T.R.

LOKMAN HEKİM UNIVERSITY

FACULTY OF MEDICINE

PHASE V

2024-2025 EDUCATION and TEACHING GUIDE

T.R.
LOKMAN HEKİM UNIVERSITY FACULTY OF MEDICINE

PHASE V COURSES and ECTS

COURSE CODE	COMPULSORY COURSES	DURATION (DAYS)	THEORETICAL LECTURES HOURS	ECTS
11051001	Child Health and Diseases	45	68	**15**
11051004	Skin and Venereal Diseases	15	24	**5**
11051005	Physical Medicine and Rehabilitation	15	34	**5**
11051002	Respiratory Medicine	15	41	**5**
11051007	Ophthalmology	15	20	**5**
11051003	Ear Nose and Throat Diseases	15	28	**5**
11051006	Orthopedics and Traumatology	15	24	**5**
11051008	Mental Health and Disorders	15	28	**5**
TOTAL COMPULSORY ECTS REQUIRED TO BE TAKEN				**60**
COURSE CODE	**ELECTIVE COURSES**	**DURATION (DAYS)**	**THEORETICAL LECTURES HOURS**	**ECTS**
11091053	Plastic, Reconstructive and Aesthetic Surgery	5	19	**3**
11091054	Radiology	5	20	**3**
11091048	Emergency Medicine	5	15	**3**
11091052	Clinical Pharmacology	5	3	**3**
11091065	Medical Genetics	5	14	**3**
11091066	Traditional and Complementary Medicine		7	
11091050	Physiotherapy and Rehabilitation		8	
	Medical Education		12	
11091051	Thoracic Surgery	5	15	**3**
11091049	Nutrition and Dietetics		15	
11091067	Medical Biochemistry		15	
	Allergic Diseases		11	
TOTAL ECTS TO BE COLLECTED AS ELECTIVES				**18**
TOTAL ECTS TO BE COLLECTED IN PHASE V				**68**

PURPOSE and LEARNING OBJECTIVES

PURPOSE:

Phase V students in *Child Health and Diseases*, *Skin and Venereal Diseases*, *Physical Medicine and Rehabilitation*, *Respiratory Medicine*, *Ophthalmology*, *Ear Nose Throat Diseases*, *Orthopedics and Traumatology*, *Mental Health and Disorders and Plastic, Reconstructive and Aesthetic Surgery*, *Radiology, Emergency Medicine, Clinical Pharmacology*, *Medical Genetics*, *Traditional and Complementary Medicine*, *Physiotherapy and Rehabilitation, Medical Education*, *Thoracic Surgery*, *Nutrition and Dietetics*, *Medical Biochemistry* and *Allergic Diseases* Clinical Course and Practise Boards (CCPB). At the end of these CCPB, phase V students will be able to realize the general approach to the patient in diseases related to the relevant Departments / Branches, diagnose or pre-diagnose common diseases, treat patients at the primary care level, and perform emergency interventions, explain the principles of preventive health services of diseases, and have the necessary skills and knowledge to explain the principles of preventive health services.

LEARNING OBJECTIVES:

Phase V students, *Child Health and Diseases*, *Skin and Venereal Diseases*, *Physical Medicine and Rehabilitation*, *Respiratory Medicine*, *Ophthalmology*, *Ear Nose Throat Diseases*, *Orthopedics and Traumatology*, *Mental Health and Disorders, and* ***Elective*** *(Plastic, Reconstructive and Aesthetic Surgery*, *Radiology, Emergency Medicine, Clinical Pharmacology*, *Medical Genetics*, *Traditional and Complementary Medicine*, *Physiotherapy and Rehabilitation, Medical Education*, *Thoracic Surgery*, *Nutrition and Dietetics*, *Medical Biochemistry* and *Allergic Diseases)* CCPBs;

1. He takes stories from the patients,
2. Makes physical examinations,
3. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
4. Distinguish the patients to be followed up in primary care, plan their treatment,
5. It directs patients who need to be treated and followed up at a higher level or by a specialist,
6. It guides rare defects,
7. Directs rare applications to an appropriate branch promptly,
8. Define the ways of prevention of common diseases in our country,

they will be able to.

EXPLANATIONS and ABBREVIATIONS RELATED to LEARNING LEVELS	
E	Define the **emergency situation**, perform the first treatment, and refer to a specialist when necessary
PreD	To be able to make a **preliminary diagnosis** in non-emergency situations, perform the necessary preliminary procedures and refer to the specialist
D	Should be able to **diagnose** and have knowledge about treatment, perform the necessary preliminary procedures and refer to the specialist
DT	Should be able to **diagnose** and **treat**
F	Should be able to perform long-term **follow-up** and control.
P	Should be able to apply **protection** measures (primary, secondary and tertiary prevention, as appropriate)

SCORING FOR BASIC MEDICAL PRACTICES LEARNING LEVEL	
Learning Level	**Description**
1	Knows how the application is performed and explains the results to the patient and/or patient relatives
2	In case of an emergency, performs the application in accordance with the guideline / directive
3	Performs the application* in non-complex, common situations/cases
4	Performs the application* including complex situations/cases
* Conducts pre-assessment/evaluation, creates and implements the necessary plans, informs patients and their relatives/community about the process and its results	

CLINICAL COURSE and PRACTICE BOARDS PROGRAM

Coordinator	**Prof. Dr. Engin DURSUN**
Deputy Coordinators	**Assoc. Prof. Dr. Esen SAYIN GÜLENSOY** **Assis. Prof. Dr. Burçin Cansu BOZCA**

CLINICAL COURSE and PRACTICE BOARDS (CCPB) GROUPS and RESPONSIBILITIES

Groups	DEPARTMENTS		Clinical Course and Practice Board Responsible	Duration (Working Day)	Total Duration (Working Day)
Group-1	***Child Health and Diseases***		Prof. Dr. Demet SOYLU	45	45
Group-2	***Respiratory Medicine***		Prof. Dr. Bülent BOZKURT	15	45
	Ear Nose and Throat Disease		Prof. Dr. Eng:n DURSUN	15	
	Elective-3: ***Plastic, Reconstructive and Aesthetic Surgery***		Assoc. Prof. Dr. Emre İNÖZÜ	5	
	Elective-4: ***Emergency Medicine***		Prof. Dr. Alper Bilal ÖZKARDEŞ	5	
	Elective (Group-2)	*Elective-9:* ***Thoracic Surgery***	Prof. Dr. Engin DURSUN	5	
		Elective-10: ***Nutrition and Dietetics***	Assoc. Prof. Dr. Ayhan DAĞ		
		Elective-11: ***Medical Biochemistry***	Prof. Dr. Metin YILDIRIMKAYA		
		Elective-12: ***Allergic Diseases***	Prof. Dr. Adile Berna DURSUN		
Group-3	***Ophthalmology***		Prof. Dr. Nurullah ÇAĞIL	15	45
	Orthopedics and Traumatology		Prof. Dr. Musa Uğur MERMERKAYA	15	
	Physical Medicine and Rehabilitation		Prof. Dr. Saime AY	15	
Group-4	*Elective-1:* ***Clinical Pharmacology***		Prof. Dr. Müge TECDER	5	45
	Elective-2: ***Radiology***		Prof. Dr. Emin Turgut TALİ	5	
	Elective (Group-1)	*Elective-5:* ***Medical Genetics***	Prof. Dr. Serdar CEYLANER	5	
		Elective-6: ***Traditional and Complementary Medicine***	Prof. Dr. Cemal ÇEVİK Assis. Prof. Fatih Mehmet SÜRMEN		
		Elective-7: ***Physiotherapy and Rehabilitation***	Prof. Dr. Nilgün BEK Prof. Dr. A. Ayşe KARADUMAN Assoc. Prof. Dr. Banu ÜNVER		
		Elective-8: ***Medical Education***	Prof. Dr. Adile Berna DURSUN		
	Skin and Venereal Diseases		Prof. Dr. Hakan ERBİL	15	

CLINICAL COURSE and PRACTICE BOARDS (CCPB) EDUCAEDUCATION and TEACHING ANNUAL PLAN

ACADEMIC CALENDAR and CLINICAL COURSE and PRACTICE BOARDS GROUPS			
SEMESTER	**DATE**	**DURATİON**	**GROUP**
1st Semester (FALL)	September 09th, 2024 November 08th, 2024	45 days	
	November 11th, 2024 January 10th , 2025	45 days	
Semester Break	January 11th, 2025 January 26th, 2025	14 days	**Semester Break**
2nd Semester (SPRING)	January 27th, 2025 March 28th, 2025	45 days	
	April 02nd, 2025 May 30th, 2025	45 days	
Make-up EXAMS	June 16th, 2025 June 20th, 2025	5 days	Those who failed to make up

CLINICAL THEORETICAL COURSE and PRACTICE METHODS

Clinical education of 5th-year medical students includes theoretical courses and practical applications. The clinics' theoretical and practical applications are prepared per the "**National Core Education Program for Medical Education**." The clinical course and practice board (CCPB) program includes theoretical lectures, general bedside practical training (bedside rounds), case-based education, student case preparation and presentation, seminars, and a student polyclinic.

1. **Theoretical courses**: Lectures are given by faculty members,
2. **Case-based education:** Conducted under the supervision of faculty members.
3. **Student] outpatient clinic:** The patient outpatient clinic is held together with faculty members,
4. **General bedside rounds:** Bedside student rounds are conducted with the faculty member. Students are also encouraged to participate in regular clinical rounds undertaken by faculty members,
5. **Seminar:** Students may prepare workshops under the supervision of faculty members,
6. **Postgraduate education program planned at the clinic or hospital level (educational activities such as panel, conference, seminar, literature presentation, mortality hour, etc.):** Students are encouraged to participate in in-clinic or hospital-wide postgraduate education programs.
7. **Examination:** According to the Lokman Hekim University, Faculty of Medicine Education and Examination Regulations, CCPB examinations at the end of the internship by the relevant departments consist of diagnostic (pre-evaluation) at the beginning of the CCPB, formative (interim evaluation) during the CCPB, theoretical exam, and objective structured clinical exams at the end of the CCPB.
    a. To be successful in the CCPB, the decision-maker assessment score must be at least 60.
    b. The decision-maker assessment score is the sum of **the theoretical** and **objective structured clinical (practical)** examinations that cover the content of the CCPB training. The effect of each exam on the decision-maker assessment score is 50%, provided that at least 50 (fifty) is obtained from each exam. Theoretical exams must be taken. In the presence of an acceptable excuse, with the request of the departments and the decision of the faculty board of directors, structured oral exams are held if objective structured clinical exams cannot be held.

c. **Theoretical exam** refers to the written (theoretical) exam conducted to measure knowledge at different levels. Theoretical exams are conducted through an electronic system to be determined by the faculty board of directors. The number of questions is determined to be at least 50 (fifty) and not less than the number of theoretical courses taught in the CCPB. At the end of the theoretical exams, it is obligatory to give information about the correct answers and explanations of the question. The contribution of the diagnostic (pre-assessment) exam/exams to the theoretical exam is 5% of the average of the scores obtained, the contribution of the formative (mid-term evaluation) exam/exams to the theoretical exam is 15% of the average of the scores obtained and 80% of the score obtained from the theoretical exam is summed up, and the theoretical exam grade is calculated. If there is no diagnostic (pre-assessment) exam, 20% of the average of the scores obtained from the formative (midterm) exam(s) and 80% of the score obtained from the theoretical exam are added together, and the theoretical grade is calculated. Without a diagnostic (pre-assessment) and formative (mid-term evaluation) exam, the score obtained from the theoretical exam is 100%, and the theoretical exam grade is calculated. With the decision of the faculty board of directors, the weights of different exam types can be changed in calculating the internship board success grade to be announced at the beginning of the internship board. Diagnostic (preliminary evaluation) and formative (interim evaluation) exams are mandatory in internships that exceed one week.

d. **Objective structured clinical (practice/practical) exam:** It refers to a valid measurement and evaluation method used to assess the student's readiness to apply the competencies related to the CCPB, such as communication, knowledge, technical skills, and clinical reasoning at the desired level expected from them during clinical practice.

1. CHILD HEALTH and DISEASES

PURPOSE:

Phase V students will learn the characteristics of the healthy child (growth - development monitoring), recognition and treatment of childhood diseases, emergency diagnosis and treatment of life-threatening conditions in pediatric patients, immunization for the protection and improvement of health in children, protection from accidents, balanced nutrition, monitoring and support of neuromotor development in the period from birth to the end of adolescence (0 - 18 years of age) *in the "Child Health and Diseases Clinical Course and Practice Board"*. In addition, the general approach to pediatric patients, evidence-based medicine practices in diagnosing and treating diseases seen in children, health problems, and conditions of the country and the world will be solved by knowing. Within the scope of the values of medicine, the ability to communicate effectively with the sick child and their family, who is a researcher and questioner and applies his profession by observing ethical rules, will also be obtained.

LEARNING OBJECTIVES:

1. Takes anamnesis from the child and their family using practical communication skills,
2. Evaluates vital signs in children,
3. Performs physical examination on the child patient,
4. Makes the necessary measurements for the evaluation of growth in children,
5. Evaluates the growth and development of healthy children,
6. Provides counseling on fundamental issues by establishing appropriate communication with the family,
7. Manages breastfeeding and childhood nutrition,
8. Plans and manages childhood immunization,
9. Explains the methods of prevention of childhood diseases,
10. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnoses or diagnoses,
    i. Interpret the basic laboratory (biochemical measurements, hematological tests, ECG, peripheral smear, ...) and radiological examinations frequently performed in child health and diseases,

ii. Explain the indications and methods of application of essential interventions in terms of pediatric diseases in patients, does practice at the primary level,

iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,

11. Distinguish the patients to be followed up in primary care, plan their treatment,

12. Applies the diagnosis and treatment of common diseases,

13. It directs patients who need to be treated and followed up at a higher level or by a specialist,

i. It guides rare defects,

ii. Directs rare applications to an appropriate branch promptly,

iii. Performs essential interventions for critically ill patients with pediatric diseases (respiratory support, circulatory support, etc.) and refers them to a higher-level health institution.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
To be able to evaluate mental state	**3**
Physical examination for the general problem	
Forensic case examination in terms of child health and diseases	**3**
Anthropometric measurements	**3**
Abdominal examination	**4**
Consciousness assessment	**4**
Examination of children and newborns	**4**
Skin examination	**4**
Evaluation of general condition and vital signs	**4**
Cardiovascular system examination	**4**
Ear-nose-throat and head and neck examination	**3**
Neurological examination	**3**
Respiratory system examination	**4**

Record keeping, reporting and notification	
Clarification and obtaining consent	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of child health and diseases	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To provide decontamination, disinfection, sterilization, antisepsis	**4**
To be able to prepare faucal smear and make microscopic examination	**3**
To be able to evaluate direct radiographs in terms of child health and diseases	**3**
To be able to take and evaluate ECG	**3**
To be able to make fecal occult blood examination	**4**
To be able to measure and evaluate blood glucose with glucometer	**4**
To be able to measure and evaluate bleeding time	**2**
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
Ability to use microscope	**4**
To be able to use and evaluate Peak-flow meter	**3**
To be able to make and evaluate peripheral smear	**3**
To be able to perform and evaluate complete urine analysis (including microscopic examination)	**3**
To be able to interpret the results of screening and diagnostic examinations in terms of child health and diseases	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of pediatric health and diseases	**3**
Airway application	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
Arterial blood gas collection	**3**
Use of balloon mask (ambu)	**4**

To be able to monitor growth and development in children (percentile curves, tanner grading)	**3**
Ability to open an intravenous line	**3**
To be able to recognise/protect/transplant evidence in terms of child health and diseases	**2**
To be able to care for the baby after birth	**3**
Hand washing	**4**
Ability to intubate	**3**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of child health and diseases	**4**
Ability to make IM, IV, SC, ID injection	**4**
Urinary catheter insertion	**3**
To be able to measure blood pressure	**4**
To be able to make blood transfusion	**3**
To be able to take samples for culture	**3**
To be able to make enema	**3**
Minimal condition examination	**3**
To be able to apply nasogastric catheter	**3**
To be able to apply oxygen and nebul-inhaler therapy	**4**
To be able to apply and evaluate pulse oximetry	**4**
Ability to provide protection and transport in accordance with the cold chain	**4**
To be able to evaluate respiratory function tests	**3**
To be able to apply basic life support	**4**
Ability to take heel blood	**4**
To be able to prepare the drugs to be applied correctly	**3**
Neonatal resuscitation	**2**
Preventive medicine and community medicine practices	
To be able to give immunization counseling	**4**
To be able to carry out immunization services	**4**
To be able to teach correct breastfeeding methods	**4**
Periodic health examinations in terms of child health and diseases (vision, hearing, metabolic diseases, vaccination of risk groups, cancer screening)	**4**
To be able to take precautions related to the protection of the health of health workers	**4**
To be able to take preventive measures against healthcare-associated infections	**3**

