

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	S. Volkan Baysungur, MD. Prof. Serdar Evman, MD. Assoc. Prof. Aysun Kosif, MD. Assoc. Prof.
Assistants	-
Goals	Aim of this clerkship is to; 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	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

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,	PO.1.1.5.	1, 3, 4	A
2.0. Define necessary workup and invasive procedures in accordance with preliminary diagnosis	PO.1.1.7./PO 1.1.8.	1, 3, 4	A

3.1. Evaluate treatment options for patient according to preliminary diagnosis,	PO.1.1.9./PO .1.1.11.	1, 3, 4	A
3.2. Select appropriate treatment option for patient	PO.1.1.11.	1, 3, 4	A
4.0. Define findings of shock in patients with tension pneumothorax, hemoptysis, or trauma	PO.1.1.3./PO .1.1.6.	1, 3, 4	A
5.0. Interpret basic concepts regarding blood transfusion, hemostasis, and coagulation	PO.1.1.10.	1, 3, 4	A
6.0. Interpret basic principles of surgical oncology	PO1.1.9./PO. 1.1.11.	1, 3, 4	A
7.0. Perform Physical Examination of a normal respiratory system and upper digestive system	PO.1.1.5./PO 1.1.6.	3, 4	A
8.0. Perform needle decompression of tension pneumothorax	PO.1.1.10.	4, 5	A, D
9.0. Assess Mallampathy level of patient for a safe airway	PO.1.1.5./PO 1.1.6.	1, 3, 4	A
10.0. Locate appropriate point of drainage on patient, according to chest x-ray findings	PO.1.1.5./PO 1.1.6./PO.1.1 .10.	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.	PO.1.1.1./PO .1.2.4./PO.2. 3.2.	1, 3, 4	A
12.0. Respect patient-doctor communication and patient privacy	PO.1.2.3./PO 2.2.1./PO.2.5 .2./PO.2.5.3.	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.	PO.1.1.4.	1, 3, 4	A
14.0. Value providing appropriate transport conditions in accordance with regulations.	PO.1.1.2./PO .2.1.1.	1, 3, 4	A
15.0. Plan basic approach and treatment to traumatized patient.	PO.1.1.3./PO .1.1.6./PO.1. 1.11./PO.1.2. 2./PO.1.3.1./ PO.3.3.2.	1, 3, 4,	A

16.0. Plan initial management and workup tests of patient presented with respiratory insufficiency	PO.1.1.7./PO.1.1.8./PO.1.1.9.	1, 3, 4,	A
17.0. Do preliminary diagnosis in thoracic pathologies by going over differential diagnosis	PO.1.1.7./PO.1.1.8./PO.1.1.9.	1, 3, 4,	A
18.0. Realize importance of providing necessary information to patient or patient's relatives	PO.1.2.1./PO.1.2.4.	1, 3, 4,	A
19.0. Manage postoperative wound care and dressing	PO1.1.10./PO.1.1.11.	3, 4,	A
20.1. Do followup postoperative patients according to vital parameters, fluid and electrolyte balance, and surgical drain outputs,	PO.1.1.9./PO.1.1.10./PO.1.1.11./PO.1.1.12.	1, 3, 4,	A
20.2. Interpret correctly postoperative chest x-rays in order to plan appropriate management	PO.1.1.9./PO.1.1.10.	1, 3, 4,	A
21.0. Refer patient to further health care centers upon indication	PO.1.1.11./PO.1.2.2./PO.1.4.1.	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
1	Introductory Session and Lecture (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

COURSE'S CONTRIBUTION TO PROGRAM

POD.G.1. Basic Professional Competencies		Contribution				
POD.1.1. Clinical Competencies		1	2	3	4	5
PO.1.1.1.	values preventive health services, offers primary prevention (i.e. prevention of diseases for the protection of health), secondary prevention (i.e. early diagnosis and treatment) tertiary prevention (i.e. rehabilitation) and quaternary prevention (i.e. prevention of excessive and unnecessary diagnosis and treatment) services, provides consultancy on these issues.					X
PO.1.1.2.	employs a patient-centered approach in patient management.				X	
PO.1.1.3.	recognizes most frequently occurring or significant clinical complaints, symptoms, signs, findings and their emergence mechanisms in clinical conditions.				X	

