



# T.R. LOKMAN HEKIM UNIVERSITY FACULTY OF MEDICINE ENGLISH PROGRAM PHASE – I 2024 – 2025 EDUCATION – TEACHING GUIDE



# T.R.

# LOKMAN HEKIM UNIVERSITY FACULTY OF MEDICINE ENGLISH PROGRAMME

# PHASE I COURSES and ECTS

CODE	COMPULSORY COURSES	Т	Р	тс	ECTS
	Adapting To University Life	40	0	40	1
	Introduction to Medicine Course Board	82	12	94	6
	Cell Structure and Their Functions Course Board	117	14	131	7
	Tissues and Their Functions Course Board	79	28	107	6
	Locomotor System I Course Board	58	20	78	5
	Locomotor System II Course Board	64	12	76	5
	Scientific and Clinical Approaches I Course Board	41	31	72	4
	TOTAL ECTS COMPULSORY	481	117	<b>598</b>	34
CODE	COMMON COMPULSORY COURSES	Т	Р	тс	ECTS
	Information Technologies	2	0	2	2
	Turkish Language and Literature I	2	0	2	2
	Turkish Language and Literature II	2	0	2	2
	Ataturk's Principles and History of Revolution I	2	0	2	2
	Ataturk's Principles and History of Revolution II	2	0	2	2
	Academic English I	2	4	4	4
	Academic English II	2	4	4	4
	TOTAL ECTS TO BE COLLECTED AS COM		OMPUL	SORY	18
CODE	ELECTIVE COURSES	Т	Р	ТС	ECTS
	Behavioral Sciences	2	0	2	4
	Healthy Life and The Importance of Vitamins	2	0	2	4
	Turkish As A Foreign Language I	2	0	2	4
	Communication Skills in Medicine	2	0	2	4
	The Future of Medicine				
	Turkish As A Foreign Language II	2	0	2	4
	TOTAL ECTS TO BE COLLE	CTED A	S ELE	CTIVE	16
	TOTAL ECTS TO BE COLI		D IN PH	ASE I	68



# PHASE I OBJECTIVES AND LEARNING OUTCOMES

## Aim:

During this period, the cell, which is the most essential unit in medical education, will be covered in detail. It is aimed at upskilling our students by the fundamentals of basic chemical and biological structures forming the organism, the concept of cell, which is the smallest structural and functional unit of living organisms, the basic structure of the tissue and skeletal system, the dynamics and general working principles of the system, basic communication skills, the importance of scientific research and methods of accessing scientific information and the approach and basic professional skills in social medicine.

- 1. Defines the basic structure and functions of the cell.
- 2. Explains the interaction between cells, receptors, messenger systems and their functions.
- **3.** Explains the role of the cell cycle in the growth and development stages of the organism and its importance in terms of the homeostasis of the organism.
- 4. Defines the structure, function and metabolism of biomolecules.
- 5. Explains the structure, synthesis and function of hereditary material.
- 6. Explains the basic processes, molecular mechanisms and regulation required for homeostasis.
- 7. Learns the basic histological examination methods and the use of microscope.
- **8.** Distinguishes different cells and tissues with their structural and histochemical properties at the light microscope level.
- **9.** Classifies microorganisms as disease agents, defines their general characteristics, has information about contamination and protection.
- 10. Discusses the importance of embryology and its place among other disciplines.
- 11. Explains the concept of basic health.
- **12.** Recognizes the structures related to the movement system, explains the peripheral nervous system and the relationships between them and the peripheral vascular system.
- **13.** Interprets the basic information about the movement system clinically.
- 14. Applies the necessary basic professional skill techniques in clinical practice.
- **15.** Defines the sources for accessing information.
- **16.** Explains the importance of being scientific in medicine.



# INTRODUCTION TO MEDICINE COURSE BOARD PI – 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
	Anatomy	5	0	5
	Biophysics	10	0	10
	Physiology	3	0	3
	Public Health	8	0	8
	Medical Biochemistry	29	6	35
	Medical Biology	21	6	27
	TOTAL	82	12	94

# AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

## Aim:

By the end of this phase, where the information on compliance with the medical education process and introduction to basic sciences is explained, our students; will learn basic anatomical terminology, learn about medical history and basic health concepts and physician-patient communication, and comprehend the basic chemical and biological structure of the organism.

- 1. Learns the basic anatomical terminology.
- 2. Defines the basic grammatical features of the words in medical terminology.
- 3. Explains the basic principles of biophysics.
- **4.** Explains energy transformations in biological systems and biomolecules with the laws of thermodynamics.
- **5.** Explains the principles of matter and energy transport in the cell membrane within the scope of biological systems.
- 6. Explains electrical processes and membrane potential formation in biological membranes.
- 7. Understands the basic processes, molecular mechanisms and regulation required for homeostasis.
- 8. Explains the concept of basic health.
- 9. Makes a general explanation about the history of medicine from past to present.
- **10.** Explains patient doctor communication.
- **11.** Defines important problems in terms of public health.
- **12.** Interprets the important elements of communication in health.
- **13.** Gains knowledge of the structure, functions and metabolism of biomolecules by acquiring knowledge of organic chemistry.
- 14. Defines the structural features in organic molecules.
- **15.** Can name organic compounds based on their functional groups.
- **16.** Classifies organic compounds according to their structural properties.
- **17.** Explains the concept of buffer and the main buffer systems in the body, the general structure of amino acids and classify amino acids.
- **18.** Explains peptide bonds and their properties, count the types of protene structures and explain the formation and breakdown of peptide bonds.



- **19.** Classifies enzymes by giving examples, explains the properties of enzymes, the concepts of apoenzyme, coenzyme, cofactor and haloenzyme.
- **20.** Explains the mechanism of action of enzymes and lists the factors affecting enzyme activity by giving examples.
- **21.** Prepare solutions of different concentrations and count the various laboratory materials used in biochemistry laboratories and explain their use.
- 22. Learns the basic concepts of medical biology.
- **23.** Understands the structure, synthesis and function of hereditary material.
- 24. Explains the structure, synthesis and genetic control mechanisms of DNA.
- **25.** Explains the structure, types and functions of RNA.
- **26.** Gains knowledge about the damages in genetic material, its causes and its place in medicine.
- **27.** Explains the types of epigenetic mechanisms and their mechanisms of action.

