p>4.Geriatics- Physiology of ageing, manifestations of diseases in old people and general principles of management. Implications of aging in physical therapy. Lung disease, Pleurisy & Pulmonary embolism</p> <p>5. Diseases of the Skin: Examination and clinical manifestations of skin diseases ; Causes, clinical features and management of the following skin conditions : Leprosy, Psoriasis, Pigmentary Anomalies, Vasomotor disorders, Dermatitis, Coccal and Fungal Parasitic and Viral infections.</p> <p>6.Psychiatric Disorders: Classifications, Causes, Clinical manifestations and treatment methods used in Psychiatry.</p>	13	CO3

CO-PO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	2	2	2	1	1	3	1	-	-	-	-	-	-
CO2	3	2	2	2	1	1	3	1	-	-	-	-	-	-
CO3	3	2	2	2	1	1	3	1	-	-	-	-	-	-
CO4	3	2	2	2	1	1	3	1	-	-	-	-	-	-
CO5	3	2	2	2	1	1	3	1	-	-	-	-	-	-

<i>Strongcontribution-3,</i>	<i>Averagecontribution-2,</i>	<i>Lowcontribution-1,</i>
Suggested Readings:		
Reference Books	1. Davidson's Principles and Practice of Medicine. 2. Textbook of k. Das 3. Harrison's Internal Medicine. 4. Hutchinson's clinical methods.	
Para Text	https://youtu.be/-axOMKlKLLQ?si=Duy9onplvJbqLuxg https://youtu.be/tVP16UJurrs?si=VI6_ujUBq2Zf6pYI https://youtu.be/4R5JzLz2gH8?si=-M7sonorotXvKw6Z https://youtu.be/cW4RJ2bSbn8?si=BY7nAbnl61hscbBy https://youtu.be/MIV4kd16c5I?si=fKbQxGNFknkmGdKc https://youtu.be/_CAv_eM2nSA?si=x_p7Vx-7vQpkGMYU	
Recapitulation & Examination Pattern		
Internal Continuous Assessment:		
Component	Marks	Pattern
Class test	12	Contains 01 long question. question carries 04Marks. 02 Short questions. Each question carries 02Marks 04 multiple choice questions. Each question carries 01Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	30	

Name of the Program	Bachelor of Physiotherapy			Year/Semester:	III year/ V sem
Course Name	Surgery	Course Code:	BPT 502	Type:	Theory
Credits	04			Total Sessions Hours:	40 Hours
Evaluation Spread	Internal Continuous Assessment:	30 Marks		End Term Exam:	70 Marks
Type of Course	Compulsory	✓ Core		Creative	Life Skill
Course Objectives	<ol style="list-style-type: none"> 1. The objective of this course is that the student will be able to demonstrate a general understanding of the surgeries that therapist would encounter in their practice. 2. They should have a brief idea of the etiology and pathology, what the patient's symptoms and the resultant functional disability. 3. This would help the candidates to understand the limitation imposed by the diseases on any therapy that may be prescribed. 				
Course Outcomes (CO): After the successful course completion, learners will develop following attributes:					
CO1	To understand fluid and electrolyte changes in surgical patient.				
CO2	To understand the complications of surgery.				
CO3	To understand the changes in respiratory and cardiovascular parameters in surgical patients.				
CO4	To understand investigations and management and management of common surgical conditions.				
CO5	The students will be able to differentiate surgical cases and handling the cases will become easier as they can relate theoretical knowledge with practical learning.				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks				
Session Details	Topic			Hours	Mapped CO
Unit1	Reasons for Surgery and surgical procedures for Thoracic Trauma- 1.Fluid, Electrolyte and Acid-Base disturbances 2. Reasons for Surgery; 3. Causes, Clinical Presentation, Diagnosis and treatment of the Thoracic Trauma situations			10	CO1 & CO2
Unit2	Surgical procedures Cholecystectomy, Colostomy, Gastrectomy, Mastectomy, Nephrectomy, Prostatectomy- 1. Surgical Oncology			15	CO3 & CO4

	2. Disorders of the Chest Wall, Lung and Mediastinum – 3. Diseases of the Arteries and Veins 4. Definition, Indication, Incision, Physiological changes and Complications following 5. Common operations: 6. Burn:		
Unit3	Surgical procedures for Laparoscopy, Colonoscopy, Hysterectomy 1. Women's Health: 2. Definition, Indications and Management of the following surgical procedures – 3. ENT 4. Ophthalmology:	15	CO4 & CO5

