

**MUSCULOSKELETAL SYSTEM**

**PURPOSE**

It is aimed to gain knowledge, skills and attitudes about the anatomical, histological, physiological properties of the structures that make up the human body, the anatomical and microstructure, localisation, tissue and cellular development of the structures of the locomotor system such as bone, joint and muscle, the dynamics of the musculoskeletal system, the general working principles of the musculoskeletal system, the physiological properties of these systems.

**LEARNING OUTCOMES**

In terms of Clinical Sciences, students will have the listed learning outcomes.

1. Explain the working principles of muscle tissue,
2. Describe the general functional organisation of peripheral nerve tissue,
3. Apply skills such as physical examination of the lumbar spine, application of elastic bandages to the wrist and forearm, musculoskeletal X-ray evaluation and intramuscular injection on models.
4. Describe the basic biomechanical properties and disorders of the spine and peripheral joints,
5. Describe the signs and symptoms, causes, risk factors, etiopathogenesis, complications and differential diagnosis of inflammatory diseases affecting the musculoskeletal system,
6. Define laboratory and radiological tests used in the diagnosis of musculoskeletal diseases.

Contribution of the learning outcomes of the course to the learning outcomes of the programme

	<u>PO1</u>	<u>PO2</u>	PO3	PO4	PO5	PO6	PO7	PO8
LO1	1	1	1	4	1	5	2	1
LO2	1	1	1	4	1	5	2	1
LO3	1	1	1	4	1	5	2	1
LO4	5	4	2	4	2	4	5	2
LO5	5	4	2	4	2	4	5	2
LO6	5	5	2	2	2	4	5	2

COMMITTEE II- MUSCOSKELETAL (CLINICS) - 5 WEEKS				
LECTURES	FACULTY	THEO.	PRAC.	TOTAL
MICROBIOLOGY	Recep Keşli, MD, Prof.Dr.	2		12
	YAĞMUR EKENOĞLU MERDAN, Assist. Dr.	8	4	
	Görkem Yaman, Prof. Dr.	1		
PHARMACOLOGY	Rezzan Gülman, MD, Prof.Dr.	6		18
	ATILA KARAALP, MD, Prof.Dr.	12		
MEDICAL BIOCHEMISTRY		6		6
MEDICAL PATHOLOGY	D. Sema ARICI, MD, Prof. Dr.	3		11
	Şadiye Mehtat Ünlü, MD, Prof. Dr.	7	3	
ORTHOPEDICS	KENAN BAYRAKCI, MD, Prof. Dr.	5		5
PHYSICAL MEDICINE AND REHABILITATION	Saliha EROĞLU DEMİR, MD, Assoc. Prof.	4		4
Introduction to Medical Practice	SERPİL YAYLACI, MD, Prof. Dr.		4	1
TOPLAM		54	3	57

