

# CORE CURRICULUM **THORACIC** MANUAL



**Philippine Association of Thoracic and  
Cardiovascular Surgeons, Inc.  
(PATACSI)**



# **PATACSI**

## **ACCREDITATION GUIDELINES**

### **THORACIC PATHWAY**



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

## PATACSI INSTRUCTIONAL DESIGN FOR THORACIC PATHWAY

THORACIC SURGERY: GENERAL MANAGEMENT OF A PATIENT UNDERGOING THORACIC SURGERY				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Understand the principles of basic anatomy, physiology, pathology and common thoracic surgery  1.1.2. Understand the principles of basic pharmacology  1.1.3. Understand the principles of basic microbiology and common thoracic infection  1.1.4. Understand and interpret common imaging and physiologic studies  1.1.5. Demonstrate knowledge of the principle of Research, Methodology and Critical Appraisal of Literature.	1.2. Content 1.2.1. Physiology, Pathology, Anatomy 1.2.1.1. Tracheobronchial tree and lungs 1.2.1.2. Thoracic inlet, neck, mediastinum and diaphragm 1.2.1.3. Esophagus, upper GI tract and colon 1.2.1.4. Pleura and chest wall  1.2.2. Antimicrobials 1.2.3. Bronchodilators 1.2.4. Pulmonary vasodilators 1.2.5. Inotropes 1.2.6. Antineoplastic 1.2.7. Anticoagulants 1.2.8. Antiplatelet 1.2.9. Management of intra-pleural sepsis 1.2.10. Management of thoracic infections 1.2.11. Chest x-ray 1.2.12. Ultrasound 1.2.13. CT scan 1.2.14. 2D echo 1.2.15. MRI 1.2.16. ABG 1.2.17. VQ Scanning 1.2.18. PET / CT 1.2.19. PFT 1.2.20. EBUS 1.2.21. EUS 1.2.22. Research Methods and Critical Appraisal of Literature	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / endorsements 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conference 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice  1.3.2. Small Group Learning 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming  1.3.3. Independent Learning 1.3.3.1. Individual Study 1.3.3.2. Self-Instructional Material 1.3.3.3. Workshops in Research 1.3.3.4. Methodology and Appraisal Literature 1.3.3.5. Workshops in GCP	1.4. Resources 1.4.1. Textbooks 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology  1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery  1.4.3. Audio-Video Equipment  1.4.4. Consultant Staff  1.4.5. Internet / Online Learning resources  1.4.6. Committee on research  1.4.7. Monograms, handouts, and textbooks on research methods	1.5. Assessment 1.5.1. Written examination  1.5.2. Oral examination  1.5.3. Direct observation  1.5.4. Research Output



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THORACIC SURGERY: GENERAL MANAGEMENT OF A PATIENT UNDERGOING THORACIC SURGERY				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>I. COGNITIVE</b>				
<p>1.1.6. At the end of level 1, II and III the trainee must complete and present a research paper. Level I at least case report or case series. Level II at least a meta-analysis. Level III at least a clinical trial paper.</p> <p>1.1.7. At the end of Level III a trainee must present a research paper (at least a clinical trial)</p>				



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THORACIC SURGERY: GENERAL MANAGEMENT OF A PATIENT UNDERGOING THORACIC SURGERY				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Evaluate surgical patients 2.1.1.1. Obtain an adequate history 2.1.1.2. Perform a thorough physical exam 2.1.1.3. Order pertinent laboratory and diagnostic exams 2.1.1.4. Formulate a logical diagnosis 2.1.1.5. Refer appropriately 2.1.1.6. Provide continuing care	2.2. Content 2.2.1. Signs and symptoms of Thoracic diseases 2.2.2. Principles of management of patients with thoracic diseases	2.3. Teaching-Learning Activities 2.3.1.1. Ward and OPD Work	2.4. Resources 2.4.1. Ward / OPD patients 2.4.2. Radiology facilities 2.4.3. Central Laboratory 2.4.4. Consultant Staff	2.5. Assessment 2.5.1. Observation 2.5.2. Rating Scale
2.1.2. Must be able to understand the different approaches to the thoracic cavity	2.2.3. Open versus minimally invasive approaches limited to trauma  2.2.4. Open basic minimally invasive approaches to thorax and abdomen	2.2.5. Ward Work 2.2.6. Exposure to thoracic operations 2.2.7. Assisting in thoracic operation	2.2.8. Ward Work 2.2.9. Operating Room 2.2.10. Recovery / ICU facility 2.2.11. Consultant Staff	2.2.12. Observation 2.2.13. Rating scales
2.1.3. Must be able to assess and stratify risks of patients undergoing thoracic surgery	2.2.14. Risk assessment and satisfaction 2.2.15. Recognition of post-thoracic surgical complications 2.2.16. Postoperative management of pain control 2.2.17. Treatment of Cardiac arrhythmias 2.2.18. Physiotherapy and rehabilitation 2.2.19. Understanding thoracic-specific ventilator techniques 2.2.20. Principles of Ventilatory support	2.3.5. Ward Work 2.3.6. Pre-op/Post-op 2.3.7. Care of thoracic patients 2.3.8. Rotations Pulmonary Service	2.4.6. Ward Work 2.4.7. Recovery/ICU facility 2.4.8. Consultant staff 2.4.9. Center for 2.4.10. Respiratory Medicine	2.2.21. Observation 2.2.22. Rating scales



