



**MUĞLA SITKI KOÇMAN UNIVERSITY FACULTY of MEDICINE
PHASE V
ENGLISH MEDICINE PROGRAM**

**COURSE of
ORTHOPEDECS & TRAUMATOLOGY
2022/2023 Academic Year
COURSE GUIDEBOOK**

**Course Code: MED5018
Course Topic Code: MED5-ORT**

***This guide has been prepared by the Department of Orthopedics and Traumatology Course Purpose, Target, Outcomes, Training and Education Contents, Methods, Educational Activities, Measurement and Evaluation Techniques, Course Logbook, Program Qualifications Matrix, Matching the Courses with NCEP 2020, Matching the Courses with the Course Objectives and Outcomes, Matching the Course Achievements with Measurement Techniques, Course Notification Form, Vertical/Horizontal Integration Status of Courses and Course Schedules were declared on 15.06.2022.**

PREFACE

Dear Students,

Welcome to the Orthopedics and Traumatology course program which is an important part of your education.

In this course program, which is going to continue for 3 weeks, we aim to give the basic education of the course program in all aspects of theoretical courses and practical applications. This guide describes what you will learn and perform during your course, the rules you must follow in our clinic, and the working conditions. We wish you all success with the belief that this guide will guide you sufficiently through your course studies.

Department of Orthopedics & Traumatology

GENERAL INFORMATION on COURSE

Course Title	: Orthopedics & Traumatology
Main Department of Course	: Surgical Sciences
Department Responsible for Course	: Orthopedics & Traumatology
Course Code	: MED-5018
Course Type	: Required
Duration of the Course	: 3 weeks
Teaching Method of the Course	: Formal
ECTS	: 5
Language	: English
Head of the department	: Prof. Dr. Nevres H AYDOĞAN
Teaching Staff	:

Teaching Staff	Subject area	Theoretical Course duration (Hours)
Prof. Dr. Nevres H AYDOĞAN	Orthopedics & Traumatology	2
Assoc. Prof. Dr. Umut CANBEK	Orthopedics & Traumatology	6
Assoc. Prof. Dr. Ulaş AKGÜN	Orthopedics & Traumatology	6
Assoc. Prof. Dr. Ahmet İMERCİ	Orthopedics & Traumatology	5
Assoc. Prof. Dr. Cem Yalın KILINÇ	Orthopedics & Traumatology	5
Assoc. Prof. Dr. Emre GÜLTAÇ	Orthopedics & Traumatology	6
Op. Dr. Fatih İlker CAN	Orthopedics & Traumatology	3
Op. Dr. İsmail Gökhan ŞAHİN	Orthopedics & Traumatology	3

Coordinator of the Department Education Program	: Prof. Dr. Nevres H AYDOĞAN
Coordinator of the Course Education Program	: Prof. Dr. Nevres H AYDOĞAN
Coordinator of the Course Examinations	: Assoc. Prof. Dr. Ulaş AKGÜN
Coordinator of Course Assessment and Evaluation	: Assoc. Prof. Dr. Ulaş AKGÜN

e-Mail	: nhaydogan@mu.edu.tr
	: umutcanbek@mu.edu.tr
	: ulasakgun@mu.edu.tr
	: ahmetimerci@mu.edu.tr
	: cykilinc@mu.edu.tr
	: emregultac@mu.edu.tr

TEACHING METHODS-TECHNIQUES

1. Theoretical lessons

2. Learning Centered Teaching

- a. Patient preparation and presentation during clinic visits
- b. Patient examination, plaster-splint-wound care-injection applications in outpatient clinics,
- c. Minor surgical interventions in the operating room,
- d. Presentation of a review article and discussing it as a group,

3. Interactive teaching

- a. Interactive case discussions with images
- b. Interactive discussion at bedside visits

