

COURSE INFORMATION					
Course Title	Code	Semester	L+P Hour	Credits	ECTS
Thoracic Surgery (Clinical Clerkship)	MED 410	Phase 4/7-8	19+21	2	2*

* ECTS credits are the university credits of the courses in Yeditepe University, Faculty of Medicine, Undergraduate Medical Education Program

Prerequisites	The student that joins this course, should completed Phase 1, 2 and 3 courses of medical faculty.
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Language of Instruction	English
Course Level	Second Cycle including First Cycle Degree (One Tier Programme)
Course Type	Compulsory
Course Coordinator	Sina Ercan, MD. Prof.
Instructors	<p><u>Yeditepe University Hospital</u> Head of the Department of Thoracic Surgery: Sina Ercan, MD. Prof.</p> <p><u>Süreyyapaşa Thoracic Diseases and Thoracic Surgery Training and Research Hospital</u> S. Volkan Baysungur M.D., Prof. Serdar Evman M.D., Assoc. Prof. Aysun Kosif M.D., Assoc. Prof. Serda Kanbur M.D., Assoc. Prof.</p>
Assistants	-
Goals	<p>Aim of this clerkship is to;</p> <ol style="list-style-type: none"> 1. Equip students with necessary knowledge, skills and attitudes required to recognize emergencies of major airways, pulmonary vascular structures, lungs, chest wall, esophagus and other frequent pathologies, 2. Equip students with necessary knowledge, skills and attitudes required to complete initial workup to confirm diagnosis, 3. Equip students with necessary knowledge, skills and attitudes required to organize initial treatment as well as arranging quick transfer to a next level health center when needed, 4. Provide students with necessary theoretical and practical training.
Content	<p>For further details please see Academic Program Book of Phase IV at https://med.yeditepe.edu.tr/sites/default/files/phase_iv_apk_2021-2022_v5_27.12.2021.pdf</p>

Learning Outcomes <i>At the end of this clerkship, student should be able to:</i>	Programme Learning Outcomes	Teaching Methods	Assessment Methods
1.0. Define anatomy of structures related to thoracic surgery including lungs, thoracic wall, mediastinum, major airways and esophagus,	1.1.1	1, 3, 4	A
2.0. Define necessary workup and invasive procedures in accordance with preliminary diagnosis	1.1.1 1.1.2 2.1.1	1, 3, 4	A
3.1. Evaluate treatment options for patient according to preliminary diagnosis,	1.1.1 1.1.4 1.1.5 2.5.3	1, 3, 4	A
3.2. Select appropriate treatment option for patient	1.1.1 1.1.5 2.5.3	1, 3, 4	A
4.0. Define findings of shock in patients with tension pneumothorax, hemoptysis, or trauma	1.1.1	1, 3, 4	A
5.0. Interpret basic concepts regarding blood transfusion, hemostasis, and coagulation	1.1.1	1, 3, 4	A
6.0. Interpret basic principles of surgical oncology	1.1.1	1, 3, 4	A
7.0. Perform Physical Examination of a normal respiratory system and upper digestive system	1.1.1	3, 4	A
8.0. Perform needle decompression of tension pneumothorax	1.1.1 2.3.1	4, 5	A, D
9.0. Assess mallampathy level of patient for a safe airway	1.1.1	1, 3, 4	A
10.0. Locate appropriate point of drainage on patient, according to chest x-ray findings	1.1.1 3.1.3	1, 3, 4	A
11.0. Realize physician's responsibilities to provide counseling and education to patient and patient's relatives regarding general health screening and surveillances (such as smoking cessation, colonoscopy, mammography, etc.) according to patient's sex, age and race if appropriate.	1.1.4 1.1.6 1.1.8 2.2.2	1, 3, 4	A
12.0. Respect patient-doctor communication and patient privacy	1.1.3 1.1.2 2.5.1	1, 3, 4	A
13.0. Obtain complete history with appropriate communication skills and behaving in a good manner towards patient and patient's relatives.	1.1.2 2.5.1 2.5.2	1, 3, 4	A