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THORACIC SURGERY: GENERAL MANAGEMENT OF A PATIENT UNDERGOING THORACIC SURGERY				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.4. Perform minor diagnostic surgical procedures	2.2. Content 2.2.12. Esophagoscopy (5) 2.2.13. Bronchoscopy (10) 2.2.14. Diagnostic Thoracoscopy (10)	2.3. Teaching-Learning Activities 2.3.9. Performing minor diagnostic thoracic procedures 2.3.10. Supervised exposure to Esophagoscopy and bronchoscopy 2.3.11. Individual study 2.3.12. Self-instructional materials	2.4. Resources 2.4.11. Operating Room facilities 2.4.12. Outpatient facilities 2.4.13. Pathology 2.4.14. Atlas of operative technique 2.4.15. Surgical skills lab 2.4.16. Consultant staff 2.4.17. ER / RR / Critical care facilities 2.4.18. Case material 2.4.19. Textbook on complication of Surgical operations 2.4.20. Internet 2.4.21. Demonstration 2.4.22. Teaching ads, videos, audiotapes	2.5. Assessment 2.2.23. Direct Observation 2.2.24. Rating scale 2.2.25. Recorded reviews 2.2.26. Logbook and records 2.2.27. Incident reports
2.1.5. Perform minor thoracic surgical procedures	2.2.15. Tracheostomy (10) 2.2.16. Thoracentesis (10) 2.2.17. Thoracotomy (10) 2.2.18. TTNA (10) 2.2.19. Postoperative care 2.2.19.1. Wound care 2.2.19.2. Care of tubes 2.2.19.3. Thoracic Drains 2.2.19.4. Catheters			
<b>III. AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, Ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate Bedside Decorum / Relationship w/ patient 3.2.5. Study / Work habits 3.2.6. Relationship with co-health workers & superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social Responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale 3.5.3. Checklist 3.5.4. Incident reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: NEOPLASM OF LUNG				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Understand TNM staging of lung cancer and its application to the diagnosis, therapeutic planning, and management of patients with lung cancer. 1.1.2. Understand the risk factors, epidemiology, genetic signatures, presentation and diagnosis of malignant neoplasm of the lungs. 1.1.3. Know and assess the signs of inoperability. 1.1.4. Understand the therapeutic options for patients with lung neoplasms. 1.1.5. Understand the principles of bronchoplastic surgery. 1.1.6. Understand the complications of pulmonary resection and their management. 1.1.7. Understand the role of induction and adjuvant therapy for lung neoplasms.	1.2. Content 1.2.1. Benign and malignant tumor of trachea, bronchus, lung 1.2.2. Epidemiology, genetic signatures, presentation and diagnosis 1.2.3. Staging including all staging tools (CT, CT/PET, EBUS, EUS, Mediastinoscopy) 1.2.4. Multimodality management of thoracic malignancy 1.2.5. Non-resectional techniques (SBRT, RFA, etc.) 1.2.6. Assessment of performance status and risk 1.2.7. Survival and recurrence patterns 1.2.8. Postoperative complications (BP Fistula, space problems, empyema, prolonged air leak, etc.) 1.2.9. Surgical palliative techniques (stents, RFA, etc.) 1.2.10. Secondary and metastatic neoplasms of the lung 1.2.11. Diagnosis and management of AV Malformations, granulomas	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Ward rounds 1.3.1.8. Workshop in Research Methodology & Critical Appraisal of Literature 1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming 1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology 1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery 1.4.5. Audio-Video Equipment 1.4.6. Consultants Staff 1.4.7. Internet / Online Learning resources 1.4.8. Committee on research	1.5. Assessment 1.5.1. Written examination 1.5.2. Oral examination 1.5.3. Direct observation



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THORACIC SURGERY: NEOPLASM OF LUNG				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>I. COGNITIVE</b>				
1.1.8. Understand the indications for resection of pulmonary metastases.  1.1.9. Understand the principles of palliation in advanced malignant diseases.  1.1.10. Understand the indications for resection of benign lung neoplasms.	1.1.11. Diagnosis and management of pulmonary metastases.  1.1.8. Diagnosis and management of AV malformations, granulomas hamartomas			





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INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Assist in and perform major and minor thoracic procedures	2.2. Content 2.2.1. Surgery (open / VATS) 2.2.1.1. Wedge resection 2.2.1.2. Lobectomy 2.2.1.3. Segmentectomy 2.2.1.4. Bilobectomy 2.2.1.5. Sleeve lobectomy 2.2.1.6. Resection with chest wall, including resection techniques 2.2.1.7. Pneumonectomy 2.2.1.8. Carinal pneumonectomy 2.2.1.9. Pancoast tumor surgery 2.2.1.10. Extended resection (SVC, spine, etc.)  2.2.2. Repeat resections, including completion pneumonectomy  2.2.3. Clagett procedure and Eloesser flap  2.2.4. Soft tissue flaps for stump coverage	2.3. Teaching-Learning Activities  2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.3. Skills lab- animate and inanimate	2.4. Resources  2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