ANATOMY			
Торіс	Туре	Time	Lecturer
Introduction to medical terminology	Theoretical	1	Prof. Dr. Afitap ANIL
Latin grammar: Basic knowledge structure,	Theoretical	1	Prof. Dr. Afitap ANIL
Latin grammar: Noun, adjective, noun phrase, adjective phrase, comparison in adjectives (ranking), reduction in meaning	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Latin grammar: Nouns derived from verbs, adjectives derived from nouns, adjectives derived from verbs, compound nouns and adjectives	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Abbreviations, singular and plural, prepositions, prefixes and suffixes	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU
BIOPHYSICS			
Торіс	Туре	Time	Lecturer
Introduction to biophysics and general concepts	Theoretical	1	Prof. Dr. Belma TURAN
Living things as an open system approachs	Theoretical	1	Prof. Dr. Belma TURAN
Principles of matter and energy transport in biological systems	Theoretical	1	Prof. Dr. Belma TURAN
Its role in water and biological systems	Theoretical	1	Prof. Dr. Belma TURAN
Energy conversions in biological systems and biomolecules	Theoretical	1	Prof. Dr. Belma TURAN
Basic principles of thermodynamics and biological systems	Theoretical	1	Prof. Dr. Belma TURAN
Biophysical foundations of diffusion and osmosis processes in biological systems	Theoretical	2	Prof. Dr. Belma TURAN
The bioelectrical processes in living systems	Theoretical	2	Prof. Dr. Belma TURAN
PHYSIOLOGY			
Торіс	Туре	Time	Lecturer
Introduction to physiology and the concept of homeostasis	Theoretical	3	Dr. Öğr. Üyesi Ruken TAN



PUBLIC HEALTH			
Торіс	Туре	Time	Lecturer
Individual and social communication in health	Theoretical	2	Prof. Dr. Sarp ÜNER
Physician rights	Theoretical	1	Prof. Dr. Sarp ÜNER
The concepts of health and disease	Theoretical	1	Prof. Dr. Sarp ÜNER
Success stories in public health	Theoretical	1	Prof. Dr. Sarp ÜNER
Critical thinking in healthcare	Theoretical	1	Prof. Dr. Sarp ÜNER
Evidence-based medicine	Theoretical	1	Prof. Dr. Sarp ÜNER
Tobacco use control	Theoretical	1	Prof. Dr. Gülsen GÜNES
MEDICAL BIOCHEMISTRY			
Topic	Туре	Time	Lecturer
Carbon atom bonds, molecular geometry	Theoretical	1	Prof. Dr. Metin YILDIRIMKAYA
and their charges			
The structural formulas of organic	<b>—</b>		
compounds and the concept of functional	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
groups			
Isomerization of organic compounds	Iheoretical	1	Prof. Dr. Metin YILDIRIMKAYA
Reactive species and basic reaction mechanisms in organic chemistry	Theoretical	1	Prof. Dr. Metin YILDIRIMKAYA
The concept of acidity and basicity in organic chemistry	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Amino acids	Theoretical	4	Prof. Dr. Metin YILDIRIMKAYA
Medical Biochemistry practice: Solution	Practical	2	Uzm. Dr Tevfik HONCA
Protein structure	Theoretical	2	Prof Dr Metin YII DIRIMKAYA
Globular proteins	Theoretical	2	Prof Dr Metin YII DIRIMKAYA
Fibrous proteins	Theoretical	2	Prof. Dr. Metin YII DIRIMKAYA
Nucleotide metabolism	Theoretical	2	Prof. Dr. Metin YII DIRIMKAYA
Enzymes – I	Theoretical	2	Prof. Dr. Metin YII DIRIMKAYA
Enzymes – II	Theoretical	2	Prof. Dr. Metin YII DIRIMKAYA
Enzymes – III	Theoretical	2	Prof. Dr. Metin YII DIRIMKAYA
Bioenergetics and oxidative phosphorylation	Theoretical	4	Prof. Dr. Metin YII DIRIMKAYA
Medical Biochemistry practice: Protein	moorotiou	•	
measurement in serum and urine	Practical	2	Uzm. Dr. Tevfik HONCA
Medical Biochemistry practice:			
Spectrophotometer and spectrophotometric	Practical	2	Uzm Dr. Tevfik HONCA
measurements	Tuotiour	2	
MEDICAL BIOLOGY		<u> </u>	
	Туре	Time	Lecturer
Introduction to medical biology	Theoretical	1	Dr. Öğr. Üyesi Selen GÜÇLÜ
Nucleic acids: Nucleotides, DNA and RNA	Theoretical	2	DURGUN
Structure and function of DNA	Theoretical	1	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
DNA synthesis and its control	Theoretical	1	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN



DNA packaging and the chromatin structure	Theoretical	1	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
Medical Biology practice: Isolation of DNA	Practical	2	Dr. Öğr. Üyesi Demet KAÇAROĞLU
Mutations and their mechanisms	Theoretical	2	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
DNA repair	Theoretical	2	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
Transcription	Theoretical	2	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
RNA structure and types	Theoretical	2	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
Genetic control mechanisms	Theoretical	2	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
Epigenetic mechanisms and cellular control mechanisms	Theoretical	2	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN
Medical Biology practice: Amplification of DNA by polymerase chain reaction	Practical	2	Dr. Öğr. Üyesi Demet KAÇAROĞLU
Medical Biology practice: DNA analysis by electrophoresis	Practical	2	Dr. Öğr. Üyesi Demet KAÇAROĞLU
Genetic code and protein synthesis	Theoretical	3	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN



# CELL STRUCTURE AND THEIR FUNCTIONS COURSE BOARD PI – 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
	Biophysics	16	0	16
	Physiology	10	0	10
	Histology and Embryology	11	6	17
	Medical Biochemistry	40	4	44
	Medical Biology	34	4	38
	TOTAL	117	14	131

# AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

#### Aim:

At the end of this committee, they will learn about the smallest structural and functional unit of living organism, cell and genetic material, genetic mechanisms that control the formation and survival of normal structure, nucleic acid metabolism and cellular concepts related with basic sciences.