PHYSICAL SPACES

Teaching Activity	Physical Space	Explanation
Theoretical lessons	Hospital Building	4th Floor Orthopedics Classroom
Inpatient bedside practice	Hospital Building	4th Floor Orthopedics Service
Policlinic	Hospital Building	Ground Floor Orthopedics Outpatient Clinic
Case analysis	Hospital Building	4th Floor Orthopedics Classroom
Problem-based teaching		
Special audit applications		4th Floor Orthopedics Classroom
Private field applications		Ground Floor Orthopedics Outpatient Clinic

RELATED LEGISLATION

<http://www.tip.mu.edu.tr/tr/ilgili-mevzuat-6641>

AIM(S) of the COURSE

- 1 In this course, It is aimed that students gain sufficient knowledge, skills and attitudes to evaluate the signs and symptoms of Orthopedics and Traumatology diseases, which are frequently encountered within the scope of the National CEP, to diagnose in primary care conditions, to create / apply a treatment plan (to gain the skill of plaster-splint) / to monitor, to perform emergency intervention when necessary, and to provide referral to an Orthopedics and Traumatology specialist.

OBJECTIVE(S) of the COURSE

1	To be able to explain the anatomy and physiology of the musculoskeletal system.
2	To be able to get medical history of the patient's health problems, personal and family history, and musculoskeletal system by communicating well with the patient and their relatives.
3	To be able to perform a physical examination of the musculoskeletal system.
4	To be able to evaluate the medical history and physical examination findings of the patient presenting with musculoskeletal system complaints, choosing the diagnostic methods/procedures that will guide the diagnosis and treatment in the appropriate order, to be able to interpret the results of these methods/operations.
5	To be able to diagnose and provide first respond to musculoskeletal emergency diseases, to be able to refer dispatch when needed.
6	To be able to explain the appropriate approach in the patient with multiple injuries.
7	To be able to explain the musculoskeletal system diseases seen in childhood, to be able to perform a developmental hip dysplasia screening examination.
8	To be able to apply basic medical interventions related to the musculoskeletal system (wrapping bandages, splints, etc.).
9	To be able to recognize common orthopedic diseases, to explain differential diagnosis algorithms, to be able to explain appropriate treatment planning and referral criteria.
10	To be able to explain the importance of multidisciplinary approach to musculoskeletal problems.

INTENDED LEARNING OUTCOME(S)

1	Can explain the anatomy and physiology of the musculoskeletal system.
2	Can get medical history of the patient's health problems, personal and family history, and musculoskeletal system by communicating well with the patient and their relatives.
3	Can perform a physical examination of the musculoskeletal system.
4	Can evaluate the medical history and physical examination findings of the patient presenting with musculoskeletal system complaints, choosing the diagnostic methods/procedures that will guide the diagnosis and treatment in the appropriate order, can interpret the results of these methods/operations.
5	Can diagnose and provide first respond to musculoskeletal emergency diseases, can refer dispatch when needed.
6	Can explain the appropriate approach in the patient with multiple injuries.
7	Can explain the musculoskeletal system diseases seen in childhood, can perform a developmental hip dysplasia screening examination.
8	Can apply basic medical interventions related to the musculoskeletal system (wrapping bandages, splints, etc.).
9	Can recognize common orthopedic diseases, to explain differential diagnosis algorithms, can explain appropriate treatment planning and referral criteria.
10	Can explain the importance of multidisciplinary approach to musculoskeletal problems.

DUTIES AND RESPONSIBILITIES OF STUDENTS

1. Duration of course is 3 weeks.
2. Students are expected to attend fully for theoretical or practical courses in the designated Classroom and Study Areas during the announced course program hours. According to the regulations, there is an attendance requirement of 70% in theoretical courses and 80% in practical courses in Phase 5.
3. Although there is no directive of the medical faculty regarding dress, all students are expected to perform personal care and dress with a style and care worthy of a physician candidate during all practical and theoretical training hours during the course.
4. It is expected that a white coat will be worn in all practical trainings.
5. Students will work daily rotation in general and local operating rooms, Orthopedics and Traumatology ward and outpatient clinic.
6. In outpatient clinic applications, students is expected to present his / her comments regarding diagnosis and treatment by taking medical history and performing physical examination.
7. In the operating room, students are expected to learn and comply with sterility conditions and patient safety.
8. The candidate doctor, who is in charge of taking patient history and physical examination in the service, is expected to present the patient information, differential diagnosis and the diagnosis of the patient during the next visit.
9. Students are responsible for completing the course logbook for each application during the course.