Principles and practices of scientific research (in terms of Child Health and Diseases)	
To be able to compile scientific data and summaries them in tables and graphs	**3**
To be able to analyze scientific data with appropriate methods and interpret the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply evidence-based medicine principles in clinical decision-making process	**3**
Healthfulness	
Immunization in childhood and adults	**4**
Infant Health Monitoring	**4**
Follow-up and periodic health examinations at different stages of life (pregnancy, birth, puerperium, newborn, childhood, adolescence, adulthood, old age)	**4**
Healthy eating	**4**
Developmental hip dysplasia screening program	**4**
Newborn metabolic and endocrine disease screening program	**4**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
CHDT1	Approach to the child with anemia	**PreD-DT-E-P-F**	**1**
CHDT2	Indications and complications of blood transfusion in children	**D-E**	**1**
CHDT3	Bleeding disorders in children	**PreD-P-F**	**1**
CHDT4	Nutritional anemias (iron deficiency)	**DT-E-P-F**	**1**
CHDT5	Evaluation of growth and development	**DT-E-P-F**	**1**
CHDT6	Congenital hypothyroidism, thyroid diseases	**DT-P-E**	**1**
CHDT7	Bacterial infections of the newborn	**E**	**1**
CHDT8	Intrauterine infections	**PreD-P**	**1**
CHDT9	Childhood hypertension and its treatment	**D-E-P-F**	**1**
CHDT10	Clinical approach and treatment of acute glomerulonephritis	**D-E**	**1**
CHDT11	Collagen tissue diseases	**PreD**	**1**

CHDT12	Oncological emergencies in childhood	**E**	**1**
CHDT13	Childhood lymphomas	**PreD**	**1**
CHDT14	Childhood leukemias	**PreD**	**1**
CHDT15	Neonatal jaundice	**D-P**	**1**
CHDT16	Perinatal asphyxia, neonatal resuscitation	**E-P**	**1**
CHDT17	Child of a diabetic mother	**D-P**	**1**
CHDT18	Approach to pediatric emergency patient and basic life support	**E**	**1**
CHDT19	Viral paralytic diseases	**PreD-P**	**1**
CHDT20	Convulsions and epilepsy	**PreD-A-P-F**	**1**
CHDT21	Vitamin D deficiency and rickets, vitamin deficiencies	**PreD-DT-P-F**	**1**
CHDT22	Diabetes mellitus and its complications	**DT-A-P-F**	**1**
CHDT23	Treatment of diabetes	**DT-A-P-F**	**1**
CHDT24	Complementary feeding in infants	**PreD-P-F**	**1**
CHDT25	Inherited metabolic diseases	**PreD-P-F**	**1**
CHDT26	Adolescent period problems	**PreD**	**1**
CHDT27	Parenteral fluid therapy in children: electrolyte balance disorders and treatment	**D-E-K**	**1**
CHDT28	Common autoinflammatory diseases in children	**PreD**	**1**
CHDT29	Acid-base balance disorders in children: Clinical approach and treatment	**E**	**1**
CHDT30	Childhood nephrotic syndromes	**D**	**1**
CHDT31	Heart failure in children	**D-E-P-F**	**1**
CHDT32	Pericarditis, myocarditis, cardiomyopathies	**PreD**	**1**
CHDT33	Cyanotic congenital heart diseases	**PreD**	**1**
CHDT34	Congenital heart diseases	**PreD**	**1**
CHDT35	Acute rheumatic fever, endocarditis	**PreD-D-P**	**1**
CHDT36	Abdominal and GI examination in children	**DT-P-F**	**1**
CHDT37	Acute gastroenteritis and dehydration	**DT-E-P**	**1**
CHDT38	Acute and chronic hepatitis in children	**PreD-D-P**	**2**

CHDT39	Chronic and recurrent abdominal pain in children	**D-E**	**1**
CHDT40	Gastroesophageal reflux in children	**DT-P-F**	**1**
CHDT41	Childhood malabsorption	**PreD**	**1**
CHDT42	Urinary tract infections in children	**DT-P**	**1**
CHDT43	Physiological characteristics and examination of the newborn	**PreD-P-F**	**1**
CHDT44	Prematurity, low birth weight baby	**D-P**	**1**
CHDT45	Anaphylaxis allergic diseases and asthma in children	**DT-E-P-F**	**3**
CHDT46	Dysrhythmias in childhood	**D-E-F**	**1**
CHDT47	Childhood solid tumors	**PreD**	**1**
CHDT48	Recurrent lung infection and cystic fibrosis	**PreD-E-P**	**1**
CHDT49	Childhood tuberculosis	**DT-P-F**	**1**
CHDT50	Respiratory system infections	**DT-P**	**2**
CHDT52	Central nervous system infections in childhood	**E**	**1**
CHDT53	Hypotonic baby, muscle diseases	**PreD**	**1**
CHDT54	Cerebral palsy	**PreD**	**1**
CHDT55	Acute kidney injury, chronic kidney disease in children	**D-E-P-F**	**2**
CHDT57	Endocrine emergencies, hypoglycemia, approach to shock in pediatrics	**E**	**2**
CHDT58	Childhood poisoning and prevention	**E-P**	**1**
CHDT59	Childhood vaccines, child health monitoring and screening	**DT-P-F**	**3**
CHDT60	Malnutrition	**DT-P-F**	**1**
		TOTAL	**68**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Taking anamnesis in pediatrics	**4**
Patient file preparation	**4**
Communicating with the patient and family	**4**

Taking anthropometric measurements	**3**
Taking and evaluating vital signs	**4**
Skin and lymph node examination	**4**
Limb examination	**4**
Head and neck examination	**3**
Respiratory system examination	**4**
Circulatory system examination	**4**
Gastrointestinal system examination	**4**
Genitourinary system examination	**4**
Neurological examination	**3**
Pubertal examination	**3**
Evaluation of growth and development	**3**
Newborn examination	**4**
Breast milk and breastfeeding counselling	**4**
Newborn care in the delivery room	**3**
Kangaroo care	**3**
Preparing the newborn for discharge	**3**
Planning of childhood screenings	**4**
Planning the follow-up and control of the patient after discharge	**4**
Evaluation of home treatment and blood glucose chart of a child with type 1 diabetes	**3**
Monitoring of healthy children	**4**
Healthy eating and lifestyle counselling	**4**
Approach to accidents and poisoning in children	**4**
Assessment of health at different stages of life (newborn, childhood, adolescence)	**4**
Peripheral smear and evaluation	**3**
Blood transfusion applications	**3**
Childhood vaccination program practices	**4**
Resuscitation of the newborn	**2**

Resuscitation of a child patient	**3**
Chest X-ray evaluation	**3**
Evaluation of hand-wrist radiography	**2**
Central nervous system imaging and evaluation	**3**
Blood count evaluation	**3**
Evaluation of biochemical tests	**3**
Blood gas collection and interpretation	**3**
Blood glucose measurement and evaluation with glucometer	**4**
Evaluation of bleeding tests	**2**
Monitoring of the pediatric patient	**4**
Approach to the febrile child	**4**
Assessment of the infant with sucking difficulties	**4**
Approach to the child presenting with acute urticaria	**4**
Childhood infectious diseases and prevention	**4**
Taking anamnesis and examination in the adolescent patient	**4**
Taking anamnesis and examination of pediatric patient in emergency	**4**
Evaluation of the emergency and critical patient	**4**
Planning and evaluation of investigations in the emergency patient	**4**
Emergency approach to convulsive child	**4**
Approach to the child presenting with accident, burn or trauma	**4**
Monitoring of the sick child in the emergency department	**3**
Administration of oxygen and nebul-inhaler therapy	**4**
Filling the request form for laboratory examination	**4**
Methods of blood collection in children	**3**
Receiving and transporting the laboratory sample under appropriate conditions	**4**
Ability to make disease / trauma scoring	**4**
Forensic case examination and report preparation	**3**
Preparing a refusal of treatment document	**4**
Forensic report preparation	**3**
Clarification and obtaining consent	**4**

Issuance of death certificate	**3**
Bad news to the family	**3**
Respect patient rights	**4**
Effective communication with health professionals	**4**
Participation in academic events and meetings	**3**
Accessing and evaluating reliable scientific data and resources	**4**
Throat, urine, pus culture	**4**
Hospitalization of the sick child in the ward	**4**
Dressing in pediatric patients	**3**
Requesting consultation from other disciplines	**4**
Preparation of a report for special diseases	**3**
Taking history and anamnesis in special cases	**3**
IM, IV, SC, ID injection	**4**
ECG and evaluation	**3**
Oral, rectal, vaginal and topical drug applications	**4**
Oxygen support therapy planning	**4**
Performing frequently used tests	**4**
Prescription issuance	**4**
Initiation of antibiotic treatment in intensive care unit	**4**
Planning the treatment of critical pediatric patients	**3**
Approach to the child with respiratory distress	**4**
Approach to neonatal jaundice	**3**
Approach to constipation in children	**3**
Assessment of a child with abdominal pain	**4**
Approach to neonatal conjunctivitis	**4**
Approach to the newborn with ompholitis	**4**
Approach to infants with colic	**4**

Counselling during the period of starting supplementary foods	**4**
Approach to vomiting infant	**4**
Approach to the cyanotic infant	**4**
Approach to the infant with respiratory distress	**4**
Evaluation of the hypotonic baby	**3**
Assessment of the hemorrhagic child	**3**
Approach to the comatose pediatric patient	**4**
Approach to infants with anomalies	**2**
Recognition and approach to neglect and abuse in children	**3**
Assessment of the child with arthritis	**3**
Approach to the pediatric patient presenting with syncope	**4**
Approach to headache in children	**4**
Assessment of a child presenting with polyuria	**4**
Danger signs in the newborn	**4**
Approach to asphyctic newborn	**4**
Emergency approach to neonatal convulsion	**4**
Palliative care practices in children	**2**
Feeding the term baby	**4**
Feeding the premature baby	**3**
Parenteral nutrition in children	**2**
Pain and sedation applications in children	**3**
Use of pain scales in children and newborns	**3**
Assessment of a child presenting with diarrhea	**4**
Fluid therapy planning in pediatric patients	**3**
Hand washing and prevention of infections	**4**
Approach to the child presenting with asthma attack	**4**
Preparation of the newborn for transplantation	**4**
Preparation of the pediatric patient for transplantation	**4**

Vascular access in children and newborns	**4**
Intubation in children and newborns	**3**
Ventilator preparation in intensive care unit	**3**
Non-invasive ventilation applications	**3**
Invasive ventilation applications	**2**
Preparation of epicrisis and discharge procedures in pediatric patients	**4**
Invasive procedures in children (bone marrow, lumbar puncture)	**1**
Central catheter applications in children	**2**
Rational use of antibiotics	**4**
Practical treatment approaches in upper respiratory tract infections	**4**
Preparation of the pediatric patient for the operation	**3**
Approach to the child who is frequently ill	**3**
Assessment of the febrile infant	**4**
Nasogastric and urinary catheterization	**4**
Performing and evaluating APGAR scoring	**4**
Making and evaluating Glasgow coma scale	**4**
CRIB and SNAP-PE II scoring	**3**

2. SKIN and VENEREAL DISEASES

PURPOSE:

Phase V students learn the dermatological examinations and methods that they should be able to perform in daily practice *in the* "*Skin and Venereal Diseases Clinical Course and Practice Board*". In addition, they evaluate and interpret the examinations and methods they must observe during the patient examination of the faculty member responsible for them. Every day, theoretical lectures, outpatient clinic follow-ups, and case discussions for the inpatient case are carried out with the responsible lecturer. During the internship, they participate as observers in seminars and article hours in the clinic. In addition, it is ensured that the interns prepare seminars and make presentations with the responsible lecturers on the topics deemed appropriate and that they will encounter frequently in daily practice.

LEARNING OBJECTIVES:

1. Takes anamnesis using practical communication skills,
2. Defines subjective and objective findings by examining the skin, skin appendages, and mucous membranes and makes differential diagnoses based on these findings,
3. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnoses or diagnoses,
    i. Interpret the fundamental laboratory and examinations commonly performed in skin and venereal diseases,
    ii. Explain the indications and methods of application of essential interventions in terms of skin and venereal diseases in patients, does practice at the primary level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
4. Diagnoses and treats common diseases,
5. Recognizes and treats diseases requiring emergency intervention, such as acute urticaria, angioedema,
6. It directs patients who need to be treated and followed up at a higher level or by a specialist,

i. Makes the guidance of rare diseases,
ii. Directs rare applications to an appropriate branch promptly,
iii. Essential interventions required for skin and venereal diseases in critically ill patients may refer the patient to a higher-level health institution.

7. Recognize allergic, inflammatory, precancerous, malignant, vascular, connective tissue, adverse drug reactions, Behçet's disease, infectious skin diseases, autoimmune, and hereditary skin diseases and direct them to centers where definitive diagnosis and treatment can be applied,

8. Recognize systemic diseases with early findings on the skin and refer patients to the relevant departments,

9. Informs the patient and health personnel about the ways of transmission and prevention of infectious skin diseases,

10. Explains the dermatological diseases that must be notified and the way of notification,

11. Explains the psychological, social, and cultural effects of chronic skin diseases on the patient and his family,

12. To be able to realize the importance of changing the wrong and harmful prejudices and attitudes towards skin diseases in society.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of skin and venereal diseases	**3**
Evaluation of general condition and vital signs	**4**
Record keeping, reporting and notification	
To be able to obtain information and consent in terms of skin and venereal diseases	**4**
To be able to prepare epicrisis in terms of skin and venereal diseases	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**

To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment in terms of skin and venereal diseases	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
In terms of skin and venereal diseases interpret the results of screening and diagnostic examinations	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of skin and venereal diseases	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
To be able to recognize evidence in terms of skin and venereal diseases / protection / transfer	**2**
To be able to open skin-soft tissue abscess	**3**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of skin and venereal diseases	**4**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
Tick extraction	**3**
To be able to take samples for culture	**3**
Ability to provide protection and transport in accordance with the cold chain	**4**
To be able to prepare the drugs to be applied correctly	**3**
To be able to do wound-burn care	**3**
Preventive medicine and community medicine practices	
In terms of skin and venereal diseases to be able to take precautions related to the protection of the health of health workers	**4**
In terms of skin and venereal diseases to take preventive measures against healthcare-associated infections	**3**
Principles and practices of scientific research (In terms of Skin and Venereal Diseases)	
To be able to compile scientific data and summaries them in tables and graphs	**3**
To be able to analyze scientific data with appropriate methods and interpret the results	**2**
To be able to plan research using scientific principles and methods	**2**

To be able to access current literature information and read it critically	**3**
To be able to apply the principles of evidence-based medicine in clinical decision-making process	**3**

THEORETICAL LECTURES				
LECTURE CODE	**LECTURE TOPICS**		**LEARNING LEVEL**	**TIME**
SVDT1	Dermatological examination, skin structure and elementary skin lesions		**E-D**	**2**
SVDT2	Bacterial diseases of the skin		**DT-P**	**1**
SVDT3	Fungal diseases of the skin		**PreD-P**	**1**
SVDT4	Viral diseases of the skin		**PreD-P**	**1**
SVDT5	Papulosquamous diseases		**D**	**1**
SVDT6	Connective tissue diseases		**PreD**	**1**
SVDT7	Behcet's disease		**PreD**	**1**
SVDT8	Acne vulgaris / rosacea		**DT-F**	**1**
SVDT9	Urticaria angioedema		**E-DT-P**	**1**
SVDT10	Skin tumors		**PreD-K**	**1**
SVDT11	Sexually transmitted diseases		**D-P-F**	**1**
SVDT12	Dermatitis	Contact dermatitis	**DT-P-F**	**3**
		Diaper dermatitis	**DT-P-F**	
		Seborrheic dermatitis	**DT-P-F**	
		Atopic dermatitis	**DT-P-F**	
SVDT13	Bullous skin diseases		**PreD**	**1**
SVDT14	Sun rays and ways of protection		**P**	**1**
SVDT15	Adverse cutaneous drug reactions		**E-DT-P**	**1**
SVDT16	Hair, nail and sweat gland diseases		**PreD**	**1**
SVDT17	Granulomatous skin diseases	Leprosy	**PreD**	**2**
		Skin tuberculosis	**PreD**	
		Sarcoidosis	**PreD**	
SVDT18	Parasitic skin diseases		**DT-P**	**1**
SVDT19	Vitiligo and pigmentation disorders		**D**	**1**
SVDT20	Genodermatoses		**PreD**	**1**
			TOTAL	**24**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Anamnesis	**4**
Skin examination	**4**
Differential diagnosis	**3**
Cryotherapy and electrocautery applications	**1**

3. PHYSICAL MEDICINE and REHABILITATION

PURPOSE:

The "Physical Medicine and Rehabilitation Clinical Course and Practice Board" of Phase V students aims to obtain information about musculoskeletal system pain, musculoskeletal system examination methods, rheumatic diseases leading to functional loss and disability, diagnosis and treatment methods, and neurological and orthopedic rehabilitation and to apply these through guides.