- 1. Explains the general electrical properties of membranes, conductive and permeabilite properties of membranes by using passive and active membrane models.
- 2. Explains the production and propagation of action potential in cell membranes.
- 3. Explains the ionic channels and currents which play roles in living cells and cell t o cell talks.
- 4. Discusses the working principles and kinetic properties of ionic channels.
- 5. Explains the action potential of cell membranes, excitability and refractory periods of cells.
- 6. Explains the active conduction of membrane potential and action potential process in cells by discussing the factors affecting the action potential pattern.
- 7. Explains the structure and functions of organelles and membranes in the cell.
- 8. Explains the cell membrane with electrical elements.
- 9. Explains cell physiology, interaction between cells, receptors.
- **10.** Explains the messenger systems in the cell and the functions of these systems.
- **11.** Explains basic histological examination methods.
- **12.** Explains the features of microscopes, especially the light microscope, that determine the histological features of structures.
- 13. Explains the basic structure and functions of the cell.
- **14.** Explains the organelles at the fine structure level along with their functions.
- **15.** Explains cell types with examples.
- 16. Distinguishes different cells with their structural and histochemical properties at the light microscope level.
- **17.** Explains the carbohydrate mechanism.
- **18.** Classifies carbohydrates.
- **19.** Defines lipid structure and metabolism.
- **20.** Explains the digestion of lipids, the mechanism and the enzymes involved, the emulsification mechanism of lipids and the properties and functions of lipases
- 21. Explains the methods of bilirubin determination in serum and urobilinogen determination methods in urine.



- **22.** Explains nucleotide synthesis and metabolism and related diseases.
- **23.** Explains the compounds involved in heme synthesis, the control step, activating and inhibiting compounds, degradation products of catecholamines, heme containing compounds and their functions.
- **24.** Explains the role of the cell cycle in the growth and development stages of the organism and its importance in terms of homeostasis of the organism.
- **25.** Explains the control of cell proliferation.
- **26.** Describe other mechanisms involved in apoptosis and cell death.

BIOPHYSICS			
Торіс	Туре	Time	Lecturer
The electrical potential/potential difference in cells responses to electrical stimulation	Theoretical	2	Prof. Dr. Belma TURAN
The electric field across membranes	Theoretical	2	Prof. Dr. Belma TURAN
Discussion on thermodynamic processes on the transport of ions across cells	Theoretical	2	Prof. Dr. Belma TURAN
The biophysical interpretation of Goldman – Hodgin – Katz (GHK) equation	Theoretical	2	Prof. Dr. Belma TURAN
Excitability of the membrane: the concept of threshold potential	Theoretical	1	Prof. Dr. Belma TURAN
Action potential of cell membranes, excitability and refractory periods of cells	Theoretical	2	Prof. Dr. Belma TURAN
Active conduction of membrane potential and action potential process in cells	Theoretical	1	Prof. Dr. Belma TURAN
Factors affecting the action potential pattern	Theoretical	2	Prof. Dr. Belma TURAN
The working principles and kinetic properties of ionic channels	Theoretical	2	Prof. Dr. Belma TURAN
PHYSIOLOGY		<u> </u>	
Торіс	Туре	Time	Lecturer
Topic           Characteristics of the cell membrane	Type Theoretical	Time 2	Lecturer Dr. Öğr. Üyesi Ruken TAN
TopicCharacteristics of the cell membraneSubstance transport across the cell membrane	Type Theoretical Theoretical	Time 2 2	Lecturer Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cells	TypeTheoreticalTheoreticalTheoretical	Time           2           2           2           2	Lecturer Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentials	TypeTheoreticalTheoreticalTheoreticalTheoretical	Time           2           2           2           2           2           2	Lecturer Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondarymessengers	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time           2           2           2           2           2           2           2           2           2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TAN
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondarymessengersHISTOLOGY AND EMBRYOLOGY	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2	Lecturer Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN Dr. Öğr. Üyesi Ruken TAN
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondarymessengersHISTOLOGY AND EMBRYOLOGYTopic	Type Theoretical Theoretical Theoretical Theoretical Theoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         3         3         4         5         5         5         5         5         5         5         6         6         6         7         6         6         7         6         6         7         6         7         6         7         7         7         7         7         7         7        <	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANLecturer
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histology	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TAN
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histologyRoutine histological laboratory techniques	Type Theoretical Theoretical Theoretical Theoretical Cheoretical Theoretical Theoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞUR
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histologyRoutine histological laboratory techniquesAdvanced histological laboratory techniques	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞUR
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histologyRoutine histological laboratory techniquesAdvanced histological laboratory techniquesHistology of human cell – I	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2          2          2          2          2          2          2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANPr. Öğr. Üyesi Ruken TANProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞUR
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histologyRoutine histological laboratory techniquesAdvanced histological laboratory techniquesHistology of human cell – IHistology of human cell – II	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞUR
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histologyRoutine histological laboratory techniquesAdvanced histological laboratory techniquesHistology of human cell – IHistology of human cell – IICell types	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         1	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞUR
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histologyRoutine histological laboratory techniquesAdvanced histological laboratory techniquesHistology of human cell – IHistology of human cell – IICell typesHistology practice: Introducing digital microscopy	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         2         2         2         2         2         2         2         2         2         2         2         2         1         2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞUR
TopicCharacteristics of the cell membraneSubstance transport across the cell membraneInteraction between cellsBioelectric potentialsCellular communications and secondary messengersHISTOLOGY AND EMBRYOLOGYTopicIntroduction to histologyRoutine histological laboratory techniquesAdvanced histological laboratory techniquesHistology of human cell – IHistology practice: Introducing digital microscopyHistology practice: Histochemical techniques	TypeTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalPracticalPracticalPractical	Time         2         2         2         2         2         2         2         2         2         2         2         1         2         2	LecturerDr. Öğr. Üyesi Ruken TANDr. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Öğr. Üyesi Ruken TANProf. Dr. Yeşim ULUTAŞ UĞURProf. Dr. Yeşim ULUTAŞ UĞUR



