



**T.R.
LOKMAN HEKİM UNIVERSITY
FACULTY OF MEDICINE
PHASE – III
2024 – 2025 ACADEMIC YEAR
EDUCATION AND TEACHING GUIDE**



| PRE-GRADUATION EDUCATION COORDINATORSHIP | |
|--|--------------------------------------|
| EXECUTIVE COORDINATORSHIP | |
| Chief Coordinator | Asst. Prof. Güleser Göktaş, PhD |
| Basic Medical Sciences Coordinator | Prof. Şükrü Volkan Özgüven, MD |
| Clinical Medical Sciences Coordinator | Prof. Engin Dursun, MD |
| | |
| PHASE I COORDINATORSHIP | |
| Coordinator | Asst. Prof. Selen Güçlü Durgun, PhD |
| Vice Coordinator (Turkish) | Asst. Prof. Demet Kaçaroğlu, PhD |
| Vice Coordinator (English) | Asst. Prof. Eda Sağıroğlu, PhD |
| Member | Lecturer Ofcan Oflaz, PhD |
| Member | Lecturer Müge Coşkun |
| Member | Res. Asst. Hilal Şamandar Aydaş |
| Member | Res. Asst. Musa Latif Çöllüoğlu |
| PHASE II COORDINATORSHIP | |
| Coordinator | Prof. Belma Turan, PhD |
| Vice Coordinator (Turkish) | Asst. Prof. Yasemin Atıcı, PhD |
| Vice Coordinator (English) | Asst. Prof. Ruken Tan, PhD |
| Member | Lecturer Onur Can Şanlı, PhD |
| Member | Lecturer Merve Sayın |
| Member | Res. Asst. Ayşe Erkaya |
| Member | Res. Asst. Neslihan İpek |
| PHASE III COORDINATORSHIP | |
| Coordinator | Asst. Prof. Elif Hilal Vural, MD |
| Vice Coordinator (Turkish) | Assoc. Prof. Can Türk, PhD |
| Vice Coordinator (English) | Asst. Prof. Fatma Yıldırım, MD |
| Member | Dr. Osman Karakuş, MD |
| Member | Res. Asst. Ayşegül Yılmaz |
| Member | Res. Asst. Sevilay Tura |
| PHASE IV COORDINATORSHIP | |
| Coordinator | Assoc. Prof. Haydar Celasin, MD |
| Vice Coordinator (Turkish) | Assoc. Prof. Müge Kuzu Kumcu, MD |
| Vice Coordinator (English) | Assoc. Prof. Cemile Özsürekcı, MD |
| Member | Assoc. Prof. Halil Akın, MD |
| PHASE V COORDINATORSHIP | |
| Coordinator | Prof. Engin Dursun, MD |
| Vice Coordinator (Turkish) | Prof. Güleser Saylam, MD |
| Vice Coordinator (English) | Assoc. Prof. Esen Sayın Gülensoy, MD |
| Member | Asst. Prof. Ali Rıza Yağmur, MD |
| PHASE VI COORDINATORSHIP | |
| Coordinator | Prof. Sarp Üner, MD |
| Vice Coordinator (Turkish) | Assoc. Prof. Fisun Sözen, MD |
| Vice Coordinator (English) | Asst. Prof. Tayfun Göktaş, MD |



T.R.

LOKMAN HEKIM UNIVERSITY
FACULTY OF MEDICINE ENGLISH PROGRAMME

PHASE III COURSES and ECTS

| CODE | COMPULSORY COURSES | T | P | TS | ECTS |
|--|---|------------|-----------|------------|-----------|
| | Neoplasia and Hematopoietic System Diseases Course Board | 102 | 3 | 105 | 8 |
| | Circulatory and Respiratory System Diseases Course Board | 93 | 3 | 96 | 8 |
| | Gastrointestinal System Diseases Course Board | 74 | 3 | 77 | 7 |
| | Endocrine and Urogenital System Diseases Course Board | 101 | 3 | 104 | 8 |
| | Central Nervous System Diseases Course Board | 99 | 3 | 102 | 8 |
| | Musculoskeletal System Diseases Course Board | 55 | 2 | 57 | 5 |
| | Public Health/Forensics/Ethics and Clinical Skills Course Board | 99 | 12 | 111 | 8 |
| TOTAL ECTS COMPULSORY | | 623 | 29 | 652 | 52 |
| CODE | ELECTIVE COURSES | T | P | K | ECTS |
| | Developing Public Health Intervention Program For Health Literacy | 2 | 0 | 2 | 4 |
| | Reproductive Endocrinology | 2 | 0 | 2 | 4 |
| | Communication in Health 1 (Yabancı uyruklu öğrenciler) | 2 | 0 | 2 | 4 |
| | The Art of Anaesthesia | 2 | 0 | 2 | 4 |
| | Molecular Mechanism Of Life | 2 | 0 | 2 | 4 |
| | Communication in Health 2 (Yabancı uyruklu öğrenciler) | 2 | 0 | 2 | 4 |
| TOTAL ECTS TO BE COLLECTED AS ELECTIVES | | | | | 8 |
| TOTAL ECTS TO BE COLLECTED IN PHASE III | | | | | 60 |



PHASE III OBJECTIVES AND LEARNING OUTCOMES

Aim:

In Phase III medical education, it is aimed to provide introductory courses to clinical sciences together with basic medical courses. In this phase, medicine students will take courses on neoplasia and hematopoietic system diseases, circulatory and respiratory system diseases, gastrointestinal system diseases, endocrine and urogenital system diseases, central nervous system diseases, musculoskeletal system diseases, public health/forensic medicine/ethics and clinical skills. At the end of these course boards, Phase III students will learn the mechanisms, pathology, clinical symptoms, basic approaches in diagnosis and treatment, methods of prevention from diseases that are frequently seen in different systems and cause of mortality and morbidity in society.

Learning Objectives:

At the end of; neoplasia and hematopoietic system diseases, circulatory and respiratory system diseases, gastrointestinal system diseases, endocrine and urogenital system diseases, central nervous system diseases, musculoskeletal system diseases, public health/forensics/ethics and clinical skills course boards, Phase III students will be able to;

1. Learn the pathological processes of common diseases that have a significant impact on human health in terms of mortality and morbidity, establishes the relationship with symptoms and signs.
2. List the most common clinical, laboratory, radiological and pathological findings of common diseases in the community.
3. Describe the pharmacological treatment approach to be applied in different symptoms and diseases.
4. Explains the importance of taking a history in children and adults, the principles of physical examination, and the importance of obtaining consent.
5. Explains the position and importance of biochemical examinations in the diagnosis of diseases seen in various systems.
6. Explains the genetic mechanisms of diseases.
7. Explains the biological principles of scintigraphy.
8. Explains the basic principles of medical imaging.
9. List the factors and signs of common infectious diseases according to the systems.



NEOPLASIA AND HEMATOPOIETIC SYSTEM DISEASES COURSE BOARD PIII – BOARD I

| CODE OF THE BOARD COURSES | NAME OF THE BOARD COURSES | THEORETICAL HOURS | PRACTICAL HOURS | SUM OF HOURS |
|---------------------------|-------------------------------------|-------------------|-----------------|--------------|
| | Exam Feedback Lesson | 2 | 0 | 2 |
| | Chief Coordinator Feedback Lesson | 2 | 0 | 2 |
| | Introduction to Course Board Lesson | 2 | 0 | 2 |
| | Emergency | 3 | 0 | 3 |
| | Pediatric Health and Diseases | 14 | 0 | 14 |
| | Infectious Diseases | 4 | 0 | 4 |
| | Internal Medicine | 20 | 0 | 20 |
| | Nuclear Medicine | 2 | 0 | 2 |
| | Radiation Oncology | 2 | 0 | 2 |
| | Radiology | 3 | 0 | 3 |
| | Medical Biochemistry | 3 | 0 | 3 |
| | Medical Pharmacology | 23 | 0 | 23 |
| | Medical Genetics | 9 | 0 | 9 |
| | Medical Pathology | 13 | 3 | 16 |
| | TOTAL | 102 | 3 | 105 |

AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

Aim:

The aim of this course is to comprehend hematopoietic system development and pathology, tumor formation, development and pathophysiology, mechanisms of formation of neoplasia and hematopoietic system diseases, prevalence and importance in society, diagnostic methods, treatment agents and mechanisms of action. Another aim is to learn the indications for the use of agents used in infectious diseases, mechanisms of action, side effects.

Learning Objectives:

1. Creates a medical history, queries necessary information for diagnosis.
2. Lists the methods of physical examination, explains which examination is appropriate in which situation.
3. Explains the principles of obtaining informed medical consent.
4. Defines the conceptual basic characteristics of benign and malignant tumors.
5. Lists what needs to be done in emergency cases such as frostbite, heatstroke, and poisonings.
6. Classifies genetic diseases and explains which diagnostic methods can be used in which classes.
7. Grasps the mechanisms of hematological diseases and explains treatment approaches.
8. Interprets the indications and complications of blood product transfusion.
9. Lists common hematopoietic system diseases in childhood and adulthood and describes their clinical and laboratory findings.
10. Explains common childhood tumors.
11. Explains the mechanisms of action and usage routes, as well as side effects of drugs used in the treatment of anemia and cancer.
12. Describes all the energies and units used for imaging.
13. Describes details of the ionizing and non-ionizing radiation and protection



14. Explains the imaging methods and basic concepts used in hematological diseases and oncology.
15. Explains the place and advantages of nuclear medicine imaging methods in diagnostic imaging.
16. Explains the nuclear medicine imaging methods used in hematology and oncology.
17. Defines lymphoproliferative and myeloproliferative diseases, and explains diagnosis, differential diagnosis, and treatment approaches.
18. Lists the usage indications and side effects of drugs used in infectious diseases.
19. Explains the mechanisms of action of antimicrobial drugs.

