**T.C. MALTEPE UNIVERSITY FACULTY OF MEDICINE**

**UNDERGRADUATE PROGRAM   
2023-2024 ACADEMIC YEAR**

**EDUCATIONAL INFORMATION PACKAGE**

| **COURSE INFORMATION** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Course Name** | **Orthopedics and Traumatology Clerkship** | | | | **Course Code** | **MED 505** |
| **Phase** | 5 | **Level of the Course** | Undergraduate | | **Language of the Course** | English |
| **Mode of Delivery** | Face to face, E-Learning , hybrid | | | | **Lesson Type** | Compulsory |
| **Practice/Laboratuary Site** | Maltepe University Medical Faculty Hospital, | | | | **Suggested Courses** | None |
| **Prerequisite** | 1. MED 100  2. MED 200  3. MED 300  4. All courses in Phase 4 | | | Concurrent Requirements:  None | | |

| **ECTS** | | | |
| --- | --- | --- | --- |
| **ECTS Credits** | **Theoretical Lecture Hours** | **Practical Hours** | **Course Duration** |
| 4 | 16 | 56 | 3 weeks |

| **COURSE COORDINATORS AND INSTRUCTORS** |
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| **Course Coordinator, Contact Details and Office Hours:**  Ender UGUTMEN,MD. Professor, Maltepe University, Faculty of Medicine, Dept of Orthopedics,  [ender.ugutmen@maltepe.edu.tr](mailto:ender.ugutmen@maltepe.edu.tr) extension: 2141  **Office Hours:**  Wednesday: 3.00 - 4.00 pm   | **Instructors, Contact Details and Office Hours:**  Ender UGUTMEN, MD., Professor, Maltepe University, Faculty of Medicine, Dept of Orthopedics,  [ender.ugutmen@maltepe.edu.tr](mailto:ender.ugutmen@maltepe.edu.tr) extension: 2141  **Office Hours:**  Wednesday: 3.00 - 4.00 pm  Ömer Kays ÜNAL, MD., Assistant Professor, Maltepe University, Faculty of Medicine, Dept of Orthopedics,  [omerkaysunal@maltepe.edu.tr](mailto:omerkaysunal@maltepe.edu.tr) extension: 2142  **Office Hours:**  Wednesday: 3.00 - 4.00 pm  Mirza Zafer DAĞTAŞ, MD., Assistant Professor, Maltepe University, Faculty of Medicine, Dept of Orthopedics,  [mirzazafer.dagtas@maltepe.edu.tr](mailto:mirzazafer.dagtas@maltepe.edu.tr) extension: 2143  **Office Hours:**  Wednesday: 3.00 - 4.00 pm ……..  Sertaç MEYDANERİ, MD., Assistant Professor, Maltepe University, Faculty of Medicine, Dept of Orthopedics,  [sertac.meydaneri@maltepe.edu.tr](mailto:sertac.meydaneri@maltepe.edu.tr) extension:: 2136  **Office Hours:**  Wednesday: 3.00-4.00 pm | | --- | |

| **GENERAL OBJECTIVE AND CATEGORY OF THE COURSE** |
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| To maintain basic information about Orthopedics and Traumatology.   | **COURSE CATEGORY** | | | --- | --- | | 1. Basic vocational course | **x** | | 1. Specialization / Field Course |  | | 1. Support lectures |  | | 1. Transferable skill courses |  | | 1. Humanities, Communication and Management skill courses |  | |

| **COURSE LEARNING OUTCOMES, SUB-SKILLS and COMPETENCIES** |
| --- |
| **Students completing this course;**   | **Sequence No.** | **Learning Output / Sub - Skills / Competencies** | **Education method** | **MR Method** | | --- | --- | --- | --- | | **1** | List the principles of obtaining information about the patient's complaint, | EY1, EY2, EY5 | ÖD1, ÖD4 | | **2** | Count the anatomical regions treated in the field of orthopedics | EY1, EY2, EY5 | ÖD1, ÖD4 | | **3** | Explain how to evaluate and treat in orthopedic emergencies. | EY1, EY2, EY5 | ÖD1, ÖD4 | | **4** | Explain the mechanisms and treatments of bone development and congenital diseases in the pediatric age group | EY1, EY2, EY5 | ÖD1, ÖD4 | | **5** | Define certain spinal diseases and tell the general approach | EY1, EY2, EY5 | ÖD1, ÖD4 | | **6** | Define common disorders in hand surgery and list their treatments. | EY1, EY2, EY5 | ÖD1, ÖD4 | | **7** | Explain the approach to sports injuries | EY1, EY2, EY5 | ÖD1, ÖD4 | | **8** | Will be able to list basic treatment approaches for joint disorders. | EY1, EY2, EY5 | ÖD1, ÖD4 | |

