



**NPTE**  
**Study Buddy**  
TOGETHER, TILL YOU SUCCEED

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***Detailed Syllabus***

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## Musculoskeletal

Topics	Details
<b>Shoulder joint</b>	<p>Biomechanics of Shoulder Joint</p> <ul style="list-style-type: none"> <li>• Glenohumeral Rhythm</li> <li>• (How scapula and Humerus moves with a Rhythm of 2:1 in complete 180 Degrees of movement)</li> <li>• Effects of Sports (Baseball &amp; Golf on the GH joint &amp; Surrounding muscles)</li> <li>• Concentric and Eccentric muscles activity concept for Shoulder.</li> <li>• Scapular winging (Medial, Lateral and Superior winging &amp; the muscles involved in it.) &amp; its treatment</li> <li>• Scapular (Upward and Downward Rotations) and the muscle involvement in it &amp; its treatment</li> <li>• Anterior and Posterior tipping of scapula (Also Muscles involved in it)</li> <li>• Acromioclavicular and Sternoclavicular Joint problems and Its impact on Shoulder Joint and the GH rhythm</li> </ul> <p>Shoulder Conditions with Focus on their Examination, Differential Diagnosis &amp; Treatment:</p> <ul style="list-style-type: none"> <li>• RC tendinitis</li> <li>• Supraspinatus Tendinitis</li> <li>• Biceps tendinopathy</li> <li>• Impingement Syndrome</li> <li>• Subacromial Bursitis</li> <li>• Thoracic Outlet syndrome</li> <li>• Adhesive Capsulitis // Frozen Shoulder</li> <li>• Glenohumeral Dislocations and Labral Tears</li> <li>• Differential Diagnosis of Conditions Such as RC tendinitis VS Supraspinatus Tendinitis Vs Subacromial Bursitis</li> <li>• Glenohumeral Dislocation</li> <li>• Differential Diagnosis of Frozen Shoulder VS Glenohumeral Muscular Tightness.</li> </ul>
<b>Elbow joint</b>	<p>Biomechanics of Elbow joint</p> <ul style="list-style-type: none"> <li>• Carrying Angle Mechanics</li> <li>• Radiohumeral, Ulnohumeral &amp; Radioulnar mechanics</li> </ul> <p>Elbow Conditions :</p> <ul style="list-style-type: none"> <li>• Lateral Epicondylitis</li> <li>• Medial Epicondylitis</li> <li>• Pulled Elbow // Nursemaid Elbow</li> <li>• Pronator Teres Syndrome</li> <li>• Differential Diagnosis of Lateral Epicondylitis Vs Pulled Elbow</li> </ul> <p>Differential Diagnosis of Medial Epicondylitis Vs Pronator Teres Syndrome</p>
<b>Wrist Joint</b>	<p>Biomechanics of Wrist Joint</p> <ul style="list-style-type: none"> <li>• Hand &amp; Wrist Biomechanics and Mobilization</li> <li>• CMC Thumb – Mechanics – of Flexion, Extension, Abduction, and Adduction</li> <li>• Snuff Box &amp; the muscles around it</li> </ul>