TOPICS

| EMERGENCY | | |
|--|-------------|------|
| Topic | Type | Time |
| Alcohol consumption and emergencies | Theoretical | 1 |
| Corrosive substance exposure | Theoretical | 1 |
| Trauma and injuries | Theoretical | 1 |
| PEDIATRIC HEALTH AND DISEASES | | |
| Topic | Type | Time |
| Hematological System Symptomatology in Children | Theoretical | 1 |
| Classification and Morphology of Anemias | Theoretical | 2 |
| Iron Metabolism and Iron Deficiency | Theoretical | 1 |
| Childhood Leukemias | Theoretical | 1 |
| Physiopathology of Homeostasis and Bleeding Diathesis | Theoretical | 2 |
| Congenital Aplastic Anemias | Theoretical | 1 |
| Erythrocyte Membrane Defects | Theoretical | 1 |
| Erythrocyte Enzyme Defects | Theoretical | 1 |
| Hemoglobinopathies | Theoretical | 2 |
| Major Histocompatibility System and its Clinical Significance | Theoretical | 1 |
| Complement System and its Clinical Significance | Theoretical | 1 |
| INFECTIOUS DISEASES | | |
| Topic | Type | Time |
| Introduction to Infectious Diseases | Theoretical | 1 |
| Viral haemorrhagic fevers | Theoretical | 1 |
| Protozoal infections of blood: Malaria and Babesiosis | Theoretical | 1 |
| Protozoer infections of tissues: toxoplasmosis, Leishmaniasis, tripanasomiasis | Theoretical | 1 |
| INTERNAL MEDICINE | | |
| Topic | Type | Time |
| Anamnesis, physical examination and laboratory practice in hematology | Theoretical | 2 |
| Introduction to anemias and hemoglobinopathies | Theoretical | 2 |
| Bleeding disorders | Theoretical | 2 |
| Leukemias, lymphoproliferative and myeloproliferative diseases | Theoretical | 2 |
| Other hematological diseases (aplastic anemia, hemochromatosis, polycythemia, diffused intravenous clotting) | Theoretical | 2 |
| Complications of blood and blood products transfusion | Theoretical | 1 |
| Taking medical history | Theoretical | 2 |



| | | |
|---|-------------|-------------|
| Clinical examination | Theoretical | 2 |
| Taking consent | Theoretical | 1 |
| Weakness/fatigue/weight loss | Theoretical | 1 |
| Fever and sweating | Theoretical | 1 |
| Introduction to oncological diseases | Theoretical | 2 |
| NUCLEAR MEDICINE | | |
| Topic | Type | Time |
| Biological principles of radiopharmaceuticals and scintigraphy | Theoretical | 1 |
| Nuclear medicine in hematology and oncology | Theoretical | 1 |
| RADIATION ONCOLOGY | | |
| Topic | Type | Time |
| Basic concepts in radiation oncology | Theoretical | 2 |
| RADIOLOGY | | |
| Topic | Type | Time |
| Introduction to Radiology and Imaging sciences – Introduction to the energies used for imaging, basics of imaging | Theoretical | 1 |
| Ionising and non-ionising radiation and protection | Theoretical | 1 |
| Bone marrow imaging, Fundamentals of the imaging of oncologic and hematologic diseases | Theoretical | 1 |
| MEDICAL BIOCHEMISTRY | | |
| Topic | Type | Time |
| Tumor markers and cancer biochemistry | Theoretical | 1 |
| Complete blood count (CBC) | Theoretical | 1 |
| Porphyrias | Theoretical | 1 |
| MEDICAL PHARMACOLOGY | | |
| Topic | Type | Time |
| Basic principles of antibiotics use | Theoretical | 1 |
| Beta-lactam antibiotics: penicillins, cephalosporins and others | Theoretical | 4 |
| Aminoglycosides | Theoretical | 1 |
| Macrolide, glycosamide and streptogramin antibiotics and linezolid | Theoretical | 1 |
| Tetracyclines and amphenicols | Theoretical | 1 |
| Narrow-spectrum antistaphylococcal and anti-anaerobic drugs and antibiotics with polypeptide structure | Theoretical | 1 |
| Fluoroquinolones, sulphonamides, co-trimoxazole and trimethoprim | Theoretical | 1 |
| Drugs used to treat leprosy, syphilis and tuberculosis | Theoretical | 1 |
| Antifungal drugs | Theoretical | 1 |
| Antiviral drugs | Theoretical | 2 |
| Antiamoebic and antiprotozoal drugs | Theoretical | 1 |
| Antimalarial drugs | Theoretical | 1 |
| Pharmacological principles of cancer treatment | Theoretical | 1 |
| Drugs used in cancer treatment | Theoretical | 3 |
| Immunomodulatory drugs | Theoretical | 1 |
| Drugs used to treat anemia | Theoretical | 2 |
| MEDICAL GENETICS | | |
| Topic | Type | Time |
| Differential diagnosis with inheritance patterns and family tree - consanguineous marriage | Theoretical | 1 |
| Basic genetic concepts | Theoretical | 1 |



| | | |
|---|-------------|-------------|
| Genetic laboratory techniques – classification in genetic diseases | Theoretical | 1 |
| Diagnostic approach in thalassemias | Theoretical | 1 |
| Diagnostic approach in rare and undiagnosed diseases | Theoretical | 1 |
| Genetic Hematological Blood Diseases | Theoretical | 1 |
| Genetic Approach and Mechanisms in Leukemia and Lymphomas | Theoretical | 1 |
| Cancer genetics (diagnosis – treatment and determination of prognosis) | Theoretical | 1 |
| Familial cancers | Theoretical | 1 |
| MEDICAL PATHOLOGY | | |
| Topic | Type | Time |
| Principles of Neoplasia I: Benign and malign, diagnosing tumor | Theoretical | 2 |
| Principles of Neoplasia II: Etiology, carcinogenesis, invasion and metastasis | Theoretical | 3 |
| Principles of Neoplasia III: Prognosis, grading, nomenclature and advanced techniques | Theoretical | 2 |
| Diseases of Eritrocytes, Thymus and Spleen | Theoretical | 2 |
| White cell disorders | Theoretical | 2 |
| Pathology of Lymphocytes | Theoretical | 2 |
| Medical Pathology Practice: Neoplasia and Hematopoetic System Diseases | Practical | 3 |

CIRCULATORY and RESPIRATORY SYSTEM DISEASES COURSE BOARD PIII – BOARD II

| CODE OF THE BOARD COURSES | NAME OF THE BOARD COURSES | THEORETICAL HOURS | PRACTICAL HOURS | SUM OF HOURS |
|---------------------------|-------------------------------------|-------------------|-----------------|--------------|
| | Exam Feedback Lesson | 2 | 0 | 2 |
| | Chief Coordinator Feedback Lesson | 2 | 0 | 2 |
| | Introduction to Course Board Lesson | 2 | 0 | 2 |
| | Anesthesiology and Reanimation | 2 | 0 | 2 |
| | Biophysics | 2 | 0 | 2 |
| | Pediatric Health and Diseases | 5 | 0 | 5 |
| | Infectious Diseases | 2 | 0 | 2 |
| | Chest Diseases | 9 | 0 | 9 |
| | Cardiovascular Surgery | 4 | 0 | 4 |
| | Cardiology | 10 | 0 | 10 |
| | Ear Nose Throat Diseases | 3 | 0 | 3 |
| | Nuclear Medicine | 2 | 0 | 2 |
| | Radiology | 3 | 0 | 3 |
| | Medical Pharmacology | 26 | 0 | 26 |
| | Medical Genetics | 5 | 0 | 5 |
| | Medical Pathology | 14 | 3 | 17 |
| | TOTAL | 93 | 3 | 96 |



AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

Aim:

The aim of this course is to increase the knowledge of the prevalence of respiratory and circulatory system diseases in the society, their importance, formation mechanisms, diagnostic methods, treatment agents and mechanisms of action.