LEARNING OBJECTIVES:

1. Counts the functional anatomy information about the musculoskeletal system,
2. Takes anamnesis using practical communication skills,
3. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    i. Interpret basic laboratory (biochemical measurements, hematological tests, ECG, peripheral smear, ...) and radiological examinations commonly performed in physical medicine and rehabilitation patients,
    ii. Explain the indications and methods of application of essential interventions in terms of physical medicine and rehabilitation diseases in patients, does practice at the primary level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
4. Distinguish the patients to be followed up in primary care, plan their treatment,
5. Applies the diagnosis and treatment of common diseases,
6. It directs patients who need to be treated and followed up at a higher level or by a specialist,
    i. It guides rare defects,
    ii. Directs rare applications to an appropriate branch promptly,
    iii. Performs the essential interventions required in terms of physical medicine and

rehabilitation in critically ill patients (respiratory support, circulatory support, ...) and refers them to a higher-level health institution.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of physical medicine and rehabilitation	**3**
Evaluation of general condition and vital signs	**4**
Record keeping, reporting and notification	
To be able to obtain clarification and consent in terms of physical medicine and rehabilitation	**4**
To be able to prepare epicrisis in terms of physical medicine and rehabilitation	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of physical medicine and rehabilitation	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To be able to evaluate direct radiographs in terms of physical medicine and rehabilitation	**3**
To be able to fill the request form for laboratory examination	**4**
In terms of physical medicine and rehabilitation interpret the results of screening and diagnostic examinations	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of physical medicine and rehabilitation	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
To be able to prepare and apply splint	**3**
To be able to apply bandage, tourniquet	**4**
Evaluation of multiple trauma patients in terms of physical medicine and rehabilitation	**3**
Ability to recognize / protect / produce evidence	**2**

To be able to take biological samples from the patient	**3**
To be able to provide appropriate transport of the patient in terms of physical medicine and rehabilitation	**4**
To be able to refer the patient appropriately in terms of physical medicine and rehabilitation	**4**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
To be able to apply cervical collar (neck collar)	**4**
To be able to prepare the drugs to be applied correctly	**3**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers in terms of physical medicine and rehabilitation	**4**
Principles and practices of scientific research (in terms of Physical Medicine and Rehabilitation)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyse scientific data with appropriate methods and interpret the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply evidence-based medicine principles in clinical decision-making process	**3**
Healthfulness	
Exercise and physical activity	**4**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
PMRT1	Musculoskeletal examination	**D-P-F**	**1**
PMRT2	Osteoarthritis and its treatment	**PreD-D-F**	**2**
PMRT3	Neck pain	**DT**	**1**
PMRT4	Lower back pain	**D**	**2**
PMRT5	Arthritis rehabilitation	**D**	**1**
PMRT6	Osteoporosis and osteomalacia	**D**	**2**
PMRT7	Stroke rehabilitation	**D-E-P-F**	**1**
PMRT8	Rehabilitation of cerebral palsy	**D-E-P-F**	**1**
PMRT9	Spinal cord injury rehabilitation	**D-E-P-F**	**1**

PMRT10	Physiotherapy agents	**PreD**	**2**
PMRT11	Fibromyalgia and myofascial pain	**D**	**2**
PMRT12	Tenosynovites	**DT**	**1**
PMRT13	Entrapment neuropathies	**PreD**	**2**
PMRT14	Torticollis	**D**	**1**
PMRT15	Rheumatoid arthritis	**PreD**	**1**
PMRT16	Posture and spinal disorders	**D-P**	**1**
PMRT17	Scoliosis	**PreD**	**1**
PMRT18	Upper extremity pain (shoulder-elbow-hand- wrist)	**D-P-F**	**1**
PMRT19	Lower limb pain (hip- knee-foot ankle)	**D-P-F**	**1**
PMRT20	Rational use of medicines and NSAIDs	**T-I**	**1**
PMRT21	Spondyloarthritis	**PreD**	**2**
PMRT22	Pressure sores	**D-P-F**	**1**
PMRT23	Limitation of movement in the joints	**D-P-F**	**1**
PMRT24	Negative effects of immobilization	**PreD**	**1**
PMRT25	Crystalline arthropathies	**PreD**	**1**
PMRT26	Polymyalgia rheumatica	**PreD**	**1**
PMRT27	Therapeutic exercises	**D-P-F**	**1**
		TOTAL	**34**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
To be able to take general and problem-oriented history	**2**
Musculoskeletal examination	**2**
Neurological examination	**2**
To be able to fill the request form for laboratory examination	**2**
To be able to read and evaluate direct radiographs	**2**
To be able to issue a prescription	**2**
Interpret the results of screening and diagnostic examinations	**2**
To be able to give health education to the society	**1**

4. RESPIRATORY MEDICINE

PURPOSE:

Phase V students will have knowledge about common respiratory system diseases and sleep-disordered breathing in the community *in the "Respiratory Medicine Clinical Course and Practice Board"* and will gain the skills of approaching patients with respiratory system problems, taking history, performing physical examination and requesting appropriate examinations; knowledge of diagnosis and treatment of respiratory system diseases at primary care level; knowledge, skills and attitudes of directing the patient to the right place at the right time for diseases that cannot be solved in primary care and protection from respiratory system diseases.

LEARNING OBJECTIVES:

1. Counts the clinical anatomy and physiology of the respiratory system; mechanism and causes of symptoms (cough, sputum, shortness of breath, chest pain, hemoptysis), diagnosis and relationship with other systems,
2. Counts the causes of common diseases in the respiratory system, which are related to public health and life-threatening diseases, functional disorders, and clinical findings they cause,
3. Counts the clinical features of the primary diseases of the respiratory system and the principles of clinical approach (diagnosis, treatment, and prevention),
4. Takes medical history from patients by the complaints and the patient's condition, performs the necessary physical examination, detects pathological conditions, interprets pathological examination findings according to the principles of differential diagnosis, requests the required examinations for the diagnosis of patients, and interprets the results,
5. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    i. Interpret basic laboratory (arterial blood gas, whole blood, biochemical measurements, simple spirometry, ppd, ...) and radiological examinations (chest

radiography, ...) commonly performed in terms of respiratory medicine,

ii. Explain the indications and methods of application of essential interventions in terms of respiratory medicine in patients, does practice at the primary level,

iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,

6. Diagnoses common respiratory system diseases, performs emergency and primary treatment, and appropriately refers to a specialist physician,

7. It directs patients who need to be treated and followed up at a higher level or by a specialist,

i. It guides rare defects,

ii. Directs rare applications to an appropriate branch promptly,

iii. Performs the necessary essential interventions in terms of respiratory medicine in critically ill patients (respiratory support, circulatory support, ...) and refers them to a higher-level health institution,

8. Bronchoscopy, pleural puncture, sleep laboratory examination, and cardiopulmonary exercise tests determine the patients who need respiratory rehabilitation and direct them to the specialist,

9. Applies inhaler methods commonly used in respiratory system diseases, provides treatment-oriented training to patients receiving inhalation therapy and long-term oxygen therapy,

10. Diagnoses and treats tuberculosis disease, contributes to the formation of public awareness in the fight against tuberculosis,

11. Knows and applies the treatments for cessation of tobacco and tobacco products,

12. Recognizes and treats environmental and occupational lung diseases, raises awareness in the community in the prevention of environmental and occupational lung diseases, and refers to the relevant centers.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of respiratory medicine	**3**

Evaluation of general condition and vital signs	**4**
Respiratory system examination	**4**
Record keeping, reporting and notification	
To be able to obtain clarification and consent in terms of respiratory medicine	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of respiratory medicine	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To provide decontamination, disinfection, sterilization, antisepsis	**4**
To be able to evaluate direct radiographs in terms of respiratory medicine	**3**
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
To be able to use and evaluate Peak-flow meter	**3**
To be able to interpret the results of screening and diagnostic examinations in terms of respiratory medicine	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of respiratory medicine	**3**
Airway application	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
Arterial blood gas collection	**3**
Use of balloon mask (ambu)	**4**
Evaluation of multiple trauma patients in terms of respiratory medicine	**3**
To be able to open an intravenous line	**3**
To be able to recognise/protect/transplant evidence in terms of respiratory medicine	**2**
To be able to open skin-soft tissue abscess	**3**
To be able to take measures to stop/limit external bleeding	**3**
Ability to intubate	**3**

To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of respiratory medicine	**4**
To be able to do first aid to remove the foreign body in the airway	**3**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
To be able to make enema	**3**
To be able to apply nasogastric catheter	**3**
To be able to perform pericardiocentesis	**1**
To be able to apply and evaluate PPD test	**3**
Pleural puncture / thoracentesis	**2**
To be able to apply and evaluate pulse oximetry	**4**
To be able to apply basic life support	**4**
To be able to prepare the drugs to be applied correctly	**3**
Preventive medicine and community medicine practices	
In terms of respiratory medicine to be able to take precautions related to the protection of the health of health workers	**4**
To be able to take preventive measures against healthcare-associated infections	**3**
Principles and practices of scientific research (in terms of Respiratory Medicine)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyse scientific data with appropriate methods and interpret the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply the principles of evidence-based medicine in clinical decision-making process	**2**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
RMT1	COPD	**DT-E-P-F**	**3**
RMT2	Asthma	**DT-E-P-F**	**3**
RMT3	Pneumonia	**DT-P**	**2**
RMT4	Lung tumors	**PreD-P**	**1**
RMT5	Pulmonary embolism	**E-P-F**	**2**
RMT6	Bronchiectasis	**PreD-P-F**	**2**
RMT7	Approach to respiratory system symptoms and radiology	**E**	**3**
RMT8	Respiratory medicine emergencies	**E**	**2**
RMT9	Cystic fibrosis	**PreD-P**	**1**
RMT10	Interstitial lung diseases	**PreD-P**	**2**
RMT11	Pulmonary tuberculosis	**DT-P-F**	**3**
RMT12	Pleural diseases	**PreD**	**2**
RMT13	Environmental and occupational lung diseases	**PreD-P-F**	**2**
RMT14	ARDS, pulmonary oedema and respiratory failure	**E**	**4**
RMT15	Sleep apnea syndrome	**PreD**	**1**
RMT16	Bronchiolitis	**D-E**	**1**
RMT17	Respiratory system examination	**D-E**	**2**
RMT18	Sarcoidosis	**PreD**	**1**
RMT19	Pulmonary function tests applications	**E-P**	**3**
RMT20	Smoking cessation methods	**PreD-P**	**1**
		TOTAL	**41**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
History taking for general and respiratory system	**4**
Respiratory system examination	**4**
Patient file preparation	**4**
Prescription regulation	**4**
Arterial blood gas interpretation	**3**
Peak-flowmeter use and evaluation	**4**
Administration of oxygen, nebul-inhaler therapy	**3**
Reading and evaluation of direct radiographs	**3**
Evaluation of pulmonary function tests	**3**
Evaluation of the PPD test	**3**

5. OPHTHALMOLOGY

PURPOSE:

It is aimed at Phase V students to learn basic information about Ophthalmology in the "*Ophthalmology Clinical Course and Practice Board*" to make the first intervention in eye emergencies to guide patients correctly to prevent Ophthalmology that causes vision loss.

LEARNING OBJECTIVES:

1. Takes anamnesis using practical communication skills,
2. In the first step, they perform the necessary examinations of the patients, interpret the results, make a preliminary diagnosis or diagnosis,
    i. Interprets the fundamental laboratory and radiologic examinations commonly performed in terms of ophthalmology,
    ii. Explains the indications and methods of application of basic procedures in terms of ophthalmologic diseases in patients, practices at the primary care level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
3. Recognizes patients to be followed up in primary care, plans their treatment,
4. Diagnoses and treats common diseases; applies,
5. Makes the first intervention in eye emergencies such as trauma and eye surface burns,
6. Directs patients who need to be treated and monitored by a higher level or specialist,
    i. It makes the direction of rare faults,
    ii. Directs rare applications to an appropriate branch promptly,
    iii. It performs the necessary basic tests in terms of ophthalmological diseases in critical patients and refers them to a higher-level health institution,
7. Pre-diagnosis of diseases that may cause eye and headache, such as glaucoma crisis, acute anterior uveitis, keratitis,
8. Knowing basic Ophthalmology that causes preventable and treatable vision loss, such as cataracts, glaucoma, lazy eye, strabismus, and diabetic retinopathy,

answers the questions of patients and directs them to an ophthalmologist, when necessary,

9. Determines the level of vision, performs fundus examination with a direct ophthalmoscope, performs strabismus examination, makes the preliminary diagnosis of diseases such as retinoblastoma, congenital cataract, etc., in children with the red reflex test,
10. Diagnosing neonatal conjunctivitis, applying treatment, and providing information about prevention methods when necessary.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of ophthalmology	**3**
Evaluation of general condition and vital signs	**4**
Ophthalmological examination	**2**
Eye examination	**3**
Record keeping, reporting and notification	
To be able to obtain clarification and consent in terms of ophthalmology	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of ophthalmology	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To provide decontamination, disinfection, sterilization, antisepsis	**4**
To be able to evaluate direct radiographs in terms of ophthalmology	**3**
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**

To be able to interpret the results of screening and diagnostic examinations in terms of ophthalmology	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of ophthalmology	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
Evaluation of multiple trauma patients in terms of ophthalmological diseases	**3**
To be able to recognize/protect/transplant evidence in terms of ophthalmology	**2**
Hand washing	**4**
Removal of foreign body from the eye	**2**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of ophthalmology	**4**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
To be able to prepare the drugs to be applied correctly	**3**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers in terms of ophthalmology	**4**
Principles and practices of scientific research (in terms of Ophthalmology)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyze scientific data with appropriate methods and interpret the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply the principles of evidence-based medicine in clinical decision-making process	**2**
Screening	
Vision screening programs	**4**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
OT1	Eye anatomy	**PreD-P-F**	**1**
OT2	Glaucoma	**PreD-P**	**1**
OT3	Corneal diseases and keratoplasty	**PreD-P**	**1**
OT4	Treatment of refractive errors	**D-E**	**1**
OT5	Cataract and its treatment	**PreD-P-F**	**1**
OT6	Behçet's disease and uveitis	**PreD-P**	**1**
OT7	Eyelid and lacrimal sac diseases	**PreD**	**1**
OT8	Conjunctival diseases	**PreD-P**	**1**
OT9	Strabismus	**D-E**	**1**
OT10	Optic nerve diseases	**D-E-P**	**1**
OT11	Vascular Diseases of the Retina	**PreD-E**	**1**
OT12	Diabetes and eye	**PreD-E-P**	**1**
OT13	Retinopathy of prematurity	**PreD-P**	**1**
OT14	Retinal detachment	**PreD-P**	**1**
OT15	Orbital diseases	**D-E**	**1**
OT16	Intraocular tumors	**PreD-E-P**	**1**
OT17	Ocular side effects of systemic drugs	**PreD-E**	**1**
OT18	Eye Emergencies	**DT-E-P-F**	**1**
OT19	Macular diseases	**PreD**	**1**
OT20	Red eye	**D-E-F**	**1**
		TOTAL	**20**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Strabismus examination practice	**3**
Retinal examination practice	**3**
Refraction practice	**3**

6. EAR NOSE THROAT (ENT) DISEASES

PURPOSE:

Phase V students "*Ear Nose Throat (ENT) Diseases Clinical Course and Practice Board*" to know the primary ENT diseases that are important and common and may require emergency intervention, to make a preliminary diagnosis or diagnosis of diseases, to treat and emergency interventions of these patients at the primary level, to refer the patient to the specialist when necessary, It is aimed to be able to follow up the diseases planned to be treated by the specialist in primary care, general approach to patients, evidence-based medical practices in the diagnosis and treatment of diseases, researcher, questioner and ethical rules of the profession within the scope of medical values, and to learn the ability to communicate effectively with patients and their families.