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THORACIC SURGERY: NEOPLASM OF LUNG				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. AFFECTIVE</b>				
2.1. Intended Learning 2.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	2.2. Content: 2.2.1. Intellectual integrity 2.2.2. Moral, ethical value 2.2.3. Reliability / Responsibility 2.2.4. Appropriate bedside decorum / relationship with patients 2.2.5. Study / work habits 2.2.6. Relationship with co-health workers and superiors 2.2.7. Emotional maturity reaction to emergency or stress 2.2.8. Social responsibility	2.3. Teaching-Learning Activities	2.4. Resources	2.5. Assessment 2.5.1. Direct observation 2.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: BENIGN LUNG CONDITIONS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Understand diagnostic procedures used to evaluate non-neoplastic lung disease.  1.1.2. Know the common pathogens that produce lung infections, including their presentation and pathologic processes, and knows the treatment and indications for operative intervention.  1.1.3. Understand the natural history, presentation and treatment of chronic obstructive lung disease.  1.1.4. Know the indications for bullectomy, lung reduction, and pulmonary transplantation.  1.1.5. Understand the pathologic results and alterations of pulmonary function due to bronchospasm.	1.2. Content 1.2.1. <b>BRONCHIECTASIS</b> 1.2.1.1. Medical Therapy 1.2.1.2. Role of surgery 1.2.1.3. Criteria for surgical resection 1.2.1.4. Diagnosis studies 1.2.1.5. Familiarity with medical therapy 1.2.1.6. Clinical evaluation and assessment for responsible surgery  1.2.2. <b>BACTERIAL INFECTIONS-</b> 1.2.2.1. Community acquired pneumonia 1.2.2.2. Nosocomial pneumonia 1.2.2.3. Aspiration pneumonia 1.2.2.4. Lung abscess 1.2.2.5. Pneumonia in the immunocompromised host 1.2.2.6. Antibiotic therapy 1.2.2.7. Clinical assessment 1.2.2.8. Techniques for culture specimen collection 1.2.2.9. Interpretation of imaging 1.2.2.10. Advance ventilator management prone position 1.2.2.11. Familiarity with medical therapy 1.2.2.12. Management of lung abscess 1.2.2.12.1. medical management 1.2.2.12.2. surgical management	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service  1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming  1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology  1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery  1.4.9. Audio-Video Equipment  1.4.10. Consultants Staff  1.4.11. Internet / Online Learning resources  1.4.12. Committee on research	1.5. Assessment 1.5.1. Written examination  1.5.2. Oral examination  1.5.3. Direct observation



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THORACIC SURGERY: BENIGN LUNG CONDITIONS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>I. COGNITIVE</b>				
<p>1.1.6. Understand the principles of surgical resection for non-neoplastic lung disease.</p> <p>1.1.7. Understand the mechanisms by which foreign bodies reach the airways, how they cause pulmonary pathology, and the management of patients with airway foreign bodies.</p>	<p>1.2.3. <b>TUBERCULOSIS and ATYPICAL MICROBACTERIA</b></p> <p>1.2.3.1. Epidemiology and screening</p> <p>1.2.3.2. Clinical presentation</p> <p>1.2.3.3. Medical Treatment</p> <p>1.2.3.4. Indications for surgery, including complications and outcomes</p> <p>1.2.3.5. Familiarity with medical therapy</p> <p>1.2.3.6. Management of complimentary TB</p> <p>1.2.3.7. Timing and preparation of patients who are candidates for surgery</p> <p>1.2.4. <b>MYCOTIC INFECTIONS</b></p> <p>1.2.4.1. Epidemiology of various fungal diseases</p> <p>1.2.4.2. Diagnosis – cultures / serology</p> <p>1.2.4.3. Imaging</p> <p>1.2.4.4. Manifestations of:</p> <p>1.2.4.4.1. Histoplasmosis</p> <p>1.2.4.4.2. Aspergillus</p> <p>1.2.4.4.3. Coccidioidomycosis</p> <p>1.2.4.4.4. Blastomycosis</p> <p>1.2.4.4.5. Pulmonary Cryptococcus</p> <p>1.2.4.4.6. Mycormycosis</p> <p>1.2.4.4.7. Familiarity with medical therapy</p> <p>1.2.4.4.8. Role of surgery</p> <p>1.2.5. <b>PARASITIC DISEASES</b></p> <p>1.2.5.1. Hybrid Diseases</p> <p>1.2.5.2. Epidemiology</p> <p>1.2.5.3. Complications</p> <p>1.2.5.4. Laboratory testing</p> <p>1.2.5.5. Imaging</p> <p>1.2.5.6. Diagnostic technique</p> <p>1.2.5.7. Familiarity with medical therapy</p> <p>1.2.5.8. Surgical treatment</p>			



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THORACIC SURGERY: BENIGN LUNG CONDITIONS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>2. COGNITIVE</b>				
	<p><b>1.2.3. INTESTINAL LUNG DISEASE</b></p> <p>1.2.3.1. Categorization</p> <p>1.2.3.2. Presentation, laboratory and physiological testing and imaging</p> <p>1.2.3.3. Diagnostic options</p> <p>1.2.3.4. Role of lung biopsy</p> <p>1.2.3.5. Assessment of surgical risk, probability of effecting treatment change</p> <p>1.2.3.6. Open and VATS lung biopsy</p> <p><b>1.2.4. EMPHYSEMA and BULLAE</b></p> <p>1.2.4.1. Etiology, pathology and Physiology of COPD</p> <p>1.2.4.2. Smoking cessation measures and outcomes</p> <p>1.2.4.3. Imaging 9V-Q scan, pulmonary function, DLCO, etc.)</p> <p>1.2.4.4. Surgical techniques and results used in the treatment of non-bullous emphysema and bullae</p> <p>1.2.4.5. Interpretation of imaging and pulmonary function</p> <p>1.2.4.6. Patients selection with assessment of function and risk</p> <p>1.2.4.7. Postoperative management</p> <p>1.2.4.8. Familiarity with pulmonary rehabilitation</p>			



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THORACIC SURGERY: BENIGN LUNG CONDITIONS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Assist in and perform major and minor thoracic procedures	2.2. Content 2.2.1. <b>BRONCHIECTASIS</b> 2.2.1.1. Assist in Lung resection 2.2.1.2. Assist in Anatomic / Non anatomic (Open / VATS)  2.2.2. <b>TUBERCULOSIS and ATYPICAL MYCOBACTERIA</b> 2.2.2.1. Assist in Resection techniques (Open / VATS) 2.2.2.2. Assist in Bronchial stump coverage  2.2.3. <b>INTERSTITIAL LUNG DISEASE</b> 2.2.3.1. Assist in Open and VATS lung biopsy  2.2.4. <b>EMPHYSEMA and BULLAE</b> 2.2.4.1. Assists in procedures to deal with secondary pneumothorax and bullae by open and VATS  2.2.4.2. Assist in Lung volume reduction surgery, unilaterally and bilaterally, using open and VATS	2.3. Teaching-Learning Activities  2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.3. Skills lab- animate and inanimate	2.4. Resources  2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