CO-PO and PSO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	1	3	3	2	1	2	-	-	3
CO2	3	2	3	3	3	-	2	2	-	2
CO3	3	3	3	3	2	-	3	-	-	2
CO4	3	2	2	3	1	-	1	1	2	2
CO5	3	3	3	3	-	-	2	1	1	3

Strong contribution-3, Average contribution-2, Low contribution-1,

Suggested Readings:

Text-Books	1. Surgery text book- S. Das
Reference Books	1. Bailey and Love's – Short Practice of Surgery
ParaText	Unit1: https://www.youtube.com/watch?v=gSW4LPgeZb0 Unit2: https://www.youtube.com/watch?v=v4PHCwvkh24 Unit3: https://www.youtube.com/watch?v=MHxWIjruwY

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class test	12	Contains 01 long question. question carries 04Marks. 02 Short questions. Each question carries 02Marks 04 multiple choice questions. Each question carries 01Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	30	

Name of the Program	Bachelor of Physiotherapy			Year/Semester:	III year/ V sem
Course Name	Neurology and Neurosurgery-I	Course Code:	BPT 503/ BPP 503	Type:	Theory & Practical
Credits	05			Total Sessions Hours:	60 Hours
Evaluation Spread	Internal Continuous Assessme:	30 Marks		End Term Exam:	70Marks
Type of Course	Compulsory	✓ Core		Creative	Life Skill
Course Objectives	<ol style="list-style-type: none"> The objective of this course is that the student will be able to learn to identify and describe the parts of nervous system, including blood circulation of the spinal cord and central nervous system. The students will have a general understanding of the diseases the therapist would encounter in their practice. The students will be able to list the etiology, pathology, clinical features & treatment methods for various neurological conditions. 				
Course Outcomes(CO): <i>After the successful course completion, learners will develop following attributes:</i>					
CO1	To understand the structure and function of the nervous system.				
CO2	Identify and explain common investigations & neurological assessment.				
CO3	To understand and identify and assess the different neurological conditions.				
CO4	To analyze the impact of neurological conditions on movement and function.				
CO5	The students will be able to differentiate neurological cases and handling the cases will become easier as they can relate theoretical knowledge with practical learning.				
Pedagogy	Interactive,discussion-bases,student-centered,presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 Bed Side behavior or Interaction in Class: 02				
Session Details	Topic			Hours	Mapped CO
Unit1	Introduction to neurological investigations 1. Neurological assessment 2. Investigations 3. Neuro-ophthalmology 4. Deafness, vertigo & imbalance			20	CO1 & CO2

Unit2	Assessments and of head injury and cerebro-vascular diseases 1. Lower cranial nerve paralysis 2. Cerebro-vascular diseases 3. head injury Practical Practice session for different neurological conditions	20	CO3 & CO5
Unit3	Assessments of higher cortical and movement & coordination disorders 1. Higher cortical, neuro psychological and neuro-behavioral disorders 2. Movement disorders 3. Cerebellar & coordination disorders Practical Practice session for different neurological conditions	20	CO4 & CO5

CO-PO and PSOM apping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	1	3	3	2	1	2	-	-	3
CO2	3	2	3	3	3	-	2	1	-	2
CO3	3	3	3	3	2	-	3	-	-	2
CO4	3	2	2	3	1	-	1	1	2	2
CO5	3	3	3	3	2	-	2	1	1	3

Strong contribution-3, Average contribution-2, Low contribution-1,

Suggested Readings:

Text-Books	1. Neurology and neurosurgery illustrated- Lindsay
ReferenceBooks	1. Principles of Neurology- Adams and Victor
ParaText	Unit1: https://youtu.be/Mb6MYVBr4dk?si=5aBy7zsDKY1fwiGw Unit2: https://youtu.be/aVluB6YyVS4?si=fs9NGLu6xVfjE10W Unit3: https://youtu.be/7υπΗΔηΑμκθΥ?σι=βλ4ω0φαΛΓ76ηΑο09

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class test	12	Contains 01 long question. question carries 04Marks. 02 Short questions. Each question carries 02Marks 04 multiple choice questions. Each question carries 01Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	30	