MEDICAL BIOCHEMISTRY			
Торіс	Туре	Time	Lecturer
Introduction to carbohydrates amd digestion of carbohydrates	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Glycolysis	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Tricarboxylic acid cycle and pyruvate dehydrogenase complex	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Gluconeogenesis	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Glycogen metabolism	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Monosaccharide and disaccharide metabolism	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Pentose phosphate pathway and nicotinamide adenine dinucleotide phosphate	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Glycosaminoglycans, proteoglycans, and glycoproteins	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Medical Biochemistry practice: Qualitative carbohydrate analysis	Practical	2	Uzm. Dr. Tevfik HONCA
Structure of lipids	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Digestion and absorption of lipids	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Fatty acid, triacylglycerol, cholestrol and bile acid synthesis	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Lipoprotein metabolism	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Lipolysis, beta-oxidation and ketone bodies	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Metabolism of complex lipids and eicosanoids	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Dislipidemia	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Digestion and absorption of amino acids	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Transamination – deamination and urea synthesis	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Amino acids: degradation and synthesis	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Amino acids: conversion to specialized products	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Heme synthesis and metabolism	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA
Medical Biochemistry practice: Urine bilirubin and urobilinogen measurement	Practical	2	Uzm. Dr. Tevfik HONCA
MEDICAL BIOLOGY			
Торіс	Туре	Time	Lecturer
Basic cell structure and multicellularity	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Membrane structure	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Membrane transport mechanisms	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Cell cytoskeleton	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Structure of nucleus	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Endoplasmic reticulum and golgi apparatus	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Protein modification and targeting	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Vesicular traffic, secretion and endocytosis	Theoretical	4	Dr. Öğr. Üyesi Seher YAYLACI
Lysosomes and peroxisomes	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Mitochondria and energy production	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Intracellular signal transduction – I	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Intracellular signal transduction – II	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Cell division: Mitosis and meiosis	Theoretical	4	Dr. Öğr. Üyesi Seher YAYLACI
Control of cell proliferation and neoplasia	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI



Cell death: Apoptosis and other mechanisms	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Medical Biology practice: Cell culture – I	Practical	2	Dr. Öğr. Üyesi Demet KAÇAROĞLU
Medical Biology practice: Cell culture – II	Practical	2	Dr. Öğr. Üyesi Demet KAÇAROĞLU



# TISSUES AND THEIR FUNCTIONS COURSE BOARD PI – 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
	Anatomy	16	12	28
	Physiology	10	2	12
	Histology and Embryology	14	8	22
	Medical Biochemistry	4	0	4
	Medical Biology	8	0	8
	Medical Microbiology	21	6	27
	TOTAL	79	28	107

# AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

#### Aim:

At the end of this course board, Phase I students will learn the basic structure of the tissue and skeletal system, the concept of microbiology, basic information about microorganisms such as bacteria and viruses. They will have information about the anatomy of the bones in the skeletal system that make up the body. In addition, it is aimed to have knowledge about the physical chemical properties of blood and blood groups, blood coagulation mechanism.

- **1.** Explains the neurocranium and viscerocranium bones.
- 2. Counts the arteries, nerves and veins entering the skull.
- 3. Discuss and explain the relationship between the anatomical structures in the rib cage and spine.
- **4.** Gain information about the nomenclature and structure of the bones that make up the human body, and explain joint types and joint movements.
- 5. Defines and demonstrates anatomy, anatomical terms and anatomical posture.
- 6. Gains the ability to use tools and materials such as anatomical atlas, models, bones and cadavers.
- 7. Defines the general composition and functions of blood.
- 8. Explains the physiological properties of the components of the blood and immune systems.
- 9. Discuss and relate the physiological processes in which blood components participate.
- **10.** Defines tissues by classifying them.
- **11.** Classifies the epithelial tissue and gives information about the lining and glandular epithelium.
- **12.** Define connective and support tissues and explain the histological features of connective and support tissues.
- **13.** Define adipose tissue and explain its histological features.
- **14.** Explains the steps of hematopoiesis.
- **15.** Describes the cells seen in the stages of hematopoiesis at the fine structure level.
- **16.** Explains blood cells at the ultrastructural level by classifying them according to their histological characteristics.
- **17.** Recognizes epithelium, connective tissues, blood and lymph at the microscopic level and describes their structural features.
- **18.** Explains hemostasis mechanisms and lists the molecules that control the coagulation cascade.
- **19.** Explains the systems that protect red cells from hemolysis by counting the functions of erythrocyte membrane proteins.



- **20.** Explains the important pathways in red blood cell metabolism by listing the biochemical basis of A, B, O blood groups.
- **21.** Defines cell connections, cell adhesion and intercellular matrix.
- **22.** Explains the importance of the connections that cells establish with other cells and extracellular matrix in terms of tissue formation.
- 23. Explains the role of the extracellular matrix in terms of cell survival, differentiation, tissue functions.
- 24. Explains the function of stem cells in the normal functioning of tissues by specifying their properties.
- **25.** Classifies microorganisms as disease agents and defines their characteristics.
- **26.** Have knowledge about the transmission of diseases and protection from diseases.
- **27.** Explains the importance of structural features of fungi in the diagnosis and treatment of diseases.
- 28. Lists the structural features and replications of viruses.
- 29. Explains the importance of the structural features of parasites in the treatment of diseases they cause.
- **30.** Defines the concepts of sterilisation and disinfection, lists the methods.
- **31.** Knows how to use critical, semi-critical and non-critical medical equipment without causing infection.
- **32.** Counts the tests that are the basis for microbiological laboratory diagnosis of infectious diseases.

ANATOMY			
Торіс	Туре	Time	Lecturer
Introduction to anatomy, the place of anatomy in medical education, its aims and objectives, terms of body regions, body lines, planes, movements, and directions	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Osteology (Osteology; bone science) and chondrologia (chondrology; cartilage science): General information	Theoretical	2	Prof. Dr. Afitap ANIL
Pectoral arch bones and upper extremity bones and clinic anatomy	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Pectoral arch bones and upper extremity bones	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Bones of lower extremity and the pelvis	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Vertebral column, costae and sternum	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Bones of lower extremity and the pelvis	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Vertebral column, costae and sternum	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Cranium: Neurocranium	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Cranium: Viscerocranium	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Cranium: Neurocranium	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Cranium: Viscerocranium	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
The skull	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: The skull	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
PHYSIOLOGY			
Торіс	Туре	Time	Lecturer
Physical and chemical characteristics of blood	Theoretical	2	Dr. Öğr. Üyesi Ruken TAN
Erythrocyte physiology	Theoretical	2	Dr. Öğr. Üyesi Ruken TAN
Leukocyte physiology and immune system	Theoretical	2	Dr. Öğr. Üyesi Ruken TAN