14.0. Value providing appropriate transport conditions in accordance with regulations.	1.1.4 2.3.2	1, 3, 4	A
15.0. Plan basic approach and treatment to traumatized patient.	1.1.1 1.1.7 1.1.8 1.1.9 2.1.1	1, 3, 4,	A
16.0. Plan initial management and workup tests of patient presented with respiratory insufficiency	1.1.1 3.1.3	1, 3, 4,	A
17.0. Do preliminary diagnosis in thoracic pathologies by going over differential diagnosis	1.1.1 1.1.7 3.1.3	1, 3, 4,	A
18.0. Realize importance of providing necessary information to patient or patient's relatives	1.1.2 1.1.6 1.1.8 2.5.1	1, 3, 4,	A
19.0. Manage postoperative wound care and dressing	1.1.1	3, 4,	A
20.1. Do followup postoperative patients according to vital parameters, fluid and electrolyte balance, and surgical drain outputs,	1.1.1 1.1.9 2.1.3 3.1.3	1, 3, 4,	A
20.2. Interpret correctly postoperative chest x-rays in order to plan appropriate management	1.1.1 3.1.3	1, 3, 4,	A
21.0. Refer patient to further health care centers upon indication	1.1.2 1.1.4 1.1.7 1.1.8 1.1.9 2.2.1	1	A

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Bedside teaching, 5: Other (OSCE)
Assessment Methods:	A: Testing (Multiple Choice and Extended Matching Questions; Structured Oral Exam), B: Presentation, C: Homework, D: OSCE

COURSE CONTENT		
Week	Topics	Study Materials
	Introductory Session and Lecture	
1	(Welcome & Acquaintance "Introduction to Thoracic Surgery and its history)	Materials for the course provided by instructor
1	Lecture Surgical Pathologies of Trachea and Their Treatment	Materials for the course provided by instructor
1	Lecture Esophageal Diseases and Surgical Treatment	Materials for the course provided by instructor
1	Case Presentation (Faculty)	Materials for the course provided by instructor

1 Lecture Topographical Anatomy of the Thorax and Thoracic Incision	Materials for the course provided by instructor
1 Lecture Preoperative Evaluation and Diagnostic Procedures in Thoracic Surgery	Materials for the course provided by instructor
1 Lecture Tracheobronchial & Esophageal Foreign Bodies	Materials for the course provided by instructor
1 Lecture Interventional Procedures in Thoracic Surgery	Materials for the course provided by instructor
1 Clinical Experience Inpatient	Materials for the course provided by instructor
1 Case Presentation (Faculty) Pneumothorax Radiology	Materials for the course provided by instructor
1 Case Presentation (Faculty)	Materials for the course provided by instructor
1 Lecture Radiological Evaluation in Thoracic Surgery	Materials for the course provided by instructor
1 Lecture Hemoptysis	Materials for the course provided by instructor
1 Lecture Mediastinal Diseases and Surgical Treatment	Materials for the course provided by instructor
1 Clinical Skills Training Performing Needle Thoracentesis on a Mannequin with a Tension Pneumothorax	Materials for the course provided by instructor
1 Clinical Skills Training Assessment Session	Materials for the course provided by instructor
1 Clinical Experience Surgical	Materials for the course provided by instructor
1 Lecture Spontaneous Pneumothorax and Bullous Disorders	Materials for the course provided by instructor
1 Lecture Thoracic Trauma I	Materials for the course provided by instructor
1 Lecture Thoracic Trauma II	Materials for the course provided by instructor
1 Clinical Experience Inpatient	Materials for the course provided by instructor
1 Case Presentation (Faculty)	Materials for the course provided by instructor
1 Lecture Lung Cancers and Other Tumors of Lung	Materials for the course provided by instructor
1 Lecture Minimal Invasive Surgical Approaches in Thoracic Diseases	Materials for the course provided by instructor
1 Lecture Benign Lung Diseases & Hydatid Cyst of the Lung	Materials for the course provided by instructor
1 Clinical Experience Surgical Intensive Care Unit	Materials for the course provided by instructor
1 Clinical Experience Surgical Operating Room	Materials for the course provided by instructor
1 Lecture Surgical Treatment of the Pathologies of Pleural Spaces	Materials for the course provided by instructor
1 Lecture Chest Wall Diseases and Surgical Treatment	Materials for the course provided by instructor
1 Lecture Diaphragmatic Diseases and Surgical Treatment	Materials for the course provided by instructor