Learning Objectives:

1. Grasps the prevalence and importance of respiratory and circulatory system diseases.
2. Lists the infectious agents causing respiratory system infections.
3. Understands the physiopathology and symptomatology of upper and lower respiratory tract diseases.
4. Describes the symptomatology of upper respiratory tract problems such as hoarseness, nasal congestion, and obstruction.
5. Explains the physiopathology and symptomatology of ear pain and discharge.
6. Classifies larynx-pharynx diseases and lymphoid tissue pathologies.
7. Explains the pharmacology of the autonomic nervous system.
8. Lists the names, effects, mechanisms of action, indications, and contraindications of sympathomimetic, sympatholytic, parasympathomimetic, and parasympatholytic drugs.
9. Lists the steps to be followed during the respiratory and circulatory system examination and approach to the patient.
10. Explains the physiopathology of infectious lung diseases and circulatory disorders.
11. Lists obstructive lung diseases, tuberculosis, and lung tumors.
12. Explains the pathology of mediastinal diseases and outlines the radiological evaluation criteria.
13. Defines normal heart sounds, cyanosis, and murmurs and evaluates their clinical significance.
14. Describes and distinguishes between fetal and neonatal circulation.
15. Clinically defines and differentiates cardiac pathologies and problems in adults and children and makes differential diagnoses.
16. Describes the physiopathology, clinical findings, and radiology of heart valve diseases.
17. Understands the physiopathology of heart failure and defines its symptoms.
18. Lists the importance, diagnosis, complications, treatment options, and prevention methods of hypertension.
19. Explains the etiopathogenesis, diagnosis, and treatment of vascular diseases.
20. Describes the pharmacokinetics, pharmacodynamics, effects, indications, contraindications, adverse effects, and drug interactions of medications effective in circulatory and respiratory system diseases.
21. Grasps the physiopathology and symptomatology of coronary circulation and coronary artery diseases.
22. Defines and understands the biochemical tests used in the diagnosis and monitoring of heart diseases.
23. Describes and lists the steps of cardiopulmonary resuscitation.
24. Describes imaging methods used in diagnosis of the head and neck diseases and basic imaging findings of them.
25. Describes the pathology of mediastinal diseases.
26. Describes imaging methods used in diagnosis of the cardiac and mediastinal diseases and basic imaging findings of them.
27. Describes evaluation criteria of the chest x-rays.
28. Describes imaging methods used in diagnosis of the respiratory diseases and basic imaging findings of them.



29. Explains basic radiological approaches in head and neck diseases, basic information about radiological images of diseases, radiological anatomy.
30. Explains basic radiological approaches in cardiovascular system diseases, basic information about radiological images of diseases, radiological anatomy.
31. Explains basic radiological approaches in respiratory system diseases, basic information about radiological images of diseases, radiological anatomy.

TOPICS

| ANESTHESIOLOGY AND REANIMATION | | |
|---|-------------|------|
| Topic | Type | Time |
| Cardiopulmonary resuscitation | Theoretical | 1 |
| Complications of Anesthesia | Theoretical | 1 |
| BIOPHYSICS | | |
| Topic | Type | Time |
| The electrical basis of cardiovascular disorders | Theoretical | 1 |
| The molecular basis of cardiovascular disorders | Theoretical | 1 |
| PEDIATRIC HEALTH AND DISEASES | | |
| Topic | Type | Time |
| Assessment of the Cardiovascular System in Children | Theoretical | 1 |
| Symptomatology of the Circulatory and Respiratory Systems in Children | Theoretical | 1 |
| Congenital Heart Diseases (Acyanotic - Cyanotic) in Children | Theoretical | 2 |
| Acute Rheumatic Fever in Children | Theoretical | 1 |
| INFECTIOUS DISEASES | | |
| Topic | Type | Time |
| Extrapulmonary tuberculosis | Theoretical | 1 |
| Diphtheria, Pertussis, Mumps | Theoretical | 1 |
| CHEST DISEASES | | |
| Topic | Type | Time |
| Anatomy, physiology and defence mechanisms of the respiratory system | Theoretical | 1 |
| Symptoms of the Respiratory System (Dyspnea, cyanosis, Clubbing, hemoptysis, Wheezing, cough, sputum production, stridor, snoring, apnea) | Theoretical | 2 |
| The Physical Examination of the Respiratory System | Theoretical | 1 |
| Pneumonia | Theoretical | 1 |
| Pulmonary Tuberculosis | Theoretical | 1 |
| Lung Edema/ Respiratory Failure | Theoretical | 1 |
| The Environmental and Occupational Lung Diseases and Tobacco | Theoretical | 1 |
| Allergic diseases and Anaphylaxis | Theoretical | 1 |
| CARDIOVASCULAR SURGERY | | |
| Topic | Type | Time |
| Clinical anatomy of the cardiovascular system | Theoretical | 1 |
| Coronary artery diseases and surgery | Theoretical | 1 |
| Heart valve diseases and surgery | Theoretical | 1 |
| Congenital heart disease surgery | Theoretical | 1 |
| CARDIOLOGY | | |



| Topic | Type | Time |
|--|-------------|------|
| Working physiology of the heart | Theoretical | 1 |
| Symptomatology in heart diseases (palpitations, hypotension, hypertension, murmur in the heart, syncope, cyanosis, chest pain) | Theoretical | 1 |
| Examination of the cardiovascular system | Theoretical | 1 |
| Approach to Hypertension | Theoretical | 2 |
| Acute Coronary Syndromes | Theoretical | 1 |
| Chronic Coronary Artery Disease | Theoretical | 1 |
| Approach to Heart Failure | Theoretical | 1 |
| Electrocardiography (ECG) | Theoretical | 2 |
| EAR NOSE AND THROAT DISEASES | | |
| Topic | Type | Time |
| Fundamentals of ENT Examination and Approach to the Patient | Theoretical | 1 |
| ENT Related Symptoms in Upper Respiratory Tract Diseases | Theoretical | 2 |
| NUCLEAR MEDICINE | | |
| Topic | Type | Time |
| Applications of nuclear medicine in cardiovascular diseases | Theoretical | 1 |
| Respiratory system scintigraphy | Theoretical | 1 |
| RADIOLOGY | | |
| Topic | Type | Time |
| Imaging methods used in diagnosis of cardiovascular system diseases, radiologic anatomy, and pathology | Theoretical | 1 |
| Basic radiological approaches, basic principles, radiological anatomy in respiratory system diseases | Theoretical | 1 |
| Imaging methods used in diagnosis of head and neck diseases, radiologic anatomy, and pathology | Theoretical | 1 |
| MEDICAL PHARMACOLOGY | | |
| Topic | Type | Time |
| Autonomic nervous system pharmacology, neurotransmission | Theoretical | 2 |
| Adrenergic receptor agonists | Theoretical | 2 |
| Adrenergic receptor antagonists | Theoretical | 2 |
| Muscarinic receptor agonists and antagonists | Theoretical | 2 |
| Anticholinesterase drugs | Theoretical | 2 |
| Nicotine and ganglion stimulating, blocking drugs | Theoretical | 2 |
| Antihypertensive drugs | Theoretical | 2 |
| Peripheral vasodilators | Theoretical | 1 |
| Antianginal drugs | Theoretical | 2 |
| Antiarrhythmic drugs | Theoretical | 2 |
| Cardiac glycosides and other drugs used to treat heart failure | Theoretical | 2 |
| Hypolipidemic drugs | Theoretical | 1 |
| Anticoagulants, antithrombotic and thrombolytic drugs | Theoretical | 2 |
| Drugs used in the respiratory system | Theoretical | 2 |
| MEDICAL GENETICS | | |
| Topic | Type | Time |
| Genetic approach to cardiovascular anomalies | Theoretical | 1 |
| Respiratory system diseases of genetic origin | Theoretical | 1 |
| Sudden death | Theoretical | 1 |
| Dysmorphology and congenital anomalies – teratogenicity | Theoretical | 1 |



| | | |
|---|-------------|-------------|
| Genetic Counseling - Applied | Theoretical | 1 |
| MEDICAL PATHOLOGY | | |
| Topic | Type | Time |
| Hypertension and Atherosclerosis | Theoretical | 1 |
| Ischemic Heart Diseases | Theoretical | 1 |
| Inflammatory and congenital heart diseases | Theoretical | 2 |
| Vasculitis | Theoretical | 1 |
| Venous Diseases and Tumors | Theoretical | 1 |
| Introduction to respiratory System Diseases: Pulmonary infections and sarcoidosis | Theoretical | 2 |
| Atelectasis bronchiectasis, pneumoconiosis | Theoretical | 2 |
| Obstructive and restrictive lung disease | Theoretical | 2 |
| Lung Tumors-Pleural Lesions | Theoretical | 2 |
| Medical Pathology Practice: Respiratory and cardiovascular system pathology | Practical | 3 |

GASTROINTESTINAL SYSTEM DISEASES COURSE BOARD

PIII – BOARD III

| CODE OF THE BOARD COURSES | NAME OF THE BOARD COURSES | THEORETICAL HOURS | PRACTICAL HOURS | SUM OF HOURS |
|---------------------------|-------------------------------------|-------------------|-----------------|--------------|
| | Exam Feedback Lesson | 2 | 0 | 2 |
| | Chief Coordinator Feedback Lesson | 2 | 0 | 2 |
| | Introduction to Course Board Lesson | 2 | 0 | 2 |
| | Pediatric Health and Diseases | 2 | 0 | 2 |
| | Infectious Diseases | 8 | 0 | 8 |
| | General Surgery | 4 | 0 | 4 |
| | Internal Medicine | 13 | 0 | 13 |
| | Nuclear Medicine | 1 | 0 | 1 |
| | Radiology | 2 | 0 | 2 |
| | Medical Biochemistry | 7 | 0 | 7 |
| | Medical Pharmacology | 6 | 0 | 6 |
| | Medical Genetics | 4 | 0 | 4 |
| | Medical Pathology | 21 | 3 | 24 |
| | TOTAL | 74 | 3 | 77 |

AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

Aim:

The aim of this course is to comprehend the mechanisms, pathologies, biochemical mechanisms, symptomatology, clinic, laboratory interpretations, imaging findings and pharmacological approaches of all diseases of the gastrointestinal system and liver.