Blood groups and transfusion reactions	Theoretical	1	Dr. Öğr. Üyesi Ruken TAN
Platelet physiology and coagulation	Theoretical	3	Dr. Öğr. Üyesi Ruken TAN
Physiology Practical: Blood experiments	Practical	2	Öğr. Gör. Merve SAYIN
HISTOLOGY AND EMBRYOLOGY			
Торіс	Туре	Time	Lecturer
Introduction to tissues	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology of lining epithelium	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology practice: Lining epithelium	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology of glandular epithelium	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology practice: Glandular epithelium	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology of connective tissue proper	Theoretical	3	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology of adipose tissue	Theoretical	1	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology practice: Connective tissue proper and adipose tissue	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology of blood	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology of bone marrow and blood production	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Histology practice: Bone marrow and blood	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
MEDICAL BIOLOGY			
Торіс	Туре	Time	Lecturer
Growth factors and their functions	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Stem cells and their differentiation	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Structure of extracellular matrix	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Cell adhesion	Theoretical	2	Dr. Öğr. Üyesi Seher YAYLACI
Торіс	Туре	Time	Lecturer
Topic Introduction to microbiology and classification of infectious agents	Type Theoretical	Time 2	Lecturer Doç. Dr. Can TÜRK
Topic Introduction to microbiology and classification of infectious agents Structure and general characteristics of bacteria	Type Theoretical Theoretical	Time 2 2	Lecturer Doç. Dr. Can TÜRK Doç. Dr. Can TÜRK
Topic         Introduction to microbiology and classification of infectious agents         Structure and general characteristics of bacteria         Structure of Rickettsia, Mycoplasma, chlamydia and spiral bacteria	TypeTheoreticalTheoreticalTheoretical	<b>Time</b> 2 2 1	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRK
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratory	TypeTheoreticalTheoreticalTheoreticalPractical	Time           2           1           2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇER
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteria	TypeTheoreticalTheoreticalTheoreticalPracticalPractical	Time         2         1         2         1         2         2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRK
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteriaMedical Microbiology practice: Bacteriological staining techniques	TypeTheoreticalTheoreticalTheoreticalPracticalPracticalPracticalPractical	Time         2         1         2         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇER
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteriaMedical Microbiology practice: Bacteriological staining techniquesBacterial genetics	TypeTheoreticalTheoreticalTheoreticalPracticalPracticalPracticalPracticalPracticalPractical	Time         2         1         2         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRK
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteriaMedical Microbiology practice: Bacteriological staining techniquesBacterial geneticsMedical Microbiology practice: Bacteriological staining techniques	TypeTheoreticalTheoreticalTheoreticalPracticalPracticalPracticalPracticalPracticalPracticalPractical	Time         2         1         2         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇER
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteriaMedical Microbiology practice: Bacteriological staining techniquesBacterial geneticsMedical Microbiology practice: Bacteriological staining techniquesIntroduction to mycology: Classification and general characteristics of fungi	TypeTheoreticalTheoreticalTheoreticalPracticalPracticalPracticalPracticalTheoreticalPracticalPracticalPractical	Time         2         1         2         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2          2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇER
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteriaMedical Microbiology practice: Bacteriological staining techniquesBacterial geneticsMedical Microbiology practice: Bacteriological staining techniquesIntroduction to mycology: Classification and general characteristics of fungiIntroduction to virology: Classification and general characteristics of viruses	TypeTheoreticalTheoreticalTheoreticalPracticalPracticalPracticalPracticalTheoreticalPracticalPracticalPracticalPracticalPracticalPracticalPractical	Time         2         1         2         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRK
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteriaMedical Microbiology practice: Bacteriological staining techniquesBacterial geneticsMedical Microbiology practice: Bacteriological staining techniquesIntroduction to mycology: Classification and general characteristics of fungiIntroduction to virology: Classification and general characteristics of virusesIntroduction to parasitology: Classification and general characteristics of parasites	TypeTheoreticalTheoreticalTheoreticalPracticalPracticalPracticalTheoreticalPracticalTheoreticalPracticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2          2          2          2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDr. Öğr. Ü. Safiye GÖÇERDr. Öğr. Ü. Safiye GÖÇERDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRK
TopicIntroduction to microbiology and classification of infectious agentsStructure and general characteristics of bacteriaStructure of Rickettsia, Mycoplasma, chlamydia and spiral bacteriaMedical Microbiology practice: Working principles and basic microbiology knowledge in the laboratoryBacterial metabolism and proliferation of bacteriaMedical Microbiology practice: Bacteriological staining techniquesBacterial geneticsMedical Microbiology practice: Bacteriological staining techniquesIntroduction to mycology: Classification and general characteristics of fungiIntroduction to virology: Classification and general characteristics of virusesIntroduction to parasitology: Classification and general characteristics of parasitesIntroduction to antibiotics: mechanisms of action and resistance	TypeTheoreticalTheoreticalTheoreticalPracticalPracticalPracticalTheoreticalTheoreticalTheoreticalInheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoreticalTheoretical	Time         2         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2          2          2          2	LecturerDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDr. Öğr. Ü. Safiye GÖÇERDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDr. Öğr. Ü. Safiye GÖÇERDoç. Dr. Can TÜRKDoç. Dr. Can TÜRK



Laboratory diagnosis of infectious diseases	Theoretical	2	Dr. Öğr. Ü. Safiye GÖÇER		
MEDICAL BIOCHEMISTRY					
Торіс	Туре	Time	Lecturer		
Erythrocyte biochemistry	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA		
Coagulation biochemistry	Theoretical	2	Prof. Dr. Metin YILDIRIMKAYA		



# LOCOMOTOR SYSTEM COURSE BOARD I PI –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
	Anatomy	18	10	28
	Physiology	9	0	9
	Histology and Embryology	15	10	25
	Medical History and Ethics	10	0	10
	TOTAL	58	20	78

## AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

#### Aim:

The aim of this course is to enable Phase I students to learn the basic structures of the locomotor system in general terms and to have knowledge about the working principles. For this, it is aimed to have knowledge about bones and joints, to explain physiologically nerve cells and neurotransmitter substances, to recognize the histological structure of cartilage, bone, nerve and muscle tissues in the body. In addition to these, it is also to provide an understanding of the history of medicine.