RECOMMENDED RESOURCE(S)

KEY RESOURCE(S)

KEY RESOURCE(S)	Matched Course Outcome(s)
1. Miller's Review of Orthopaedics 8th Edition	1,2,3,4,5,6,7,9,10

ADDITIONAL RESOURCE(S)

ADDITIONAL RESOURCE(S)	Matched Course Outcome(s)
1. Campbell's Operative Orthopaedics 13th Edition	1,2,3,4,5,6,7,9,10
2. Tachdjian's Pediatric Orthopaedics 5th Edition	1,2,3,4,5,6,7,9,10

ASSESSMENT and EVALUATION

Assessment and Evaluation in the End of Course Evaluation Exam

Assessment and Evaluation Method	Explanation	Role in the End of Course Evaluation	% Value for the End of Course Evaluation
Attendance to Classes		Compulsory	
Course Logbook		Compulsory	
Multiple Choice Theoretical Test Exam*	Multiple choice questions		50
Bedside Clinical Practice Exam**			5
Structured Oral Examination***	Under the supervision of at least two faculty members		45
Total			100

Availability of Course Logbook, Place of Course Report in Course Assessment and Evaluation Principles

For the right to take the written exam, the student must be evaluated as “adequate” from the criteria specified in the course report.

Existence of Attendance Requirement and Its Place in Course Assessment-Evaluation Principles

It is stated at the beginning of the course that the student who is absent from the courses will not be taken to the written exam.

The Effect of the Assessment and Evaluation Methods to be Applied on the Success Status at the End of the Course

In order to be successful in the course, it is required to get at least 60 points at each stage of the course exams. A student whose score is 59 and below in an assessment-evaluation technique is not allowed to participate in the other exam phase.

1st stage: . Multiple Choice Theoretical Test

2nd stage: Structured Oral Exam

Assessment and Evaluation in Resit Examination

Assessment and Evaluation Method	Explanation	Role in the End of Course Evaluation	% Value at the End of Course Evaluation
Multiple Choice Theoretical Test Exam*	Multiple choice questions		50
Structured Oral Examination**	Under the supervision of at least two faculty members		50
Total			%100

Assessment and Evaluation in Single Course Resit Exam

Assessment and Evaluation Method	Explanation	Role in the End of Course Evaluation	% Value at the End of Course Evaluation
Multiple Choice Theoretical Test Exam*	Multiple choice questions		50
Structured Oral Examination**	Under the supervision of at least two faculty members		50
Total			%100

COURSE LOGBOOK

STUDENT'S NAME AND SURNAME :

STUDENT'S SCHOOL NO :

COURSE PERIOD :

APPLICATION	NCEP Clause	TEACHING STAFF (SIGNATURE)
DATE		
Wearing sterile medical gloves		
Observation of a surgery in the operation room		
Wound care of a patient		
Performing upper extremity physical examination		
Performing lower extremity physical examination		
Performing spinal physical examination		
Performing a forearm splint		
Performing a long upper extremity splint		
Performing a short lower extremity splint		
Performing a long lower extremity splint		

DECISION: PASS FAIL

Head of Department or Coordinator:

Date:

Signature:

Faculty of Medicine
English Medicine Program
Phase V
Orthopedics & Traumatology COURSE
Competence Matrix

The Name of the Course	Po1	Po2	Po3	Po4	Po5	Po6	Po7	Po8	Po9	Po10	Po11	Po12	Po13
Orthopedics & Traumatology	5	5	5	5	5	5	0	5	0	0	0	0	0

* Completed according to the following program outcomes. (Score from 0 to 5.)