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THORACIC SURGERY: BENIGN LUNG CONDITIONS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE PLEURA				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Be familiar with the clinical presentation of benign and malignant diseases of the pleura.  1.1.2. Understand the types of pleural effusions, their evaluation and treatment including chylothorax.  1.1.3. Understand the management of empyema with and without bronchopleural fistula.  1.1.4. Understand the indications, contraindications, and complications of video assisted thoracic surgery and has a working knowledge of the equipment.  1.1.5. Understand the treatment of benign and malignant diseases of the pleura.	1.2. Content 1.2.1. Anatomy and physiology of the pleura  1.2.2. Inflammatory, ineffective and malignant diseases of parietal and visceral pleura  1.2.3. Pneumothorax (spontaneous, secondary, catamenial)  1.2.4. Complex pleural effusion / empyema  1.2.5. Mesothelioma  1.2.6. Hemothorax  1.2.7. Chylothorax  1.2.8. Fibrous tumor of the pleura	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service  1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming  1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology  1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery  1.4.13. Audio-Video Equipment  1.4.14. Consultants Staff  1.4.15. Internet / Online Learning resources	1.5. Assessment 1.5.1. Written examination  1.5.2. Oral examination  1.5.3. Direct observation





# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE PLEURA				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Perform minor thoracic procedures for the pleura  2.1.6. Assist in and perform major and medium procedures for the pleura	2.2. Content 2.2.1. Chest drain insertion, management, removal and treatment of complication  2.1.1. Open and VATS procedures for the uncomplicated pleural problems, (pneumothorax, effusion, Hemothorax, etc.,) including drainage, biopsy, lytic therapy, and pleurectomy  2.1.2. Open and VATS procedures for empyema, including techniques for decortication  2.1.3. Advance techniques of pleural space obliteration  2.1.4. Surgical options for malignant mesothelioma  2.1.5. Resection of the other pleural tumors  2.1.6. pleurodesis techniques	2.3. Teaching-Learning Activities 2.3.2. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.3. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.4. Skills lab- animate and inanimate	2.3. Resources 2.3.1. Operating room 2.3.2. Surgical wards 2.3.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.3.4. Pathology service 2.3.5. Pulmonary service 2.3.6. Oncology Service 2.3.7. Actual and simulated patients  2.3.8. Simulated laboratories / venues 2.3.8.1. Inanimate specimens  2.3.9. Minimally invasive surgery 2.3.9.1. Instruments 2.3.9.2. Trocars 2.3.9.3. Scopes 2.3.9.4. Energy devices and tower 2.3.9.5. MIS Workshops  2.3.10. Teaching and audio-video facilities	2.4. Assessment 2.4.1. Direct Observation  2.4.2. Rating scale  2.4.3. Workplace assessment  2.4.4. Reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE PLEURA				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE CHESTWALL				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>II. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Discuss the anatomy and physiology of the cutaneous, muscular, and bony components of the chest wall and their anatomic and physiologic relationships to adjacent structures.  1.1.2. Describe the anatomy of the vascular, neural, muscular, and bony components of the thoracic outlet.  1.1.3. Describe the major musculocutaneous or pedicled flaps used in chest wall reconstruction	1.2. Content 1.2.1. Anatomy of the chest wall  1.2.2. Chest wall tumors  1.2.3. Congenital lesions (e.g. pectus deformities)  1.2.4. Thoracic outlet syndrome  1.2.5. Inflammatory / infectious disease  1.2.6. Clinical, laboratory and imaging techniques  1.2.7. Techniques used in diagnosis  1.2.8. Resect the sternum and chest wall, physiological and cosmetic sequelae  1.2.9. Techniques of the chest wall reconstruction (prosthetic and muscle flaps)  1.2.10. Interpretation of laboratory, physiological and imaging technique  1.2.11. Patients selection for operation  1.2.12. Diagnose and manage patients with thoracic outlet syndrome	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service  1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming  1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology  1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery  1.4.16. Audio-Video Equipment  1.4.17. Consultants Staff  1.4.18. Internet / Online Learning resources  1.4.19. Committee on research  1.4.20. Monograms, handouts and textbooks on research methods	1.5. Assessment 1.5.1. Written examination  1.5.2. Oral examination  1.5.3. Direct observation



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE CHESTWALL				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Perform minor thoracic procedures for the chest wall	2.2. Content 2.2.1. FNAB 2.2.1.1. Incisional biopsy 2.2.1.2. Excisional biopsy 2.2.1.3. Core biopsy	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)	2.4. Resources 2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients 2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens 2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops 2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation 2.5.2. Rating scale 2.5.3. Workplace assessment 2.5.4. Reports
2.1.2. Assist in and perform major and medium procedures for the chest wall	2.1.6. Chest wall resection for benign and malignant diseases 2.1.7. Selection and insertion of prosthetic materials for reconstruction 2.1.8. Surgery for complications of chest wall resection, and repeat surgery 2.1.9. Supraclavicular and trans-axillary first rib approach to thoracic outlet syndrome 2.1.10. Chest wall deformity repair	2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year) 2.3.3. Skills lab- animate and inanimate		