PO.1.1.4.	takes medical history from the applicant himself/herself or from the individual's companions.				X	
PO.1.1.5.	does general and focused physical and mental examination.				X	
PO.1.1.6.	interprets findings in medical history, physical and mental examination.					X
PO.1.1.7.	employs diagnostic procedures that are used frequently at the primary health care level.			X		
PO.1.1.8.	selects tests that have evidence-based high efficacy at the primary health care level and interprets results.				X	
PO.1.1.9.	makes clinical decisions using evidence-based systematic data in health care service.				X	
PO.1.1.10.	performs medical interventional procedures that are used frequently at the primary health care level.				X	
PO.1.1.11.	manages healthy individuals and patients in the context of health care services.			X		
PO.1.1.12.	keeps medical records in health care provision and uses information systems to that aim.		X			
	POD.1.2. Competencies related to Communication					
PO.1.2.1.	throughout his/her career, communicates effectively with health care beneficiaries, co-workers, accompanying persons, visitors, patient's relatives, care givers, colleagues, other individuals, organizations and institutions.				X	
PO.1.2.2.	collaborates as a team member with related organizations and institutions, with other professionals and health care workers, on issues related to health.				X	
PO.1.2.3.	recognizes the protection and privacy policy for health care beneficiaries, co-workers, accompanying persons and visitors.				X	
PO.1.2.4.	communicates with all stakeholders taking into consideration the socio-cultural diversity.				X	
	POD.1.3. Competencies Related to Leadership and Management					
PO.1.3.1.	manages and leads within the health care team in primary health care organization.		X			
PO.1.3.2.	recognizes the principles of health management and health sector economy, models of organization and financing of health care services.					
PO.1.3.3.	recognizes the resources in the health care service, the principles for cost-effective use.					
	POD.1.4. Competencies related to Health Advocacy					
PO.1.4.1.	recognizes the health status of the individual and the community and the factors affecting the health, implements the necessary measures to prevent effects of these factors on the health.			X		
PO.1.4.2.	recognizes and manages the health determinants including conditions that prevent access to health care.					
	POD.1.5. Competencies related to Research					
PO.1.5.1.	develops, prepares and presents research projects					
	POD.1.6. Competencies related to Health Education and Counseling					
PO.1.6.1.	provides consultancy services and organizes health education for the community to sustain and promote the health of individual and community.					
	PODG.2. Professional Values and Perspectives					
	POD.2.1. Competencies related to Law and Legal Regulations					

PO.2.1.1.	performs medical practices in accordance with the legal framework which regulates the primary health care service.					
POD.2.2. Competencies Related to Ethical Aspects of Medicine						
PO.2.2.1.	recognizes basic ethical principles completely, and distinguishes ethical and legal problems.			X		
PO.2.2.2.	pays importance to the rights of patient, patient's relatives and physicians, and provides services in this context.			X		
POD.2.3. Competencies Related to Social and Behavioral Sciences						
PO.2.3.1.	relates historical, anthropological and philosophical evolution of medicine, with the current medical practice.					
PO.2.3.2.	recognizes the individual's behavior and attitudes and factors that determine the social dynamics of the community.			X		
POD.2.4. Competencies Related to Social Awareness and Participation						
PO.2.4.1.	leads community with sense of responsibility, behavior and attitudes in consideration of individual behaviors and social dynamics of the community, and if there is a necessity, develops projects directed towards health care services.					
POD.2.5. Competencies Related to Professional Attitudes and Behaviors						
PO.2.5.1.	displays a patient-centered and holistic (biopsychosocial) approach to patients and their problems.					
PO.2.5.2.	respects patients, colleagues and all stakeholders in health care delivery.				X	
PO.2.5.3.	displays the proper behavior in case of disadvantaged groups and situations in the community.				X	
PO.2.5.4.	takes responsibility for the development of patient safety and healthcare quality.					
PO.2.5.5.	evaluates own performance as open to criticism, realizes the qualifications and limitations.					
PODG.3. Professional Development and Self-Worth						
PODG.3.1. Personal Development and Values						
PO.3.1.1.	embraces the importance of lifelong self-learning and implements .					
PO.3.1.2.	embraces the importance of updating knowledge and skills; searches current advancements and improves own knowledge and skills.					
PO.3.1.3.	uses English language at least at a level adequate to follow the international literature and to establish communication related to the profession.					
POD.3.2. Competencies Related to Career Management						
PO.3.2.1.	recognizes and investigates postgraduate work domains and job opportunities.					
PO.3.2.2.	recognizes the application requirements to postgraduate work/job domains, and distinguishes and plans any requirement for further training and work experience.					
PO.3.2.3.	prepares a resume, and recognizes job interview methods.					
POD.3.3. Competencies Related to Protection and Development of Own Physical and Mental Health						
PO.3.3.1.	implements the rules of healthy living.					

PO.3.3.2.	displays appropriate behavior specific to work under stressful conditions.			x		
PO.3.3.3.	uses self-motivation factors.					

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