- **1.** Recognize joint and muscle tissues at the microscopic level, describe the structural features and development of muscle tissue.
- **2.** Understands the types of joints and muscles in the upper extremity, explains the parts of the upper extremity muscles and their relationship with the joint.
- 3. Explains the anatomical nomenclature and functions of bones and joints in the skeleton.
- 4. Explains the anatomical structure of the upper extremity muscles.
- 5. Anatomically defines the pectoral region and arm area.
- 6. Describes and explains the anatomical formations in the arm and pectoral region.
- 7. Discuss the organization of the nervous system.
- 8. List the properties of neurotransmitter substances.
- 9. Explains the organization of the nervous system and the physiology of nerve conduction.
- **10.** Explains the physiological properties of the peripheral nervous system and list the features of nerve conduction.
- 11. Discuss the autonomic nervous system.
- 12. Explains neurotransmitter substances and physiological properties of the autonomic nervous system.
- **13.** Defines bone and cartilage tissue and explains its formation and histological properties.
- **14.** Distinguishes different types of bone and cartilage and explains them using a light microscope.
- **15.** Defines muscle tissue and explains its formation and histological features.
- **16.** Distinguishes different muscle types and explains them using a light microscope.
- **17.** Explains the histological features of the joint structure.
- **18.** Define nervous tissue and explain its histological features and cells.
- **19.** Distinguish nervous tissue and cells under a light microscope.
- 20. Explains the layers of the skin histologically and gives information about their components.
- **21.** Describes the skin appendages according to their histological features and distinguishes them under a light microscope.



**22.** Explains the nerve endings in the skin.

**23.** Explains the history of medicine and medicine in ancient civilizations.

24. Describes medical practices in Ancient Anatolian Civilizations and Roman Period respectively.

**25.** Explains medical science in the Seljuk and Ottoman periods.

**26.** In Islamic history, medicine and medicine are stored and explained.

ANATOMY			
Торіс	Туре	Time	Lecturer
Arthrologia (Joint science): General information	Theoretical	2	Prof. Dr. Afitap ANIL
Upper extremity joints	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Lower extremity joints and arches of the feet	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Vertebral, craniovertebral, costal, sternal joints and temporomandibular joint	Theoretical	2	Prof. Dr. Afitap ANIL
Anatomy practice: Upper and lower extremity joints, arches of the feet	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Vertebral, craniovertebral, costal, sternal joints and temporomandibular joint	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Myologia (Muscle science): General information	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Back and neck muscles, trigonum suboccipitale, shoulder and posterior arm region, humerotricipital and scapulotricipital spaces	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Back and neck muscles, trigonum suboccipitale, shoulder and posterior arm region, humerotricipital and scapulotricipital spaces	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Pectoral region, anterior arm muscles, trigonum deltopectorale (clavipectorale)	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Axilla, plexus brachialis, arteria-vena axillaris and axillary lymph nodes	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Forearm muscles and neurovascular structures, fossa cubitalis, fovea radialis and carpal tunnel	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Hand muscles and neurovascular structures	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Pectoral region, anterior arm muscles, trigonum deltopectorale, axilla, plexus brachialis and arteria-vena axillaris	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Forearm muscles and hand muscles, fossa cubitalis, fovea radialis, carpal tunnel and neurovascular structures	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
PHYSIOLOGY			
Торіс	Туре	Time	Lecturer
Organization of the nervous system	Theoretical	1	Dr. Oğr. Uyesi Ruken TAN
Action potential initiation and propagation, Synaptic transmission	Theoretical	3	Dr. Öğr. Üyesi Ruken TAN



Neurotransmitter substances	Theoretical	2	Dr. Öğr. Üyesi Ruken TAN			
Physiological features of the autonomic nervous system	Theoretical	3	Dr. Öğr. Üyesi Ruken TAN			
Торіс	Туре	Time	Lecturer			
Histology of cartilage tissue	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology practice: Cartilage tissue	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology of bone tissue, osteogenesis and synovium	Theoretical	3	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology practice: Bone tissue	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology of muscle tissue	Theoretical	3	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology practice: Muscle tissue	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology of nervous tissue	Theoretical	3	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology practice: Nervous tissue	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology of skin and nerve endings	Theoretical	4	Prof. Dr. Yeşim ULUTAŞ UĞUR			
Histology practice: Skin and nerve endings	Practical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR			
MEDICAL HISTORY						
Торіс	Туре	Time	Lecturer			
Introduction to medical history	Theoretical	1	Prof. Dr. Nesrin ÇOBANOĞLU			
Medicine in Antiquity	Theoretical	2	Prof. Dr. Nesrin ÇOBANOĞLU			
Medicine in Mesopotamia	Theoretical	1	Prof. Dr. Nesrin ÇOBANOĞLU			
Medical practices in ancient Anatolian civilisations	Theoretical	1	Prof. Dr. Nesrin ÇOBANOĞLU			
Medical practices in the Roman period	Theoretical	1	Prof. Dr. Nesrin ÇOBANOĞLU			
Medicine in Seljuk and Ottoman Empire	Theoretical	2	Prof. Dr. Nesrin ÇOBANOĞLU			
Medicine in Islam	Theoretical	2	Prof. Dr. Nesrin ÇOBANOĞLU			



# LOCOMOTOR SYSTEM COURSE BOARD II PI – 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
	Anatomy	15	10	25
	Biophysics	4	0	4
	Physiology	7	2	9
	Histology and Embryology	23	0	23
	Medical History and Ethics	9	0	9
	TOTAL	64	12	76

## AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

#### Aim:

The aim of this course board is to ensure that Phase I students have anatomical, histological, physiological and biophysical knowledge about the dynamics of the locomotor system and the principles of general study.

### Learning Objectives:

- 1. Counts the anatomical structures in the hip, thigh, leg and foot area.
- 2. Discuss the anatomical structures in the hip, thigh, leg and foot area and relate them to each other.
- **3.** It defines the innervation of the anatomical structures located in the hip, thigh, leg and foot region.
- 4. Explains the types of muscles in the body, counts the parts of skeletal muscle.
- **5.** Explains the nerves that stimulate the muscles, explains the relationship of muscles with bones and nerves.
- 6. Explains the anatomical nomenclature and functions of skeletal muscles.
- **7.** Explains bone and muscle properties by using general biological material properties such as elasticity and stiffness.
- 8. Explains the living system mechanics by using general mechanical laws.
- 9. Physical characteristics of muscle cells define.
- **10.** Defines Skeletal muscle physiology and smooth muscle physiology.
- 11. Discusses EMG (Electromyography) measurement.
- 12. Describes events that may occur because of nerve damage.
- 13. Explains neuromuscular junction, muscle types and contraction mechanisms.
- 14. Describes excitable tissues and arousal steps.