Learning Objectives:

1. Defines the terminology and symptomatology of the gastrointestinal and hepatobiliary system and nutrition.



2. Evaluates diseases of the mouth and salivary gland, explains their pathology.
3. Explains the pathophysiology of motor dysfunctions of the esophagus and reflux, describes the pathology and the peculiarities of the diseases.
4. Defines the pathology and functional disorders of stomach diseases and counts the mechanisms of action of drugs used in treatment of peptic ulcer.
5. Comprehends the basis of small intestine and large intestine diseases, explains their pathology and radiology.
6. Distinguishes different approaches to diseases on the basis of each acute and chronic abdominal pain, conducts radiological and pharmacological evaluation.
7. Describes the pathology, symptomatology of liver, biliary tract and pancreatic diseases, makes biochemical and radiological evaluations.
8. Conducts pathologies and clinical evaluation of tumors of the gastrointestinal tract.
9. Defines the importance of nutrition, its basic concepts and tells the incidence of nutritional deficiencies and the markers that affect them.
10. Defines microorganisms that cause gastrointestinal tract infection.
11. Explains the fundamental radiological concepts in the diagnosis of gastrointestinal system diseases.
12. Explains basic radiological approaches in gastrointestinal system diseases, basic information about radiological images of diseases, radiological anatomy.

TOPICS

| PEDIATRIC HEALTH AND DISEASES | | |
|---|-------------|------|
| Topic | Type | Time |
| Bilirubin Metabolism and Approach to Patients with Jaundice | Theoretical | 1 |
| Congenital Metabolic Disorders | Theoretical | 1 |
| INFECTIOUS DISEASES | | |
| Topic | Type | Time |
| Acute hepatitis | Theoretical | 2 |
| Gastroenteritis and food poisoning | Theoretical | 2 |
| Enteric fever | Theoretical | 1 |
| Gastrointestinal parasitosis and echinococcosis | Theoretical | 2 |
| Zoonoses; Anthrax and others | Theoretical | 1 |
| GENERAL SURGERY | | |
| Topic | Type | Time |
| Surgical approach to abdominal pain and acute abdomen | Theoretical | 1 |
| Inguinal and abdominal wall hernias | Theoretical | 1 |
| Abdominal traumas | Theoretical | 1 |
| Abdominal examination | Theoretical | 1 |
| INTERNAL MEDICINE | | |
| Topic | Type | Time |
| Introduction to diseases of the esophagus and stomach | Theoretical | 2 |
| Dyspepsia, reflux, gastritis, ulcer | Theoretical | 2 |
| Inflammatory, functional diseases of the intestine | Theoretical | 2 |
| Introduction to liver diseases | Theoretical | 2 |
| Acute hepatitis | Theoretical | 1 |
| Introduction to pancreatic diseases | Theoretical | 1 |
| Gastrointestinal tract tumors | Theoretical | 2 |
| Gastrointestinal tract hemorrhages | Theoretical | 1 |
| NUCLEAR MEDICINE | | |



| Topic | Type | Time |
|---|-------------|------|
| Gastrointestinal system scintigraphy | Theoretical | 1 |
| RADIOLOGY | | |
| Topic | Type | Time |
| Imaging methods used in diagnosis of gastrointestinal system diseases, radiologic anatomy and pathology 1 | Theoretical | 1 |
| Imaging methods used in diagnosis of gastrointestinal system diseases, radiologic anatomy and pathology 2 | Theoretical | 1 |
| MEDICAL BIOCHEMISTRY | | |
| Topic | Type | Time |
| Liver function tests | Theoretical | 1 |
| Bilirubin metabolism and hyperbilirubinemia | Theoretical | 1 |
| Avitaminosis | Theoretical | 2 |
| Vitamin D deficiency | Theoretical | 1 |
| Clinical toxicology | Theoretical | 2 |
| MEDICAL PHARMACOLOGY | | |
| Topic | Type | Time |
| Drugs used in the treatment of peptic ulcer | Theoretical | 2 |
| Emetic, antiemetic and prokinetic drugs and other drugs | Theoretical | 2 |
| Laxative, purgative and antidiarrheal drugs | Theoretical | 2 |
| MEDICAL GENETICS | | |
| Topic | Type | Time |
| Genetically caused diarrhea - GIS Anomalies - Other GIS diseases | Theoretical | 1 |
| Gluten Enteropathy - Autoimmune and autoinflammatory diseases and Inflammatory Bowel Diseases | Theoretical | 1 |
| Mutation evaluation – reading the genetic report | Theoretical | 1 |
| PFIC – Cystic fibrosis – Prolonged jaundice – other GI diseases | Theoretical | 1 |
| MEDICAL PATHOLOGY | | |
| Topic | Type | Time |
| Oral, Salivary gland diseases and neoplasias | Theoretical | 2 |
| Diseases and Neoplasias of Esophagus | Theoretical | 2 |
| Diseases and Neoplasias of Nasopharynx and Larynx | Theoretical | 2 |
| Developmental abnormalities, Inflammatory Diseases and Tumors of Stomach | Theoretical | 2 |
| Inflammatory Diseases and Tumors of Small intestine infections | Theoretical | 2 |
| Inflammatory Diseases and Tumors of Colon, Appendiks vermiformis, anogenital region and periton | Theoretical | 2 |
| Introduction and basic principles of Liver Diseases | Theoretical | 2 |
| Hepatitis and Parasitic infections of Liver | Theoretical | 2 |
| Toxic and metabolic diseases of Liver and Diseases of Gall bladder | Theoretical | 2 |
| Neoplasias of Hepatobiliary system | Theoretical | 2 |
| Diseases and Neoplasias of Pancreas | Theoretical | 1 |
| Medical Pathology practice: Gastrointestinal system pathology | Practical | 3 |



ENDOCRINE and UROGENITAL SYSTEM DISEASES COURSE BOARD PIII – BOARD IV

| CODE OF THE BOARD COURSES | NAME OF THE BOARD COURSES | THEORETICAL HOURS | PRACTICAL HOURS | SUM OF HOURS |
|---------------------------|-------------------------------------|-------------------|-----------------|--------------|
| | Exam Feedback Lesson | 2 | 0 | 2 |
| | Chief Coordinator Feedback Lesson | 2 | 0 | 2 |
| | Introduction to Course Board Lesson | 2 | 0 | 2 |
| | Biophysics | 2 | 0 | 2 |
| | Pediatric Health and Diseases | 15 | 0 | 15 |
| | Infectious Diseases | 2 | 0 | 2 |
| | Internal Medicine | 14 | 0 | 14 |
| | Obstetrics and Gynaecology | 10 | 0 | 10 |
| | Nuclear Medicine | 2 | 0 | 2 |
| | Radiology | 4 | 0 | 4 |
| | Medical Pharmacology | 12 | 0 | 12 |
| | Medical Genetics | 7 | 0 | 7 |
| | Medical Pathology | 23 | 3 | 26 |
| | Urology | 4 | 0 | 4 |
| | TOTAL | 101 | 3 | 104 |

AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

Aim:

The aim of this course is to identify the mechanisms of formation of diseases, their pathologies, biochemistry, disease causes, infectious agents, diseases clinical features, laboratory and imaging findings and pharmacological approaches and drugs used in treatment of endocrine, reproductive, and urinary systems diseases using the clinical physiology of these systems.

Learning Objectives:

1. Defines the terminology and symptomatology of the endocrine, reproductive and urinary systems.
2. Explains the hormonal physiology of the pituitary gland and hypothalamus, pharmacological properties of hormones, the development of diseases in these glands, pathology, clinical manifestations of each, in both childhood and adulthood.
3. Lists the functional physiology of the thyroid gland and the effects of its hormones, classifies diseases related to thyroid gland, defines the mechanism of their formation, explains their pathologies, clinical features and diagnostic methods in both childhood and adulthood.
4. Explains the mechanism of development, laboratory and imaging findings, clinical features of diseases related to calcium metabolism in adults and drugs used in the treatment of mineral disorders.
5. Explains the mechanism, biochemistry, pathology and clinical features of congenital and acquired diseases of the adrenal cortex and medulla and describes the corticosteroid and mineralocorticoid drugs used in the treatment of these diseases.
6. Explains the mechanism of development, biochemistry, pathology and clinical findings of diseases related to glucose metabolism in childhood and adulthood.
7. Lists the acute and chronic complications of diabetes mellitus, describes its clinical features, counts the pharmacological properties of the insulin hormone and drugs used in the treatment of diabetes mellitus.
8. Lists the causes of obesity observed in childhood and adulthood, explains the mechanism of its development, defines neuroendocrine control of energy metabolism and obesity drugs, and comprehends the importance of obesity in terms of public health.