	<ul style="list-style-type: none"> <li>• Radial &amp; Ulnar Deviation &amp; their mobilization</li> </ul> <p>Wrist Conditions</p> <ul style="list-style-type: none"> <li>• Carpal Tunnel Syndrome</li> <li>• De Quervain's Tenosynovitis</li> <li>• Colles' Fracture</li> <li>• Smith's Fracture</li> <li>• Dupuytren's Contracture</li> <li>• Deformities (Boutonniere, Swan Neck, Ape hand, Mallet Finger, Gamekeepers thumb)</li> <li>• Boxers Fracture</li> <li>• Difference between Capsular &amp; muscles tightness of the MCP, PIP Jt.</li> </ul>
<p><b>Hip Joint</b></p>	<p>Biomechanics of Hip Joint</p> <ul style="list-style-type: none"> <li>• Lumbo-Pelvic Rhythm</li> <li>• Anterior &amp; Posterior Innominate - Muscles Involved &amp; its treatment</li> <li>• Ant &amp; Post Pelvic Tilt – Muscles Involved &amp; its treatment</li> <li>• Sacroiliac Joint Mechanics</li> <li>• Nutation &amp; Counternutation.</li> <li>• Lower Crossed Syndrome Muscles Involved &amp; Its treatment</li> <li>• Anteversion &amp; Retroversion Mechanics &amp; its effect on LE kinematics</li> <li>• Coxa Valga &amp; Vara Mechanics &amp; its effect on LE kinematics</li> <li>• Hip Ligaments &amp; its role in Gait, Trunk bending &amp; Joint Stability</li> </ul> <p>Hip Pelvis &amp; SI Conditions</p> <ul style="list-style-type: none"> <li>• AVN VS SCFE VS Perthes Disease &gt;&gt;&gt; Differential Diagnosis</li> <li>• Trochanteric Bursitis</li> <li>• IT band Syndrome</li> <li>• Piriformis Syndrome</li> <li>• Trendelenburg Syndrome</li> <li>• Differential Diagnosis of</li> <li>• SI Syndrome VS Piriformis Syndrome vs Gluteus Medius Syndrome vs There will be a Separate lecture on THR, TKR, Meniscal injuries</li> </ul>
<p><b>Knee Joint</b></p>	<p>Biomechanics of Knee Joint</p> <ul style="list-style-type: none"> <li>• Screw Home Mechanism</li> <li>• Femoral &amp; Tibial Rotations During Open Chain Flexion and Extension</li> <li>• Ligaments of Knee Joints &amp; its role in Restrictions of Knee Movements</li> <li>• Genu Varum &amp; Valgum mechanics &amp; its effect on LE kinematics</li> </ul> <p>Knee Conditions</p> <ul style="list-style-type: none"> <li>• Myositis Ossificans at Knee</li> <li>• Ligament Sprains &amp; their Differential Diagnosis</li> <li>• Meniscal vs Ligaments Injuries Differential Diagnosis</li> <li>• Patellofemoral Syndrome</li> <li>• Chondromalacia Patella</li> <li>• Patellar Conditions (Alta &amp; Baja Patella &amp; their Differential Diagnosis)</li> <li>• Pes Anserine Bursitis</li> <li>• Osgood-Schlatter disease</li> <li>• Jumper's Knee Syndrome</li> <li>• Differential Diagnosis Of Meniscal vs Ligament Injuries</li> </ul>

