T.C.
LOKMAN HEKIM UNIVERSITY
FACULTY OF MEDICINE
PHASE – III
2023–2024
ACADEMIC YEAR EDUCATION GUIDE

LOKMAN HEKIM UNIVERSITY FACULTY OF MEDICINE

PHASE III COURSES and CREDITS

CODE	REQUIRED COURSES	T	P	TS	ECTS
21030001	*Neoplasia and Hematopoietic System Diseases*	*93*	*3*	*96*	*7*
21030002	*Circulatory and Respiratory System Diseases*	*88*	*3*	*91*	*9*
21030003	*Gastrointestinal System Diseases*	*68*	*3*	*71*	*6*
21030004	*Endocrine and Urogenital System Diseases*	*94*	*3*	*97*	*9*
21030005	*Central Nervous System Diseases*	*89*	*3*	*92*	*9*
21030006	*Musculoskeletal System Diseases*	*50*	*2*	*52*	*6*
21030007	*Public Health/Forensics/Ethics and Clinical Skills*	*83*	*12*	*95*	*9*
TOTAL ECTS COMPULSORY					**55**
CODE	**ELECTIVE COURSES**	**T**	**P**	**K**	**ECTS**
	University Elective 1	2	2	3	3
	University Elective 2	2	2	3	3
	University Elective 3	2	2	3	3
	University Elective 4	2	2	3	3
	University Elective 5	2	0	3	3
	University Elective 6	2	0	3	3
	Faculty Elective 5	2	0	3	3
	Faculty Elective 6	2	0	3	3
	Faculty Electives 7	2	0	3	3
	Faculty Elective 8	2	0	3	3
	Faculty Elective 9	2	0	3	3
	Faculty Elective 10	2	0	3	3
TOTAL ECTS TO BE COLLECTED AS ELECTIVES					**12**
TOTAL ECTS TO BE COLLECTED IN PHASE III					**67**

PHASE III AIMS AND LEARNING OBJECTIVES

Purpose:

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. Explain the importance of taking a history in children and adults, the principles of physical examination, and the importance of obtaining consent.
5. Explain the position and importance of biochemical examinations in the diagnosis of diseases seen in various systems.
6. Explain the genetic mechanisms of diseases.
7. Explain the biological principles of scintigraphy.
8. Explain 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

COURSES	THEORETICAL HOURS	PRACTICAL HOURS	SUM OF HOURS
21030001-01 Coordinator Feedback Meeting	2	0	2
21030001-02 Emergency	3	0	3
21030001-03 Pediatric Health and Diseases	14	0	14
21030001-04 Infectious Diseases	4	0	4
21030001-05 Internal Medicine	20	0	20
21030001-06 Nuclear Medicine	2	0	2
21030001-07 Radiation Oncology	2	0	2
21030001-08 Radiology	3	0	3
21030001-09 Medical Biochemistry	3	0	3
21030001-10 Medical Pharmacology	22	0	22
21030001-11 Medical Genetics	5	0	5
21030001-12 Medical Pathology	13	3	16
TOTAL	**93**	**3**	**96**

COURSE BOARD OBJECTIVES and LEARNING OBJECTIVES

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
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**
Genetic laboratory techniques – classification in genetic diseases	Theoretical	1
Diagnostic approach in rare and undiagnosed diseases	Theoretical	1
Cancer genetics (diagnosis – treatment and determination of prognosis)	Theoretical	1
Familial cancers	Theoretical	1
Genetic approach to hematological diseases	Theoretical	1
MEDICAL PATHOLOGY		
Topic	**Type**	**Time**
Principles of Neoplasia I: Benign and malign, diagnosing tumor	Theoretical	2
Principles of Neoplasia II: Etiology,carsinogenesis,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
Neoplasia and Hematopoetic System Diseases-LAB.	Practical	3