LEARNING OBJECTIVES

1. Takes anamnesis using practical communication skills,
2. Evaluates vital signs,
3. Performs physical examination,
4. Performs ear, nose, throat, and head and neck exams,
5. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    i. Interprets basic laboratory (auditory evaluations, biochemical measurements, hematological tests, ...) and radiological examinations commonly performed in otolaryngology,
    ii. Explain the indications and methods of application of essential interventions in terms of ear, nose, and throat in patients, does practice at the primary level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
6. Distinguish the patients to be followed up in primary care, plan their treatment,
7. Applies the diagnosis and treatment of common diseases,
8. It directs patients who need to be treated and followed up at a higher level or by a specialist,

i. It guides rare defects,

ii. Directs rare applications to an appropriate branch promptly,

iii. Performs essential interventions for ENT in critically ill patients (respiratory support, ...) and refers them to a higher-level health institution.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of ENT diseases	**3**
Evaluation of general condition and vital signs	**4**
Examination of the nose-nose-throat and head and neck	**3**
Record keeping, reporting and notification	
To be able to obtain clarification and consent in terms of ENT diseases	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of ENT diseases	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To provide decontamination, disinfection, sterilization, antisepsis	**4**
To be able to evaluate direct radiographs in terms of ENT diseases	**3**
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
To be able to interpret the results of screening and diagnostic examinations for ENT diseases	**3**

Interventional and non-interventional applications	
To be able to manage forensic cases in terms of ENT diseases	**3**
Airway application	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
To be able to intervene in nosebleed	**2**
Evaluation of multiple trauma patients in terms of ENT diseases	**3**
To be able to recognise/protect/transplant evidence in terms of ENT diseases	**2**
To be able to open skin-soft tissue abscess	**3**
To be able to take measures to stop/limit external bleeding	**3**
To be able to apply Dix Hallpike test and Epley manoeuvre	**3**
Hand washing	**4**
Endoscopic procedure	**1**
Ability to intubate	**2**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of eye diseases	**4**
To be able to do first aid to remove the foreign body in the airway	**3**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
To be able to apply nasogastric catheter	**3**
Paracentesis	**1**
To be able to apply Rinne-Weber tests	**3**
To be able to prepare the drugs to be applied correctly	**3**
To be able to suture and take superficial sutures	**4**
Preventive medicine and community medicine practices	
In terms of ENT diseases to be able to take precautions related to the protection of the health of health workers	**4**
In terms of ENT diseases to take preventive measures against healthcare-associated infections	**3**
Principles and practices of scientific research (in terms of ENT diseases)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyze scientific data with appropriate methods and interpret the results	**2**

To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply the principles of evidence-based medicine in the clinical decision-making process	**2**
Screening	
Hearing screening programs	**4**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
ENTDT1	Ear-Nose-Throat and Head and Neck Examination-1: History taking and approach to the patient	**4**	**1**
ENTDT2	Ear-Nose-Throat and Head and Neck Examination-2: Inspection	**3**	**1**
ENTDT3	Ear clinical tests and diagnostic methods- Hearing screening programs- Rinne Weber tests	**3**	**1**
ENTDT4	Ear pain/discharge/blockage	**DT-P**	**1**
ENTDT5	Hearing losses - (Sudden hearing loss - ASH, ...)"	**PreD**	**1**
ENTDT6	Otitis externa Infectious and inflammatory diseases of the external auditory canal	**DT-P**	**1**
ENTDT7	Otitis media-1: Acute otitis media (AOM)- Serous otitis media (SOM)	**DT-P PreD**	**1**
ENTDT8	Otitis media-2 Eardrum perforation- Chronic otitis media (COM)	**PreD**	**1**
ENTDT9	Dizziness (Vertigo)-1: General approach and evaluation	**PreD**	**1**
ENTDT10	Dizziness (Vertigo)-2: Bening Paroxysmal Positional Vertigo-BPPV- Other diseases (Vestibular neurinitis/Meniere's disease ...)	**DT PreD**	**1**
ENTDT11	Tinnitus - Associated ear diseases	**PreD**	**1**
ENTDT12	Otosclerosis	**PreD**	**1**
ENTDT13	Facial paralysis: (idiopathic/ear trauma ...)	**D-E PreD**	**1**
ENTDT14	Hoarseness	**PreD**	**1**
ENTDT15	Cough	**DT-P**	**1**
ENTDT16	Mass in the neck	**PreD**	**1**

ENTDT17	Infectious and inflammatory diseases of the salivary glands	**PreD**	**1**
ENTDT18	Sleep apnoea syndrome	**PreD**	**1**
ENTDT19	Runny nose / nasal congestion (Adenoid hypertrophy/Alergic rhinitis/ Tumours/Septum deviation/ Upper respiratory tract infections-UTI/ Problems related to foreign body)	**PreD/DT-P PreD-P/PreD DT-P D-E-P**	**1**
ENTDT20	Nosebleeds - Approach to nosebleeds	**PreD**	**1**
ENTDT21	Snoring (Adenoid hypertrophy/ Deviated septum/ Sleep apnoea syndrome/ Upper respiratory tractinfections-UTI/ Problems associated with foreign body	**PreD PreD DT-P D-E-P**	**1**
ENTDT22	Upper respiratory tract infections-1: General	**DT-P**	**1**
ENTDT23	Upper respiratory tract infections-2: Rhinosinusitis	**DT-P**	**1**
ENTDT24	Upper respiratory tract infections- 3: Tonsillitis- Pharyngitis/Laryngitis	**DT-P/D-P**	**1**
ENTDT25	Allergic rhinitis-Rhinitis	**DT-P**	**1**
ENTDT26	Head and Neck tumours	**PreD-P**	**1**
ENTDT27	Laryngeal obstruction - Tracheotomy/ ENT emergencies (Foreign bodies, ...)	**E**	**1**
ENTDT28	Rational drug use and prescribing in ENT	**4**	**1**
		TOTAL	**28**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Approach to the patient, taking anamnesis	**3**
ENT examination	**4**
Endoscopic examination	**2**
Cranial nerve examinations in ENT diseases	**4**
Diapozon tests	**4**
Audiogram and tympanogram evaluation	**3**
Benign paroxysmal positional vertigo (BPPV) maneuvers	**3**
Polysomnography (PSG) assessment	**3**
Radiological evaluation in ENT diseases	**3**
Tracheotomy and care practice	**4**
Nosebleed (epistaxis) control	**3**
Assessment (Preliminary / Midterm / Weekly / Exam) (six courses)	
Case discussions (nine lectures)	
Article (four lectures)	
Students' lectures (four lectures)	
Basic Medical Practice – General Practice (twenty-seven lectures)	

7. ORTHOPEDICS and TRAVMATOLOGY

PURPOSE:

In the "*Orthopedics and Traumatology Clinical Course and Practice Board*" for Phase V students it is aimed to be able to define the emergencies of common congenital and acquired pathologies, tumors, infections, and traumatic injuries of the musculoskeletal system to make a primary diagnosis and preliminary diagnosis and to have knowledge about their treatment. In addition, from practical applications, It aims to perform the musculoskeletal examination in uncomplicated common cases, plaster splint, and bandage application in uncomplicated common cases by the guidelines/guidelines.

LEARNING OBJECTIVES:

1. Takes anamnesis from the child and their family using practical communication skills,
2. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    i. interprets the fundamental laboratory and radiological examinations commonly performed in orthopedics and traumatology diseases,
    ii. Explain the indications and methods of application of essential interventions in terms of pediatric diseases in patients, does practice at the primary level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
3. Distinguish the patients to be followed up in primary care, plan their treatment,
4. Applies the diagnosis and treatment of common diseases,
5. It directs patients who need to be treated and followed up at a higher level or by a specialist,
    i. It guides rare defects,
    ii. Directs rare applications to an appropriate branch promptly,
    iii. Performs the necessary essential interventions in terms of orthopedics and traumatology in critically ill patients (respiratory support, circulatory support, ...) and can refer them to a higher-level health institution.

6. **Common amputations:** Diagnoses, recognizes the emergency, counts the treatment steps, performs the necessary preliminary procedures, and refers to the specialist,
7. **Pelvis and lower extremity fractures:** Diagnoses, recognizes the emergency, counts the treatment steps, directs to the specialist by performing the necessary preliminary procedures,
8. **Standard movement system and soft tissue injuries:** Diagnoses, counts the treatment steps, directs to the specialist by performing the necessary preliminary procedures,
9. **Perthes and bone dysplasias:** Makes a preliminary diagnosis, refers to a specialist,
10. **General approach to common skeletal system tumors:** Make a preliminary diagnosis, refer to a specialist,
11. **Diagnosis and treatment of scoliosis and Scheuermann kyphosis:** Makes the diagnosis, counts the treatment steps, directs to the specialist,
12. **Standard hand and upper extremity injuries:** Diagnoses, recognizes the emergency, counts the treatment steps, directs to the specialist by performing the necessary preliminary procedures,
13. **Common child fractures:** Makes the diagnosis, counts the treatment steps, directs to the specialist by performing the necessary preliminary procedures,
14. **Typical bone and joint infections:** Makes the preliminary diagnosis, counts the treatment steps, directs to the specialist,
15. **Cerebral palsy:** Preliminary diagnosis, referral to a specialist,
16. **Approach to the patient with polytrauma:** Makes the diagnosis, counts the treatment steps, directs to the specialist by making the necessary preliminary procedures,
17. **Rheumatoid arthritis, osteoarthritis:** Makes the diagnosis, counts the treatment steps, directs to the specialist,
18. **Common metabolic bone diseases:** Makes the diagnosis, counts the treatment steps, directs to the specialist,
19. **Routine uncomplicated orthopedic radiology:** Makes the diagnosis, counts the treatment steps, performs the necessary preliminary procedures, and directs to the specialist,
20. **Frequently used orthopedic terminology:** Counts frequently used orthopedic terminology,
21. **Common adult spine problems:** Makes the diagnosis, counts the treatment steps, refers to

the specialist,

22. **Common infections of the hand:** Diagnoses, counts the treatment steps, directs to the specialist by performing the necessary preliminary procedures,
23. **Developmental hip dysplasia:** Makes the preliminary diagnosis, counts the treatment steps and prevention measures, directs to the specialist,
24. **Common dislocations and joint injuries:** Diagnoses, counts the treatment steps, directs to the specialist by performing the necessary preliminary procedures,
25. **"Club food" and other foot deformities:** Makes a preliminary diagnosis, directs to a specialist,
26. **Fracture healing and general treatment principles:** Counts the stages of fracture healing and treatment steps,
27. **Standard hand and wrist diseases:** Makes the preliminary diagnosis, counts the treatment steps, directs to the specialist,
28. **Common spinal injuries:** Make a preliminary diagnosis, recognize the emergency, refer to a specialist,
29. **Common emergency orthopedic diseases:** Makes the diagnosis, counts the treatment steps, directs to the specialist by performing the necessary preliminary procedures,
30. **Implementation:**
    i. **Anamnesis** General and movement system-orientated anamnesis is taken,
    ii. **Examination:** Performs musculoskeletal examination,
    iii. **Radiological assessment:** Reads and evaluates direct radiographs of common, uncomplicated cases,
    iv. Child hip examination: Performs in uncomplicated common cases,
    v. Knee examination: Performs in common, uncomplicated cases,
    vi. Reading radiographs related to orthopedics: Applies in uncomplicated common cases,
    vii. Types of traction: Applies in uncomplicated common cases,
    viii. Plaster and splint applications: Applies in uncomplicated and common cases,
    ix. Foot and ankle examination: Performs in uncomplicated, typical cases,
    x. Velpa/Bandage application: Applies in uncomplicated common cases,
    xi. Spinal examination: Performs in common, uncomplicated cases,
    xii. Upper extremity examination: Performs in uncomplicated and common cases

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of orthopedics and traumatology	**3**
Evaluation of general condition and vital signs	**4**
Record keeping, reporting and notification	
Clarification and obtaining consent	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of orthopedics and traumatology	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To provide decontamination, disinfection, sterilization, antisepsis	**4**
To be able to evaluate direct radiographs in terms of orthopedics and traumatology	**3**
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
In terms of orthopedics and traumatology interprets the results of screening and diagnostic examinations	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of orthopedics and traumatology	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
To be able to prepare and apply splint	**3**

To be able to apply bandage, tourniquet	**4**
Evaluation of multiple trauma patients in terms of orthopedics and traumatology	**3**
To be able to open an intravenous line	**3**
To be able to recognize/protect/transplant evidence in terms of orthopedics and traumatology	**2**
To be able to open skin-soft tissue abscess	**3**
To be able to take measures to stop/limit external bleeding	**3**
Hand washing	**4**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of orthopedics and traumatology	**4**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
To be able to make enema	**3**
To be able to apply nasogastric catheter	**3**
To be able to apply cervical collar (neck collar)	**4**
To be able to provide appropriate transport of the severed limb after trauma	**4**
To be able to prepare the drugs to be applied correctly	**3**
To be able to suture and take superficial sutures	**4**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers	**4**
To be able to take preventive measures against healthcare-associated infections	**3**
Principles and practices of scientific research (in terms of Orthopedics and Traumatology)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyze scientific data with appropriate methods and interprets the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply evidence-based medicine principles in clinical decision-making process	**3**

Healthfulness	
Exercise and physical activity	**4**
Developmental hip dysplasia screening program	**4**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
OTT1	Perthes and bone dysplasia	**PreD**	**1**
OTT2	General approach to skeletal system tumors	**PreD**	**1**
OTT3	Hand and upper extremity injuries	**D-E-P**	**1**
OTT4	Child fractures	**D-E-P**	**1**
OTT5	Bone and joint infections	**PreD**	**1**
OTT6	Rheumatoid arthritis, osteoarthritis	**DT-P-F**	**1**
OTT7	Metabolic bone diseases	**PreD-P**	**1**
OTT8	Developmental hip dysplasia	**PreD-P**	**1**
OTT9	"Club food" and other foot deformities	**PreD**	**1**
OTT10	Movement system and soft tissue injuries	**D-E**	**1**
OTT11	Diagnosis and treatment of scoliosis and Scheuermann kyphosis	**D-P**	**1**
OTT12	Approach to the patient with polytrauma	**E-P**	**1**
OTT13	Orthopedic radiology	**D**	**1**
OTT14	Orthopedic terminology	**D**	**1**
OTT15	Dislocations and joint injuries	**D-E-P**	**1**
OTT16	Fracture healing and general treatment principles	**D-P**	**1**
OTT17	Amputations	**PreD**	**1**
OTT18	Pelvis and lower extremity fractures	**D**	**1**
OTT19	Cerebral palsy	**PreD**	**1**
OTT20	Infections of the hand	**D**	**1**
OTT21	Hand and wrist diseases	**PreD**	**1**
OTT22	Spinal injuries	**E**	**1**
OTT23	Adult spinal problems	**PreD**	**1**
OTT24	Emergency approach to the orthopedic patient	**D-E**	**1**
		TOTAL	**24**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Reading radiographs related to orthopedics	**3**
Foot and ankle examination	**3**
Velpa - bandage application	**2**
Knee examination	**3**
Types of traction	**2**
Upper extremity examination	**3**
Child hip examination	**3**
Plaster and splint applications	**2**
Spinal examination	**2**

8. MENTAL HEALTH and DISORDERS

PURPOSE:

At the end of the "*Mental Health and Disorders Clinical Course and Practice Board",* Phase V students will be able to adopt a psychiatric evaluation and approach, evaluate the patient psychiatrically in a holistic approach in general medical practice, recognize psychopathologies, and make differential diagnoses in psychiatric diseases that they may frequently encounter.