	<ul style="list-style-type: none"> <li>• Differential Diagnosis of Lateral Knee Pain Conditions such as &gt;&gt; PFPS vs Lateral Collateral Injury vs IT band Pain at lateral Knee vs Knee OA</li> <li>• Differential Diagnosis of Ant knee pain Conditions such as Patellar tendinitis Vs Jumpers Knee vs Knee OA vs Osgood Schlatter disease</li> <li>• Differential Diagnosis of medial Knee pain such as Pes Anserine bursitis vs Weak VMO pain Vs Knee OA vs MCL injury.</li> </ul>
<p><b>Foot &amp; Ankle</b></p>	<p>Biomechanics of Foot &amp; Ankle</p> <ul style="list-style-type: none"> <li>• Mechanics of Joints of Hind foot, Midfoot &amp; Forefoot</li> <li>• Ligaments of Ankle &amp; the conditions in which they provide stability &amp; their Injuries causing instabilities.</li> <li>• Effect of Forefoot abnormalities on hindfoot &amp; whole LE</li> <li>• Effect of Hindfoot abnormality on whole forefoot &amp; the LE.</li> </ul> <p>Leg &amp; foot Conditions</p> <ul style="list-style-type: none"> <li>• Medial Tibial Stress Syndrome// Posterior Shin Splint</li> <li>• Ant Shin Splint</li> <li>• Anterior Compartment Syndrome (Muscles Involved)</li> <li>• Posterior Deep Compartment Syndrome Muscles Involved &amp; its symptoms</li> <li>• Posterior Superficial Compartment Syndrome</li> <li>• Ankle Sprains – Medial &amp; Lateral &amp; their Differential Diagnosis with different ligaments</li> <li>• Achilles Tendinitis</li> <li>• Plantar fasciitis</li> <li>• Tarsal Tunnel Syndrome</li> <li>• Flexor hallucis Tendonopathy</li> <li>• Foot Conditions _ - Pes Cavus, Pes planus, Equinovarus &amp; Equinus</li> <li>• Metatarsalgia &amp; Morton’s Neuroma &amp; Morton’s Fracture</li> <li>• Hallux Valgus &amp; varus</li> <li>• Ankle Taping in sprains.</li> <li>• Differential Diagnosis of Medial Ankle Problems – such as Tarsal Tunnel Syndrome VS Tibialis Posterior Tendinitis VS Flexor hallucis Tendinitis VS Deltoid Ligament</li> <li>• Sprain</li> <li>• Differential Diagnosis of Hind Foot Conditions such as Plantar Fasciitis vs Achilles Tendinitis</li> <li>• Differential Diagnosis of Lateral Ankle Conditions Such as Calcaneofibular Sprain Vs Ant talofibular ligament sprain</li> <li>• Differential Diagnosis of Ant foot conditions such as Morton’s Neuroma Vs Morton’s Fracture Vs Forefoot Varus &amp; Valgus</li> <li>• Differential Diagnosis of Foot joints Movements Talonavicular VS Subtalar vs Calcaneal VS Distal Tibiofibular mobility</li> </ul>
<p><b>Spine</b></p>	<p>Biomechanics of Spine</p> <ul style="list-style-type: none"> <li>• Coupling Patterns of Spine with Rotations &amp; Side bending</li> <li>• Spinal Mobilization during rotation, Opening, Closing of Vertebra, To Improve Flexion &amp; Extension, to Correct Joint locking, to Correct Joint Closing.</li> <li>• Mechanics of Trunk Bending Ant &amp; Posterior &amp; the muscles involved in it.</li> <li>• Scoliosis &amp; its impact on trunk and the whole-body movements.</li> </ul> <p>Spine Conditions</p> <ul style="list-style-type: none"> <li>• Facet Syndrome</li> </ul>

	<ul style="list-style-type: none"> <li>• Disc Prolapse</li> <li>• Ankylosing Spondylitis</li> <li>• Spondylolisthesis</li> <li>• Spondylolysis</li> <li>• Spondylosis</li> <li>• Scoliosis</li> <li>• Differential Diagnosis of Pain During Posterior Bending such as Facet Syndrome vs Ankylosing Spondylitis Vs Disc Protrusion or Prolapse</li> <li>• Differential Diagnosis of Spondylosis vs Spondylolisthesis Vs Spondylolysis</li> <li>• Upper Crossed Syndrome &amp; the Muscles Involved in it along with its treatment</li> </ul>
<b>Gait Mechanics</b>	<p>Gait Mechanics with</p> <ul style="list-style-type: none"> <li>• Anterior, Posterior &amp; Lateral Trunk bending,</li> <li>• Muscles Involved during different phases of gait,</li> <li>• Abnormalities caused by various Muscles weaknesses,</li> <li>• Compensations by the trunk during various muscle weaknesses.</li> </ul>
<b>Special Topics</b>	<ul style="list-style-type: none"> <li>• For soft tissue Injuries of the various joints includes training for Acute phase, Moderate phase &amp; Chronic Phase</li> <li>• THR, TKR, Meniscal Injuries, Ligament Injuries of Knee for All phases</li> <li>• Shoulder Repairs &amp; their rehab</li> </ul>