CIRCULATORY AND RESPIRATORY SYSTEM DISEASES COURSE BOARD

COURSES	THEORETICAL COURSE DURATION (h)	PRACTICAL COURSE DURATION (h)	TOTAL COURSE DURATION (h)
21030002-01 Coordinator Feedback Meeting	1	0	1
21030002-02 Anesthesiology and Reanimation	2	0	2
21030002-03 Biophysics	2	0	2
21030002-04 Pediatric Health and Diseases	5	0	5
21030002-05 Infectious Diseases	2	0	2
21030002-06 Chest Diseases	9	0	9
21030002-07 Cardiovascular Surgery	4	0	4
21030002-08 Cardiology	10	0	10
21030002-09 Ear Nose Throat Diseases	3	0	3
21030002-10 Nuclear Medicine	2	0	2
21030002-11 Radiology	3	0	3
21030002-12 Medical Pharmacology	26	0	26
21030002-03 Medical Genetics	5	0	5
21030002-14 Medical Pathology	14	3	17
Sum	**88**	**3**	**91**

COURSE BOARD OBJECTIVES and LEARNING OBJECTIVES

Purpose:

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.

TOPICS

ANESTHESIOLOGY and REANIMATION		
Topic	**Type**	**Time**
Cardiopulmonary resuscitation	Theoretical	1
Complications of Anesthesia	Theoretical	1
BIOPHYSICS		
Topic	**Type**	**Time**
Molecular mechanisms related with cardiac dysfunction	Theoretical	1
Electrical mechanisms related with cardiac dysfunction	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, Clubbibg, hemoptysis, Whezing, cough, sputum production, stridor, snoring, apnea)	Theoretical	2
The Physical Examination of the Respiratory System	Theoretical	1
Pneumonia	Theoretical	1
Tuberculosis of Lung	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
Approach to Heart Failure	Theoretical	1
Electrocardiography (ECG)	Theoretical	2
Acute Coronary Syndromes	Theoretical	1
Chronic Coronary Artery Disease	Theoretical	1
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**
Basic radiological approaches, basic principles, radiological anatomy in respiratory system diseases	Theoretical	1
Imaging methods used in diagnosis of cardiovascular system diseases, radiologic anatomy, and pathology	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 in 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**
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
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
Respiratory and cardiovascular system pathology-LAB.	Practical	3

GASTROINTESTINAL SYSTEM DISEASES COURSE BOARD

COURSES	THEORETICAL COURSE DURATION (h)	PRACTICAL COURSE DURATION (h)	TOTAL COURSE DURATION (h)
21030003-01 Coordinator Feedback Meeting	1	0	1
21030003-02 Pediatric Health and Diseases	2	0	2
21030003-03 Infectious Diseases	8	0	8
21030003-04 General Surgery	4	0	4
21030003-05 Internal Medicine	13	0	13
21030003-06 Nuclear Medicine	1	0	1
21030003-07 Radiology	2	0	2
21030003-08 Medical Biochemistry	7	0	7
21030003-09 Medical Pharmacology	6	0	6
21030003-10 Medical Genetics	3	0	3
21030003-11 Medical Pathology	21	3	24
Sum	**69**	**3**	**72**

COURSE BOARD OBJECTIVES and LEARNING OBJECTIVES

Objective:
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

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
Food poisoning	Theoretical	1
Enteric fever	Theoretical	1
Gastroenteritis	Theoretical	1
Gastrointestinal parasitosis and echinococcosis	Theoretical	1
Parasitosis of the gastrointestinal tract and hydatid cyst disease	Theoretical	1
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 cystography system	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
Laxative, purgative and antidiarrheal drugs	Theoretical	2
Emetic, antiemetic and prokinetic drugs and other drugs	Theoretical	2
MEDICAL GENETICS		
Topic	**Type**	**Time**
Genetic approach in gastrointestinal system 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	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
Gastrointestinal system pathology-LAB	Practical	3