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE CHESTWALL				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE DIAPHRAGM				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Know the embryologic origin of the diaphragm.  1.1.2. Understand the anatomy of the diaphragm and adjacent structures.  1.1.3. Understand the neural and vascular supply of the diaphragm and the pathologic consequences of injury.  1.1.4. Understand imaging studies for assessing the diaphragm;  1.1.5. Understand the consequences of incisions in the diaphragm;  1.1.6. Understand developmental anomalies of the diaphragm  1.1.7. Understand the presentation of diaphragmatic rupture and associated injuries.	1.2. Content 1.2.1. Anatomy and Physiology  1.2.2. Pathology of the diaphragm  1.2.3. Clinical, physiological and imaging techniques  1.2.4. Physiologic consequences of diaphragmatic herniation or paresis  1.2.5. Surgical technique used to biopsy and resect diaphragmatic tumors  1.2.6. Reconstructive material	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service  1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming  1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology  1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery  1.4.21. Audio-Video Equipment  1.4.22. Consultants Staff  1.4.23. Internet / Online Learning resources	1.5. Assessment 1.5.1. Written examination  1.5.2. Oral examination  1.5.3. Direct observation



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE DIAPHRAGM				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. COGNITIVE</b>				
1.1.8. Know evaluation methods for penetrating injuries of the diaphragm				
1.1.9. Know management of infections immediately above and below the diaphragm.				
1.1.10. Understand the etiology, presentation, diagnosis, and management of acquired diaphragmatic hernias.				
1.1.11. Understand the etiology, diagnosis, and treatment of diaphragmatic paralysis.				
1.1.12. Understand the primary and secondary tumors of the diaphragm and their management.				
1.1.13. Understand reconstruction methods for the diaphragm.				
1.1.14. Understand the indications for and techniques of diaphragmatic pacing				



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE DIAPHRAGM				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.3. Assist in and perform major and medium procedures for the diaphragm	2.2. Content 2.2.1. Resection, repair and reconstruction of diaphragm 2.2.2. Diaphragmatic plication 2.2.3. Familiarity with diaphragmatic pacing	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year) 2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year) 2.3.3. Skills lab- animate and inanimate	2.4. Resources 2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients 2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens 2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops 2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation 2.5.2. Rating scale 2.5.3. Workplace assessment 2.5.4. Reports





# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE DIAPHRAGM				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE MEDIASTINUM				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Understand mediastinal infections and their management. 1.1.2. Understand the diagnostic tests available. 1.1.3. Understand evaluation and management of myasthenia gravis 1.1.3.1. Relationship to thymoma 1.1.3.2. Laboratory testing 1.1.3.3. Indications for surgery 1.1.3.4. Perioperative management 1.1.3.5. Surgical techniques 1.1.4. Recognize the histologic appearance of benign and malignant mediastinal neoplasms. 1.1.5. Understand the neoplastic and non-neoplastic mediastinal diseases. 1.1.6. Understand the operative management of benign and malignant mediastinal neoplasms. 1.1.7. Understand chemotherapy and radiotherapy in mediastinal neoplasm management.	1.2. Content 1.2.1. Anatomy and mediastinum 1.2.2. Congenital, benign, infectious and malignant (primary and secondary) conditions of the mediastinum 1.2.3. Systematic conditions associated with the mediastinum 1.2.4. Clinical laboratory and imaging techniques used in the diagnosis and assessment of patients with mediastinal diseases 1.2.5. Myasthenia gravis: medical, surgical and peri-operative management 1.2.6. Staging of thymoma 1.2.7. Oncologic treatment of malignant disease of the mediastinum, including multidisciplinary care (Thymoma, germ cell cancers) 1.2.8. Surgical techniques for the treatment of myasthenia gravis, mediastinal cyst and tumors, complications and results	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service 1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming 1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology 1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery 1.4.24. Audio-Video Equipment 1.4.25. Consultants Staff 1.4.26. Internet / Online Learning resources	1.5. Assessment 1.5.1. Written examination 1.5.2. Oral examination 1.5.3. Direct observation



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE MEDIASTINUM				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b><i>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</i></b>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Perform biopsy procedures for the mediastinal tumor  2.1.2. Assist and perform major mediastinal operation	2.2. Content 2.2.1. Biopsy of mediastinal masses (Mediastinoscopy / mediastinotomy)  2.2.2. Thymectomy for myasthenia gravis (open and VATS)  2.2.3. Resection of mediastinal tumors, including resection of adjacent structures	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.3. Skills lab- animate and inanimate	2.4. Resources 2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE MEDIASTINUM				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>III. AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: CARDIOTHORACIC TRAUMA				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>I.COGNITIVE</b>				
1.1. Intended Learning 1.1.1. To accurately diagnose and manage acute cardiothoracic trauma conditions	1.2. Content 1.2.1. Blunt, penetrating and deceleration injuries to the chest  1.2.2. Indications and use of appropriate investigations  1.2.3. Indications for thoracotomy in trauma  1.2.4. Post-ACLS definitive care of blunt, penetrating and deceleration injuries of the chest  1.2.5. Recognition and management of immediately life threatening situations  1.2.6. Obstructed airway, tension pneumothorax, massive hemothorax, open  1.2.7. Recognition and assessment of potentially life threatening situations:  1.2.8. Lung contusion, bronchial rupture, blunt cardiac injury, intrathoracic bleeding  1.2.9. Esophageal injury, simple pneumothorax and major vascular injury	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service  1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming  1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology  1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery  1.4.27. Audio-Video Equipment  1.4.28. Consultants Staff  1.4.29. Internet / Online Learning resources	1.5. Assessment 1.5.1. Written examination  1.5.2. Oral examination  1.5.3. Direct observation