## Neurology

Topics	Details
<b>SCI</b>	<ul style="list-style-type: none"> <li>• Basic neuro anatomy of spine, different ascending &amp; descending tracts,</li> <li>• D/D (Differential Diagnosis) - UMN v/s LMN. Syndromes in SCI – Brown-Sequard, central cord, anterior cord, post cord, cauda equina etc.</li> <li>• Neurological complications associated with SCI - autonomic dysreflexia, orthostatic hypotension, pulmonary complications etc. &amp; management. Highest functional prognosis with different levels of SCI.</li> <li>• M/M (Management) - bladder training with spastic &amp; flaccid bladder mobility training including bed mobility, transfer, ambulation and wheel chair.</li> </ul>
<b>Neuro Anatomy &amp; Examination</b>	<ul style="list-style-type: none"> <li>• Basic anatomy of brain, sensory examination, detailed perceptual dysfunction examination &amp; treatment (video), cranial nerves.</li> <li>• Examinations (D/D between II &amp; III, D/D of V &amp; VII, D/D UMN v/s LMN type of facial paralysis, D/D IX &amp; X), spasticity v/s rigidity, agnosia, apraxia (ideomotor/ideational)</li> </ul>
<b>CVA</b>	<ul style="list-style-type: none"> <li>• Blood Circulation of Brain, Neurovascular syndrome with detailed explanation (depending upon arteries involved MCA, ACA, PCA, VBA, Wallenberg, Locked-in syndrome, weber syndrome, Horner’s Syndrome) and their differential diagnosis (D/D of AICA v/s PICA), Pusher Syndrome, Synergy Pattern &amp; how to break synergy with PNF application.</li> <li>• Gait training treatment approaches as per synergy pattern.</li> </ul>
<b>Balance (cerebellar &amp; Basal Ganglia)</b>	<ul style="list-style-type: none"> <li>• Various definitions of cerebellar &amp; basal ganglia disorders with explanation (Video) D/D of various postural control (Proactive, Reactive, Adaptive &amp; suspension),</li> <li>• Role of vision, vestibular &amp; CNS in adaptive postural control, D/D of ankle strategies &amp; hip strategies</li> <li>• CTSIB/SOT (sensory organization testing) with detailed explanation</li> </ul>
<b>MS</b>	<ul style="list-style-type: none"> <li>• Etiology, pathophysiology, D/D of types of MS (RRMS, PPMS, SPMS, PRMS). D/D of pseudo exacerbation &amp; exacerbation of MS, S/S (Sign and Symptoms) consideration for appropriate exercises prescription for MS Related fatigue, D/D of MS related Fatigue &amp; Exercise Related Fatigue, balance and coordination training in MS .M/M of fatigue, Gait and mobility training.</li> </ul>
<b>Parkinson</b>	<ul style="list-style-type: none"> <li>• Etiology, pathophysiology, D/D between Parkinsonism, Primary Parkinson’s &amp; Secondary Parkinson’s, feed forward mechanism, functional outcome as per stages of Parkinson’s. S/S and Physical therapy interventions including flexibility, balance, Gait and mobility training (compensatory strategies to unlock freezing of gait)</li> </ul>
<b>Vestibular Disorders</b>	<ul style="list-style-type: none"> <li>• Basic Anatomy of Vestibular System, Examination, Unilateral Vestibular Hypofunction, Resting Nystagmus D/D &amp; distinguished tests, Vestibular ocular reflex (VOR), vestibular spinal reflex (VSR), BPPV examination with</li> <li>• maneuver and its canalith repositioning treatment. D/D of canalithiasis V/S cupulolithiasis. Gaze stability exercises. D/D of Meiners Disease / UVH/BBPV. D/D of central pathology V/S peripheral Pathology.</li> </ul>
<b>TBI</b>	<ul style="list-style-type: none"> <li>• Causes of TBI (PDF notes). GCS in detail. Ranchos Los Amigos Scale in full detail with TBI patient M/M according to various stages of scale.</li> </ul>