9. Describes the physiology of growth and its disorders, lists the physiological features of puberty and describes puberty disorders, explains the biochemistry of disorders of gonadal hormones, lists the causes of male hypogonadism and describes its clinical features.
10. Classifies and defines diseases related to menstruation and ovulation disorders.
11. Classifies and defines inflammatory and neoplastic diseases seen in the organs of the female genital system, describe their pathological features, describe the symptoms in gynecology, list clinical and imaging diagnostic methods.
12. Explains the physiology of the fetus and placenta, classifies and defines placental and trophoblastic diseases.
13. Explains the physiology of pregnancy and lactation, the development of pregnancy, lists scanning tests and prenatal diagnostic tests in pregnancy.
14. Explains the physiology and mechanism of normal delivery.
15. Explains reproduction physiology, defines and classifies infertility, explains diagnostic methods.
16. Defines, lists and describes birth control methods, classifies and counts the pharmacological agents used in birth control, explains the methods of genetic consulting.
17. Explains the approach to urinary system symptomatology, describes the tests used in the diagnostic approach to kidney diseases, explains renal hemodynamics and urine formation.
18. Describes the mechanisms that constitute acid-base balance, describes fluid and electrolyte system disorders, explains the mechanism of action, pharmacokinetics, toxic effects, drug interactions and clinical uses of drugs used in the treatment of diuretics, fluid-electrolyte balance disorders and acid-base balance disorders.
19. Evaluates the pathologies of urinary system diseases, describes the diagnosis, pathologies and clinical manifestations of glomerular diseases, counts the congenital anomalies of the urinary system and comprehends their diagnosis.
20. Approaches the patient with proteinuria, hematuria and edema, interprets the mechanisms of the development of hypertension, distinguishes its primary and secondary causes; determines the tests used in the identification of secondary causes.
21. Explains the causes and consequences of acute and chronic renal failure.
22. Counts the specific and nonspecific signs and symptoms of the urinary system and explains the examination methods used in the diagnosis of urinary system diseases.
23. Explains basic radiological approaches in male urogenital system diseases, basic information about radiological images of diseases, radiological anatomy.
24. Explains basic radiological approaches in female urogenital system diseases, basic information about radiological images of diseases, radiological anatomy.
25. Explains basic radiological approaches in endocrine system diseases, basic information about radiological images of diseases, radiological anatomy.
26. Explains basic radiological approaches in breast diseases, basic information about radiological images of diseases, radiological anatomy.



TOPICS

| BIOPHYSICS | | |
|---|-------------|------|
| Topic | Type | Time |
| Biophysical basis of altered electrical activity in cardiac dysfunction in metabolic disorders | Theoretical | 1 |
| Electrical and molecular basis of alteration parameters of ECGs of hearts under hyperglycemic and hyperinsulinemic conditions – ionic channels, transporters, and receptors | Theoretical | 1 |
| PEDIATRIC HEALTH AND DISEASES | | |
| Topic | Type | Time |
| Congenital Adrenal Hyperplasia | Theoretical | 1 |
| Introduction to Inherited Metabolic Diseases | Theoretical | 1 |
| Physiopathology of Type 1 Diabetes | Theoretical | 1 |
| Childhood Obesity | Theoretical | 1 |
| Calcium, Phosphorus, Magnesium Balance and Disorders | Theoretical | 2 |
| Normal Puberty | Theoretical | 1 |
| Disorders of Sexual Differentiation | Theoretical | 1 |
| Proteinuria in Children | Theoretical | 1 |
| Hematuria in Children | Theoretical | 1 |
| Introduction to Glomerular Diseases | Theoretical | 1 |
| Renal Tubular Diseases | Theoretical | 1 |
| Acid-Base Balance and Disorders | Theoretical | 1 |
| Physiopathology of Acute and Chronic Kidney Failure | Theoretical | 1 |
| Interstitial Nephritis | Theoretical | 1 |
| INFECTIOUS DISEASES | | |
| Topic | Type | Time |
| Sexually transmitted diseases | Theoretical | 2 |
| INTERNAL MEDICINE | | |
| Topic | Type | Time |
| Signs and symptoms of endocrinological system diseases | Theoretical | 1 |
| Diseases of the pituitary axes and pituitary gland | Theoretical | 2 |
| Thyroid and parathyroid glands and their diseases | Theoretical | 2 |
| Adrenal gland diseases (Cushing's disease, adrenocortical insufficiency) | Theoretical | 1 |
| Diabetes mellitus and complications | Theoretical | 1 |
| Other endocrine diseases (pheochromocytoma, multiple endocrine neoplasias) | Theoretical | 1 |
| Symptomatology of the urinary system | Theoretical | 1 |
| Renal failures (acute kidney injury, chronic kidney disease) | Theoretical | 2 |
| Acid-base balance disorders/fluid and electrolyte balance disorders/edema and proteinuria | Theoretical | 1 |
| Acute glomerulonephritis, chronic glomerulonephritis, tubulointerstitial diseases, nephrotic syndrome | Theoretical | 1 |
| Etiopathogenesis of hypertension | Theoretical | 1 |
| OBSTETRICS AND GYNECOLOGY | | |
| Topic | Type | Time |
| Gynecological history, physical examination and diagnostic methods | Theoretical | 1 |



| | | |
|---|-------------|-------------|
| Menstrual cycle | Theoretical | 1 |
| Menstrual disorder /Amenorrhea | Theoretical | 1 |
| Pelvic pain/Dysmenorrhea / Endometriosis | Theoretical | 1 |
| Introduction to obstetrics, definition and endocrinology of pregnancy | Theoretical | 1 |
| Physiology of pregnancy (maternal, fetal) / hyperemesis gravidarum | Theoretical | 1 |
| Vaginal bleeding (pregnancy, postpartum, postmenopausal, others) | Theoretical | 1 |
| Eclampsia / Preeclampsia/ Gestational diabetes | Theoretical | 1 |
| Antenatal care and screening tests | Theoretical | 1 |
| Intrauterine infections | Theoretical | 1 |
| NUCLEAR MEDICINE | | |
| Topic | Type | Time |
| Applications of nuclear medicine in endocrine diseases | Theoretical | 1 |
| Nuclear medicine methods used in nephrourological pathologies | Theoretical | 1 |
| RADIOLOGY | | |
| Topic | Type | Time |
| Imaging methods used in diagnosis of endocrine system diseases, radiologic anatomy and pathology | Theoretical | 1 |
| Imaging methods used in diagnosis of female urogenital system diseases, radiologic anatomy and pathology 1 | Theoretical | 1 |
| Imaging methods used in diagnosis of male urogenital system diseases, radiologic anatomy and pathology 2 | Theoretical | 1 |
| Imaging methods used in diagnosis of breast diseases, radiologic anatomy and pathology | Theoretical | 1 |
| MEDICAL PHARMACOLOGY | | |
| Topic | Type | Time |
| Pharmacological and pharmacokinetic aspects of hormones | Theoretical | 1 |
| Drugs that affect bone mineral homeostasis; thyroid medications | Theoretical | 1 |
| Thyroid medications | Theoretical | 1 |
| Corticosteroids, corticosteroid antagonists and ACTH (glucocorticoid, mineralocorticoid, aldosterone antagonist, ACTH)) | Theoretical | 2 |
| Insulin | Theoretical | 1 |
| Oral antidiabetic drugs and glucagon | Theoretical | 1 |
| Hemostatic drugs and solutions that expand plasma volume | Theoretical | 1 |
| Diuretic drugs | Theoretical | 1 |
| Drugs and solutions used in fluid-electrolyte balance and acid-base balance disorders. | Theoretical | 1 |
| Estrogens, progestins and antagonists, oral contraceptives, oxytocic drugs | Theoretical | 1 |
| Androgens, anabolic steroids and antiandrogenic drugs | Theoretical | 1 |
| MEDICAL GENETICS | | |
| Topic | Type | Time |
| Endocrine syndromes and overgrowth | Theoretical | 1 |
| Genetic diseases of the kidneys and urinary system | Theoretical | 1 |
| Genital anomalies | Theoretical | 1 |
| Prenatal Diagnosis-Preimplantation Genetic Diagnosis | Theoretical | 1 |
| Pregnancy management in genetics, pregnancy screening and diagnosis of pregnancy complication | Theoretical | 1 |
| Pregnancy losses | Theoretical | 1 |



| | | |
|--|-------------|-------------|
| Infertility | Theoretical | 1 |
| MEDICAL PATHOLOGY | | |
| Topic | Type | Time |
| Pituitary gland adenomas and Neoplasia of adrenal gland | Theoretical | 2 |
| Diseases and Neoplasias of Thyroid | Theoretical | 2 |
| Diseases of Parathyroid and MEN | Theoretical | 1 |
| Diseases of endocrine pancreas | Theoretical | 1 |
| Renal glomerular diseases | Theoretical | 3 |
| Tubulointerstitial Diseases | Theoretical | 1 |
| Renal and Urothelial Neoplasias | Theoretical | 2 |
| Diseases of Vulva and Vagen | Theoretical | 1 |
| Diseases of Cervix | Theoretical | 1 |
| Diseases of Corpus uteri | Theoretical | 1 |
| Ovary tumors | Theoretical | 1 |
| Gestational tumors and Diseases of placenta | Theoretical | 1 |
| Male genital system diseases and tumors | Theoretical | 2 |
| Prostate diseases and tumors | Theoretical | 1 |
| Genital system infections and PID | Theoretical | 1 |
| Inflammatory diseases and tumors of Breast | Theoretical | 2 |
| Medical Pathology practice: Pathology of endocrine and urogenital system | Practical | 3 |
| UROLOGY | | |
| Topic | Type | Time |
| Description of symptoms in urology and principles of general approach | Theoretical | 1 |
| Urological examination | Theoretical | 1 |
| Laboratory and imaging methods in urology | Theoretical | 1 |
| Urological emergencies | Theoretical | 1 |