Name of the Program	BPT			Year/Semester:	III year/ V sem
Course Name	Orthopaedics - i	CourseCode:	BPT 504/ BPP 504	Type:	Theory & Practical
Credits	05			Total Sessions Hours:	60 Hours
Evaluation Spread	Internal Continuous Assessment:	30 Marks		End Term Exam:	70Marks
Type of Course	<input type="radio"/> Compulsory	<input checked="" type="radio"/> Core		<input type="radio"/> Cre	<input type="radio"/> Life Skill
Course Objectives	<ol style="list-style-type: none"> 1. Understanding of orthopedics, traumatology, fractures, and upper limb dislocations through comprehensive patient assessment and diagnostic techniques. 2. Understand and manage upper limb dislocations, such as anterior and posterior shoulder dislocations, and posterior elbow dislocations. 3. Learn to diagnose and treat spinal fractures in the cervical, thoracic, and lumbar regions, as well as coccyx and rib cage fractures, including immobilization and surgical options. 4. Understand and manage a variety of lower limb fractures, dislocations, and hand injuries effectively. 5. Develop expertise in assessing and managing amputations and traumatic spinal cord injuries for improved patient care and outcomes. 				
CourseOutcomes(CO): <i>Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowing attributes:</i>					
CourseOut come(CO)	Attributes				
CO1	Ability to differentiate and effectively manage various upper limb fractures and dislocations, ensuring optimal patient care and recovery				
CO2	Proficiency in assessing and treating upper limb dislocations effectively				
CO3	Ability to diagnose and manage a variety of spinal fractures, enhancing patient care and recovery				
CO4	Proficiency in the assessment and management of various lower limb fractures, dislocations, and hand injuries, leading to enhanced patient care and improved recovery outcomes				

CO5	Expertise in handling amputations and traumatic spinal cord injuries, ensuring effective management and rehabilitation for patients		
Pedagogy	Interactive, discussion-bases, student-centered , presentation.		
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks		
Session Details	Topic	Hours	Mapped CO
Unit1 Introduction to Orthopedics and Fractures of the Upper Limb	<ol style="list-style-type: none"> 1. Introduction to Orthopedics: An Orthopaedic patient, history taking, clinical features, clinical examination, and investigation (X- ray, CT scans, MRI scan, Bone scan) 2. Traumatology Fracture: definition, types, signs and symptoms. Fracture healing. Complications of fractures. Conservative and surgical approaches. Principles of management – reduction(open/closed, immobilization etc). Subluxation/ dislocations – definition, signs and symptoms, management (conservative and operative). 3. Fractures and Dislocations of Upper Limb Fractures of Upper Limb - causes, clinical features, mechanism of injury, complications, conservative and surgical management of the following fractures: Fractures of clavicle and scapula. Fractures of greater tuberosity and neck of humerus. Fracture shaft of humerus. Supracondylar fracture of humerus. Fractures of capitulum, radial head, olecranon, coronoid, and epicondyles. Side swipe injury of elbow. Both bone fractures of ulna and radius. Fracture of forearm – monteggia, galaezzi fracture –dislocation. Chauffer's fracture.Colle's fracture. Smith's fracture. Scaphoid fracture. Fracture of the metacarpals. Bennett's fracture.Fracture of the phalanges. (Proximal and middle) PRACTICAL: Orthopaedic assessment 	20 hrs	CO1
Unit2 Dislocations of Upper Limb and Fracture of Spine	<ol style="list-style-type: none"> 1. Dislocations of Upper Limb - Anterior dislocation of shoulder – mechanism of injury, clinical feature, complications, conservative management (Kocher's and Hippocrates maneuver), surgical management (putti plat, bankart's) etc. Recurrent dislocation of shoulder. Posterior dislocation of shoulder – mechanism of injury, clinical features and management. Posterior dislocation of elbow mechanism of injury, clinical feature, complications & management. 2. Fracture of Spine Fracture of Cervical Spine - Mechanism of injury, clinical feature, complications (quadriplegia); Management- immobilization (collar, cast, brace, traction); Management for stabilization, management of complication (bladder and bowel, quadriplegia). Clay 	20 hrs	CO2 & CO3