	<ul style="list-style-type: none"> <li>• Behavior Management of TBI patients as per different stages (from ICU to Total Functional Recovery)</li> </ul>
<b>ALS and GBS</b>	<ul style="list-style-type: none"> <li>• Pathophysiology of ALS &amp; GBS, assessment &amp; management, Bulbar V/S</li> <li>• Pseudobulbar Palsy, D/D of ALS, MS, GBS &amp; Polio.</li> </ul>
<b>PNF &amp; Motor Learning</b>	<ul style="list-style-type: none"> <li>• PNF- detailed explanation of various techniques of PNF &amp; their application in Neuro Rehab (video), Lift, Reverse Lift, Chop, Reverse Chop, thrust &amp; reverse thrust pattern and its application (mainly in breaking stroke Synergy pattern).</li> <li>• Motor Learning- detail discussion of various terms &amp; feedbacks in motor leaning &amp; its application in rehab, Kp V/S Kr, Stages of Motor Learning</li> </ul>
<b>Pediatric Conditions</b>	<ul style="list-style-type: none"> <li>• Clinical features and physical therapy management of CP, Spina Bifida, hydrocephalus, DMD V/S BMD, Plagiocephaly along with torticollis.</li> <li>• Down's syndrome (Video), Autism (Video) etc.</li> </ul>

## OtherSystem

Topics	Details
<b>Integumentary</b>	<ul style="list-style-type: none"> <li>• This topic involves different Anatomical and Physiological relations to integumentary systems with tests and measures based on current EBP.</li> <li>• Different analysis of forces and mechanical deformation of skin due to pressure or forces laid on it.</li> <li>• Differential Diagnosis, prognosis: It involves differentiating features of different skin conditions and its prognosis with pharmacological and non-pharmacological management with inclination to PT procedures.</li> <li>• Physical therapy interventions and its concepts with different effects or complications from PT and its medical management.</li> </ul>
<b>Metabolic and endocrine disorders</b>	<ul style="list-style-type: none"> <li>• Differential Diagnosis of metabolic and endocrine disorders. With thyroid, adrenal gland, Parathyroid hormones, Diabetes which impact bone metabolism, insulin absorption.</li> <li>• With pathological and physiological concepts on plan of care.</li> <li>• Intervention: Application of PT interventions and its modifications to metabolic and endocrine disorders with exercise prescription for Diabetes with insulin management.</li> </ul>
<b>Gastrointestinal disorders</b>	<ul style="list-style-type: none"> <li>• Differential Diagnosis of GI.</li> <li>• With pathological and physiological concepts on plan of care, Diseases of Stomach, esophagus, large intestine and small intestine, liver, Gall bladder and pancreas</li> <li>• Interventions: Application of PT interventions and its modifications to GI disorders with positions, surgical implications and Exercise prescription with do and don't.</li> </ul>
<b>Genitourinary disorders</b>	<ul style="list-style-type: none"> <li>• Examination of Genitourinary system.</li> <li>• Its related pathological and physiological concepts and its implications on POC.</li> <li>• DD of GU, evaluation and its prognosis:</li> <li>• Key DD of GU pathology, different types of Incontinences, with neurological disorders and its prognosis on ADL.</li> <li>• Interventions: PT implications of different GU disorders with exercises to Pelvic floor muscles and its modifications, bladder management with biofeedback and electrical therapy.</li> </ul>
<b>System interactions</b>	<ul style="list-style-type: none"> <li>• Comprehensive analysis of different pathologies on other integrated aspects of PT like obesity, cancer chemotherapy, psychological issues, hip fractures with relations on other systems and its polypharmacy approaches</li> </ul>