COMMITTEE II- MUSCOSKELETAL (CLINICS) / WEEK I					
Nov. 27 - Dec. 1 18, 2023	Monday, November 27, 2023	Tuesday, November 28, 2023	Wednesday, November 29, 2023	Thursday, November 30, 2023	Friday, December 1, 2023
08:30-09:15	INDEPENDENT LEARNING	Introduction to Autonomic Nervous System Pharmacology PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.	Parasympathetic Nervous System PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.	Parasympathomimetics & Parasympatholytics PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.	Sympathetic Nervous System PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.
09:30-10:15	INDEPENDENT LEARNING	Introduction to Autonomic Nervous System Pharmacology PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.	Parasympathetic Nervous System PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.	Parasympathomimetics & Parasympatholytics PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.	Sympathetic Nervous System PHARMACOLOGY ATILA KARAALP, MD, Prof. Dr.
10:30-11:15	Campylobacter and Helicobacter MICROBIOLOGY Recep Keşli, MD, Prof. Dr.	Bone fracture healing MEDICAL PATHOLOGY ŞADIYE MEHTAT ÜNLÜ, MD, Prof. Dr.	Pseudomonas and Related Bacteria MICROBIOLOGY Yağmur Ekenoğlu Merdan, Assisst. Prof. Dr.	Pathology of arthritis MEDICAL PATHOLOGY ŞADIYE MEHTAT ÜNLÜ, MD, Prof. Dr.	Haemophilus and Related Bacteria MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr.
11:30-12:15	Campylobacter and Helicobacter MICROBIOLOGY Recep Keşli, MD, Prof. Dr.	Osteomyelitis MEDICAL PATHOLOGY ŞADIYE MEHTAT ÜNLÜ, MD, Prof. Dr.	Pseudomonas and Related Bacteria MICROBIOLOGY Yağmur Ekenoğlu Merdan, Assisst. Prof. Dr.	INDEPENDENT LEARNING	Haemophilus and Related Bacteria MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr.
LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK
13:30-14:15	Introduction to bone pathology MEDICAL PATHOLOGY ŞADIYE MEHTAT ÜNLÜ, MD, Prof. Dr.	INDEPENDENT LEARNING	Bone tumors MEDICAL PATHOLOGY ŞADIYE MEHTAT ÜNLÜ, MD, Prof. Dr.	INDEPENDENT LEARNING	
14:30-15:15	Metabolic bone diseases MEDICAL PATHOLOGY ŞADIYE MEHTAT ÜNLÜ, MD, Prof. Dr.	INDEPENDENT LEARNING	Soft Tissue Tumors MEDICAL PATHOLOGY ŞADIYE MEHTAT ÜNLÜ, MD, Prof. Dr.	INDEPENDENT LEARNING	Introduction to orthopedics, terminology, anamnesis and examination ORTHOPEDICS KENAN BAYRAKCI, MD, Prof. Dr.
15:30-16:15	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING	Extremity Traumas approach to lower extremity fractures ORTHOPEDICS KENAN BAYRAKCI, MD, Prof. Dr.
16:30-17:15	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING	Extremity Traumas approach to upper extremity fractures ORTHOPEDICS KENAN BAYRAKCI, MD, Prof. Dr.
17:30-18:15	TDH101 - OFFLINE	ATA101 - OFFLINE	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING

COMMITTEE II- MUSCOSKELETAL (CLINICS) / WEEK II					
Nov. 21 - 26, 2022	Monday, December 4, 2023	Tuesday, December 5, 2023	Wednesday, December 6, 2023	Thursday, December 7, 2023	Friday, December 8, 2023
08:30-09:15	Sympathomimetics & Sympatholytics PHARMACOLOGY KARAAALP, MD, Prof.Dr. ATİLA	Drugs Affecting Autonomic Ganglia, Neuromuscular Junction & Skeletal Muscle Relaxants PHARMACOLOGY ATİLA KARAAALP, MD, Prof.Dr.	Evolutional hip dysplasia - Definition and diagnosis ORTHOPEDECS KENAN BAYRAKCI, MD, Prof.Dr.	Locomotor system examination Medical Education Introduction to Medical Practice Yaylıca Group 4 Serpil	PHASE 1 EXAM
09:30-10:15	Sympathomimetics & Sympatholytics PHARMACOLOGY KARAAALP, MD, Prof.Dr. ATİLA	Drugs Affecting Autonomic Ganglia, Neuromuscular Junction & Skeletal Muscle Relaxants PHARMACOLOGY ATİLA KARAAALP, MD, Prof.Dr.	Spine deformities RTHOPEDECS KENAN BAYRAKCI, MD, Prof.Dr.	Locomotor system examination Medical Education Introduction to Medical Practice Yaylıca Group 3 Serpil	
10:30-11:15	Bordetella MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr.	INDEPENDENT LEARNING	Legionella MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr.	Locomotor system examination Medical Education Introduction to Medical Practice Yaylıca Group 2 Serpil	
11:30-12:15	INDEPENDENT LEARNING	INDEPENDENT LEARNING	Various Gram Negative bacilli MICROBIOLOGY Görkem Yaman, Assist. Dr.	Locomotor system examination Medical Education Introduction to Medical Practice Yaylıca Group 1 Serpil	
LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	
13:30-14:15	Muscle Biochemistry BIOCHEMISTRY Huri Dedeakayoğulları, Assoc. Prof. Dr.	Lab: Gram-negative bacteria MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr. Gr1	MUSCULOSKELETAL SYSTEM PATHOLOGY LAB PRESENTATION MEDICAL PATHOLOGY Saliha EROĞLU DEMİR, MD, Prof. Dr.	Brucella and Francisella MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr.	Pharmacology of Pain Transmission & Inflammation PHARMACOLOGY Dr. Rezzan Gülhan
14:30-15:15	Biochemical Approach to Muscle Diseases BIOCHEMISTRY Huri Dedeakayoğulları, Assoc. Prof. Dr.	Lab: Gram-negative bacteria MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr. Gr2	LAB: Bone pathology MEDICAL PATHOLOGY Saliha EROĞLU DEMİR, MD, Prof. Dr. Group 2	Brucella and Francisella MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr.	Pharmacology of Pain Transmission & Inflammation PHARMACOLOGY Dr. Rezzan Gülhan
15:30-16:15	Connective Tissue Biochemistry BIOCHEMISTRY Huri Dedeakayoğulları, Assoc. Prof. Dr..	Lab: Gram-negative bacteria MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr. Gr3	LAB: Bone pathology MEDICAL PATHOLOGY Saliha EROĞLU DEMİR, MD, Prof. Dr. Group 3	INDEPENDENT LEARNING	Physical Examination of the Musculoskeletal System PHYSICAL MEDICINE AND REHABILITATION Saliha EROĞLU DEMİR, MD, Assoc. Prof.
16:30-17:15	Biochemical Evaluation of Connective Tissue Diseases BIOCHEMISTRY Huri Dedeakayoğulları, Assoc. Prof. Dr.	Lab: Gram-negative bacteria MICROBIOLOGY YAĞMUR EKENOĞLU MERDAN, Assist. Dr. Gr4	LAB: Bone pathology MEDICAL PATHOLOGY Saliha EROĞLU DEMİR, MD, Prof. Dr. Group 4	INDEPENDENT LEARNING	Musculoskeletal Symptoms, Muscle Weakness, Chronic and Neuropathic Pain PHYSICAL MEDICINE AND REHABILITATION Saliha EROĞLU DEMİR, MD, Assoc. Prof.
17:30-18:15	TDH01 - OFFLINE	ATA101 - OFFLINE	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING

COMMITTEE II- MUSCOSKELETAL (CLINICS) / WEEK III					
Nov 28 - Dec 2, 2022	Monday, December 11, 2023	Tuesday, December 12, 2023	Wednesday, December 13, 2023	Thursday, December 14, 2023	Friday, December 15, 2023
08:30-09:15	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING	COMMITTEE EXAM
09:30-10:15	PATHOLOGY CASES: MUSCULOSKELETAL SYSTEM MEDICAL PATHOLOGY Sema ARICI, MD, Prof. Dr. D.	INDEPENDENT LEARNING	INDEPENDENT LEARNING	INDEPENDENT LEARNING	
10:30-11:15	PATHOLOGY CASES: MUSCULOSKELETAL SYSTEM MEDICAL PATHOLOGY Sema ARICI, MD, Prof. Dr. D.	Drugs Used in the Treatment of Rheumatic Diseases & Gout PHARMACOLOGY Rezzan Gülhan Dr.	INDEPENDENT LEARNING	INDEPENDENT LEARNING	
11:30-12:15	PATHOLOGY CASES: MUSCULOSKELETAL SYSTEM MEDICAL PATHOLOGY Sema ARICI, MD, Prof. Dr. D.	Drugs Used in the Treatment of Rheumatic Diseases & Gout PHARMACOLOGY Rezzan Gülhan Dr.	INDEPENDENT LEARNING	INDEPENDENT LEARNING	
LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	
13:30-14:15	Non-Steroidal Anti Inflammatory Drugs PHARMACOLOGY Rezzan Gülhan Dr.	Bone Biochemistry and Synovial Fluid BIOCHEMISTRY Huri Dedeakayoğulları, Assoc. Prof. Dr.	INDEPENDENT LEARNING	INDEPENDENT LEARNING	
14:30-15:15	Non-Steroidal Anti Inflammatory Drugs PHARMACOLOGY Rezzan Gülhan Dr.	Biochemical Evaluation of Bone Diseases BIOCHEMISTRY Huri Dedeakayoğulları, Assoc. Prof. Dr.	INDEPENDENT LEARNING	INDEPENDENT LEARNING	
15:30-16:15	INDEPENDENT LEARNING	Joint pain and swelling PHYSICAL MEDICINE AND REHABILITATION Saliha EROĞLU DEMİR, MD, Assoc. Prof.	INDEPENDENT LEARNING	INDEPENDENT LEARNING	
16:30-17:15	INDEPENDENT LEARNING	Fibromyalgia PHYSICAL MEDICINE AND REHABILITATION Saliha EROĞLU DEMİR, MD, Assoc. Prof.	INDEPENDENT LEARNING	INDEPENDENT LEARNING	
17:30-18:15	TDH01 - OFFLINE	ATA101 - OFFLINE			