	<p>shoveller's fracture. Hangman's fracture. Fracture odontoid. Fracture of atlas. Fracture of Thoracic and Lumbar Regions - Mechanism of injury, clinical features, and management —conservative and surgical of common fractures around thoracic and lumbar regions. Fracture of coccyx. Fracture of Rib Cage - Mechanism of injury, clinical features, management for Fracture Ribs, Fracture of sternum.</p> <p>PRACTICAL: Orthopaedic assessment</p>		
<p>Unit 3 Fractures and Dislocations of Lower Limb and amputations</p>	<p>1. Fractures and Dislocations of Lower Limb: Fracture of Pelvis and Lower Limb - causes, clinical features, mechanism of injury, complications, conservative and surgical management of the following fractures: Fracture of pelvis. Fracture neck of femur – classification, clinical features, complications, management - conservative and surgical. Fractures of trochanters. Fracture shaft femur— clinical features, mechanism of injury, complications, management-conservative and surgical. Supracondylar fracture of femur. Fractures of the condyles of femur. Fracture patella. Fractures of tibial condyles. Both bones fracture of tibia and fibula. Dupuytren's fracture Maisonneuve's fracture. Pott's fracture – mechanism of injury, management. Bimalleolar fracture Trimalleolar fracture Fracture calcaneum – mechanism of injury, complications and management. Fracture of talus. Fracture of metatarsals—stress fractures Jones's fracture. Fracture of phalanges. Dislocations of Lower Limb - mechanism of injury, clinical features, complications, management of the following dislocations of lower limb. Anterior dislocation of hip. Posterior dislocation of hip. Central dislocation of hip. Dislocation of patella. Recurrent dislocation of patella.</p> <p>2. Hand Injuries - mechanism of injury, clinical features, and management of the following - Crush injuries. Flexor and extensor injuries. Burn injuries of hand.</p> <p>3. Amputations - Definition, levels of amputation of both lower and upper limbs, indications, complications.</p> <p>4. Traumatic Spinal Cord Injuries - Clinical features, complications, medical and surgical management of Paraplegia and Quadriplegia.</p> <p>PRACTICAL Orthopaedic patients exposure</p>	<p>20 hrs</p>	<p>CO4 & CO5</p>

CO-PO Mapping										
CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	2	1	-	-	2	1	-	2
CO2	3	2	2	1	-	-	2	1	-	2
CO3	3	2	2	1	-	-	2	1	-	2
CO4	3	2	2	1	-	-	2	1	-	2
CO5	3	2	2	1	-	-	2	1	-	2
<i>Strong contribution-3,</i>			<i>Average contribution-2,</i>			<i>Low contribution-1,</i>				
Suggested Readings:										
Text-Books	<ol style="list-style-type: none"> 1. Essential Orthopaedics: Maheshwari 2. Textbook of Orthopaedics: Kotwal and Natrajan 3. Apley System of orthopedics and Fracture 									
Reference Books	<ol style="list-style-type: none"> 1. Essential Clinical Orthopaedics by John Ebenezer 2. Outline of fracture: Adams 									
Para Text	<ol style="list-style-type: none"> 1. https://youtu.be/dzgrAyckvJg 2. https://youtu.be/al2A_RQIFac 3. https://youtu.be/fFVaPonJk6M 4. https://youtu.be/mU75SnzPlbc 5. https://youtu.be/Mox5YRyf6bM 6. https://youtu.be/xc0ehmdW44k 									
Recapitulation & Examination Pattern										
Internal Continuous Assessment:										
Component	Marks	Pattern								
Class test	12	Contains 01 long question. question carries 04 marks 02 short questions. each question carries 02 marks 04 multiple choice questions. each question carries 01 marks								
Class participation or any other	04	This to be made on activities and instruction given by subject teacher								
Marks assignments/project	04	Assignment to be made on topics and instruction given by subject teacher								
Class presentation	04	This to be made on topics and instruction given by subject teacher								
Bed side behavior or interaction in class	02	This is to be made on activities and instruction given by subject teacher								
attendance	04	As per policy								
Total marks	30									