## NonSystem

Topics	Details
<b>Research</b>	<ul style="list-style-type: none"> <li>• Research and it's steps, EBP and its steps, PICO, Types of variables, Hypothesis, Types of data, Population and sample, Types of sampling, Validity: Types, threats, Reliability: Types, threats</li> <li>• Research design, Levels of design, True +/-, False +/-, Sensitivity, specificity, MDC, MCID, Clinical significance v/s statistical significance, Clinical prediction rule, Clinical practice guidelines</li> <li>• Measure of central tendency, Normal distribution, Measure of variability, Graphs, data analysis (statistical tools for data analysis)</li> </ul>
<b>Standard Precautions</b>	<ul style="list-style-type: none"> <li>• Hand hygiene,</li> <li>• Personal Protective Equipment (PPE)</li> <li>• Contact precautions, Droplet precautions, Airborne precaution</li> <li>• Coughing techniques</li> </ul>
<b>Safety Precautions</b>	<ul style="list-style-type: none"> <li>• CPR, AED, Choking, Sharp needle management</li> <li>• Fall preventions</li> </ul>
<b>Equipment, Devices and Transfers</b>	<ul style="list-style-type: none"> <li>• Assistive devices, Different transfers techniques, Wheelchair management, disability and environmental assessments.</li> </ul>
<b>Therapeutic Modalities</b>	<ul style="list-style-type: none"> <li>• Ultrasound, Electrical stimulations, Iontophoresis and phonophoresis Traction, Heat and cold therapy, Biofeedback, TENS, IFC, HVPC</li> </ul>
<b>Prosthesis, Orthosis and gait deviation</b>	<ul style="list-style-type: none"> <li>• Orthosis - orthosis and its parts, Upper limb orthosis, Lower limb orthosis, Spinal orthosis</li> <li>• Prosthesis - prosthesis and its parts, Stump care and amputation care, Below knee prosthesis, Knee prosthesis, Above knee prosthesis, Hip prosthesis, Below elbow prosthesis, Above elbow prosthesis</li> <li>• Gait Deviations - Correlation of anatomical and apparent deviations in limb length, Gait deviation in normal individuals due to muscular imbalances, Gait deviations due to prosthesis, Gait deviations due to orthosis, Co relation between gait deviations due to orthosis, prosthesis and normal individuals.</li> </ul>
<b>Ethics/professional responsibilities</b>	<ul style="list-style-type: none"> <li>• HIPPA, Principles of ethics</li> <li>• Scenarios related to clinical practice and clinical decision making</li> <li>• Role of PT, PTA, PT aide, PT student</li> <li>• Insurance related information</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>• Special equipment such as ventilators, urinary catheter, drainage system, IV lines.</li> <li>• Child and elderly abuse</li> <li>• Ergonomics and body mechanics</li> </ul>

## Cardiopulmonary/Lymphatics

Topic	Details
<b>Heart disease/malformation/injury (e.g. arteriosclerosis, blunt trauma)</b>	<ul style="list-style-type: none"> <li>Arteriosclerosis: Goodman Page 46-248 (Know the table 6-3 Risk factors), Page 586 of Sullivan, 6th edition. (Clinical Presentation, History, Tests &amp; Measurements, Intervention).</li> <li>Angina: Page. 249 of Goodman 5th edition, Pg. 559 of Sullivan (interventions for patients with coronary Artery Disease).</li> </ul>
<b>Myocardial ischemia and infarction</b>	<p>Be conversant with concepts explained in the class</p> <ul style="list-style-type: none"> <li>Myocardial Infarction: Page. 251-252 of Goodman (do the table of clinical Signs &amp; Symptoms). Sullivan 6th edition (Page. 562: Myocardial Infarction Intervention. Reid &amp; Chung Case 5, 18. Do table 15-1, 18-1, 18-2 from Reid &amp; Chung: (Wound &amp; sternal Care): Very Important</li> </ul>
<b>Heart failure, Cor pulmonale</b>	<ul style="list-style-type: none"> <li>Heart failure: Page. 540-545, 559-562 for intervention from Sullivan. Do Reid &amp; Chung Cases: 6, 19, 20</li> <li>Goodman Page. 254-256. (Differentiate between Angina &amp; MI Characteristics table).</li> <li>Cor Pulmonale: Page. 489 from Sullivan, (Connect Cor pulmonale with Right ventricular Hypertrophy reasons as explained in the Class). Page 310 from Goodman 5th edition.</li> </ul>
<b>Pneumonia (primary or post-operative/preventive)</b>	<p>Key points to remember:</p> <ul style="list-style-type: none"> <li>Difference from Viral Pneumonia Vs Bacterial Pneumonia (Do it from TED)</li> <li>Risk factors: Pg. 301 of Goodman.</li> <li>S&amp;S: Pg. 301 table of Signs &amp; Symptoms) of Goodman 5th Edition, (Suggest to read case example 7-2 on Pg. 301).</li> <li>Decrease Breath Sounds, Bronchial Breath Sounds over consolidated area.</li> <li>Low-Pitched Crackles &amp; Wheezes. (Read case no 8, 4, &amp; 23 from Reid &amp; Chung) &amp; increased Fremitus</li> <li>X ray Findings: Increased opacity over the consolidated area.</li> <li>Pneumonia treatment always think of Mobilization if Vitals are Stable. (Read Table 21-1, 2A, 2b, 2C from Reid &amp; Chung).</li> </ul>
<b>Atelectasis (primary or post-operative/preventive)</b>	<ul style="list-style-type: none"> <li>Read it from TED. (causes/Risk Factors Pg. 260, 2018 edition.)</li> <li>Risk Factors: Obese, Lack of Mobility, Post-surgical procedure, Pneumothorax or Hemothorax, Post Trauma (Table 18-1 on Pg. 259 from Reid &amp; Chung.</li> <li>Read Case 1, 8 from Reid &amp; Chung (Second Edition)</li> <li>Remember Atelectasis has Increased Fremitus &amp; shift is to the same side as the collapse.</li> <li>Intervention: Early Mobilization, Deep breathing exercises, Spiro but if Atelectasis is after Pneumothorax spirometer can be done only after Pneumothorax has resolved or ICD is put. Read Page 82-84, 107 table 6-1 from Reid &amp; Chung.</li> <li>X-Ray shows: plate like streaks. (Ted 2018 edition)</li> <li>Complications: Pneumonia.</li> </ul>
<b>Acute lung injury (e.g. adult/infant respiratory)</b>	<ul style="list-style-type: none"> <li>Read from TED page 257: ARDS</li> </ul>