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: CARDIOTHORACIC TRAUMA				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Perform minor and major emergency operations for cardiothoracic trauma	2.2. Content 2.2.1. Various approaches to expose thoracic trauma  2.2.2. Part of Cardiac Repair of cardiac injuries  2.2.3. Repair of esophageal injuries  2.2.4. Repair of bronchial injuries  2.2.5. Repair of aortic transection  2.2.6. Repair of other great vessel injuries  2.2.7. Repair of lung injuries, chest injuries, diaphragmatic injuries	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  3.1.1. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)	2.4. Resources 2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: CARDIOTHORACIC TRAUMA				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: BENIGN ESOPHAGEAL DISORDERS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</b>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Understand anatomy, physiology of the esophagus and benign esophageal disorders	1.2. Content 1.2.1. Esophageal and gastric anatomy 1.2.2. Anatomy of small and large intestine as related to reconstruction 1.2.3. Pathology 1.2.3.1. Motility disorders (esophageal sphincter dysfunction, achalasia, esophageal spasm) 1.2.3.2. Diverticula and types of hiatal hernias – sliding and paraesophageal 1.2.3.3. Trauma (blunt, penetrating, iatrogenic perforations, radiation induced, caustic ingestion, drug induced) 1.2.3.4. Infection (Candida, herpetic) 1.2.3.5. Strictures (reflux-induced, caustic, anastomotic) 1.2.3.6. Tracheoesophageal fistula 1.2.3.7. Barrett's esophagus 1.2.4. Diagnostic procedures and their interpretation 1.2.4.1. Imaging, Radiography 1.2.4.2. Gastric empty, GE Reflux 1.2.5. Esophageal function tests 1.2.6. Drugs used in the treatment of GE reflux and dysmotility disorders 1.2.7. Treatment options of achalasia	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service 1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming 1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology 1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery 1.4.30. Audio-Video Equipment 1.4.31. Consultants Staff 1.4.32. Internet / Online Learning resources	1.5. Assessment 1.5.1. Written examination 1.5.2. Oral examination 1.5.3. Direct observation





# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: BENIGN ESOPHAGEAL DISORDERS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST, SECOND and THIRD YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Assist and Perform operation for esophageal disorder.  2.1.2. Manage patients with esophageal disorder	2.2. Content 2.2.1. Non operative and operative options for treatment  2.2.2. Management of the post op patients  2.2.3. Management of post-op complications  2.2.4. Open and lap fundoplication (Belsey, Nissen, Dor, Toupet)  2.2.5. Open and lap esophagomyotomy  2.2.6. Reoperations  2.2.7. Surgical treatment of the esophageal perforations (Stent, Repair, Diversion)  2.2.8. Open or MIS / Esophagomyotomy for diverticula	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.3. Skills lab- animate and inanimate	2.4. Resources 2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: BENIGN ESOPHAGEAL DISORDERS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</b>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: ESOPHAGEAL NEOPLASMS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</b>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Know the anatomy of the esophagus, its anatomical relationship from cricopharyngeus to cardia, including details of blood supply and lymphatic drainage 1.1.2. Know the anatomy of the stomach, including its anatomical relationships, blood supply and lymphatic drainage 1.1.3. Know the anatomy of the small and large intestine including its blood supply 1.1.4. Understand the etiology and epidemiology of esophageal cancer 1.1.5. Understand the metaplasia-dysplasia sequence 1.1.6. Understand the diagnosis, staging, and treatment options for esophageal cancer 1.1.7. Understand post-op management and long-term surveillance	1.2. Content 1.2.1. Esophageal and gastric anatomy 1.2.2. Anatomy of small and large intestine as related to reconstruction 1.2.3. Screening methods and Preventive measures 1.2.4. Interpretation of staging tests 1.2.5. Staging of esophageal cancer 1.2.6. Risk assessment of patients undergoing esophageal resection 1.2.7. Treatment options for high grade dysplasia/ very early esophageal cancer 1.2.8. Treatment options for Stage I,II,III esophageal cancer 1.2.9. Induction therapy 1.2.10. Management of Post esophagectomy patients 1.2.11. Identification/ management of post-resection complications 1.2.12. Pallative procedures 1.2.13. Long-term follow-up and management recurrence	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service 1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming 1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology 1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery 1.4.33. Audio-Video Equipment 1.4.34. Consultants Staff 1.4.35. Internet / Online Learning resources	1.5. Assessment 1.5.1. Written examination 1.5.2. Oral examination 1.5.3. Direct observation



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: ESOPHAGEAL NEOPLASMS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Assist in and Perform operations on patient with esophageal cancer	2.2. Content 2.2.1. Various Mobilization of the esophagus, stomach, colon  2.2.2. Esophageal resection (different approaches)  2.2.3. various Esophageal reconstruction approaches including interposition techniques  2.2.4. Management of intra and post-operative complications	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.3. Skills lab- animate and inanimate	2.4. Resources 2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: ESOPHAGEAL NEOPLASMS				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</b>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE AIRWAY				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</b>				
<b>I.COGNITIVE</b>				
1.1. Intended Learning 1.1.1. Know the anatomy of the larynx, trachea, and bronchus  1.1.2. Understand the symptoms and signs of airway disease  1.1.3. Understand the presentation, evaluation and treatment of fistulas in the aerodigestive tract due to benign, malignant and iatrogenic causes  1.1.4. Know the medical and oncologic airway disease treatments  1.1.5. Understand the different techniques for tracheal resection  1.1.6. Understand the post-tracheal management and follow-up	1.2. Content 1.2.1. Anatomy of the larynx, trachea and bronchus  1.2.2. Diagnosis/ assessment of airway obstruction  1.2.3. Interpretation of laboratory and imaging techniques  1.2.4. Bronchoscopy (FOB, rigid)  1.2.5. Patient selection with assessment of function and risk  1.2.6. Bronchoplastic procedures: applications and limitations  1.2.7. Post-op care of patients after airway surgery	1.3. Teaching-Learning Activities 1.3.1. Large Group Learning 1.3.1.1. Grand rounds 1.3.1.2. Pre and Postoperative Conference 1.3.1.3. Mortality and Morbidity Conference 1.3.1.4. Admitting rounds / Endorsement 1.3.1.5. Lectures 1.3.1.6. Journal club 1.3.1.7. Interdisciplinary Tumor Conferences 1.3.1.8. Ward rounds 1.3.1.9. Surgical practice 1.3.1.10. Rotations in Pulmonary service, Infectious Diseases service  1.3.2. Small Group Discussion 1.3.2.1. Group Discussion 1.3.2.2. Group Tutorial 1.3.2.3. Brainstorming  1.3.3. Independent Learning 1.3.3.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.1. Textbooks: 1.4.1.1. Anatomy, Physiology 1.4.1.2. Principles of surgery 1.4.1.3. Thoracic Surgery 1.4.1.4. Pathology  1.4.2. Journals 1.4.2.1. Annals of thoracic Surgery 1.4.2.2. European Journal on thoracic cardiovascular surgery  1.4.36. Audio-Video Equipment  1.4.37. Consultants Staff  1.4.38. Internet / Online Learning resources	1.5. Assessment 1.5.1. Written examination  1.5.2. Oral examination  1.5.3. Direct observation