Name of the Program	Bachelor of Physiotherapy			Year/ Semester:	III year/ V sem
Course Name	Community Medicine-I	Course Code:	BPT 505	Type:	Theory
Credits	03			Total Sessions Hours:	30 Hours
Evaluation Spread	Internal Continuous Assessment:	30 Marks		End Term Exam:	70 Marks
Type of Course	Compulsory	✓ Core		Creative	Life Skill
Course Objectives	Student will learn about Health, Disease, Epidemiology, Epidemiology of communicable disease, Public health administration, Health programmes in India and Demography and Family Planning definition and also their implementation with evidence based practical approach.				
Course Outcomes (CO): <i>After the successful course completion, learners will develop following attributes:</i>					
Course Outcome (CO)	Attributes				
CO1	Acquire the basic concept of Health, Disease Principles of Epidemiology and Different Epidemiological methods that are required to be practiced in community and at all levels of health care system.				
CO2	Acquire the knowledge of Public health administration and Epidemiology of communicable disease in preventive and curative measures that are required to be practiced in community.				
CO3	Student will know about different Health programmes in India and Demography and Family Planning.				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks				
Session Details	Topic			Hours	Mapped CO
Unit 1	Health and Disease- Definitions, Concepts, Dimensions and Indicators of Health, Concept of well-being, Spectrum and Determinants of Health, Concept and natural history of Disease, Concepts of disease control and prevention, Modes of Intervention, Population Medicine, Therole of socio-economic and cultural environment in health and disease. Epidemiology, definition and scope- Principles of Epidemiology and Epidemiological methods: Components and Aims, Basic measurements, Methods, Uses of Epidemiology, Infectious disease epidemiology, Dynamics and modes of disease transmission, Host defenses and Immunizing agents, Hazards of Immunization, Disease prevention and control, Disinfection.Screening, for Disease: Concept of			10	CO1

	screening, Aims and Objectives, Uses and types of screening.		
Unit 2	<p>Public health administration An overview of the health administration set up at Central and state levels. The national health programme-highlighting the role of social, economic and cultural factors in the implementation of the national programmes. Health problems of vulnerable groups-pregnant and lactating women, infants and pre-school children, occupational groups .</p> <p>Epidemiology of communicable disease Respiratory infections, Intestinal infections, Arthropodborne infections, Zoonoses, Surface infections, Hospital acquired infections Epidemiology of chronic non-communicable diseases and conditions: Cardio vascular diseases: Coronary heartdisease, Hypertension, Stroke, Rheumatic heart disease, Cancer, Diabetes, Obesity, Blindness,Accidents and Injuries.</p>	10	CO2
Unit 3	<p>Health programmes in India Vector borne disease control programme, National leprosy eradication programme, National tuberculosis programme, National AIDS control programme, National programme for control of blindness, Iodine deficiency disorders (IDD) programme, Universal Immunisation programme, Reproductive and child health programme, National cancer control programme, National mental health programme. National diabetes control programme, National family welfare programme, National sanitation and water supply programme,Minimum needs programme .</p> <p>Demography and Family Planning: Demographic cycle, Fertility, Family planning-objectives Of national family planning programme and family planning methods, A general idea of advantageand disadvantages of the methods.</p>	10	CO3

CO-PO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	3	1	2	1		3	1	2
CO2	1	1	2	3	2	3	1		2	1
CO3	2			1		1		2	2	3
<i>Strongcontribution-3, Averagecontribution-2, Lowcontribution-1,</i>										

Suggested Readings:

Reference Books-

1. Textbook of Preventive & Social Medicine, Dr. J E Park
2. Textbook of Prevention Practice and Community Physiotherapy (Vol. 1)- Dr. Bharati Vijay Bellare
3. Physiotherapy in Community Health and Rehabilitation-Waqar Naqv
4. ESSENTIALS OF COMMUNITY PHYSIOTHERAPY & ETHICS- PROF. (DR.) RAJENDRA RAJPUT
5. Textbook of Community Medicine: Preventive and Social Medicine, by Sunderlal. Maxcy Rosenau
6. Textbook of Community Medicine- Bhalwar

e-Learning Source:	<ol style="list-style-type: none"> 1. https://youtu.be/0CiOFQbbouo?si=z3VzfvqZtSq3xUMiMedial_Tibial_Stress_Syndrome_A_Review_of_the_Literature 2. https://youtu.be/N-B4XPAdNuw?si=RISOOgZ7xUIoh3D- 3. https://youtu.be/lP-eevU5-Hc?si=IxeBZ9xwfwA5eyl 4. https://youtu.be/5DBgh03wy6U?si=rtfPbloNr-un_CWK
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Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class Test	12	Contains 01 long question. question carries 04Marks. 02 Short questions. Each question carries 02Marks 04 multiple choice questions. Each question carries 01Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	30	