1 Clinical Experience Surgical	Materials for the course provided by instructor
1 Clinical Experience Surgical Tube Thoracostomy	Materials for the course provided by instructor
1 Clinical Experience Surgical	Materials for the course provided by instructor
1 Clinical Experience Surgical Bronchoscopy	Materials for the course provided by instructor
1 Written Exam	Materials for the course provided by instructor
1 Oral Exam	Materials for the course provided by instructor
1 Program Evaluation Session Review of the Exam Questions, Evaluation of the Clerkship Program	Materials for the course provided by instructor

NCC 2014 – Essential Medical Procedures (National Core Curriculum)	Performance Level
Respiratory system examination	3
Reading and evaluating direct radiographs	4
Performing pleural puncture	3
Evaluating pulmonary function tests	3

RECOMMENDED SOURCES	
Textbook	Göğüs Cerrahisi (Kırmızı Kitap), 2. Baskı, Editör Prof Dr Mustafa Yüksel, 2015 Nobel Tıp Kitapevi
Additional Resources	Ders sunumları

ASSESSMENT	
Question Types (Pencil.Paper Tests)	Proportion of Questions
Multiple Choice Questions	45%
Total	45%
Other Assessment Methods and Tools	Proportion
Oral Exam (OE)	50%
Objective Structured Clinical Exam (OSCE)	5%
Total	55%
Pass/Fail Decision	Proportion (in Pass/Fail Decision)
Pencil-Paper Tests	45%
Other Assessments Methods and Tools	55%
Total	100%

MATERIAL SHARING	
Documents	Photocopy shareable.
Assignments	Not Shareable
Exams	Not shareable

COURSE CATEGORY	Expertise/Field Courses
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COURSES CONTRIBUTION TO PROGRAM					
COMPETENCE AREA-1 / Professional Practices	Contribution				
COMPETENCE 1.1. Health Service Provider	1	2	3	4	5
Competency 1.1.1. Integrates knowledge, skills, and attitudes acquired from basic and clinical medical sciences, behavioral sciences, and social sciences to provide health services.					X
Competency 1.1.2. Demonstrates a biopsychosocial approach that considers the individual's sociodemographic and sociocultural background without discrimination based on language, religion, race, or gender in patient management.			X		
Competency 1.1.3. Prioritizes the protection and improvement of individuals' and community's health in the delivery of healthcare services.	X				