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE AIRWAY				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. Perform airways diagnostic procedure  2.1.2. Assist in and perform major operation involving the airway	2.2. Content 2.2.1. Bronchoscopy (FOB, Rigid)  2.2.2. Sleeve resection of the trachea for simple benign conditions  2.2.3. Sleeve resection of the main bronchi including lobectomy  2.2.4. Techniques for the relief of major airway obstruction, including stenting, 'core out' PDT, dilation, cryotherapy, etc.  2.2.5. Airway resection for tumors and complex benign conditions and techniques for airway reconstruction, anastomosis, and laryngeal release  2.2.6. Repeat resections for recurrence and complications of prior resection  2.2.7. Management of fistulas in the aerodigestive tract by surgical and endoscopic techniques	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.3. Skills lab- animate and inanimate	2.4. Resources 2.4.1. Operating room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: DISORDERS OF THE AIRWAY				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</b>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports





# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: CONGENITAL LUNG and THORACIC DISEASES				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</b>				
<b>I. COGNITIVE</b>				
1.1. Intended Learning 1.1.2. Recognize various congenital lung abnormalities and understands their anatomy and indications for treatment	1.2. Content 1.2.2. Pulmonary sequestration  1.2.3. Congenital lobar emphysema  1.2.4. Bronchogenic cysts  1.2.5. Cystic adenomatoid malformation	1.3. Teaching-Learning Activities 1.3.2. Large Group Learning 1.3.2.1. Grand rounds 1.3.2.2. Pre and Postoperative Conference 1.3.2.3. Mortality and Morbidity Conference 1.3.2.4. Admitting rounds / Endorsement 1.3.2.5. Lectures 1.3.2.6. Journal club 1.3.2.7. Interdisciplinary Tumor Conferences 1.3.2.8. Ward rounds 1.3.2.9. Surgical practice 1.3.2.10. Rotations in Pulmonary service, Infectious Diseases service  1.3.3. Small Group Discussion 1.3.3.1. Group Discussion 1.3.3.2. Group Tutorial 1.3.3.3. Brainstorming  1.3.4. Independent Learning 1.3.4.1. Individual Study Self-Instructional Material meeting	1.4. Resources 1.4.2. Textbooks: 1.4.2.1. Anatomy, Physiology 1.4.2.2. Principles of surgery 1.4.2.3. Thoracic Surgery 1.4.2.4. Pathology  1.4.3. Journals 1.4.3.1. Annals of thoracic Surgery 1.4.3.2. European Journal on thoracic cardiovascular surgery  1.4.39. Audio-Video Equipment  1.4.40. Consultants Staff  1.4.41. Internet / Online Learning resources	1.5. Assessment 1.5.2. Written examination  1.5.3. Oral examination  1.5.4. Direct observation



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: CONGENITAL LUNG and THORACIC DISEASES				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<i>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</i>				
<b>II. PSYCHOMOTOR</b>				
2.1. Intended Learning 2.1.1. FIRST YEAR Resident 2.1.1.1. Evaluate patient with congenital lung anomaly.  2.1.2. SECOND / THIRD YEAR Resident 2.1.2.1. Perform operations for congenital lung abnormalities and manage their complications	2.2. Content 2.2.1. Congenital Lung disease (cystic adenomatoid malformation, congenital lobar emphysema, sequestration)  2.2.2. Foregut duplication cysts diaphragmatic hernia and eventration  2.2.3. Esophageal atresia / fistula  2.2.4. Diagnosis, Assessment and treatment of common congenital pulmonary and esophageal disease  2.2.5. Congenital thoracic disease imaging interpretation	2.3. Teaching-Learning Activities 2.3.1. Assist major and minor thoracic operations (1 <sup>st</sup> year)  2.3.2. Perform major operations (as primary surgeon, 2 <sup>nd</sup> and 3 <sup>rd</sup> year)  2.3.3. Skills lab- animate and inanimate	2.4. Resources 2.4.1. Operating Room 2.4.2. Surgical wards 2.4.3. Radiologic service, Radiologic, ultrasound imaging and Physiologic modalities 2.4.4. Pathology service 2.4.5. Pulmonary service 2.4.6. Oncology Service 2.4.7. Actual and simulated patients  2.4.8. Simulated laboratories / venues 2.4.8.1. Inanimate specimens  2.4.9. Minimally invasive surgery 2.4.9.1. Instruments 2.4.9.2. Trocars 2.4.9.3. Scopes 2.4.9.4. Energy devices and tower 2.4.9.5. MIS Workshops  2.4.10. Teaching and audio-video facilities	2.5. Assessment 2.5.1. Direct Observation  2.5.2. Rating scale  2.5.3. Workplace assessment  2.5.4. Reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