LOKMAN HEKİM
ÜNİVERSİTESİ

ENDOCRINE AND UROGENITAL SYSTEM DISEASES COURSE BOARD

COURSES	THEORETICAL COURSE DURATION (h)	PRACTICAL COURSE DURATION (h)	TOTAL COURSE DURATION (h)
21030004-01 Coordinator Feedback Meeting	1	0	1
21030004-02 Biophysics	2	0	2
21030004-03 Pediatric Health and Diseases	15	0	15
21030004-04 Infectious Diseases	2	0	2
21030004-05 Internal Medicine	14	0	14
21030004-06 Obstetrics and Gynaecology	10	0	10
21030004-07 Nuclear Medicine	2	0	2
21030004-08 Radiology	4	0	4
21030004-09 Medical Pharmacology	12	0	12
21030004-10 Medical Genetics	5	0	5
21030004-11 Medical Pathology	22	3	25
21030004-12 Urology	4	0	4
Sum	**93**	**3**	**96**

COURSE BOARD OBJECTIVES and LEARNING OBJECTIVES

Objectives:
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. Describes imaging methods used in diagnosis of the genitourinary system and the endocrine diseases and basic imaging findings of them.

TOPICS

BIOPHYSICS		
Topic	**Type**	**Time**
Biophysical basis of alterated electrical activity in cardiac dysfunction in metabolic disorders	Theoretical	1
Electrical and molecular basis of in 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**
Childhood Obesity	Theoretical	1
Congenital Adrenal Hyperplasia	Theoretical	1
Normal Puberty	Theoretical	1
Physiopathology of Type 1 Diabetes	Theoretical	1
Introduction to Inherited Metabolic Diseases	Theoretical	1
Calcium, Phosphorus, Magnesium Balance and Disorders	Theoretical	2
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 disorder /Amenorrhea	Theoretical	1
Pelvic pain/Dysmenorrhea/Endometriosis	Theoretical	1
Vaginal bleeding (pregnancy, postpartum, postmenopausal, others)	Theoretical	1
Menstrual cycle	Theoretical	1
Introduction to obstetrics, definition and endocrinology of pregnancy	Theoretical	1
Physiology of pregnancy /hyperemesis gravidarum	Theoretical	1
Antenatal care and screening tests	Theoretical	1
Eclampsia / Preeclampsia/ Gestational diabetes	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 male urogenital system diseases, radiologic anatomy and pathology 1	Theoretical	1
Imaging methods used in diagnosis of female 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
Insulin	Theoretical	1
Oral antidiabetic drugs and glucagon	Theoretical	1
Corticosteroids, corticosteroid antagonists and ACTH (glucocorticoid, mineralocorticoid, aldosterone antagonist, ACTH))	Theoretical	2
Drugs that affect bone mineral homeostasis; thyroid medications	Theoretical	1
Thyroid medications	Theoretical	1
Estrogens, progestins and antagonists, oral contraceptives, oxytocic drugs	Theoretical	1
Androgens, anabolic steroids and antiandrogenic drugs	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
MEDICAL GENETICS		
Topic	**Type**	**Time**
Genital anomalies	Theoretical	1
Genetics in infertility and obstetrics	Theoretical	2
Endocrine syndromes and overgrowth	Theoretical	1
Genetic diseases of the kidneys and urinary system	Theoretical	1
MEDICAL PATHOLOGY		
Topic	**Type**	**Time**
Diseases and Neoplasias of Thyroid	Theoretical	2
Diseases of Parathyroid and MEN	Theoretical	1
Pituitary gland adenomas and Neoplasia of adrenal gland	Theoretical	2
Diseases of endocrine pancreas	Theoretical	1
Renal and Urothelial Neoplasias	Theoretical	2
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
Tubulointerstitial Diseases	Theoretical	1
Renal glomerular diseases	Theoretical	3
Diseases of Vulva and Vagen	Theoretical	1
Diseases of Cervix	Theoretical	1
Ovary tumors	Theoretical	1
Gestational tumors and Diseases of placenta	Theoretical	1
Diseases of Corpus uteri	Theoretical	1
Pathology of endocrine and urogenital system - LAB	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