Competency 1.1.4. Performs the necessary actions in the direction of maintaining and improving the state of health as considering the individual, social, social and environmental factors affecting health.			X		
Competency 1.1.5. Provides health education to healthy/ill individuals and their families, as well as to other healthcare professionals, by recognizing the characteristics, needs, and expectations of the target audience.		X			
Competency 1.1.6. Demonstrates a safe, rational, and effective approach in the processes of protection, diagnosis, treatment, follow-up, and rehabilitation in health service delivery.		X			
Competency 1.1.7. Performs interventional and/or non-interventional procedures safely and effectively for the patient in the processes of diagnosis, treatment, follow-up, and rehabilitation.				X	
Competency 1.1.8. Provides healthcare services considering patient and employee health and safety.				X	
Competency 1.1.9. Considers changes related to the physical and socio-economic environment at both regional and global scales that affect health, as well as changes in the individual characteristics and behaviors of those who seek healthcare services.				X	
COMPETENCE AREA-2 / Professional Values and Approaches	Contribution				
COMPETENCE 2.1. Adopting Professional Ethics and Principles	1	2	3	4	5
Competency 2.1.1. Considers good medical practices while performing the profession.		X			
Competency 2.1.2. Fulfills duties and obligations within the framework of ethical principles, rights, and legal responsibilities required by the profession.	X				
Competency 2.1.3. Demonstrates determined behavior in providing high-quality healthcare while considering the patient's integrity.	X				
Competency 2.1.4. Evaluates own performance in professional practices by considering own emotions and cognitive characteristics.	X				
COMPETENCE 2.2. Health Advocate					
Competency 2.2.1. Advocates for the improvement of healthcare service delivery by considering the concepts of social accountability and social responsibility in the protection and enhancement of community health.	X				
Competency 2.2.2. Plans and implements service delivery, education, and counseling processes related to individual and community health, in collaboration with all stakeholders, for the protection and improvement of health.		X			
Competency 2.2.3. Evaluates the impact of health policies and practices on individual and community health indicators and advocates for the improvement of healthcare quality.	X				
Competency 2.2.4. Gives importance to protecting and improving own physical, mental, and social health and takes necessary actions for it.	X				
COMPETENCE 2.3. Leader-Manager					
Competency 2.3.1. Demonstrates exemplary behavior and leadership within the healthcare team during service delivery.	X				
Competency 2.3.2. Utilizes resources in a cost-effective, socially beneficial, and compliant manner with regulations in the planning, implementation, and evaluation processes of healthcare services as the manager in the healthcare institution.	X				
COMPETENCE 2.4. Team Member					
Competency 2.4.1. Communicates effectively within the healthcare team and takes on different team roles as necessary.	X				
Competency 2.4.2. Displays appropriate behaviors while being aware of the duties and responsibilities of healthcare workers within the healthcare team.	X				
Competency 2.4.3. Works collaboratively and effectively with colleagues and other professional groups in professional practice.		X			

COMPETENCE 2.5. Communicator					
Competency 2.5.1. Communicates effectively with patients, their families, healthcare professionals, and other occupational groups, institutions and organizations.			X		
Competency 2.5.2. Communicates effectively with individuals and groups who require a special approach and have different sociocultural characteristics.	X				
Competency 2.5.3. Demonstrates a patient-centered approach that involves the patient in decision-making mechanisms during the diagnosis, treatment, follow-up, and rehabilitation processes.		X			
COMPETENCE AREA-3 / Professional and Personal Development	Contribution				
COMPETENCE 3.1. Scientific and Analytical Approach	1	2	3	4	5
Competency 3.1.1. Plans and implements scientific research, as necessary, for the population it serves, and utilizes the results obtained, as well as those from other research, for the benefit of the community.				X	
Competency 3.1.2. Accesses and critically evaluates current literature related to their profession.	X				
Competency 3.1.3. Applies evidence-based medicine principles in the clinical decision-making process.			X		
Competency 3.1.4. Uses information technologies to enhance the effectiveness of healthcare, research, and education activities.	X				
COMPETENCE 3.2. Lifelong Learner					
Competency 3.2.1. Manages effectively individual study processes and career development.	X				
Competency 3.2.2. Demonstrates skills in acquiring, evaluating, integrating new information with existing knowledge, applying to professional situations, and adapting to changing conditions throughout professional career.	X				
Competency 3.2.3. Selects the right learning resources to improve the quality of health care and organizes the learning process.	X				

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration (1.5 weeks)	7	6	42
Hours for off-the-classroom study (Pre-study, practice, review/week)	20	1	20
Homework	-	-	-
Exam	1	3	3
Total Work Load			65
Total Work Load / 30 (h)			2.17
ECTS Credit of the Course			2