PO: Program Outcomes of Faculty of Medicine

PO Link: <https://muweb.mu.edu.tr/tr/program-yeterlilikleri-6598?site=tip.mu.edu.tr>

TRAINING ACTIVITY AND ASSESMENT AND EVALUATION METHODS MATCHING OF COURSE GAINS

Intended Learning Outcome	TRAINING ACTIVITY MATCHING	ASSESSMENT AND EVALUATION METHODS MATCHING
1. Can explain the anatomy and physiology of the musculoskeletal system.	CR, C, T	P-L
2. Can get medical history of the patient's health problems, personal and family history, and musculoskeletal system by communicating well with the patient and their relatives.	C	P-L
3. Can perform a physical examination of the musculoskeletal system.	V, CR, C, T	P-L
4. Can evaluate the medical history and physical examination findings of the patient presenting with musculoskeletal system complaints, choosing the diagnostic methods/procedures that will guide the diagnosis and treatment in the appropriate order, can interpret the results of these methods/operations.	V, CR, C, T	P-L
5. Can diagnose and provide first respond to musculoskeletal emergency diseases, can refer dispatch when needed.	V, CR, C, T, PR	P-L, T
6. Can explain the appropriate approach in the patient with multiple injuries.	P, T	P-L, T
7. Can explain the musculoskeletal system diseases seen in childhood, can perform a developmental hip dysplasia screening examination.	V, CR, C, T	P-L, T
8. Can apply basic medical interventions related to the musculoskeletal system (wrapping bandages, splints, etc.).	C	P-L
9. Can recognize common orthopedic diseases, to explain differential diagnosis algorithms, can explain appropriate treatment planning and referral criteria.	V, CR, C, T, PR	P-L, T
10. Can explain the importance of multidisciplinary approach to musculoskeletal problems.	V, CR, C, PR	P-L, T
<p>Abbreviations Teaching Activity: Theoretical lessons (T), Visit (V), Case report (CR), Clinical picture discussion-Outpatient clinic (C), Vocational skills lab (VSL), Radiological evaluation (R), Laboratory evaluation (L), Presentation (Pr) Assessment Method: Practical - Logbook (P-L), Oral exam (OE), Theoretical exam (TE)</p>		

INFORMATION AND MATCHING TABLE ON THE THEORETICAL AND PRACTICAL COURSES IN THE COURSE TO BE INCLUDED IN THE 2022- 2023 ACADEMIC YEAR COURSE POGRAM

Lecture Code*	Hour	Lecture Type	Lecture Subject	Course Aim Matching	Course Learning Outcome Matching	Activity Matching**	Assessment and Evaluation Method matching **	Vertical Integration	Horizontal Integration
MED5-ORT001	1	P	Course Introduction-Information Meeting and Forming Groups (A-B-C)	1	10	PR	P-L		
MED5-ORT002	1	T	Orthopedic Terminology and Concepts	1	1	T	TE		Phase 5 Physical Therapy and Rehabilitation
MED5-ORT003	1	T	Upper Extremity Examination	1	3	T	TE, OE	Phase 1 Anatomy	Phase 5 Physical Therapy and Rehabilitation
MED5-ORT004	1	T	Spine and Lower Extremity Examination	1	3	T	TE, OE	Phase 1 Anatomy	Phase 5 Physical Therapy and Rehabilitation Phase 5 Brain and Neurosurgery
MED5-ORT005	1	T	Introduction to Fractures	1	2,3,4,5,6,8,9	T	TE, OE		
MED5-ORT006	1	T	Fracture Healing	1	5,6,8,9	T	TE, OE	Phase 2 Physiology	
MED5-ORT007	1	T	Osteoporotic - Pathological Fractures	1	5,6,8,9	T	TE, OE	Phase 4 Internal Medicine	
MED5-ORT008	1	T	Open Fractures	1	5,6,8,9	T	TE, OE		Phase 5 Plastic and Reconstructive Surgery
MED5-ORT009	1	T	Fracture Complications	1	5,6,8,9	T	TE, OE		Phase 5 Physical Therapy and Rehabilitation
MED5-ORT010	1	T	Compartment Syndrome	1	5,9	T	TE, OE	Phase 4 General Surgery	
MED5-ORT011	1	T	Spine Problems	1	2,3,4,5,6,8,9	T	TE, OE		Phase 5 Brain and Neurosurgery
MED5-ORT012	1	T	Pediatric Fractures	1	2,3,4,5,6,7,8,9	T	TE, OE		
MED5-ORT013	1	T	Congenital Orthopedic Disorders	1	7	T	TE, OE	Phase 4 Child Health and Diseases	
MED5-	1	T	Fractures of Hip and Femur	1	2,3,4,5	T	TE, OE		