CENTRAL NERVOUS SYSTEM DISEASES COURSE BOARD

PIII – BOARD V

| CODE OF THE BOARD COURSES | NAME OF THE BOARD COURSES | THEORETICAL HOURS | PRACTICAL HOURS | SUM OF HOURS |
|---------------------------|---|-------------------|-----------------|--------------|
| | Exam Feedback Lesson | 2 | 0 | 2 |
| | Chief Coordinator Feedback Lesson | 2 | 0 | 2 |
| | Introduction to Course Board Lesson | 2 | 0 | 2 |
| | Brain and Nerve Surgery | 4 | 0 | 4 |
| | Biophysics | 2 | 0 | 2 |
| | Pediatric Health and Diseases | 3 | 0 | 3 |
| | Pediatric and Adolescent Mental Health and Diseases | 6 | 0 | 6 |
| | Infectious Diseases | 4 | 0 | 4 |
| | Eye Diseases | 3 | 0 | 3 |
| | Ear Nose and Throat Diseases | 1 | 0 | 1 |
| | Neurology | 12 | 0 | 12 |
| | Radiology | 3 | 0 | 3 |
| | Mental Health and Diseases | 15 | 0 | 15 |
| | Medical Biochemistry | 4 | 0 | 4 |
| | Medical Pharmacology | 18 | 0 | 18 |
| | Medical Genetics | 6 | 0 | 6 |
| | Medical Pathology | 10 | 3 | 13 |
| | TOTAL | 97 | 3 | 100 |

AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

Aim:

The aim of this course is to teach the basic concepts related to the pathologies of functions and disorders of central and peripheral nervous system, causes of diseases, infectious agents, the clinical features of diseases, laboratory and imaging findings, pharmacological approaches and drugs used in the treatment and to classify and explain the psychiatric disorders such as mood and neurocognitive disorders, drug abuse disorders and psychoses.

Learning Objectives:

1. Describes the frequently observed vascular, degenerative and demyelinating diseases of central nervous system.
2. Lists microbial factors that cause infection in nervous system, explains the mechanisms of disease development, explains the diagnostic methods and the methods of protection from and control of these infectious agents.
3. Defines epileptic seizures in children and adults.
4. Identifies the primary and secondary causes of headache, lists the available treatment approaches.
5. Lists the symptoms of peripheral neuropathy, describes the mechanism and clinic of common etiological causes.



6. Describes the pathogenesis of childhood and adult muscle diseases and counts their clinical signs and symptoms.
7. Tells the methods of radiological examination of the central nervous system.
8. Counts central nervous system tumors and clinical manifestations.
9. Classifies and explains psychiatric disorders such as mood disorders, neurocognitive and sleep disorders, alcohol and drug abuse disorders and psychoses, anxiety disorders, obsessive compulsive disorder (OCD), trauma and stress-related disorders.
10. Grades the physical, psychosocial, and cognitive development of a child.
11. Describes syndromes that lead to sensory and motor systems disorders.
12. Describes the symptoms and signs of physical examination in pathologies lead to eye disorders.
13. Counts the symptoms and signs in diseases related to brain and neurosurgery.
14. Counts the symptoms and signs seen in neurological diseases.
15. Classifies neurological diseases.
16. Describes basic radiological approaches in central system diseases, basic information about radiological images of diseases, radiological anatomy.

TOPICS

| BRAIN AND NERVE SURGERY | | |
|---|-------------|------|
| Topic | Type | Time |
| Cerebrovascular pathologies | Theoretical | 1 |
| Syndrome of increased intracranial pressure | Theoretical | 1 |
| Head trauma | Theoretical | 1 |
| Spinal traumas | Theoretical | 1 |
| BIOPHYSICS | | |
| Topic | Type | Time |
| Medical imaging and application techniques I | Theoretical | 1 |
| Medical imaging and application techniques II | Theoretical | 1 |
| PEDIATRIC HEALTH AND DISEASES | | |
| Topic | Type | Time |
| Neurological system's symptoms in pediatric patients and neurological examination | Theoretical | 1 |
| Degenerative diseases of white matter | Theoretical | 1 |
| Degenerative diseases of gray matter | Theoretical | 1 |
| PEDIATRIC AND ADOLESCENT MENTAL HEALTH and DISEASES | | |
| Topic | Type | Time |
| Psychiatric evaluation in children and adolescents | Theoretical | 1 |
| Attention deficit and hyperactivity disorder | Theoretical | 1 |
| Disruptive disorders, impulse control and behavioral disorders | Theoretical | 1 |
| Autism spectrum disorder | Theoretical | 1 |
| Depression and anxiety disorders in children and adolescents | Theoretical | 1 |
| Childhood neglect and abuse | Theoretical | 1 |
| INFECTIOUS DISEASES | | |
| Topic | Type | Time |
| Rabies | Theoretical | 1 |
| Central Nervous System Infections | Theoretical | 1 |
| Meningococcal diseases | Theoretical | 1 |
| Clostridial infections: Tetanus and Botulism | Theoretical | 1 |
| EYE DISEASES | | |



| Topic | Type | Time |
|--|-------------|------|
| Visual impairment/loss – eye examination | Theoretical | 1 |
| Eye trauma (physical, chemical) | Theoretical | 1 |
| Red eye (redness of the eye)/conjunctivitis | Theoretical | 1 |
| EAR NOSE and THROAT DISEASES | | |
| Topic | Type | Time |
| Hearing impairment and tinnitus | Theoretical | 1 |
| NEUROLOGY | | |
| Topic | Type | Time |
| Symptoms and signs of neurological diseases / Classification of neurological diseases | Theoretical | 1 |
| Changes in consciousness and coma | Theoretical | 1 |
| Tremor and Parkinson's disease | Theoretical | 1 |
| Ataxic disorders | Theoretical | 1 |
| Paresthesia, Paresis, Paralysis and Speech Disorders | Theoretical | 1 |
| Transient ischemic attack and cerebral infarction | Theoretical | 1 |
| Seizures and Epilepsy | Theoretical | 1 |
| Peripheral Nerve and Motor Neuron Diseases / Neuropathic pain, Muscle diseases (myopathies) | Theoretical | 1 |
| Diplopia, myasthenia gravis, cholinergic crisis | Theoretical | 1 |
| Headache, Migraine, tension-type headache | Theoretical | 1 |
| Multiple sclerosis | Theoretical | 1 |
| Cognitive disorders/ Dementia and Alzheimer's disease | Theoretical | 1 |
| RADIOLOGY | | |
| Topic | Type | Time |
| Imaging methods used in diagnosis of central nervous system diseases, radiologic anatomy and pathology 1 | Theoretical | 1 |
| Imaging methods used in diagnosis of central nervous system diseases, radiologic anatomy and pathology 2 | Theoretical | 1 |
| Imaging methods used in diagnosis of central nervous system diseases, radiologic anatomy and pathology 3 | Theoretical | 1 |
| MENTAL HEALTH AND DISEASES | | |
| Topic | Type | Time |
| Psychic apparatus | Theoretical | 1 |
| Defense mechanisms | Theoretical | 1 |
| Introduction to psychiatry, psychiatric symptoms and signs | Theoretical | 2 |
| Psychiatric interview and clinical evaluation | Theoretical | 1 |
| Definition, classification and clinical features of psychotic disorders | Theoretical | 2 |
| Definition, classification and clinical features of mood disorders | Theoretical | 2 |
| Alcohol and drug addiction | Theoretical | 2 |
| Definition, classification and clinical features of anxiety disorders | Theoretical | 1 |
| Definition, classification and clinical features of obsessive-compulsive disorder and related disorders | Theoretical | 1 |
| Delirium and dementia | Theoretical | 1 |
| Disorders associated with trauma and stressors | Theoretical | 1 |
| Definition, classification and clinical features of somatic symptom disorder and related disorders | Theoretical | 1 |



| | | |
|--|-------------|-------------|
| Definition, classification and clinical features of sexual dysfunction; paraphilias and gender dysphoria | Theoretical | 1 |
| MEDICAL BIOCHEMISTRY | | |
| Topic | Type | Time |
| Sample collection and storage in clinical biochemistry | Theoretical | 1 |
| Biochemistry of trauma and tissue injuries | Theoretical | 1 |
| Therapeutic drug monitoring | Theoretical | 1 |
| Pharmacogenetics | Theoretical | 1 |
| MEDICAL PHARMACOLOGY | | |
| Topic | Type | Time |
| Central nervous system pharmacology, central nervous system neurotransmitters | Theoretical | 2 |
| Pharmacology of general anaesthesia | Theoretical | 2 |
| Local anaesthetic drugs | Theoretical | 2 |
| Neuromuscular blocking drugs | Theoretical | 1 |
| Sedative and hypnotic drugs | Theoretical | 2 |
| Antipsychotic drugs | Theoretical | 2 |
| Antidepressant medications | Theoretical | 2 |
| Drug abuse and addiction | Theoretical | 1 |
| CNS stimulants and hallucinogens | Theoretical | 1 |
| Antiepileptic drugs | Theoretical | 2 |
| Medications used to treat Parkinson's disease and other movement disorders | Theoretical | 1 |
| MEDICAL GENETICS | | |
| Topic | Type | Time |
| Neurogenetic Diseases - Epilepsy - Mental retardation | Theoretical | 3 |
| Channelopathies | Theoretical | 1 |
| Metabolic diseases | Theoretical | 1 |
| CNS anomalies | Theoretical | 1 |
| MEDICAL PATHOLOGY | | |
| Topic | Type | Time |
| CNS pathology cells, developmental/genetic conditions and Phacomatoses | Theoretical | 2 |
| Neurodegenerative and demyelinating diseases of CNS | Theoretical | 2 |
| Vascular diseases and trauma of CNS | Theoretical | 1 |
| Tumors of CNS | Theoretical | 2 |
| Perinatal injury | Theoretical | 1 |
| The eye and Peripheral Neural diseases | Theoretical | 2 |
| Medical Pathology practice: Central nervous system pathology | Practical | 3 |