### **15.** Explains embryological terms.

- 16. Explains the formation and development of the human embryo and its appendages.
- **17.** It describes the events that occur from the formation of germ cells and zygote until the end of embryogenesis.
- **18.** Explains the characteristics of the fetal period.
- **19.** Explains multiple pregnancies and their anomalies.
- 20. Explains the placenta in multiple pregnancy by defining the placenta and fetal membranes.
- **21.** Explains human birth anomalies and teratogenicity.
- 22. Explains the development of the skeletal system and muscles.
- **23.** Gives information about the Hippocratic oath.
- 24. Explains the history of medical education in the Renaissance period and in Turkey.
- **25.** Explains the relationship between science and philosophy.



ANATOMY			
Торіс	Туре	Time	Lecturer
Gluteal region and ischial openings, intramuscular injection sites	Theoretical	2	Prof. Dr. Afitap ANIL
Back and outer thigh muscles and neurovascular structures, fossa poplitea and plexus sacralis	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Gluteal region and intramuscular injection sites, posterior and outer thigh muscles, neurovascular structures, fossa poplitea and plexus sacralis	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anterior and inner thigh muscles and neurovascular structures, trigonum femorale, canalis adductorius, plexus lumbalis	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Anterior and inner thigh muscles and neurovascular structures, trigonum femorale, canalis adductorius, plexus lumbalis	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anterior and external leg muscles and neurovascular structures	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Posterior leg muscles, neurovascular structures, and tarsal tunnel	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Leg muscles and neurovascular structures, tarsal tunnel	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Foot muscles and neurovascular structures	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Facial anatomy: muscles and neurovascular structures	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Foot muscles and neurovascular structures	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anterior and lateral neck regions, neck fascia, neck triangles, plexus cervicalis	Theoretical	3	Dr. Öğr. Üyesi Eda SAĞIROĞLU
Anatomy practice: Facial anatomy: muscles and neurovascular structures, anterior and lateral neck regions, neck triangles, plexus cervicalis	Practical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU
BIOPHYSICS			
Торіс	Туре	Time	Lecturer
The general properties of biological materials, solids and fluids	Theoretical	2	Prof. Dr. Belma TURAN
The concepts of biomechanics	Theoretical	2	Prof. Dr. Belma TURAN
PHYSIOLOGY			-
Торіс	Туре	Time	Lecturer
Physical characteristics of muscle cells	Theoretical	2	Dr. Ogr. Uyesi Ruken TAN
Skeletal muscle physiology	Theoretical	3	Dr. Ögr. Üyesi Ruken TAN
Smooth muscle physiology	Prestical	2	Dr. Öğr. Üvesi Ruken TAN
	Pracucal	2	Dr. Ogr. Oyest Ruken TAN
	Туре	Time	Lecturer



Introduction to embryology	Theoretical	1	Prof. Dr. Yeşim ULUTAŞ UĞUR
Gametogenesis	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Menstrual cycle, ovulation and spermiation	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Beginning of human development: 1st week	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Formation of bilaminar embryonic disc: 2nd week	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Formation of germ layers: 3rd week	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Organogenesis period: 4-8th weeks	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Fetal period	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Placenta and fetal membranes, multiple pregnancies	Theoretical	3	Prof. Dr. Yeşim ULUTAŞ UĞUR
Human birth defects and teratogens	Theoretical	2	Prof. Dr. Yeşim ULUTAŞ UĞUR
Development of skeletal system and muscles	Theoretical	3	Prof. Dr. Yeşim ULUTAŞ UĞUR
MEDICAL HISTORY			
Торіс	Туре	Time	Lecturer
Hippocratic Medicine	Theoretical	1	Prof. Dr. Nesrin ÇOBANOĞLU
Medieval Medicine	Theoretical	2	Prof. Dr. Nesrin ÇOBANOĞLU
History and basic features of medical education in Turkey	Theoretical	2	Prof. Dr. Nesrin ÇOBANOĞLU
The relationship between science and philosophy	Theoretical	2	Prof. Dr. Nesrin ÇOBANOĞLU
Empirical method and science methodology	Theoretical	2	Prof. Dr. Nesrin ÇOBANOĞLU



# SCIENTIFIC AND CLINICAL APPROACHES I COURSE BOARD PI – BOARD VI

CODE OF THE BOARD COURSES	NAME OF THE BOARD COURSES	THEORETICAL HOURS	PRACTICAL HOURS	SUM OF HOURS
	Preparation for Scientific Knowledge	11	5	16
	Clinical Overview I	26	2	28
	Clinical Skill I	0	10	10
	Early Introduction to the Clinic	4	14	18
	TOTAL	41	31	72

# AIMS AND LEARNING OBJECTIVES OF THE COURSE BOARD

### Aim:

At the end of this course board, the students will learn basic professional skills on models in accordance with ethical principles; they will learn about the reflection of the basic information they have learned in the clinic and the ways in which they can access scientific information.

- 1. Applies the basic professional skill techniques required in clinical practice.
- 2. Gains the ability to put on and take off protective equipment.
- **3.** Gains the skill of intramuscular and subcutaneous injection.
- 4. Anatomically defines the structure of the plexuses of the nervous system and its clinical relationship.
- 5. Counts the diseases caused by injury to the plexuses.
- 6. Discuss the structures that lose their function in plexus injury.
- 7. Understands and interprets techniques using molecular biology and genetic mechanisms.
- 8. Interprets basic knowledge of locomotor system clinically.
- 9. Defines the sources of accessing information.
- **10.** Explains plagiarism and programs used to prevent plagiarism.
- **11.** Counts article scanning methods.
- **12.** Explains the importance of being scientific in medicine.
- **13.** Explains the use of biostatistics in medical research.
- 14. Counts blood transfusion and tissue transplantation.
- 15. Counts and discusses ability to wear protective equipment (apron, mask, goggles/face shield, gloves).
- **16.** Gains the hand washing skill.
- 17. Counts respiration and pulse rate.
- **18.** Performs basic life support and Heimlich maneuver.
- **19.** Explains Ability to count breathing and pulse rate.
- 20. Explains by discussing the ability to ensure appropriate patient transport.