ORT014					6,8,9				
MED5-ORT015	1	T	Fractures of Knee, Tibia and Ankle	1	2,3,4,5,6,8,9	T	TE, OE		
MED5-ORT016	1	T	Fractures of Shoulder, Elbow and Forearm	1	2,3,4,5,6,8,9	T	TE, OE		
MED5-ORT017	1	T	Fractures of Hand and Wrist	1	2,3,4,5,6,8,9	T	TE, OE		Phase 5 Plastic and Reconstructive Surgery
MED5-ORT018	1	T	Approach to Patients with Multiple Trauma	1	6	T	TE, OE	Phase 4 General Surgery	
MED5-ORT019	1	T	Fractures of Spine and Pelvis	1	2,3,4,5,6,8,9	T	TE, OE		Phase 5 Brain and Neurosurgery
MED5-ORT020	1	T	Developmental Dysplasia of Hip	1	7	T	TE, OE	Phase 4 Child Health and Diseases	
MED5-ORT021	1	T	Pediatric Disorders of Hip	1	7	T	TE, OE	Phase 4 Child Health and Diseases	
MED5-ORT022	1	T	Osteochondrosis	1	2,3,4,9	T	TE, OE	Phase 4 Child Health and Diseases	
MED5-ORT023	1	T	Hand Injuries	1	2,3,4,5,6,8,9	T	TE, OE		Phase 5 Plastic and Reconstructive Surgery Phase 5 Physical Therapy and Rehabilitation
MED5-ORT024	1	T	Disorders of Upper Extremity and Hand	1	2,3,4,9	T	TE, OE		Phase 5 Plastic and Reconstructive Surgery Phase 5 Physical Therapy and Reh.
MED5-ORT025	1	T	Disorders of Foot and Ankle	1	2,3,4,9	T	TE, OE		Phase 5 Physical Therapy and Rehabilitation
MED5-ORT026	1	T	Dislocations	1	2,3,4,5,8,9	T	TE, OE		
MED5-ORT027	1	T	Traumatic Soft Tissue Disorders	1	2,3,4,5,8,9	T	TE, OE		Phase 5 Physical Therapy and Rehabilitation
MED5-ORT028	1	T	Common Orthopedic Problems in Athletes	1	2,3,4,5,8,9	T	TE, OE		Phase 5 Physical Therapy and Rehabilitation
MED5-ORT029	1	T	Introduction to Musculoskeletal Tumors	1	2,3,4	T	TE, OE	Phase 3 Pathology	
MED5-ORT030	1	T	Benign Musculoskeletal Tumors	1	2,3,4	T	TE, OE	Phase 3 Pathology	
MED5-ORT031	1	T	Malignant Musculoskeletal Tumors	1	2,3,4	T	TE, OE	Phase 3 Pathology	
MED5-ORT032	1	T	Cartilage Injuries & Disorders	1	2,3,4,9	T	TE, OE	Phase 2 Physiology	Phase 5 Physical Therapy and Rehabilitation
MED5-ORT033	1	T	Degenerative Joint Diseases	1	2,3,4,9	T	TE, OE	Phase 3 Pathology	Phase 5 Physical Therapy and Rehabilitation
MED5-ORT034	1	T	Osteonecrosis	1	2,3,4,9	T	TE, OE	Phase 3 Pathology	
MED5-ORT035	1	T	Musculoskeletal Infectious Diseases	1	2,3,4,9	T	TE, OE	Phase 3 Pathology Phase 4 Infectious Diseases	
MED5-	1	T	Spinal Infections	1	2,3,4	T	TE, OE	Phase 3	