COURSES	THEORETICAL COURSE DURATION (h)	PRACTICAL COURSE DURATION (h)	TOTAL COURSE DURATION (h)
21030005-01 Coordinator Feedback Meeting	1	0	1
21030005-02 Brain and Nerve Surgery	4	0	4
21030005-03 Biophysics	2	0	2
21030005-04 Pediatric Health and Diseases	3	0	3
21030005-05 Pediatric and Adolescent Mental Health and Diseases	6	0	6
21030005-06 Infectious Diseases	4	0	4
21030005-07 Eye Diseases	3	0	3
21030005-08 Ear Nose Throat Diseases	1	0	1
21030005-09 Neurology	12	0	12
21030005-10 Radiology	3	0	3
21030005-11 Mental Health and Diseases	14	0	14
21030005-12 Medical Biochemistry	4	0	4
21030005-13 Medical Pharmacology	18	0	18
21030005-14Medical Genetics	4	0	4
21030005-15 Medical Pathology	10	3	13
Sum	**89**	**3**	**92**

COURSE BOARD OBJECTIVES and LEARNING OBJECTIVES

Purpose:

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 ~~the~~ microbial factors that cause infection in ~~the~~ 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 imaging methods used in diagnosis of the central nervous system diseases and basic imaging findings of them.

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 zone	Theoretical	1
Degenerative diseases of gray zone	Theoretical	1

PEDIATRIC AND ADOLESCENT MENTAL HEALTH and DISEASES		
Topic	**Type**	**Time**
Psychosocial development of child and attachment	Theoretical	1
Child's cognitive development and neurodevelopmental disorders	Theoretical	1
Attention deficit and hyperactivity disorder	Theoretical	1
Destructive disorders, impulse control and behavior disorders	Theoretical	1
Depression and fear disorders in children and adolescents	Theoretical	1
Neglection, abuse, posttraumatic stress disorders in childhood	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
Red eye (redness of the eye)/conjunctivitis	Theoretical	1
Eye trauma (physical, chemical)	Theoretical	1
EAR NOSE and THROAT DISEASE		
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
Consciousness changes 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 Stroke	Theoretical	1
Seizure, Epilepsy	Theoretical	1
Peripheric Nerve and Motor Neuron Diseases / Neuropathic pain, Muscle diseases (myopathies)	Theoretical	1
Double vision ,ptosis - Myasthenia gravis and cholinergic crisis	Theoretical	1
Headache, Migraine, tension-type headache	Theoretical	1
Multiple sclerosis- Prediagnosis	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 spinal diseases, radiologic anatomy and pathology	Theoretical	1
MENTAL HEALTH AND DISEASES		
Topic	**Type**	**Time**
Introduction to psychiatry – psychiatric symptoms and signs	Theoretical	2
Psychiatric interview and clinical evaluation	Theoretical	1
Physical symptom disorders and related disorders; description, classification and clinical features	Theoretical	1
Psychotic disorders; description, classification and clinical features	Theoretical	2
Mood disorders; description, classification and clinical features	Theoretical	2
Definition, classification and clinical features of anxiety disorders	Theoretical	1
OCD and related disorders; description, classification and clinical features	Theoretical	1
Disorders associated with trauma and stressors	Theoretical	1
Sexual dysfunctions; definition, classification and clinical features, paraphilias, dissatisfaction with sexuality	Theoretical	1
Delirium and dementia	Theoretical	1
Alcohol and drug addiction	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 – anomalies of the central nervous system	Theoretical	2
Channelopathies (sodium, potassium, chlorine and calcium channel diseases)	Theoretical	1
Metabolic diseases	Theoretical	1
MEDICAL PATHOLOGY		
Topic	**Type**	**Time**
CNS pathology cells, developmental/genetic conditions and Phacomatoses	Theoretical	2
Vasculary diseases and trauma of CNS	Theoretical	1
Neurodegenerative and demyelinating diseases of CNS	Theoretical	2
Perinatal injury	Theoretical	1
Tumors of CNS	Theoretical	2
The eye and Peripheral Neural diseases	Theoretical	2
Central nervous system pathology -LAB	Practical	3