MUSCULOSKELETAL SYSTEM DISEASES COURSE BOARD PIII –BOARD VI

| CODE OF THE BOARD COURSES | NAME OF THE BOARD COURSES | THEORETICAL HOURS | PRACTICAL HOURS | SUM OF HOURS |
|---------------------------|--------------------------------------|-------------------|-----------------|--------------|
| | Exam Feedback Lesson | 2 | 0 | 2 |
| | Chief Coordinator Feedback Lesson | 2 | 0 | 2 |
| | Introduction to Course Board Lesson | 2 | 0 | 2 |
| | Anesthesiology and Reanimation | 1 | 0 | 1 |
| | Pediatric Health and Diseases | 1 | 0 | 1 |
| | Physical Medicine and Rehabilitation | 8 | 0 | 8 |
| | Nuclear Medicine | 1 | 0 | 1 |
| | Orthopedics and Traumatology | 10 | 0 | 10 |
| | Radiology | 3 | 0 | 3 |
| | Medical Biochemistry | 1 | 0 | 1 |
| | Medical Pharmacology | 6 | 0 | 6 |
| | Medical Genetics | 5 | 0 | 5 |
| | Medical Pathology | 10 | 2 | 12 |
| | Dermatology | 3 | 0 | 3 |
| | TOTAL | 55 | 2 | 57 |

AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

Aim:

The aim of this course is to teach the signs and symptoms of diseases affecting the musculoskeletal system, to classify diseases with these signs and symptoms and to explain the abnormal laboratory tests and imaging methods that may occur in diseases.

Learning Objectives:

1. Lists pathological features of diseases of bones, joints and soft tissue.
2. Explains bone and soft tissue tumors, metabolic bone diseases.
3. Lists analgesic and anti-inflammatory drugs and centrally acting muscle relaxants.
4. Explains childhood rash diseases and autoinflammatory diseases.
5. Explains the imaging methods used in trauma and stroke.
6. Explains treatment approaches in acute and chronic pain.
7. Counts congenital, traumatic, infectious diseases of the musculoskeletal system and their symptoms.
8. Counts musculoskeletal diseases of genetic origin.
9. Describes imaging methods used in diagnosis of the musculoskeletal system diseases and basic imaging findings of them.
10. Lists fracture complications.
11. Comprehends the functions of the musculoskeletal system.
12. Explains basic radiological approaches in musculoskeletal diseases, basic information about radiological images of diseases, radiological anatomy.



TOPICS

| ANAESTHESIOLOGY and REANIMATION | | |
|--|-------------|------|
| Topic | Type | Time |
| Treatment approaches for acute and chronic pain | Theoretical | 1 |
| PEDIATRIC HEALTH AND DISEASES | | |
| Topic | Type | Time |
| Infectious diseases with rashes (in children) | Theoretical | 1 |
| PHYSICAL MEDICINE AND REHABILITATION | | |
| Topic | Type | Time |
| Musculoskeletal Examination | Theoretical | 2 |
| Approach to arthritic patients | Theoretical | 1 |
| Neck pain | Theoretical | 1 |
| Back - Low Back Pain | Theoretical | 1 |
| Osteoarthritis | Theoretical | 1 |
| Spondyloarthropathies | Theoretical | 1 |
| Tenosynovitis | Theoretical | 1 |
| NUCLEAR MEDICINE | | |
| Topic | Type | Time |
| Nuclear medicine approaches in the musculoskeletal system | Theoretical | 1 |
| ORTHOPEDICS and TRAUMATOLOGY | | |
| Topic | Type | Time |
| Limb trauma/fractures | Theoretical | 1 |
| Dislocations, soft tissue and ligament injuries | Theoretical | 1 |
| Developmental hip dysplasia (hip dislocation) | Theoretical | 1 |
| Osteomyelitis and septic arthritis | Theoretical | 1 |
| Mesenchymal tumors (bone tumors) | Theoretical | 2 |
| Spine deformities | Theoretical | 2 |
| Crush injury and compartment syndrome | Theoretical | 2 |
| RADIOLOGY | | |
| Topic | Type | Time |
| Imaging methods used in diagnosis of musculoskeletal system diseases, radiologic anatomy and pathology 1 | Theoretical | 1 |
| Imaging methods used in diagnosis of musculoskeletal system diseases, radiologic anatomy and pathology 2 | Theoretical | 1 |
| Imaging methods used in diagnosis of musculoskeletal system diseases, radiologic anatomy and pathology 3 | Theoretical | 1 |
| MEDICAL BIOCHEMISTRY | | |
| Topic | Type | Time |
| Biochemical markers in musculoskeletal diseases | Theoretical | 1 |
| MEDICAL PHARMACOLOGY | | |
| Topic | Type | Time |
| Opioid analgesic drugs | Theoretical | 1 |
| Nonsteroidal anti-inflammatory drugs | Theoretical | 2 |
| Centrally acting muscle relaxants | Theoretical | 1 |
| General principles of treatment in poisoning | Theoretical | 1 |
| Prescribing rules | Theoretical | 1 |
| MEDICAL GENETICS | | |
| Topic | Type | Time |



| | | |
|---|-------------|-------------|
| Diagnosis in Muscle Diseases | Theoretical | 1 |
| Genodermatoses | Theoretical | 1 |
| Skeletal dysplasia and skeletal anomalies | Theoretical | 1 |
| Connective tissue diseases | Theoretical | 1 |
| Immunogenetics | Theoretical | 1 |
| MEDICAL PATHOLOGY | | |
| Topic | Type | Time |
| Inflammation and non-tumoral diseases of Bone and Joints | Theoretical | 2 |
| Tumors of Bone and Soft Tissue | Theoretical | 2 |
| Musculoskeletal diseases | Theoretical | 2 |
| Basic pathology of non-neoplastic diseases of epidermis and dermis | Theoretical | 2 |
| Melanocytic tumors | Theoretical | 1 |
| Epidermal and adnexal tumors | Theoretical | 1 |
| Medical Pathology practice: Skin and Musculoskeletal System Pathology | Practical | 2 |
| DERMATOLOGY | | |
| Topic | Type | Time |
| Structure, Anatomy, Physiology of the skin, and the Principles of Dermatological treatments | Theoretical | 1 |
| Identification of Skin Diseases and Elementary Lesions | Theoretical | 1 |
| The Diagnostic Methods for dermatological diseases and the Phenomens | Theoretical | 1 |

PUBLIC HEALTH/FORENSIC MEDICINE/ETHICS AND CLINICAL SKILLS COURSE BOARD PIII – BOARD VI

| CODE OF THE BOARD COURSES | NAME OF THE BOARD COURSES | THEORETICAL HOURS | PRACTICAL HOURS | SUM OF HOURS |
|---------------------------|-------------------------------------|-------------------|-----------------|--------------|
| | Exam Feedback Lesson | 2 | 0 | 2 |
| | Chief Coordinator Feedback Lesson | 2 | 0 | 2 |
| | Introduction to Course Board Lesson | 2 | 0 | 2 |
| | Forensics | 9 | 0 | 9 |
| | Family Medicine | 20 | 0 | 20 |
| | Public Health | 65 | 0 | 65 |
| | Clinical Skills III | 0 | 12 | 12 |
| | History of Medicine and Ethics | 8 | 0 | 8 |
| | TOTAL | 108 | 12 | 120 |

AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

Aim:

The aim of this course is to gain knowledge and attitude about the development process of public health insight and the risk factors in health, protection, evidence-based information creation and evaluation in the fields of early diagnosis, to learn about ethics and forensic medicine, and to acquire the clinical skills determined for the current year.