LEARNING OBJECTIVES:

1. Understands the function of psychiatry, explains the prevalence and classification of psychiatric disorders, counts the basic principles of approach in psychiatry,
2. Takes general and problem-oriented history, takes psychiatric anamnesis, performs mental status examination, performs consciousness assessment and mental status examination in uncomplicated situations, prepares epicrisis and patient file, performs mini-mental status examination,
3. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    i. interprets the fundamental laboratory and radiological examinations commonly performed in mental health and disorders,
    ii. Explain the indications and methods of application of essential interventions in terms of mental health and disorders in patients, does practice at the primary level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
4. Recognizes the relationship and distinction of psychiatric disorders with other medical diseases, makes the distinction between neurosis and psychosis, comprehends the unconscious mechanisms underlying neuroses, explains the importance of the biopsychosocial approach,
5. Diagnosed with schizophrenia and other psychotic disorders, perform emergency treatment, refer to a specialist for treatment,

6. Diagnoses cognitive dysfunction, delirium, and other psychiatric diseases, performs the emergency treatment, applies prevention and precautions, and conducts follow-up and control of those diseases,
7. Recognizes alcohol and substance use disorders, makes emergency treatment, and applies prevention measures,
8. Counts the indications, contraindications, side effects, and drug-drug interactions of psychotropic drugs, makes rational drug use practices, writes prescriptions,
9. Makes a preliminary diagnosis of eating disorders and dissociative disorders,
10. Makes a preliminary diagnosis of adjustment disorder and post-traumatic stress disorder,
11. Recognizes bipolar disorder; performs emergency treatment; diagnoses and treats depressive disorders; performs the emergency treatment, follow-up, and control in primary care conditions; applies prevention measures,
12. Pre-diagnoses anxiety disorders, phobic disorders, panic disorder, and obsessive-compulsive disorder and makes the emergency treatment of panic disorder,
13. Makes a preliminary diagnosis of personal disorders,
14. Diagnoses somatoform disorders (such as somatic symptom disorder, hypochondriasis, and conversion disorder) and performs the emergency treatment,
15. Approaches to common psychiatric emergencies, stabilize the emergency psychiatric patient, assess the risk of suicide, and approach the patient with suicide risk appropriately,
16. Makes a preliminary diagnosis of sexual dysfunctions,
17. Knows ECT and other somatic treatments used in psychiatry and counts the indications,
18. It directs patients who need to be treated and followed up at a higher level or by a specialist,
    i. It guides rare defects,
    ii. Directs rare applications to an appropriate branch promptly,
    iii. Performs the necessary essential interventions in terms of mental health and disorders in critically ill patients (respiratory support, circulatory support, ...) and refers them to a higher-level health institution.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
To be able to evaluate mental state	**3**
To be able to take psychiatric history	**3**
Physical examination for the general problem	
Forensic case examination in terms of mental health and disorders	**2**
Consciousness assessment	**4**
Evaluation of general condition and vital signs	**4**
Mental state examination	**3**
Record keeping, reporting and notification	
To be able to obtain enlightenment and consent in terms of mental health and disorders	**4**
To be able to prepare epicrisis in terms of mental health and disorders	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of mental health and disorders	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To be able to fill the request form for laboratory examination	**4**
Interventional and non-interventional applications	
To be able to stabilize the emergency psychiatric patient	**3**
To be able to manage forensic cases in terms of mental health and disorders	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
Ability to recognize/protect/produce evidence	**2**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of mental health and disorders	**4**

Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
Minimal condition examination	**3**
To be able to prepare the drugs to be applied correctly	**3**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers in terms of mental health and disorders	**4**
Principles and practices of scientific research (in terms of Mental Health and Disorders)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyse scientific data with appropriate methods and interprets the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply evidence-based medicine principles in clinical decision-making process	**3**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
MHDT1	Introduction to psychiatry and classification	**D-E-P-F**	**1**
MHDT2	Psychiatric report and examination principles	**D-E-P-F**	**2**
MHDT3	Schizophrenia and other psychotic disorders	**PreD-P-F**	**2**
MHDT4	Neurocognitive disorders	**PreD-P-F**	**1**
MHDT5	Alcohol and substance use disorders	**PreD-E-P**	**3**
MHDT6	Psychopharmacology and psychopharmacotherapy -1	**D-E-P-F**	**1**
MHDT7	Psychopharmacology and psychopharmacotherapy -2	**D-E-P-F**	**1**
MHDT8	Eating disorders and dissociative disorders	**PreD**	**1**
MHDT9	**Adjustment disorders** - Acute stress disorder, - Posttraumat4k stress disorder	**PreD-E**	**1**
MHDT10	Sexual dysfunctions	**PreD**	**1**
MHDT11	Depressive disorders and bipolar disorders	**PreD-E-P-F**	**2**

MHDT12	Anxiety disorders and obsessive-compulsive disorder	**PreD-E-P-F**	**2**
MHDT13	Personality disorders	**PreD**	**1**
MHDT14	Somatoform disorders	**PreD**	**2**
MHDT15	Psychiatric emergencies and crisis management	**D-E-P-F**	**2**
MHDT16	Psychiatric assessment, symptoms and examination	**D-E-P-F**	**2**
MHDT17	Psychological test applications	**D-E-P-F**	**1**
MHDT18	ECT and other somatic therapies	**D-E-P-F**	**1**
MHDT19	Demonstration of psychotropic drugs	**D-E-P-F**	**1**
		TOTAL	**28**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Psychiatric examination	**3**
Patient assessment	**3**
Case presentation and discussion	**3**
Article presentation	**1**

Elective-1. PLASTIC, RECONSTRUCTIVE and AESTHETIC SURGERY

PURPOSE:

Phase V students will be able to diagnose common congenital anomalies and traumas of the head, neck, trunk, and extremities, burn trauma, acute-chronic skin wounds, and skin tumors and make the necessary treatment approaches in the first step in the "*Plastic, Reconstructive and Aesthetic Surgery Clinical Course and Practice Board*".

LEARNING OBJECTIVES:

1. Takes anamnesis using practical communication skills,
2. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnoses or diagnoses,
    a. interprets the fundamental laboratory and radiological examinations commonly performed in plastic, reconstructive, and aesthetic surgery,
    b. Explains the indications and methods of application of essential interventions in terms of plastic, reconstructive, and aesthetic surgery in patients, makes application at the primary level,
    c. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
3. Distinguish the patients to be followed up in primary care, plan their treatment,
4. Diagnoses and treats common diseases,
5. Defines soft tissue and bone injuries of the head and neck region and soft tissue injuries of all other parts of the body and performs first-step procedures,
6. Performs first aid and treatment of the patient with burn trauma and defines the burn wound. In addition, it ensures that precautions are taken by knowing the methods of protection from common burn injuries,
7. To be able to learn the basics of medical or surgical interventions related to the skin, know its standard structure, and count the conditions that may disrupt routine wound healing,

8. Counts reconstruction methods and options,
9. Knows the common aesthetic interventions in the community,
10. It directs patients who need to be treated and followed up at a higher level or by a specialist;
    a. Guidance for rare disorders (congenital anomalies, ...)
    b. Recognizes common benign and malignant tumors and vascular anomalies of the skin and
       to the organization,
    c. Directs rare applications to an appropriate branch promptly,
    d. Performs the necessary essential interventions in terms of plastic, reconstructive, and aesthetic surgery in critically ill patients and refers them to a higher-level health institution,
        i. Recognizes and directs lower extremity wounds that may develop due to pressure sores and systemic disorders,
        ii. Makes and directs emergency approaches in injuries in the form of limb rupture.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of plastic, reconstructive and aesthetic surgery	**3**
Evaluation of general condition and vital signs	**4**
Record keeping, reporting and notification	
Clarification and obtaining consent	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**

To be able to prepare a refusal of treatment document in terms of plastic, reconstructive and aesthetic surgery	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To provide decontamination, disinfection, sterilization, antisepsis	**4**
To be able to evaluate direct radiographs in terms of plastic, reconstructive and aesthetic surgery	**3**
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
In terms of plastic, reconstructive and aesthetic surgery interprets the results of screening and diagnostic examinations	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of plastic, reconstructive and aesthetic surgery	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
Evaluation of multiple trauma patients in terms of plastic, reconstructive and aesthetic surgery	**3**
To be able to open an intravenous line	**3**
Recognize/protect/transplant evidence in terms of plastic, reconstructive and aesthetic surgery	**2**
To be able to open skin-soft tissue abscess	**3**
To be able to take measures to stop/limit external bleeding	**3**
Hand washing	**4**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of plastic, reconstructive and aesthetic surgery	**4**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
To be able to make enema	**3**
To be able to apply nasogastric catheter	**3**
To be able to provide appropriate transport of the severed limb after trauma	**4**
To be able to prepare the drugs to be applied correctly	**3**
To be able to suture and take superficial sutures	**4**

Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers	**4**
To be able to take preventive measures against healthcare-associated infections	**3**
Principles and practices of scientific research (In terms of Plastic, Reconstructive and Aesthetic Surgery)	
To be able to compile scientific data and summarize them in tables and graphs,	**3**
To be able to analyze scientific data with appropriate methods and interprets the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply evidence-based medicine principles in the clinical decision-making process	**3**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
PRAST1	Introduction to plastic surgery, basic principles	**D**	**2**
PRAST2	Physical properties of the skin	**D**	**1**
PRAST3	Pressure Sore	**DT-P-F**	**1**
PRAST4	Leg ulcers and lymph oedema	**PreD-P-F**	**1**
PRAST5	Overview of aesthetic surgery	**PreD**	**1**
PRAST6	Grafts-flaps	**PreD**	**1**
PRAST7	Maxillo-facial injuries	**E**	**1**
PRAST8	Congenital anomalies in terms of plastic surgery	**PreD**	**1**
PRAST9	Cleft lip and palate and rare facial clefts	**D**	**1**
PRAST10	Pigmented skin lesions	**PreD**	**1**
PRAST11	Malignant melanoma and soft tissue sarcomas	**PreD**	**1**
PRAST12	Non-melanoma malignant lesions of the skin	**PreD**	**1**
PRAST13	General principles of burns	**DT-E**	**1**
PRAST14	Dull, chemical injuries and electrical burns	**E**	**1**
PRAST15	Vascular Anomalies	**PreD**	**1**
PRAST16	Benign - premalignant lesions of the skin	**PreD**	**1**
PRAST17	Factors affecting poor wound healing	**PreD**	**1**
PRAST18	Soft tissue injuries of the hand	**E**	**1**

PRAST19	Reconstructive microsurgery	**PreD**	**1**
		TOTAL	**20**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Story taking skills	**4**
Skin examination	**4**
Non-fracture facial examination	**4**
Approach to the patient with soft tissue trauma	**3**
Sewing practice	**3**
Wound care and dressing	**3**

Elective-2. RADIOLOGY

PURPOSE:

The introduction of the devices and units used in radiological examinations, the issues to be considered in the examinations and the introduction of the examination consent forms, information on how to fill the request documents, rational imaging request, and the introduction of the radiological algorithm to the physicians who will take part in primary health care *in the* "*Radiology Clinical Course and Practice Board*" of Phase V students, It is aimed that the physician candidates who have completed the theoretical and practical clinical course can know the radiological pre-diagnosis and diagnosis of diseases, to have knowledge about the radiological pre-diagnosis and diagnosis of diseases, to be able to make radiological follow-up of the diseases treated by the specialist in primary care.

Theoretical Courses:

1. **Introduction to radiology and communication:** This section will explain the radiological methods used in imaging diseases, pathologies, and interventional procedures, the images obtained, their qualifications, and current innovations.
2. **Radiation Protection:** The definition of radiation, radiation dose and units, the ALARA principle, the effects of radiation, X-ray doses in diagnostic radiology, radiation measurement devices, safe radiation dose limits for personnel working with radiation and other individuals, general rules of radiation protection, and measures to prevent unnecessary dose intake will be explained in detail again.
3. **Central Nervous System Radiology-1:** Basic imaging findings in congenital malformations of the central nervous system, radiological algorithm, essential imaging findings in white and gray matter diseases, radiological algorithm, glymphatic system, essential imaging findings in pathologies related to brain fluids, radiological algorithm, essential imaging findings related to aging brain, radiological algorithm, essential imaging findings in central nervous system infections, interventional methods, imaging findings in central nervous system neoplasms, radiological algorithm will be explained.

4. **Central Nervous System Radiology-2:** Basic imaging findings in cranial and spinal traumas, radiological algorithm, essential imaging findings in traumatic and nontraumatic cranial and spinal bleeding, radiological algorithm, essential imaging findings in vascular pathologies and ischemia/infarction/stroke, interventional methods and radiological algorithm will be introduced.
5. **Central Nervous System Radiology-3:** Basic imaging findings in spinal congenital malformations, radiological algorithm, essential imaging findings related to spinal degenerative changes, radiological algorithm, essential imaging findings in spinal infections, interventional methods and radiological algorithm, essential imaging findings in spinal neoplasms, interventional procedures, and the radiological algorithm will be introduced.
6. **Cardiovascular Radiology:** Diagnostic methods, algorithms, and essential radiological findings will be described. Basic diagnostic radiological methods and algorithms for congenital and acquired heart diseases will be introduced. Vascular anatomy emergency radiological algorithm and essential imaging findings will be explained. Peripheral vascular diseases, non-invasive diagnostic methods, Doppler ultrasound indications, and radiological algorithms in peripheral vascular diseases will be given.
7. **Abdominal Radiology:** Basic imaging findings in evaluating hepatobiliary system pathologies, radiological algorithms, and clues in differential diagnosis will be introduced.
8. **Gastrointestinal System Radiology:** This section will explain essential imaging findings in small and large intestine pathologies, a radiological algorithm, and tips on differential diagnosis.
9. **Pediatric Abdomen Radiology:** This section will explain the essential imaging findings of congenital pathologies, liver, and gastrointestinal tract space-occupying lesions, as well as the radiological algorithm and differential diagnosis tips for pediatric patients.
10. **Emergency Abdominal Radiology:** The radiological algorithm in emergencies, essential imaging findings in the examinations performed, and clues in differential diagnosis will be explained.
11. **Thorax Radiology:** The basic radiologic diagnostic methods in thoracic diseases will be briefly discussed, and the radiologic algorithm will be explained. Radiologic findings and algorithms in infectious and noninfectious pathologies of the airways will be described. The contribution of imaging to diagnosis and treatment will be presented, and the points to be considered in direct radiography will be defined. Radiologic imaging findings in lung

neoplasms and the importance of radiology and radiologic algorithms will be described. Radiologic findings of pulmonary embolism, the importance of radiologic imaging in early diagnosis, radiologic algorithm, and significant radiologic findings will be explained. Radiologic findings and radiologic algorithms of pleural, mediastinal, and diaphragmatic pathologies will be described.

12. **Obstetric and Gynecological Radiology:** Obstetric and gynecological emergencies, essential radiological imaging findings, and vital radiological signs will be described, and the diagnostic algorithm will be explained. Radiological imaging findings of gynecological neoplasms, radiological algorithm, radiological imaging findings in pelvic inflammatory (PID) and non-inflammatory diseases, radiological algorithm, radiological imaging findings, and radiological algorithm in obstetric imaging will be explained.
13. **Genitourinary System Radiology:** This section will explain the essential radiological findings and algorithms obtained with basic imaging methods in congenital, infectious and inflammatory, metabolic, traumatic, vascular, benign, and malignant neoplastic diseases of the genitourinary system.
14. **Head and Neck Radiology:** This section will explain the essential radiological findings and algorithms obtained by basic imaging methods in congenital, infectious and inflammatory, metabolic, traumatic, vascular, benign, and malignant neoplastic diseases of the head and neck.
15. **Pediatric Radiology:** This section will explain the essential radiological findings and algorithms obtained by basic imaging methods in congenital, infectious inflammatory, metabolic, traumatic, vascular, benign, and malignant neoplastic diseases common in the pediatric age group.
16. **Nonvascular Interventional Radiology:** -CT, US, Fluoroscopy guided diagnostic biopsy procedures; abscess, seroma, glioma, lymphocele drainage diagnosis, and treatment; pleural effusion and intra-abdominal ascites sampling and drainage treatments; percutaneous transhepatic cholangiography, biliary drainage and stent treatment in biliary obstructions; gallbladder drainage; non-vascular procedures in diseases of the urogenital system: percutaneous nephrostomy, antegrade double-j stent placement, cystostomy; percutaneous treatment of symptomatic renal cysts; percutaneous gastrostomy, gastrojejunostomy in gastrointestinal system diseases.
17. **Musculoskeletal System Radiology-1:** Basic radiological imaging findings and algorithms in musculoskeletal trauma will be introduced.