<p><b>distress syndrome, pneumothorax)</b></p>	<ul style="list-style-type: none"> <li>• Prone Position is preferred position for treating ARDS but due to intubation difficult to achieve</li> <li>• Read page no 272 &amp; 273 from Reid &amp; Chung. Case 8</li> <li>• (Very important to read the Contraindications on Page 272.Reid &amp; Chung).</li> <li>• Pneumothorax:</li> <li>• S&amp;S: Goodman Page 311, 312. (Table 312)</li> <li>• Case 11 Reid &amp; Chung.</li> <li>• Pneumothorax has Decreased Breath Sounds, Decreased Fremitus.</li> <li>• Sitting upright is the most comfortable position&amp; shoulder pain. (differentiation factor with other conditions.)</li> </ul>
<p><b>Chronic obstructive pulmonary disease (e.g. emphysema, bronchiectasis).</b></p>	<ul style="list-style-type: none"> <li>• Read tables from Goodman 5th edition: Pg. 295-299. Be good with all the tables of each condition.</li> <li>• Sullivan 6th edition: Pg. 487-494, Physical therapy Management from Page. 499-5519.</li> <li>• Chapter 2 Page. 40-44 of Reid &amp; Chung.</li> <li>• Intervention: COPD patient if in acute exacerbation avoid teaching Diaphragmatic Breathing instead Relieving postures. (Pg. 256Chapter 18), Page 257.</li> <li>• Inspiratory Muscle training is used as intervention in COPD treatment (Page. 257 of Reid &amp; Chung).</li> <li>• Breath Holding should be avoided due to Hyperinflation of lungs in COPD.</li> <li>• For X ray &amp; Auscultation findings go thru case 14,17,16 from Reid &amp; Chung.</li> <li>• Read about Pink Puffers &amp; Blue Bloaters.</li> </ul>
<p><b>Restrictive pulmonary disease (e.g. fibrosis, asthma)</b></p>	<ul style="list-style-type: none"> <li>• Read from Sullivan Page. 294.</li> <li>• TED 257 from 2018 edition.</li> <li>• Case 13,10,11 of Reid &amp; Chung, Page. 46-47 Chapter 2 of Reid &amp; Chung.</li> </ul>
<p><b>Tuberculosis</b></p>	<ul style="list-style-type: none"> <li>• Know about the Standard Precautions from the lecture.</li> <li>• S&amp;S: Page. 301-302 of Goodman 5th edition. (Know the table)</li> <li>• TED Page. 255, Auscultation &amp; X-ray findings.</li> </ul>
<p><b>Pleural effusion</b></p>	<ul style="list-style-type: none"> <li>• TED 2018 Page. 259, Lecture slides from Ankit sir.</li> <li>• Page. 311 of Goodman 5th edition. (under the heading of Pleurisy).</li> <li>• Case 9 &amp;24. Of Reid &amp; Chung</li> <li>• Intervention is Early mobilization. This is the best option to pick if vitals are stable.</li> <li>• Think to yourself what can be different from pneumonia intervention as both involve early mobilization as treatment.</li> </ul>
<p><b>Pulmonary edema</b></p>	<ul style="list-style-type: none"> <li>• Page. 540-569(overlaps with CHF) but important to read for Pulmonary Causes: Page. 259 TED 2018.</li> <li>• Page. 309-310 from Goodman 5th edition. (Table of S&amp;S)</li> <li>• Page. 540-569(overlaps with CHF) but important to read for Pulmonary Edema.</li> <li>• Clinical &amp;X-Ray findings:</li> <li>• Case 6 from Reid &amp; Chung. (V.V.V Imp)</li> <li>• Butterfly appearance seen on X-Ray.</li> </ul>