THORACIC SURGERY: CONGENITAL LUNG and THORACIC DISEASES				
INTENDED LEARNING	CONTENT	LEARNING ACTIVITIES	RESOURCES	EVALUATION
<b>At the end of the FIRST and SECOND YEAR, the RESIDENT should be able to:</b>				
<b>III.AFFECTIVE</b>				
3.1. Intended Learning 3.1.1. Demonstrate the proper attitudes and habits in the practice of surgery.	3.2. Content: 3.2.1. Intellectual integrity 3.2.2. Moral, ethical value 3.2.3. Reliability / Responsibility 3.2.4. Appropriate bedside decorum / relationship with patients 3.2.5. Study / work habits 3.2.6. Relationship with co-health workers and superiors 3.2.7. Emotional maturity reaction to emergency or stress 3.2.8. Social responsibility	3.3. Teaching-Learning Activities	3.4. Resources	3.5. Assessment 3.5.1. Direct observation 3.5.2. Rating scale reports



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

## THORACIC SURGERY – COMPETENCY INDEX CASES (CORE)

PROCEDURE	CORE
1. Median Sternotomy / Clamshell (opening and closure)	5
2. Thoracotomy	5
3. Saphenous Vein Harvest	10
4. Pericardial Drainage	5
5. Peripheral Revascularization (embolectomy, etc.)	5
6. Varicose Vein Ablation	5
7. Central Venous Cannulation	10
8. Arterio-Venous Fistula / AV Graft	10
9. Vascular Trauma • (Head & Neck / Chest / Abdominal Vascular / Peripheral Vascular – Artery & Vein Repair)	5
10. Amputations • (BKA / AKA / Metatarsal)	5
11. Thoracic, Cardiac and Vascular Trauma with Visceral Organ Repair	5
12. FNAB / TTNA / Core Biopsy	5
13. Chest Tube Insertion	10
14. Thoracentesis (with or without ultrasound guidance)	10
15. Bronchoscopy: Flexible / Rigid as primary or secondary operator	5
16. Tracheostomy as primary or secondary operator	3
<b>TOTAL</b>	<b>103</b>



# PHILIPPINE ASSOCIATION OF THORACIC AND CARDIOVASCULAR SURGEONS, INC. (PATACSI)

## THORACIC SURGERY – COMPETENCY INDEX CASES (TRACKING)

PROCEDURE	TRACKING
<b>1. LUNG</b> <ul style="list-style-type: none"> <li>• Open Anatomic Resections (<i>Segmentectomy, lobectomy, pneumonectomy</i>) Major VATS / Robotic Anatomic Resections (at least 5 VATS and 3 Open)</li> </ul>	<b>20</b> <b>(VATS 5 / OPEN 3)</b>
<b>2. LUNG</b> <ul style="list-style-type: none"> <li>• Non-Anatomic Resections</li> </ul>	<b>20</b> <b>(VATS 15)</b>
<b>3. PLEURA</b> <ul style="list-style-type: none"> <li>• Decortication</li> <li>• Pleurectomy, or other tumor resection, Symphatectomy, Pleurodesis</li> </ul>	<b>20</b>
<b>4. CHEST WALL and DIAPHRAGM</b> <ul style="list-style-type: none"> <li>• Chest wall resection (at least 2 with chest wall reconstruction), pectus repair</li> </ul>	<b>3</b>
<b>5. CHEST WALL and DIAPHRAGM</b> <ul style="list-style-type: none"> <li>• Diaphragmatic Surgeries (diaphragm resection or plication, repair of Morgagni, Bochdalek, or traumatic hernia)</li> </ul>	<b>3</b>
<b>6. MEDIASTINUM</b> <ul style="list-style-type: none"> <li>• Tumor / cyst / mass resection via open, VATS, or robotic technique</li> </ul>	<b>10</b> <b>(VATS 3)</b>
<b>7. MEDIASTINUM</b> <ul style="list-style-type: none"> <li>• Mediastinoscopy / Mediastinotomy</li> </ul>	<b>5</b>
<b>8. TRACHEOBRONCHIAL – AIRWAY SURGERY</b> <ul style="list-style-type: none"> <li>• Tracheal-bronchial resection (at least 1 with reconstruction)</li> <li>• Laryngotracheal resection/reconstruction, airway anastomosis, tracheal stenting</li> </ul>	<b>3</b>
<b>9. ESOPHAGUS</b> <ul style="list-style-type: none"> <li>• Esophagectomy (Open or minimally invasive) (at least 1 with reconstruction)</li> <li>• Benign Esophagus, Repair of perforation, drain perforation, diverticulectomy, myotomy, hiatal hernia repair</li> </ul>	<b>2</b>
<b>10. PEDIATHORACIC SURGERY</b> <ul style="list-style-type: none"> <li>• Lung resection</li> <li>• Pleura</li> <li>• Mediastinal Surgery / Chest wall / Diaphragm</li> </ul>	<b>5</b>
<b>11. CARDIOTHORACIC TRAUMA including Iatrogenic</b>	<b>3</b>
<b>12. FNAB / TTNA/ Core Biopsy</b>	<b>5</b>
<b>13. CTT</b>	<b>25</b>
<b>14. THORACENTESIS (with or w/o ultrasound guidance)</b>	<b>10</b>
<b>15. ESOPHAGOSCOPY</b>	<b>5</b>
<b>16. BRONCHOSCOPY</b> <ul style="list-style-type: none"> <li>• Flexible</li> </ul>	<b>10</b>
<b>17. BRONCHOSCOPY</b> <ul style="list-style-type: none"> <li>• Rigid</li> </ul>	<b>2</b>
<b>18. DIAGNOSTIC THORACOSCOPY</b>	<b>10</b>
<b>19. TRACHEOSTOMY</b>	<b>3</b>
<b>TOTAL</b>	<b>164</b>