MUSCULOSKELETAL SYSTEM DISEASES BOARD

COURSES	THEORETICAL COURSE DURATION (h)	PRACTICAL COURSE DURATION (h)	TOTAL COURSE DURATION (h)
21030006-01 Coordinator Feedback Meeting	1	0	1
21030006-02 Anaesthesiology and Reanimation	1	0	1
21030006-03 Pediatric Health and Diseases	1	0	1
21030006-04 Physical Medicine and Rehabilitation	8	0	8
21030006-05 Nuclear Medicine	1	0	1
21030006-06 Orthopaedics and Traumatology	10	0	10
21030006-07 Radiology	3	0	3
21030006-08 Medical Biochemistry	1	0	1
21030006-09 Medical Pharmacology	6	0	6
21030006-10 Medical Genetics	5	0	5
21030006-11 Medical Pathology	10	2	12
21030006-12 Dermatology	3	0	3
Sum	**50**	**2**	**52**

COURSE BOARD OBJECTIVES and LEARNING OBJECTIVES

Purpose:

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.
1. Lists analgesic and anti-inflammatory drugs and centrally acting muscle relaxants.
2. Explains childhood rash diseases and autoinflammatory diseases.
3. Explains the imaging methods used in trauma and stroke.
4. Explains treatment approaches in acute and chronic pain.

5. Counts congenital, traumatic, infectious diseases of the musculoskeletal system and their symptoms.
6. Counts musculoskeletal diseases of genetic origin.
7. Describes imaging methods used in diagnosis of the musculoskeletal system diseases and basic imaging findings of them.
8. Lists fracture complications.
9. Comprehends the functions of the musculoskeletal system.
10. Explains the fundamental laboratory, radiological, and nuclear medicine concepts used in the diagnosis and follow-up of diseases and traumas affecting the musculoskeletal system

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**
Genetic 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
Skin and Musculoskeletal System Pathology-LAB	Practical	2
DERMATOLOGY		
Structure, Anatomy, Physiology, and Principles of Dermatological Treatment of the Skin	Theoretical	1
Identification of Skin Diseases and Elementary Lesions	Theoretical	1
Diagnostic Methods and Phenomena in Skin Diseases	Theoretical	1

PUBLIC HEALTH/FORENSIC MEDICINE/ETHICS AND CLINICAL SKILLS COURSE BOARD

COURSES	THEORETICAL COURSE DURATION (h)	PRACTICAL COURSE DURATION (h)	TOTAL COURSE DURATION (h)
21030007-01 Coordinator Feedback Meeting	1	0	1
21030007-02 Forensics	9	0	9
21030007-03 Public Health	65	0	65
21030007-04 Clinical Skills III	0	12	12
21030007-05 History of Medicine and Ethics	8	0	8
Sum	**83**	**12**	**95**

COURSE BOARD OBJECTIVES and LEARNING OBJECTIVES

Purpose:

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**
Introduction to forensic medicine, legal responsibilities of the physician, medical malpractice	Theoretical	1
Forensic psychiatry, introduction and concepts	Theoretical	1
Human rights and child abuse	Theoretical	1
Sexual assaults	Theoretical	1

Violence	Theoretical	1
Forensic reports	Theoretical	1
Injuries	Theoretical	1
Pathophysiology of death and brain death	Theoretical	1
Forensic autopsy	Theoretical	1
PUBLIC HEALTH		
Topic	**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
Case-control studies	Theoretical	1
Cohort studies	Theoretical	1
Intervention research, methodological research	Theoretical	1
Health measures	Theoretical	2
Research planning	Theoretical	2
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
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

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
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
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
Monitoring of malnutrition growth	Theoretical	1
Prevention of nutritional diseases	Theoretical	1
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		
Topic	**Type**	**Time**
Intravenous injection (IV) skill	Practical	2
Stitch and taking primary Stitch skills	Practical	2
Taking throat culture and sow skills	Practical	2
Inserting a nasogastric catheter skill	Practical	2
Inserting urethral catheter skill	Practical	2

Venous cannula application	Practical	2
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