PREPARING FOR SCIENTIFIC INFORMATION (PSI)				
Торіс	Туре	Time	Lecturer	
1.Introduction to Medicine	Туре	Time	Lecturer	
SCA1-PSI: Information technologies	Practical	5	Doç. Dr. Can TÜRK	
2.Cell Structure and Their Functions	Туре	Time	Lecturer	
SCA1-PSI: What is knowledge?	Theoretical	1	Doç. Dr. Can TÜRK	
SCA1-PSI: What are the types of information sources?	Theoretical	1	Doç. Dr. Can TÜRK	
3.Tissues and Their Functions	Туре	Time	Lecturer	
SCA1-PSI: Classification of science	Theoretical	1	Doç. Dr. Can TÜRK	
SCA1-PSI: Classification of medical research	Theoretical	1	Doç. Dr. Can TÜRK	
SCA1-PSI: What is plagiarism? Methods used to prevent plagiarism	Theoretical	1	Doç. Dr. Can TÜRK	
SCA1-PSI: Programs used to prevent plagiarism	Theoretical	1	Doç. Dr. Can TÜRK	
4. Locomotor System – 1	Туре	Time	Lecturer	
SCA1-PSI: Medical article searching at TR index	Theoretical	1	Doç. Dr. Can TÜRK	
SCA1-PSI: Library-supported article search methods	Theoretical	1	Doç. Dr. Can TÜRK	
SCA1-PSI: Academic journals and international indexes	Theoretical	1	Doç. Dr. Can TÜRK	
5.Locomotor System – 2	Туре	Time	Lecturer	
SCA1-PSI: Use of biostatistics in medical research	Theoretical	2	Prof. Dr. A. Ergun Karaağaoğlu	
CLINICAL OVERVIEW I (COV I)				
1.Introduction to Medicine	Туре	Time	Lecturer	
SCA1-COV Medical Biology: Structure of chromosome	Theoretical	2	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN	
SCA1-COV Medical Biology: Chromosome types and karyotype analysis	Theoretical	1	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN	
SCA1-COV Medical Biology: Sex chromosomes and examples of chromosomal aberrations	Theoretical	1	Dr. Öğr. Üyesi Selen GÜÇLÜ DURGUN	
SCA1-COV Medical Biology practice: Human chromosomes and karyotype analysis	Practical	2	Dr. Öğr. Üyesi Demet KAÇAROĞLU	
2.Cell Structure and Their Functions	Туре	Time	Lecturer	
SCA1-COV Medical Biology: Molecular Biology of mitochondrial diseases	Theoretical	1	Dr. Öğr. Üyesi Seher YAYLACI	
3.Tissues and Their Functions	Туре	Time	Lecturer	
SCA1-COV Anatomy: Clinical anatomy of upper extremity bones and pectoral girdle bones	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU	
SCA1-COV Anatomy: Clinical anatomy of the bones of lower extremity and the pelvis	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU	
SCA1-COV Anatomy: Clinical anatomy of the vertebral column, ribs, and sternum	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU	
SCA1-COV Anatomy: Clinical anatomy of the cranium	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU	



SCA1-COV Internal medicine: Blood transfusion	Theoretical	1	Dr. Öğr.Üyesi Ruken TAN		
SCA1-COV Medical Biology: Organization of			Dr Öğr Üvesi Selen		
human genome and genomic variations	Theoretical	1	GÜÇLÜ DURGUN		
SCA1-COV Medical Biology: Progress in genome	Theoretical	1	Dr. Öğr. Üyesi Selen		
science	meoretical	I	GÜÇLÜ DURGUN		
SCA1-COV Medical Biology: Novel approaches in					
personal medicine and the use of genomic	Theoretical	1	Dr. Oğr. Uyesi Selen		
technics in medicine			GUÇLU DUKGUN Dr. Öğr. Üvesi Selen		
applications in medicine	Theoretical	1	GÜCLÜ DURGUN		
4. Locomotor System I	Туре	Time	Lecturer		
SCA1-COV Anatomy: Clinical terminology of joint	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical anatomy of the joints of upper extremity	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical anatomy of the joints of lower extremity	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical anatomy of the vertebral, craniovertebral, costal, sternal, and temporomandibular joints	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical terminology of muscle	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical anatomy of the back muscles and muscles of the upper extremity	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical anatomy of brachial plexus	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
5.Locomotor System II	Туре	Time	Lecturer		
SCA1-COV Anatomy: Lesions of the lumbar plexus and sacral plexus	Theoretical	2	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical anatomy of the muscles of lower extremity	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
SCA1-COV Anatomy: Clinical anatomy of the head and neck regions	Theoretical	1	Dr. Öğr. Üyesi Eda SAĞIROĞLU		
CLINICAL SKILL I (CSK I)					
1.Introduction to Medicine	Туре	Time	Lecturer		
SCA1-CSK: Hand washing skill	Practical	2	Dr. Safiye Göçer		
2.Cell Structure and Their Functions	Туре	Time	Lecturer		
equipment (apron, mask, goggles/face shield, gloves)	Practical	2	Dr. Safiye Göçer		
3.Tissues and Their Functions	Туре	Time	Lecturer		
SCA1-CSK: Ability to count breathing and pulse rate	Practical	2	Dr. Ali Osman Avcı		
4. Locomotor System I	Туре	Time	Lecturer		
SCA1-CSK: Basic life support and ability to perform the Heimlich maneuver	Practical	2	Dr. Ö. Zühtü Yöndem		



5.Locomotor System II	Туре	Time	Lecturer
SCA1-CSK: Ability to ensure appropriate transportation of the patient	Practical	2	Doç. Dr. Fisun Sözen
EARLY INTRODUCTION TO THE CLINIC (EIC)			
1.Introduction to Medicine	Туре	Time	Lecturer
SCA1-EIC: Early introduction to the Clinic – 1	Theoretic al	2	Doç. Dr. Fisun Sözen
2.Cell Structure and Their Functions	Туре	Time	Lecturer
SCA1- EIC: Early Introduction to the Clinic – 2	Theoretic al	2	Doç. Dr. Fisun Sözen
SCA1- EIC: Early Introduction to the Clinic – 3	Practical	2	Doç. Dr. Fisun Sözen
3.Tissues and Their Functions	Туре	Time	Lecturer
SCA1- EIC: Early Introduction to the Clinic – 4	Practical	4	Doç. Dr. Fisun Sözen
4. Locomotor System I	Туре	Time	Lecturer
SCA1- EIC: Early Introduction to the Clinic – 5	Practical	4	Doç. Dr. Fisun Sözen
5.Locomotor System II	Туре	Time	Lecturer
SCA1- EIC: Early Introduction to the Clinic – 6	Practical	4	Doç. Dr. Fisun Sözen