ORT036									Pathology Phase 4 Infectious Diseases	
MED5- ORT037	1	T	Metabolic Bone Disorders	1	2,3,4	T	TE, OE		Phase 3 Pathology Phase 4 Internal Medicine	
MED5- ORT038	1	P	Practice of Upper Extremity Examination	1	3	C	P-L			Phase 5 Physical Therapy and Rehabilitation
MED5- ORT039	1	P	Practice of Lower Extremity Examination	1	3	C	P-L			Phase 5 Physical Therapy and Rehabilitation
MED5- ORT040	1	P	Practice of Spinal Examination	1	3	C	P-L			Phase 5 Brain and Neurosurgery Phase 5 Physical Therapy and Rehabilitation
MED5- ORT041	1	P	Imaging in Orthopedic Trauma	1	4,5	R	OE			Phase 5 Radiology
MED5- ORT042	1	P	Orthopedic Braces	1	9	C	P-L			Phase 5 Physical Therapy and Rehabilitation
MED5- ORT043	1	P	Orthopedic Implants	1	9	C	P-L			
MED5- ORT044	1	P	Plaster and Splint Applications in Orthopedics	1	8	C	P-L			
MED5- ORT045	1	P	Practice of Skeletal Traction Application	1	9	C	P-L			
MED5- ORT046	1	P	Wound Care and Dressing in Orthopedics	1	9	C	P-L	Phase 4 General Surgery		Phase 5 Plastic and Reconstructive Surgery
MED5- ORT047	3	P	Orthopedic Approach in Emergency Department	1	5,6	C	P-L	Phase 4 General Surgery		
MED5- ORT048	1	P	Practice of Hip Examination in Children	1	7	C	P-L	Phase 4 Child Health and Diseases		
MED5- ORT049	1	P	Practice of Pavlik Harness Application	1	7	C	P-L	Phase 4 Child Health and Diseases		
MED5- ORT050	1	P	Practice of Gait Analysis in Children	1	7	C	P-L	Phase 4 Child Health and Diseases		
MED5- ORT051	1	P	Practice of Meniscus Examination	1	2,3,4,9	C	P-L			Phase 5 Physical Therapy and Rehabilitation
MED5- ORT052	1	P	Practice of Ligament Examination	1	2,3,4,9	C	P-L			Phase 5 Physical Therapy and Rehabilitation
MED5- ORT053	1	P	Imaging in Sports Injuries	1	2,3,4,5, 8,9	R	OE			Phase 5 Radiology
MED5- ORT054	3	P	K Imaging in Musculoskeletal Tumors	1	2,3,4	R	OE			Phase 5 Radiology
MED5- ORT055	7	P	Free Study	1	10	PR	OE			
MED5- ORT056	26	P	Clinical Visit - Case-based Discussion	1	1,2,3,4, 9,10	V, CR, C	OE			
MED5- ORT057	18	P	Ward - Outpatient Clinic - Operating Room Practice	1	1,2,3,4, 5,6,7,8, 9,10	C	OE			
MED5- ORT058	3	P	Review Article Presentation	1	1,10	PR	OE			
EXPLANATIONS:										

* Lecture code will be formed by writing 001, 002,... at the end of the code taken from the "Codes for Phase 5 matrix" section.

****Abbreviations**

Teaching Activity: Theoretical lessons (T), Visit (V), Case report (CR), Clinical picture discussion-Outpatient clinic (C), Vocational skills lab (VSL), Radiological evaluation (R), Laboratory evaluation (L), Presentation (Pr)

Assessment Method: Practical - Logbook (P-L), Oral exam (OE), Theoretical exam (TE)