18. **Musculoskeletal System Radiology-2:** Basic radiological imaging findings and algorithms in bone tumors, joint diseases, idiopathic diseases, and metabolic and endocrine diseases will be introduced.
19. **Breast Radiology:** The essential radiological imaging findings and algorithm in non-neoplastic and neoplastic breast diseases will be introduced.
20. **Vascular Interventional Radiology:**

    i. *Peripheral vascular interventional procedures*:

    Diagnostic angiography: all non-cardiac organ and extremity vessels; intravenous treatment of arterial stenosis or occlusion, balloon-stent applications; intravenous treatment of venous stenosis or occlusion:] balloon-stent applications; treatment of thoracic and abdominal aortic aneurysm; treatment of thoracic aortic dissection; treatment of bleeding foci in cases of trauma and injury by vascular route; treatment of gastrointestinal bleeding; hemodialysis fistula treatment; tumor embolization procedures;] chemoembolization; peripheral smear or central vascular access; placement of vena cava filter; removal of foreign body from the vascular system; adrenal gland and petrosal sac blood sampling in some endocrinological diseases will be outlined, and procedures will be explained.

    ii. *Neuro-vascular interventional procedures*:

    Diagnostic angiography: Outlines and procedures for treating neck and cerebral vessels, balloon and stenting treatment of carotid artery stenoses, balloon and stenting treatment of cerebral artery stenoses, and pre-operative embolization of tumors in the neck and skull base will be described.

Interactive Studies:

1. **Central Nervous System Radiology -1:** Introduction of the Magnetic Resonance Imaging (MRI) unit and MRI device at the beginning, the issues to be considered in the examinations and the introduction of consent forms, information on how to fill out the request documents, one or two of the students will be given a short brain and spinal MRI examination experience, interactive discussion on the images of different patients, evaluations of pre-written reports, patient and treatment follow-up.

2. **Central Nervous System Radiology -2: Initially, the computed tomography (CT) unit will be introduced**. The issues to be considered in the examinations and the consent forms will be introduced. Information on how to fill out the request documents will be provided. An interactive discussion will be held on the images of different patients. Evaluations with pre-written reports will be conducted, and patient follow-up will be informed.
3. **Genito-Urinary System Radiology:** Introduction of radiography and ultrasound imaging devices and units at the beginning of the devices, how the shots are taken, and how to prepare a report with images will be informed. Introduction of computed tomography and magnetic resonance imaging units at the beginning of the device, the issues to be considered in the examinations and the introduction of consent forms, information on how to fill out the request documents, discussion and report preparation stages with images of different patients will be informed about patient follow-up.
4. **Pediatric Radiology:** At the beginning of the imaging devices and units used in radiology, what to pay attention to when performing radiological examinations of pediatric age group patients, how the shots are made, how the request documents should be filled in, and the stages of discussion and report preparation with images of different patients will be informed about patient follow-up.
5. **Head and Neck Radiology:** Introduction of radiography, ultrasound imaging devices and units at the beginning of the devices, information about how the shots are taken, and how to prepare a report with images. Introduction of computed tomography and magnetic resonance imaging units at the beginning of the device, the issues to be considered in the examinations and the introduction of consent forms, information on how to fill out the request documents, discussion and report preparation stages with images of different patients will be informed about patient follow-up.
6. **Musculoskeletal System Radiology -1:** Introduction of the radiography unit and x-ray device at the beginning of the device, which radiological examination should be requested in which musculoskeletal system pathologies and the issues to be considered in the evaluation of bone and joint direct radiography and the introduction of consent forms, information on how to fill out the request documents, one or two of the students will be given a short bone and joint radiography experience, interactive discussion over the images

of different patients, evaluations of pre-written reports, patient and treatment follow-up will be informed.

7. **Musculoskeletal System Radiology -2: The** use of magnetic resonance and computed tomography in the musculoskeletal system, the issues to be considered in the examinations and the introduction of consent forms, information on how to fill out the request documents, interactive discussion on the images of different patients, evaluations with pre-written reports, patient follow-up will be informed.
8. Direct radiography, the primary imaging method in thoracic pathologies and an essential part of primary medical education will be transferred to our students at the beginning of the X-ray device. Significant direct radiography findings will be explained on the radiographs taken by storming ideas with case-based evaluations. The importance of thorax computed tomography (CT) examination and the radiological algorithm will be emphasized.
9. **Interactive Study on Cardiovascular Radiology:** Key findings and signs for cardiovascular diseases in direct radiography, the primary radiological method, will be explained. Computerized tomography devices will be introduced, and the issues to be considered in examinations and reports will be defined. Introduction of consent forms, information on how to fill out the request documents, and how to evaluate vascular pathologies on images will be explained.
10. **Interactive Study on Obstetric and Gynecological Radiology:** At the beginning of the ultrasonography device, which is the primary imaging device, the working principles of the devices will be introduced, and the importance of obstetric and gynecological radiology and the way it is done will be mentioned. Four-dimensional (4D) ultrasonography imaging will be introduced online on the patient whose permission is obtained; obstetric essential findings and important information written in the reports will be explained to our students through the pre-registered archive.
11. **Interventional Radiology:** The digital Subtraction Angiography unit (DSA) and DSA device will be introduced initially. The issues to be considered in the procedures and consent forms will be introduced. Information on how to fill out the request documents will be provided. An interactive discussion on the images of different patients will be held. Patients and treatment follow-ups will be informed.

12. **Vascular Interventional Radiology:** The digital Subtraction Angiography unit (DSA) and DSA device will be introduced initially. The issues to be considered in the procedures and consent forms will be introduced. Information on how to fill out the request documents will be provided. An interactive discussion on the images of different patients will be held. Patients and treatment follow-ups will be informed.

LEARNING OBJECTIVES

1. Takes radiological anamnesis using practical communication skills,
2. Defines current innovations in radiological methods used in the imaging of diseases and pathologies and interventional procedures,
3. Counts the algorithm steps to be followed to request radiological examination,
4. Counts the protection from ionizing and non-ionizing radiation and the things to be considered in radiological procedures,
5. Applies the communication rules to be followed in telling the patient the results of radiological triggering,
6. Evaluate essential direct X-rays and recognize some common pathologies,
7. Counts which radiological examinations should be requested in which order in emergency patients,
8. Counts the methods used in the diagnosis of central nervous system diseases, competencies, essential imaging findings, and radiological algorithms,
9. Counts the methods used in the diagnosis of head and neck diseases, competencies, essential imaging findings, and radiological algorithm,
10. List the methods used in respiratory system radiology, competencies, essential imaging findings, and radiological algorithms,
11. Can evaluate chest radiographs,
12. Explains the characteristics of the methods used in the diagnosis and follow-up of breast diseases, knows the essential imaging findings, can request radiological examinations appropriately,
13. Counts the methods used in the diagnosis of cardiovascular system diseases, competencies, essential imaging findings, and radiological algorithms,

14. Counts the methods used in the diagnosis of gastrointestinal system diseases, competencies, essential imaging findings, and radiological algorithms,
15. Evaluates direct urinary system and standing direct abdominal radiographs,
16. Counts the methods used in the diagnosis of Genito-Urinary System diseases, competencies, essential imaging findings, and radiological algorithm,
17. Counts the methods used in diseases related to the musculoskeletal system, competencies, essential imaging findings, and radiological algorithm,
18. Evaluates the anatomical structure in essential extremity and vertebral radiographs,
19. Knows the groups of pathologies evaluated in pediatric radiology, requests radiological examinations by the algorithm according to the preliminary diagnosis considered in the patient,
20. Counts the diagnosis and treatment methods used in the field of interventional radiology,
21. In the first step, they interpret the radiological results of the patients and make a preliminary diagnosis or diagnosis,
    i. Interprets radiological examinations,
    ii. Explains the indications and methods of application of essential interventions in terms of radiologic, makes application in primary care level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
22. Distinguishes patients to be followed up in primary care,
23. Diagnoses common diseases,
24. It directs patients who need to be treated and followed up at a higher level or by a specialist,
    i. It guides rare faults,
    ii. Directs infrequent applications to an appropriate branch promptly,
    iii. Performs basic radiology procedures for crisis patients and refers them to a higher-level health institution.

BASIC MEDICAL PRACTICE		
APPLICATIONS		**LEARNING LEVEL**
Story retrieval		
To be able to take history for radiological examination		**4**
Physical examination for the general problem		
Radiological forensic case evaluation		**3**
Preparation of the patient for radiological examination		**3**
Record keeping, reporting and notification		
To be able to obtain radiological examination clarification and consent		**3**
To be able to prepare radiological epicrisis		**3**
To be able to write radiology notes to the patient file		**2**
To be able to issue radiological prescription		**3**
To be able to prepare radiological intervention rejection document		**2**
Laboratory tests and other related procedures		
To be able to evaluate direct radiographs	In central nervous system radiology	**3**
	Abdomen Radiology	**3**
	Gastrointestinal system radiology	**3**
	Thoracic radiology	**3**
	Gynecological and obstetric radiology	**3**
	Head and neck radiology	**3**
	Genito-urinary system radiology	**3**
	Musculoskeletal system radiology	**3**
Ultrasonography application		**1**
Computed tomography application		**1**
Magnetic resonance imaging application		**1**
Angiography application		**1**
To be able to fill the request form for laboratory (radiological) examination		**4**
To be able to interprets the results of screening examination (Radiological)		**1**
Interventional and non-interventional applications		
To be able to manage radiological processes of forensic cases		**3**
To be able to make a rational imaging examination request		**4**

Radiological evaluation of multiple trauma patients	**2**
To be able to recognize/protect/transfer radiological evidence	**2**
To be able to prepare the drugs to be applied (opaque substance) correctly	**3**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of radiological health of health workers	**4**
Principles and practices of scientific research (Radiological)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyze scientific data with appropriate methods and interprets the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply evidence-based medicine principles in clinical decision-making process	**2**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
RT1	**Introduction to radiology and communication**	**PreD-D-F**	**1**
RT2	**Radiation protection** - definition of radiation, - radiation dose and units, - effects of radiation, - radiation measurement devices, - radiation dose limits, - general rules in radiation protection	**PreD-D-F**	**1**
RT3	**Central nervous system radiology -1** - congenital malformations, - white and grey matter diseases, - glymphatic system, - pathologies related to brain fluids, - degenerative diseases, - aging brain, infections, neoplasms	**PreD-D-F**	**1**
RT4	**Central nervous system radiology -2** - traumas - traumatic and nontraumatic, - cranial and spinal hemorrhages, - vascular pathologies, - ischemia/infarction/stroke	**PreD-D-F**	**1**
RT5	**Central nervous system radiology -3** - spinal congenital malformations, - spinal degenerative changes, - spinal infections, - spinal neoplasms	**PreD-D-F**	**1**

RT6	**Cardiovascular Radiology** - methods used in cardiovascular radiology, - congenital and acquired heart diseases, - vascular anatomy and emergency radiological algorithm, - peripheral vascular diseases, - non-invasive diagnostic methods, - doppler indications	**PreD-D-F**	**1**
RT7	**Emergency radiology** - radiological algorithm and approach in emergencies	**PreD-D-F**	**1**
RT8	**Abdomen Radiology** - space-occupying lesions of the hepatobiliary system	**PreD-D-F**	**1**
RT9	**Gastrointestinal system radiology** - pathologies of the small and large intestine	**PreD-D-F**	**1**
RT10	**Pediatric abdominal radiology** - pediatric liver, - space-occupying lesions of the gastrointestinal tract, - congenital pathologies	**PreD-D-F**	**1**
RT11	**Thoracic radiology** - radiological diagnostic methods in thoracic diseases, - direct radiograph interpretation, - elementary lesions of the lung, - infectious and non-infectious pathologies of the airways, - lung neoplasms, - pulmonary embolism, -pleural, mediastinal and diaphragmatic pathologies	**PreD-D-F**	**1**
RT12	**Gynecological and obstetric radiology** - obstetric and gynecological radiological diagnostic methods, - obstetric and gynecological emergencies and diagnostic algorithm, - gynecological neoplasms, - pelvic inflammatory and non-inflammatory diseases, - current imaging methods in obstetric imaging	**PreD-D-F**	**1**
RT13	**Head and neck radiology** - congenital, infectious and inflammatory, metabolic, traumatic, vascular, benign and malignant neoplastic diseases	**PreD-D-F**	**1**
RT14	**Genito-urinary system radiology** - congenital, infectious and inflammatory, metabolic, traumatic, vascular, benign and malignant neoplastic diseases	**PreD-D-F**	**1**
RT15	**Pediatric radiology** - congenital, infectious and inflammatory, metabolic, traumatic, vascular, benign and malignant, seen in pediatric age group neoplastic diseases	**PreD-D-F**	**1**
RT16	**Nonvascular interventional radiology**	**PreD-D-F**	**1**

RT17	**Musculoskeletal system radiology -1** - imaging methods in musculoskeletal system diseases, - radiological algorithm, - musculoskeletal traumas	**PreD-D-F**	**1**
RT18	**Musculoskeletal system radiology -2** - bone tumors, - joint diseases, - idiopathic diseases, - metabolic and endocrine diseases	**PreD-D-F**	**1**
RT19	**Breast radiology** - radiological imaging methods in breast diseases, - benign-malignant diseases of the breast	**PreD-D-F**	**1**
RT20	**Vascular Interventional Radiology**	**PreD-D-F**	**1**
		TOTAL	**20**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Magnetic resonance imaging (MRI) unit and device (demonstration)	**1**
Computed tomography (CT) device (demonstration)	**1**
Demonstration of interventional radiology unit and angiography device	**1**
Ultrasound device (demonstration)	**1**
Mammography device (demonstration)	**1**
Direct radiography and portable direct radiography devices (demonstration)	**1**
Points to be considered in examinations and consent forms	**2**
Information on how to fill in the request documents	**2**
Interactive discussion on images of different patients	**2**
Evaluations of previously written reports	**2**
Informing about patient and treatment follow-up	**2**
Radiation protection and issues to be considered for radiological examinations	**3**
Points to be considered in radiological examinations in the pediatric age group	**2**

Elective-3. EMERGENCY MEDICINE

PURPOSE:

Phase V students will have knowledge about common emergency diseases in the community *in the* "*Emergency Medicine Clinical Course and Practice Board*" and will gain the skills of approaching the emergency patient, taking history, performing physical examination and requesting appropriate examinations; knowledge of diagnosis and treatment at the primary care level; For diseases that cannot be solved in primary care, the patient will be directed to the right place at the right time and will gain the knowledge, skills, and attitude of protection from emergency diseases.