Name of the Program	Bachelor of Physiotherapy			Year/ Semester:	III year/ V sem
Course Name	Cardiothoracic conditions and surgery	Course Code:	BPT-506/ BPP 506	Type:	Theory/ Practical
Credits	05			Total Sessions Hours:	60 Hours
Evaluation Spread	Internal Continuous Assessment :	30 Marks		End Term Exam:	70 Marks
Type of Course	Compulsory	✓ Core		Creative	Life Skill
Course Objectives	<ol style="list-style-type: none"> 1. The student will be able to recognize and understand the diagnosis, management, and surgical treatment of heart, lung, and chest conditions. 2. They will also understand the congenital conditions of heart and lungs with their etiology, clinical features, sign and symptoms and treatment. 3. The students will also be able to recognize multiple types of procedure and surgeries perform on lung, heart and thoracic along with management. 				
Course Outcomes (CO): <i>After the successful course completion, learners will develop following attributes:</i>					
CO1	Students will gain a deep understanding of the anatomical structures and physiological functions of the heart, lungs, and other thoracic organs.				
CO2	Students will be able to explain the pathophysiological mechanisms underlying common cardiothoracic conditions, such as coronary artery disease, valvular heart disease, lung cancer, and congenital heart defects.				
CO3	Students will acquire knowledge of the fundamental principles of cardiothoracic surgery, including pre-operative assessment, surgical techniques, and post-operative care.				
CO4	Students will learn the importance of interdisciplinary teamwork in managing cardiothoracic patients, including collaboration with cardiologists, pulmonologists, anesthesiologists, and other healthcare professionals.				
CO5	Students will explore the ethical and professional issues specific to cardiothoracic surgery and medicine, such as patient consent, risk management, and end-of-life care.				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks				

Session Details	Topic	Hours	Mapped CO							
Unit 1	Examination of the Cardiovascular System: Examination of the Cardiovascular System – Investigations : ECG, Exercise Stress Testing, Radiology Congenital Heart diseases – Acyanotic congenital heart disease & Cyanotic congenital heart disease : Patent Ductus Arteriosus, Coarctation of Aorta, Atrial Septal Defect, Ventricular Septal Defect, Tetralogy of Fallot, Transposition of Great Vessels ; Acquired Heart Disease – Mitral Stenosis & Insufficiency, Aortic Stenosis and Insufficiency, Ischemic Heart Disease – Coronary Artery Disease, Cardiac tumors. Practical – Examination of Cardiothoracic Region	20	CO1							
Unit 2	Examination of the Respiratory System : Chest Radiographs, Pulmonary Function Testing, Arterial Blood Gas Analysis, Chronic Bronchitis, Emphysema, Asthma, Bronchiectasis, Cystic Fibrosis, Upper Respiratory Tract Infections, Pneumonia, Tuberculosis, Fungal Diseases, Interstitial Lung Diseases, Diseases of the pleura, diaphragm and chest wall ; Respiratory failure – Definition, types, causes, clinical features, diagnosis and management. Practical – Exposure of patients with Cardiothoracic and Respiratory Conditions	20	CO2 & CO4							
Unit 3	Thoracic surgeries: Thoracotomy – Definition, Types of Incisions with emphasis to the site of incisions, muscles cut and complications. Lung surgeries : Pneumonectomy, Lobectomy, segmentectomy – Indications, Physiological changes and Complications ; Thoracoplasty, Pleurectomy, Pleurodesis and Decortication of the Lung. Cardiac surgeries – An overview of the Cardio-Pulmonary Bypass Machine – Extra cardiac Operations, Closed Heart surgery, Open Heart surgery. Transplant Surgery – Heart, Lung and Kidney – Indications, Physiological changes and Complications.	20	CO3, CO4 & CO5							
CO-PO and PSO Mapping										
CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	3	3	2	1	2	3
CO2	3	2	3	3	3	2	3	2	2	2
CO3	3	2	3	2	2	2	3	-	-	3
CO4	3	1	2	3	2	-	2	-	2	2
CO5	1	-	3	2	1	3	2	1	2	3
<i>Strong contribution-3, Average contribution-2, Low contribution-1,</i>										
Suggested Readings:										
Text- Books	<ol style="list-style-type: none"> 1. Surgery text book- S. Das 2. Cash Textbook of Cardiothoracic surgery 									
Reference Books	<ol style="list-style-type: none"> 1. Bailey and Love's – Short Practice of Surgery 									

Para Text	Unit 1: https://www.youtube.com/watch?v=Zrxiv0fljFw Unit 2: <ul style="list-style-type: none"> • https://www.youtube.com/watch?v=xIZQRjkwV9Q Unit 3: <ul style="list-style-type: none"> • https://www.youtube.com/watch?v=bSCbdqGjAZ0
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Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class test	12	Contains 01 long question . Question carries 04Marks . 02 Short questions . Each question carries 02Marks 04 multiple choice questions . Each question carries 01Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	30	