Learning Objectives:

1. Defines the concept of public health, comprehends the issues of basic health services and planning and management of health services and health workforce.
2. Lists the epidemiological criteria, form a comment by calculating these criteria and defines the basic strategy of epidemiology.
3. Lists the basic characteristics of descriptive research, explains the criteria of causality, gives examples by comparing analytical research in terms of their characteristics, explains the basic features and criteria of intervention research through example, explains the basic features and criteria of methodological research through example.
4. Explains the health criteria.
5. Explains the economic characteristics of health care services.
6. Explains the concept of infectious diseases, classifies infectious diseases according to the ways of transmission, explains the methods of prevention of infectious diseases according to the way of transmission.
7. Talks about the vaccines in the childhood, pregnancy and adult age vaccination calendar applied in Turkey, their doses and the scheme of administration.
8. Defines the cold chain, counts the cold chain elements.
9. Defines the basic concepts in the epidemiology of infectious diseases, explains the principles of surveillance of infectious diseases.
10. Groups infectious diseases of which notification is mandatory.
11. Counts the epidemic investigation steps and explains the principles of epidemic investigation and epidemic control measures.
12. Comprehends the epidemiological criteria of occupational health.
13. Defines the concept of occupational disease and risk factors causing it.
14. Defines the concept of work accident and risk factors causing it.
15. Defines the concept of emergency situations and causative factors, comprehends the components of health care in extraordinary situations.
16. Explains the concept of environmental influence, explains the concept of environmental disease, counts the types of environmental influences and counts the environmental factors that can affect health (air pollution, water pollution, wastes, etc.).
17. Counts chronic diseases and explains ways of protection.
18. Tells about the concept of early diagnosis and counts the methods of early diagnosis for chronic diseases.
19. Tells about the relationship between nutrition and health.
20. Tells about the concept of school and adolescent health.
21. Explains the well-child examination and enumerates the steps of the well-child examination in terms of child health.
22. Explains the concept of reproductive health.
23. Explains the concept of demography.
24. Lists the health problems that come together with society aging.
25. Lists the types of accidents, talks about the ways of protection against accidents.
26. Explains the concept of protecting and promoting health.
27. Explains the place and importance of ethics in medical practice.
28. Explains the legal responsibilities of the physician and the concept of malpractice.
29. Explains the forensic report and its characteristics in cases of sexual assaults, violence, injuries and deaths.

TOPICS



| FORENSICS | | |
|---|-------------|-------------|
| Topic | Type | Time |
| 1. Neoplasia and Hematopoietic System Diseases Course Board | Type | Time |
| Introduction to forensic medicine, legal responsibilities of the physician, medical malpractice | Theoretical | 1 |
| Forensic psychiatry, introduction and concepts | Theoretical | 1 |
| 2. Circulatory and Respiratory System Diseases Course Board | Type | Time |
| Forensic reports | Theoretical | 1 |
| 3. Gastrointestinal System Diseases Course Board | Type | Time |
| Injuries | Theoretical | 1 |
| 4. Endocrine and Urogenital System Diseases Course Board | Type | Time |
| Human rights and child abuse | Theoretical | 1 |
| Sexual assaults | Theoretical | 1 |
| Violence | Theoretical | 1 |
| 5. Central Nervous System Diseases Course Board | Type | Time |
| Pathophysiology of death and brain death | Theoretical | 1 |
| 6. Musculoskeletal System Diseases Course Board | Type | Time |
| Forensic autopsy | Theoretical | 1 |
| FAMILY MEDICINE | | |
| Topic | Type | Time |
| 1. Neoplasia and Hematopoietic System Diseases Course Board | Type | Time |
| Taking anamnesis | Theoretical | 2 |
| Obtaining informed consent | Theoretical | 2 |
| Head, neck and lymphatic system examination | Theoretical | 2 |
| 2. Circulatory and Respiratory System Diseases Course Board | Type | Time |
| Respiratory system examination | Theoretical | 2 |
| Circulatory system examination | Theoretical | 2 |
| 3. Gastrointestinal System Diseases Course Board | Type | Time |
| Abdomen examination | Theoretical | 2 |
| 4. Endocrine and Urogenital System Diseases Course Board | Type | Time |
| Genitourinary system examination | Theoretical | 2 |
| Breast, testis, prostate examination | Theoretical | 2 |
| 5. Central Nervous System Diseases Course Board | Type | Time |
| Neurological examination | Theoretical | 2 |
| 6. Musculoskeletal System Diseases Course Board | Type | Time |
| Full physical examination | Theoretical | 2 |
| PUBLIC HEALTH | | |
| Topic | Type | Time |
| 1. Neoplasia and Hematopoietic System Diseases Course Board | Type | Time |
| The concept of public health | Theoretical | 1 |
| Primary health services | Theoretical | 2 |
| Health administration | Theoretical | 1 |
| Planning of health services | Theoretical | 1 |
| Health human resources | Theoretical | 1 |
| Health services in Türkiye | Theoretical | 1 |
| Definition of epidemiology, usage areas and research types | Theoretical | 1 |
| Descriptive studies, cause concept in epidemiology, cross-sectional studies | Theoretical | 1 |



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| Case-control studies | Theoretical | 1 |
| Cohort studies | Theoretical | 1 |
| Intervention research, methodological research | Theoretical | 1 |
| Health measures | Theoretical | 2 |
| Research planning | Theoretical | 2 |
| 2. Circulatory and Respiratory System Diseases Course Board | Type | Time |
| Introduction to health economics, factors affecting health | Theoretical | 1 |
| Economic characteristics of health care services | Theoretical | 1 |
| Techniques of economic evaluation in health | Theoretical | 1 |
| Control of communicable diseases | Theoretical | 2 |
| Surveillance | Theoretical | 1 |
| Outbreak investigation and control | Theoretical | 1 |
| Immunization | Theoretical | 2 |
| Non-communicable diseases risk factors | Theoretical | 1 |
| Non-communicable diseases – The situation in the world and in Türkiye | Theoretical | 1 |
| Prevention of non-communicable diseases | Theoretical | 1 |
| 3. Gastrointestinal System Diseases Course Board | Type | Time |
| Healthy lifestyle behaviors | Theoretical | 1 |
| Health promotion | Theoretical | 1 |
| Health literacy | Theoretical | 1 |
| Quality of life | Theoretical | 1 |
| Environmental health – basic principles | Theoretical | 1 |
| Water and soil pollution | Theoretical | 1 |
| Outdoor and indoor air pollution | Theoretical | 1 |
| Solid and liquid wastes | Theoretical | 1 |
| Environmental medicine | Theoretical | 1 |
| Global warming and climate change | Theoretical | 1 |
| 4. Endocrine and Urogenital System Diseases Course Board | Type | Time |
| Evaluation of children's health from a public health perspective | Theoretical | 1 |
| The state of children's health and children's rights in the world | Theoretical | 1 |
| Situation of child health in Türkiye | Theoretical | 1 |
| Protection and promotion of adolescent health | Theoretical | 1 |
| School health | Theoretical | 1 |
| The determinants of women's health and the concept of gender | Theoretical | 1 |
| Women's health problems in the world and in Türkiye | Theoretical | 1 |
| Factors affecting fertility | Theoretical | 1 |
| Unwanted pregnancies and induced abortions | Theoretical | 1 |
| Maternal mortality and safe motherhood | Theoretical | 1 |
| Family planning | Theoretical | 1 |
| Violence against women | Theoretical | 1 |
| 5. Central Nervous System Diseases Course Board | Type | Time |
| Occupational health and safety – basic concepts | Theoretical | 1 |
| Occupational diseases | Theoretical | 1 |
| Occupational diseases, work accidents | Theoretical | 1 |
| Definitions and terminology in disaster medicine | Theoretical | 1 |
| Health services in disasters | Theoretical | 1 |
| Introduction to community nutrition, risk groups in nutrition and related problems | Theoretical | 1 |



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| Monitoring of malnutrition growth | Theoretical | 1 |
| Prevention of nutritional diseases | Theoretical | 1 |
| 6. Musculoskeletal System Diseases Course Board | Type | Time |
| International health | Theoretical | 1 |
| Health problems of refugees and displaced persons | Theoretical | 1 |
| Elderly | Theoretical | 1 |
| Public health and disability | Theoretical | 1 |
| Violence from a public health perspective | Theoretical | 1 |
| Sustainable development goals | Theoretical | 1 |
| Protection from accidents and injuries | Theoretical | 1 |
| CLINICAL SKILLS (CSK III) | | |
| Topic | Type | Time |
| 1. Neoplasia and Hematopoietic System Diseases Course Board | Type | Time |
| | | |
| 2. Circulatory and Respiratory System Diseases Course Board | Type | Time |
| | | |
| 3. Gastrointestinal System Diseases Course Board | Type | Time |
| | | |
| 4. Endocrine and Urogenital System Diseases Course Board | Type | Time |
| | | |
| 5. Central Nervous System Diseases Course Board | Type | Time |
| | | |
| 6. Musculoskeletal System Diseases Course Board | Type | Time |
| | | |
| HISTORY OF MEDICINE AND ETHICS | | |
| Topic | Type | Time |
| What is 'ethics', what is 'ethics' in medical practice'? | Theoretical | 2 |
| Ethical approach in organ transplantation, euthanasia and reproductive technologies | Theoretical | 2 |
| Ethical and legal approach to patient rights | Theoretical | 2 |
| Ethical approach in medical research and publications, ethics committees | Theoretical | 2 |