LEARNING OBJECTIVES:

1. Counts the clinical features of emergency primary diseases and principles of clinical approach (diagnosis, treatment, and prevention),
2. Takes medical history from patients by the complaints and the patient's condition, performs the necessary physical examination, detects pathological conditions, interprets pathological examination findings according to the principles of differential diagnosis, requests the required examinations for the diagnosis of patients, and interprets the results,
3. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    i. interprets basic laboratory (arterial blood gas, whole blood, biochemical measurements, ...) and radiological examinations (chest X-ray, ...) commonly performed in terms of emergency diseases,
    ii. Explain the indications and methods of application of essential interventions in terms of emergency diseases in patients, does practice at the primary level,
    iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
4. Diagnoses common emergency diseases, performs emergency and primary treatment, and appropriately directs to the specialist physician,
5. It directs patients who need to be treated and followed up at a higher level or by a

specialist,

i. It guides rare defects,
ii. Directs rare applications to an appropriate branch promptly,
iii. Performs the necessary essential interventions in terms of emergency diseases in critically ill patients (respiratory support, circulatory support, ...) and refers them to a higher-level health institution,

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
To be able to evaluate mental state	**3**
Physical examination for the general problem	
Forensic case examination in terms of emergency diseases	**3**
Abdominal examination	**4**
Consciousness assessment	**4**
Evaluation of general condition and vital signs	**4**
Cardiovascular system examination	**4**
Musculoskeletal examination	**3**
Neurological examination	**3**
Respiratory system examination	**4**
Record keeping, reporting and notification	
To be able to organize forensic case notification	**4**
To be able to obtain clarification and consent in terms of emergency diseases	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of emergency diseases	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**

Laboratory tests and other related procedures	
To be able to evaluate direct radiographs in terms of emergency diseases	**3**
To be able to take and evaluate ECG	**3**
To be able to measure and evaluate blood glucose with glucometer	
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
To be able to make and evaluate complete urine analysis	**3**
In terms of emergency diseases interprets the results of screening and diagnostic examinations	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of emergency diseases	**3**
Airway application	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
Arterial blood gas collection	**3**
To be able to prepare and apply splint	**3**
Use of balloon mask (ambu)	**4**
To be able to apply bandage, tourniquet	**4**
Evaluation of multiple trauma patients	**3**
Ability to open an intravenous line	**3**
Applying defibrillation	**4**
To be able to recognize/protect/transplant evidence in terms of emergency diseases	**2**
To be able to open skin-soft tissue abscess	**3**
To be able to take measures to stop/limit external bleeding	**3**
Ability to intubate	**3**
To be able to take biological samples from the patient	**3**
To ensure that the patient is transported appropriately	**4**
To be able to refer the patient appropriately in terms of emergency diseases	**4**
To be able to do first aid to remove the foreign body in the airway	**3**
Ability to make IM, IV, SC, ID injection	**4**

Urinary catheter insertion	**3**
To provide advanced life support	**3**
Suicide intervention	**2**
To be able to measure blood pressure	**4**
Capillary blood sampling	**4**
Tick extraction	**3**
To be able to take samples for culture	**3**
To be able to make enema	**3**
To be able to apply nasogastric catheter	**3**
To be able to apply oxygen and nebul-inhaler therapy	**4**
Pleural puncture / thoracentesis	**2**
To be able to apply and evaluate pulse oximetry	**4**
To be able to apply cervical collar (neck collar)	**4**
To be able to evaluate respiratory function tests	**3**
To be able to apply basic life support	**4**
To be able to provide appropriate transport of the severed limb after trauma	**4**
To be able to prepare the drugs to be applied correctly	**3**
To be able to do wound-burn care	**3**
To be able to suture and take superficial sutures	**4**
Providing acute decontamination principles in poisoning	**2**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers in terms of emergency diseases	**4**
To be able to take preventive measures against healthcare-associated infections	**3**
Principles and practices of scientific research (in terms of Emergency Medicine)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyze scientific data with appropriate methods and interprets the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply the principles of evidence-based medicine in clinical decision- making process	**2**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
EMT1	Approach to emergency patient and triage	**PreD**	**1**
EMT2	Basic life support and advanced life support	**PreD**	**1**
EMT3	Environmental emergencies (frostbite, drowning, hypothermia, heat stroke, electric shock, insect bites)	**E**	**1**
EMT4	Poisoning	**E-P**	**1**
EMT5	Sho ck (traumatic, non-traumatic, cardiogenic)	**E**	**1**
EMT6	Allergy and anaphylaxis	**DT-P-F**	**1**
EMT7	Acute coronary syndrome and ECG emergencies	**DT-P-F**	**1**
EMT8	Emergency approach to the patient with extremity trauma	**D-E**	**1**
EMT9	Emergency approach to the patient with spinal trauma	**E**	**1**
EMT10	Emergency approach to the patient with head trauma	**E**	**1**
EMT11	Emergency approach to the patient with abdominal trauma	**E**	**1**
EMT12	Emergency approach to the patient with multiple system trauma	**E**	**1**
EMT13	Infectious disease emergencies	**E**	**1**
EMT14	Syncope	**E**	**1**
EMT15	Approach to burns	**E**	**1**
		TOTAL	**15**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Anamnesis taking and communication in the emergency department	**4**
Evaluation of general condition, vital signs, respiratory and cardiovascular systems	**4**
Evaluation of respiratory function tests, arterial blood gas interpretation	**3**
Reading and evaluating direct radiographs	**3**
Pulse oximetry and oxygen therapy application	**4**
Musculoskeletal examination, bandage and tourniquet application	**4**
Ensuring appropriate transport of the traumatized patient	**4**
Airway management and intubation	**4**
Basic life support and defibrillation	**4**
Burn care	**3**

Elective-4. CLINICAL PHARMACOLOGY

PURPOSE:

Rational drug use (Rational Pharmacotherapy) is a set of rules that ensure that patients receive drugs appropriate to their clinical needs, in doses that meet their individual needs, in sufficient time, at the lowest cost to the patient and society. In line with this definition, the "*Clinical Pharmacology Clinical Course and Practice Board*" for Phase V students aims to improve students' drug selection and prescribing skills to make practical applications of the theoretical knowledge acquired in the II. and III. classes, to improve communication skills related to drug use and follow-up, and to develop pharmacotherapy practices within a logical structure with the Groningen Model.

LEARNING OBJECTIVES:

Theoretical Courses

1. Explain the concept of rational drug use.
2. It counts the rules that ensure that patients receive the drugs appropriate to their clinical needs in doses that meet their individual needs in sufficient time, at the lowest cost to the patient and society,
3. Discusses the theoretical knowledge acquired in previous classes about the correct dose and the correct route of administration according to the indication of the drugs through case examples,
4. Counts the effective and efficient use of information resources for rational medicine, rational prescribing,
5. Determines the goals of the treatment to be applied by considering the disease and individual characteristics,
6. Establishes the patient's follow-up parameters with treatment,
7. Obtains detailed information about the efficacy and safety of the drug of choice,
8. Evaluate alternative treatment options according to accompanying pathologies, if any,
9. Counts the side effects of the selected drug, contraindications, and risk groups in the application,

10. Counts the requirements of a complete prescription,
11. Counts the follow-up parameters for the selected drug,

Interactive applications (simulated patient applications)

1. Develops practical knowledge and skills about the effective and efficient use of information resources during prescribing,
2. Chooses the appropriate drug for the proper indication, considering the indication and individual characteristics of the patient,
3. Determines the appropriate drug administration route, considering the patient and the disease,
4. Creates a complete prescription with a rational pharmacotherapy approach,
5. Applies the correct communication techniques with patients and their relatives, taking into account individual characteristics,
6. Establishes follow-up parameters for the patient's problem and reviews the whole process if necessary.

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
CPT1	General information about rational drug use internship	**PreD-D-F**	**1**
CPT2	Rational drug use	**Pre-D-D-F**	**2**
		TOTAL	**3**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Rational drug use	**3**
Ensuring that patients receive medicines appropriate to their clinical needs, in doses that meet their individual needs, in sufficient time, at the lowest cost to the patient and society tell the rules	**2**
Discusses the theoretical knowledge acquired in previous classes about the correct dose and the correct route of administration according to the indication of drugs through case examples	**2**
Counts the requirements of a complete prescription	**3**
The objectives of the treatment to be applied by considering the disease and individual characteristics determines	**1**

Establishes the patient's follow-up parameters with treatment	**2**
Obtain detailed information on the efficacy and safety of the drug of choice	**3**
Evaluates alternative treatment options according to accompanying pathologies, if any	**2**

Elective-5. MEDICAL GENETICS

PURPOSE:

The "Medical Genetics Clinical Course and Practice Board" for Phase V students aims to teach genetic terminology, explain inheritance models, process the classification steps of common and rare diseases, introduce genetic tests, interpret genetic test results, teach and apply algorithms to give basic and advanced information about cancer genetics, to use national and international databases, to explain the basics of genetic counseling and patient communication, to teach genetic disease algorithms according to branches.

LEARNING OBJECTIVES:

1. **Genetic terminology:** Defines and uses basic genetic terms,
2. **Inheritance models:** Explain different inheritance models and explain with examples,
3. **Disease classification:** Learns the classification steps of common and rare genetic diseases and supports them with examples,
4. **Genetic tests:** Defines genetic tests, explains t h the different types of tests and explains in which cases they are used,
5. **Genetic test results:** Learns the methods of interbreeding genetic test results and how to transfer the results to the patient,
6. **Algorithms:** Understand and gain the ability to apply algorithms used in the diagnosis and management of genetic diseases,
7. **Cancer genetics:** Covers essential cancer genetics topics and introduces advanced knowledge,
8. **Databases:** Learns to use national and international genetic databases,
9. **Genetic counseling:** Learn the principles of genetic counseling and understand the ethical and practical issues related to patient communication,
10. **Branches according to algorithms:** Different branches of genetic diseases learning and applies appropriate algorithms.

THEORETICAL LECTURES				
LECTURE CODE	**LECTURE TOPICS**		**LEARNING LEVEL**	**TIME**
MGT1	Basic information (terminology, inheritance patterns, tests, disease classification)		**PreD**	**1**
MGT2	Cancer genetics- Genetic algorithms- Solid and hematological cancers		**PreD**	**2**
MGT3	Algorithms in common diseases (Haemoglobinopathies- Cystic fibrosis- FMF and ligament tissue diseases etc.)		**PreD**	**1**
MGT4	Use of databases in genetic diagnosis- Disease-Patient mappings		**PreD**	**1**
MGT5	Genetic algorithms	Respiratory and cardiovascular diseases	**PreD**	**1**
MGT6		Gastrointestinal system diseases	**PreD**	**1**
MGT7		Endocrine system diseases	**PreD**	**1**
MGT8		Gynecology	**PreD**	**2**
MGT9		Urinary system diseases	**PreD**	**1**
MGT10		Neurogenetic and metabolic diseases	**PreD**	**1**
MGT11		Skin diseases	**PreD**	**1**
MGT12		Immune system diseases	**PreD**	**1**
			TOTAL	**14**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Basic literature review training	**1**
Pedigree drawing	**1**
Use of genetic databases	**1**
"Symptom - diagnosis - treatment" application	**1**

Elective-6. TRADITIONAL and COMPLEMENTARY MEDICINE

PURPOSE:

The "*Traditional and Complementary Medicine Clinical Course and Practice Board*" for Phase V students aims to provide information about various traditional and complementary medicine methods and practices that help modern medical practices.

LEARNING OBJECTIVES:

1. Understand the function of traditional and complementary medicine, count the basic principles of approach,
2. Understand the function of acupuncture and count the basic principles of the approach.

THEORETICAL LECTURES				
LECTURE CODE	**LECTURE TOPICS**		**LEARNING LEVEL**	**TIME**
TCMT1	Basic information		**PreD**	**1**
TCMT2	Acupuncture	Description and history	**PreD**	**1**
TCMT3		Scientific foundations	**PreD**	**1**
TCMT4		Yin Yang theory	**PreD**	**1**
TCMT5		Five element theory	**PreD**	**1**
TCMT6		QI and channels theory	**PreD**	**1**
TCMT7		Pathogenicity	**PreD**	**1**
			TOTAL	**7**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Acupuncture treatment	**1**

Elective-7. PHYSIOTHERAPY and REHABILITATION

PURPOSE:

In the "Physiotherapy and Rehabilitation (Physical Activity in Geriatric Population) Clinical Course and Practice Board" of Phase V students, students gain knowledge about the changes and management of body systems with aging, causes of balance disorders in old age and causes of falls in old age, methods used in the prevention and treatment of balance disorders in old age, physical activity recommendations given to the elderly and appropriate exercise prescription, gait disorders in old age and foot problems in old age and proper shoe selection for these problems; It is aimed to provide students with information on different cases and to gain analysis skills through observation by creating examples with scenarios consisting of falls, various exercises, gait pathologies in elderly individuals, and to gain knowledge and foresight about the initial findings of Alzheimer's disease, which is the prototype of dementia syndrome, the personal and social problems it causes, and the approach to patients and their relatives.

LEARNING OBJECTIVES:

1. It makes the definition of older people,
2. Counts the musculoskeletal system changes that occur in elderly individuals,
3. Counts the changes that occur in the balance systems of elderly individuals,
4. Counts the modifications related to walking that occur in elderly individuals,
5. Counts the rehabilitation steps planned to manage the effects of aging on body systems,
6. Counts the tasks of the doctor in managing the impact of aging on body systems,
7. Counts the duties of physiotherapists in managing the effects of aging on body systems,
8. Explains the rehabilitation modalities to be applied in the management of changes occurring in the musculoskeletal system,
9. Counts the types of balance disorders in old age,

10. Explain the pathophysiology of balance disorders in old age,
11. Explains the causes of falls in old age by associating them with changes in systems,
12. Explains the importance of balance rehabilitation applied to improve balance in old age,
13. Counts the aims of balance rehabilitation applied to enhance balance in old age,
14. Counts the content of balance rehabilitation applied in older people,
15. Counts the duties of physiotherapists in balance education.
16. Observationally analyses the factors leading to loss of equilibrium,
17. Gains awareness that different patient profiles will provide them with different information,
18. Defines the terms physical activity and exercise,
19. Counts the physical activity recommendations used in older people,
20. Explains the importance of appropriate exercise prescriptions given to older people,
21. Explains the significance of physiotherapists in increasing the physical activity levels of older people and exercise planning,
22. Defines the exercise principles used when prescribing appropriate exercise prescriptions for the elderly.
23. Explains the importance of doing sport in old age,
24. Counts the sports that can be safe and dangerous for older people to do,
25. Explains the importance of adjusting the frequency and intensity of sports recommended to older people,
26. Counts the issues to be considered during the sports recommended for older people,
27. Explain the concepts of calisthenic exercise, recreational education,
28. Explains the awareness of physical activity in old age,
29. Explains the importance of offering different exercise options to different patient profiles,
30. Counts the phases of walking and the elements to be considered during walking evaluation,
31. Counts the gait disorders that can be seen in the elderly, the causes of gait disorders, and the aims of rehabilitation of gait disorders,
32. Counts the foot problems that can be seen in old age,
33. Explains the causes of foot problems that can be seen in old age and the purpose of the rehabilitation program applied for foot problems,
34. Counts the importance of appropriate footwear selection for foot problems in older people and the properties of shoes that can be recommended,

35. Distinguishes different causes that change/impair gait in elderly individuals,
36. Counts the different gait pathologies that occur in different patient profiles,
37. Recognize the emergence and first signs of Alzheimer's disease and have an idea about the problems that can be seen during the disease and the resulting cognitive dysfunctions, impairment in activities of daily living, behavioral issues, and methods of coping with them.

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
PRT1	Effects of ageing on body systems	**PreD-D**	**1**
PRT2	Management of the effects of ageing on body systems	**PreD-D**	**1**
PRT3	Old age and balance	**PreD-D**	**1**
PRT4	Balance training and its importance	**PreD-D**	**1**
PRT5	Physical activity and appropriate exercise prescription	**PreD-D**	**1**
PRT6	Sports suitable for the elderly	**PreD-D**	**1**
PRT7	Old age and walking	**PreD-D**	**1**
PRT8	Foot problems and proper shoe selection	**PreD-D**	**1**
		TOTAL	**8**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Falling	**1**
Calisthenic exercise	**1**
Gait pathologies	**1**
Iris Murdoch, professor of literature, writer, and philosopher, who is suffering from Alzheimer's disease watched the film **"Iris"** about her biography	**1**

Elective-8. MEDICAL EDUCATION

PURPOSE:

The "*Medical Education Clinical Course and Practice Board*" aims to help Phase V students improve their communication skills and basic medical practices.