	<ul style="list-style-type: none"> <li>Interventions include Deep breathing exercises, Coughing or huffing as necessary. Increase Mobilization as quickly as tolerated (Pg. 409 of Reid &amp; Chung).</li> <li>(Think Postural drainage may not be a part of Pulmonary Edema treatment).</li> </ul>
<b>Cystic fibrosis</b>	<ul style="list-style-type: none"> <li>Def: Page. 45 Reid &amp; Chung.</li> <li>Physical &amp; Clinical Findings: Case 15 in Reid &amp; Chung.</li> <li>Interventions on Page. 46 Chapter 2. (Know all the techniques properly. Be able to do critical thinking MOST IMPORTANT INTERVENTION IS WHICH ONE?)</li> <li>Cystic Fibrosis in children Management: if inactive focus on Clearing secretions, if Active then focus more on Mobility techniques &amp; Endurance activities. Look for what is asked in the question.</li> </ul>
<b>Disorders of the blood vessels (e.g. aneurysm, peripheral vascular disease, peripheral arterial disease)</b>	<ul style="list-style-type: none"> <li>Difference b/w Vascular, Neurogenic, peripheral Neuropathy Claudication, Peripheral &amp; Restless leg Syndrome. (Table 16-5) from Goodman Chapter 16, Page. 649 5th editions.</li> <li>Page. 68-70, 441-443 (Case 21) of Reid &amp; Chung.</li> <li>Sullivan 6TH edition: read Clinical presentation &amp; Intervention.</li> </ul>
<b>Hematologic disorders</b>	<ul style="list-style-type: none"> <li>Anemia &amp; Sickle Cell Anemia:</li> <li>Know the correct values of Hematologic Systems from Ted</li> <li>Precautions &amp; Treatment when seeing these patients. (Read from Pt implications Goodman).</li> <li>Please read only the PT implications part not the full topic).</li> <li>Think of Clinical scenarios for e.g. In Acute condition, what will be precautions /Contraindications with respect to exercise.</li> <li>Refer TED :2018 Page. 301-302</li> </ul>
<b>For all interventions</b>	For all interventions recommend to go through Page. 381. (Understand interventions for each condition).
<b>Lymphatic System</b>	<ul style="list-style-type: none"> <li>Structure and function of lymphatic system</li> <li>Lymphatic disorders</li> <li>Guideline for drainage management</li> <li>Exercises</li> </ul> <p>(Kisner Chapter 26: Management of lymphatic disorders)</p>