LEARNING OBJECTIVES:

1. Interprets the basic concepts and principles of learning and teaching,
2. Defines the concepts of governance and leadership, lists the differences between leader and manager,
3. Understands the importance of educational research,
4. Interprets the basic concepts and principles related to education and education/training programs,
5. To be able to compare approaches and models related to education/training programs with each other and evaluate these models using different criteria,
6. It assesses the main problems and trends for change in health in general and medical education in particular,
7. Defines the basic concepts and principles of measurement and evaluation,
8. Defines program evaluation models,
9. Interpret the concept of professionalism in medicine,
10. Explains the importance of teamwork in health services,
11. Can apply the steps of crisis management.

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
MET1	Introduction to Learning and Teaching	**PreD**	**1**
MET2	Education research	**PreD**	**1**
MET3	Historical development of medical education	**PreD**	**1**
MET4	Program models in medical education	**PreD**	**1**

MET5	Basic concepts in measurement and evaluation	**PreD**	**1**
MET6	Assessment and evaluation in medical education	**PreD**	**1**
MET7	Program evaluation models and medical education	**PreD**	**1**
MET8	Professionalism in medicine	**PreD**	**1**
MET9	Governance and Leadership	**PreD**	**1**
MET10	Leadership in medicine	**PreD**	**1**
MET11	Teamwork	**PreD**	**1**
MET12	Crisis management	**PreD**	**1**
		TOTAL	**12**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Communication skills	**4**
General basic medical skills	**4**
Teamwork	**3**
Case-based cooperative learning applications	**3**

Elective-9. THORACIC SURGERY

PURPOSE:

The aim of the "*Thoracic Surgery Clinical Course and Practice Board*" for Phase V students is to train physicians who have an ethical and conscious approach in terms of preliminary diagnosis, differential diagnosis, and preventive medicine practices in health problems requiring surgical or interventional treatment-related to the respiratory system, mediastinum, thoracic wall and esophagus in primary health care within the framework of the national core education program of pre-graduate medical education. In addition, it aims to provide physician candidates with the knowledge, skills, and attitudes necessary to recognize common diseases in the field of Thoracic Surgery and to explain treatment methods to distinguish emergencies, especially to make the first intervention in thoracic trauma, and to refer appropriately.

LEARNING OBJECTIVES:

1. Counts information about the surgical anatomy and physiology of the respiratory system,
2. Counts the causes, mechanisms of occurrence, clinical findings, and principles of the surgical approach of common diseases of the respiratory system, mediastinum, thoracic wall, and esophagus that require surgical/interventional treatment,
3. Emphasizing the crucial role of effective communication skills, the course guides students in taking anamnesis from patients with respiratory system complaints. This not only enhances their understanding of the patient's condition but also fosters a sense of empathy and connection, making them feel more prepared for their future practice.
4. Makes physical examination of the respiratory system,
5. Counts the basic diagnostic methods used in the diagnosis of the respiratory system, mediastinum, thoracic wall, and esophageal diseases and the steps of their procedures,
6. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    i. Interprets the basic laboratory (arterial blood gas, whole blood, biochemical measurements, ...) and radiological examinations (chest radiography, ...) commonly performed for thoracic surgery,

ii. Explain the indications and methods of application of essential interventions in terms of thoracic surgery in patients, does practice at the primary level,
iii. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,

7. Evaluates anamnesis, physical examination findings, and laboratory tests; make differential diagnoses of diseases of the respiratory system, mediastinum, and esophagus requiring surgical/interventional treatment; make preliminary diagnosis/diagnosis,

8. Distinguish the patients to be followed up in primary care, plan their treatment,

9. Applies the diagnosis and treatment of common diseases,

10. Counts the surgical treatment methods in the respiratory system, mediastinum, thoracic wall, and esophagus diseases,

11. Applies essential medical interventions for the respiratory system (pleural puncture, etc.),

12. It directs patients who need to be treated and followed up at a higher level or by a specialist,

i. It guides rare defects,
ii. Directs rare applications to an appropriate branch promptly,
iii. Performs the necessary essential interventions in terms of thoracic surgery in critically ill patients (respiratory support, circulatory support, ...) and refers them to a higher-level health institution,

13. Explains emergency surgical conditions related to the respiratory system, mediastinum, thoracic wall, and esophagus, performs first intervention at the primary level, and refers appropriately,

14. Explains prevention measures in the respiratory system and esophageal diseases (hydatid cyst, cancer, etc.),

15. Knows the approach to thoracic trauma diagnoses, makes the first intervention at the first step level, and makes appropriate referrals,

16. Evaluates the problems related to the respiratory system, esophagus, thoracic wall, and mediastinal diseases with a multidisciplinary approach,

17. Communicates effectively with patients and their relatives.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem-oriented history	**4**
Physical examination for the general problem	
Forensic case examination in terms of thoracic surgery	**3**
Evaluation of general condition and vital signs	**4**
Respiratory system examination	**4**
Record keeping, reporting and notification	
To be able to obtain clarification and consent in terms of thoracic surgery	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of thoracic surgery	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To provide decontamination, disinfection, sterilization, antisepsis	**4**
To be able to evaluate direct radiographs in terms of thoracic surgery	**3**
To be able to fill the request form for laboratory examination	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
To be able to use and evaluate Peak-flow meter	**3**
To be able to interPreD the results of screening and diagnostic examinations in terms of thoracic surgery	**3**
Interventional and non-interventional applications	
To be able to manage forensic cases in terms of thoracic surgery	**3**
Airway application	**3**
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
Arterial blood gas collection	**3**
Use of balloon mask (ambu)	**4**

Evaluation of multiple trauma patients in terms of thoracic surgery	**3**
To be able to open an intravenous line	**3**
To be able to recognise/protect/transplant evidence in terms of thoracic surgery	**2**
To be able to open skin-soft tissue abscess	**3**
To be able to take measures to stop/limit external bleeding	**3**
Hand washing	**4**
Ability to intubate	**3**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of thoracic surgery	**4**
To be able to do first aid to remove the foreign body in the airway	**3**
Ability to make IM, IV, SC, ID injection	**4**
To be able to measure blood pressure	**4**
To be able to take samples for culture	**3**
To be able to make enema	**3**
To be able to apply nasogastric catheter	**3**
To be able to perform pericardiocentesis	**1**
Pleural puncture / thoracentesis	**2**
To be able to apply and evaluate pulse oximetry	**4**
To be able to apply basic life support	**4**
To be able to prepare the drugs to be applied correctly	**3**
To be able to suture and take superficial sutures	**4**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers in terms of thoracic surgery	**4**
Principles and practices of scientific research (in terms of Thoracic Surgery)	
To be able to compile scientific data and summarize them in tables and graphs	**3**
To be able to analyse scientific data with appropriate methods and interprets the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply evidence-based medicine principles in clinical decision-making process	**2**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
TST1	Surgical anatomy of the thorax	**PreD**	**1**
TST2	Thoracic traumas and injuries	**E**	**1**
TST3	Pneumothorax	**E**	**1**
TST4	Surgical treatment of pleural diseases	**PreD**	**1**
TST5	Foreign body aspirations	**D-E-P**	**1**
TST6	Hydatid cyst	**PreD-P**	**1**
TST7	Bronchiectasis	**PreD-P-F**	**1**
TST8	Surgical treatment of lung tumors	**PreD-P**	**1**
TST9	Chest wall deformities	**D-P**	**1**
TST10	Thoracic wall tumors	**PreD**	**1**
TST11	Surgical diseases of the mediastinum	**PreD**	**1**
TST12	Surgical treatment of esophageal tumors	**PreD**	**1**
TST13	Thoracic surgical techniques	**PreD**	**1**
TST14	Congenital lung diseases	**PreD**	**1**
TST15	Lung transplant	**PreD**	**1**
		TOTAL	**15**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
History taking for general and respiratory system	**4**
Respiratory system examination	**4**
To be able to prepare a patient file	**4**
Reading and evaluating direct radiographs	**4**
To be able to remove the foreign body in the airway with appropriate maneuver	**4**
To be able to make pleural puncture	**2**
Tube thoracostomy	**1**
Video thoracoscopy	**1**

Elective-10. NUTRITION and DIETETICS

PURPOSE:

To teach the definition of macro and micronutrients, their properties, digestion, absorption and metabolism, requirements, and the nutrients and quantities to meet these requirements *in the* "*Nutrition and Dietetics Clinical Course and Practice Board*" for Phase V students, Explanation of diet therapy practices related to the inpatient, application of malnutrition screening and detection methods in adult patients, determination of their nutritional status, enteral and parenteral nutrition applications, indications, cautions, complications and enteral and parenteral products are aimed to teach.

LEARNING OBJECTIVES:

1. Counts the importance of macro and micronutrients (carbohydrate, protein, fat, vitamins, and minerals) in healthy nutrition,
2. Counts the importance of macro and micronutrients in body functioning.
3. Counts the macro and micronutrient content of foods,
4. Counts the daily macro and micronutrient requirements according to different age and gender,
5. Counts the type and amount of foods that can provide daily macro and micronutrient requirements according to different age and gender,
6. Counts diet therapy applications related to diseases,
7. Counts the nutritional status screening and detection methods and counts the situations in which they are used and how they are done,
8. Enteral and parenteral nutrition Methods, Indications, Counts contraindications, complications, applications and products,
9. Counts the calculation methods of macro and micronutrient requirements of the patient in enteral and parenteral nutrition and how they are made,
10. Counts the importance of teamwork in nutritional support practices and the duties of professional disciplines in the team.

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
NDT1	Macronutrients: Carbohydrates	**PreD-D**	**1**
NDT2	Macronutrients: Proteins	**PreD-D**	**1**
NDT3	Macronutrients: Lipids	**PreD-D**	**1**
NDT4	Micronutrients: Vitamins and minerals	**PreD-D**	**3**
NDT5	Dietary Consultation Practices	**PreD-D**	**1**
NDT6	Nutrition in special groups: Obesity, child, pregnancy, lactation, elderly	**PreD-D**	**1**
NDT7	Definition, causes and consequences of malnutrition	**PreD-D**	**1**
NDT8	Methods for determining nutritional status	**PreD-D**	**1**
NDT9	Enteral Nutrition: Definition, indications, complications, methods and advantages	**PreD-D**	**1**
NDT10	Parenteral Nutrition: Definition, indications, complications, methods and advantages	**PreD-D**	**1**
NDT11	Macro and micronutrients in enteral-parenteral nutrition items requirements	**PreD-D**	**1**
NDT12	Characteristics of enteral and parenteral products	**PreD-D**	**1**
NDT13	Nutrition team and job descriptions	**PreD-D**	**1**
		TOTAL	**15**

Elective-11. MEDICAL BIOCHEMİSTRY

PURPOSE:

The "Medical Biochemistry Clinical Course and Practice Board" for Phase V students aims to provide high and original knowledge about the structure, functions, and metabolism of biomolecules and the regulation mechanisms of metabolic pathways to teach the molecular mechanisms of diseases that occur as a result of metabolic disorders in the body, biochemical diagnosis, and research methods, to provide basic and clinical biochemistry knowledge in the light of the latest scientific developments and to contribute to the integration of this knowledge with clinical medical sciences.

LEARNING OBJECTIVES:

1. Learns the biochemical basis of diseases and uses this information in diagnosis,
2. Makes the selection of biochemical diagnostic tests and interprets the results.

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
MCT1	Cardiovascular system diseases and laboratory	**PreD**	**1**
MCT2	Coagulation biochemistry	**PreD**	**1**
MCT3	Atherosclerosis and blood lipids	**PreD**	**1**
MCT4	Renal function and chronic renal failure	**PreD**	**1**
MCT5	Bone metabolism	**PreD**	**1**
MCT6	Cancer biochemistry	**PreD**	**1**
MCT7	Biochemistry of liver and gastrointestinal system	**PreD**	**1**
MCT8	Diabetes and laboratory	**PreD**	**1**
MCT9	Thyroid function tests	**PreD**	**1**
MCT10	Newborn screening tests	**PreD**	**1**

MCT11	Down syndrome and prenatal screening	**PreD**	**1**
MCT12	Anemia laboratory	**PreD**	**1**
		TOTAL	**12**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
General information (Laboratory and feasibilities)	**1**
Preparation of samples	**2**
Complete blood count	**3**
Complete urinalysis	**3**
Biochemical analyses	**2**
Hormonal analyses	**1**

Elective-12. ALERGIC DISEASES

PURPOSE:

Phase V students can diagnose allergic diseases in adulthood in the "*Allergic Diseases Clinical Course and Practice Board*". They can make the necessary treatment approaches in the first step.

LEARNING OBJECTIVES:

1. Takes anamnesis using practical communication skills,
2. In primary care, they request the necessary examinations of the patients, interpret the results, make preliminary diagnosis or diagnoses,
    a. interprets the basic laboratory investigations commonly performed in allergic diseases,
    b. Explain the indications and methods of application of essential interventions in terms of allergic diseases in patients, does practice at the primary level,
    c. Provides counseling on fundamental issues by establishing appropriate communication with the patient and family,
3. Distinguish the patients to be followed up in primary care, plan their treatment,
4. Diagnoses and treats common diseases,
5. Emphasize the gravity of the decision to refer patients to higher levels or specialists, underscoring the vital role Phase V students play in patient care.
    a. Makes the guidance of rare defects
    b. Directs rare applications to an appropriate branch promptly,
    c. Performs essential interventions for allergic diseases in critically ill patients and refers them to a higher-level health institution.

BASIC MEDICAL PRACTICE	
APPLICATIONS	**LEARNING LEVEL**
Story retrieval	
To be able to take general and problem- oriented history	**4**
Physical examination for the general problem	
Case examination in terms of allergic diseases	**3**
Evaluation of general condition and vital signs	**4**
Record keeping, reporting and notification	
Clarification and obtaining consent	**4**
To be able to prepare epicrisis	**4**
To be able to prepare health reports in accordance with current legislation	**3**
To be able to prepare a patient file	**4**
To be able to issue a death certificate	**3**
To be able to issue a prescription	**4**
To be able to prepare a refusal of treatment document in terms of allergic diseases	**4**
Reporting and reporting legally notifiable diseases and conditions	**4**
Laboratory tests and other related procedures	
To be able to fill the request form for laboratory examination in terms of allergic diseases	**4**
To be able to take the laboratory sample under appropriate conditions and deliver it to the laboratory	**4**
To be able to interprets the results of screening and diagnostic examinations for allergic diseases	**3**
Interventional and non-interventional applications	
To be able to apply the principles of rational drug use	**4**
To be able to request rational laboratory and imaging examination	**4**
To be able to take biological samples from the patient	**3**
To be able to refer the patient appropriately in terms of allergic diseases	**4**
Ability to make IM, IV, SC, ID injection	**4**
To be able to prepare the drugs to be applied correctly	**3**
Preventive medicine and community medicine practices	
To be able to take precautions related to the protection of the health of health workers	**4**
To be able to take preventive measures against healthcare-associated infections	**3**

Principles and practices of scientific research (in terms of Allergic Diseases)	
To be able to compile scientific data and summarize them in tables and graphs,	**3**
To be able to analyze scientific data with appropriate methods and interprets the results	**2**
To be able to plan research using scientific principles and methods	**2**
To be able to access current literature information and read it critically	**3**
To be able to apply the principles of evidence-based medicine in clinical decision-making process	**3**

THEORETICAL LECTURES			
LECTURE CODE	**LECTURE TOPICS**	**LEARNING LEVEL**	**TIME**
ADT1	Introduction and overview of allergy	**D**	**1**
ADT2	Anamnesis, examination and communication in allergy	**D**	**1**
ADT3	Diagnostic methods in allergic diseases	**DT-P-F**	**1**
ADT4	Treatment methods in allergic diseases	**E-DT-P-F**	**1**
ADT5	Allergic rhinitis	**DT-P-F**	**1**
ADT6	Anaphylaxis	**E-DT-P-F**	**1**
ADT7	Drug reactions	**E-PreD-P**	**1**
ADT8	Food and latex reactions	**E**	**1**
ADT9	Bee venom allergy	**PreD**	**1**
ADT10	Skin allergies	**E-PreD**	**1**
ADT11	Occupational allergies	**PreD**	**1**
		TOTAL	**11**

EDUCATIONAL ACTIVITIES IN PRACTICE	
EDUCATION ACTIVITIES	**LEARNING LEVEL**
Story taking skills	**4**
Practical skin tests	**2**
The practice of using an adrenaline auto-injector	**4**
Practice of managing anaphylaxis	**4**
Prescription writing practice	**3**