| **GENERAL COMPETENCIES:** |
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| 1. Productive 2. Rational 3. Creative 4. Ethical 5. Respectful to differences 6. Sensitive to social issues 7. Able to use own language effectively 8. Sensitive to environment 9. Able to use a foreign language effectively 10. Able to adapt to different social roles in various situations 11. Able to work as a team member 12. Able to use time effectively 13. Having a critical mind |

| **COURSE CONTENTS** |
| --- |
| Orthopedics and Traumatology Internship is compulsory for 5th grade students and lasts for 3 weeks. During this period, students are taught the early diagnosis of certain orthopedic diseases and especially congenital orthopedic problems and the treatment methods to be applied. Developmental hip dislocation, congenital clubfoot, scoliosis, bone and joint infections and tumors are important topics taught.    Another purpose of this internship is to teach the diagnosis of traumatic diseases and sports injuries of the musculoskeletal system, the first response to these and the precautions to be taken against the complications that will occur with practical applications. Common fractures of the upper and lower extremities and their possible complications are reviewed; plaster cast, following the plastered extremity and plaster cast are practiced. Closed reduction techniques, radiological evaluation of fracture diagnosis and evaluation of basic issues in the light of literature.  Orthopedics: It deals with skeletal and muscular system diseases in general. In the orthopedics department, necessary information is given to patients. Then, it is applied with appropriate medical and surgical, scientific methods for treatment. In this process, it is aimed to educate the students by showing the needs of the patients on the patients themselves.  Recognition of situations where musculoskeletal health is impaired, e.g. Joint pains, fractures, congenital deformities, emergency orthopedic pathologies, various common diseases of all extremities such as lower and upper extremities, infections (osteomyelitis, septic arthritis, etc.), oncological diseases of the bone (osteoid osteoma, osteosarcoma, chondrosarcoma, etc.), growth-development disorders, pediatric congenital disorders (pes equinovarus, developmental hip dysplasia, etc.) and spine disorders (scoliosis, kyphosis) should be included in the education program.  With the help of all this information, a student doing an orthopedic internship should be able to perform musculoskeletal examination, go to diagnosis, perform some interventional applications (eg plaster, splint, arm sling, pelvic bandage, etc.) and be of the quality and standard to organize his first treatment.  **Phase 5 Orthopedics and Traumatology Clerkship**  1. Introduction to Orthopedics - Terminology and History  2. Pediatric trauma  3. Sports injuries  4. Pediatric orthopedics  5. Lower Extremity Fractures  6. Upper Extremity Fractures  7. Osteoarthritis  8. Osteomyelitis and Septic Arthritis  9. Approach to the patient with polytrauma  10. Orthopedic Dislocations  11. Hand injuries  12. Bone Tumors  13. Pelvis and Spine Fractures  14. Scoliosis  15. Kyphosis  16. Fracture Complications |

| **COURSE TEXTBOOKS AND SUPPLEMENTARY READINGS** |
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| **Textbooks**  Rockwood ve Green Erişkin Kırıkları, Campbell Orthopedics  **Supplemantary Readings**  Miller Orthopedics |

| **COURSE ASSESSMENT AND EVALUATION SYSTEM** |
| --- |
| | **Studies during the year** | **Percent grade** | | --- | --- | | **Clerkship Examination** | **%40** | | **Structured Oral Examination** | **%50** | | **ICE (İş Başı Değerlendirme)** | %10 | | **OSCE (Structured Subjective Clinical Examination)** | %0 | | **Attendance** | %0 | | **Laboratory** | %0 | | **Clinical Practice** | %0 | | **Field study** | %0 | | **Lesson Specific Internship** (if there is) | %0 | | **Homework** | %0 | | **Presentation** | %0 | | **Project** | %0 | | **Seminar** | %0 | | **Problem Based Learning** | %0 | | **Others** | %0 | | **TOTAL** | **100** |   **NOTES:**  Assessment and Evaluation System is organized according to T.C. Maltepe University Faculty of Medicine Education and Training Regulations. |

| **ECTS STUDENT WORKLOAD TABLE** |
| --- |
| | **Activities** | **Number** | **Duration**  **(hours)** | **Total work load** | | --- | --- | --- | --- | | **Lectures** | **16** | **1** | **16** | | **Laboratory** | **-** | **-** | **-** | | **Practice** | **56** | **1** | **56** | | **Lesson specific internship** (if there is) | **-** | **-** | **-** | | **Field study** | **-** | **-** | **-** | | **Lesson study time out of class** (pre work, strengthen, etc) | **40** | **1** | **40** | | **Presentation / Preparing seminar** | **-** | **-** | **-** | | **Project** | **-** | **-** | **-** | | **Homework** | **-** | **-** | **-** | | **İnterval examinations** | **-** | **-** | **-** | | **Clerkship Examination** | **2** | **2** | **2** | | **Total work load** | | | **114** | |

| **RELATIONSHIP BETWEEN ORTHOPEDICS AND TRAUMATOLOGY COURSE LEARNING OUTCOMES AND MEDICAL EDUCATION PROGRAMME KEY LEARNING OUTCOMES** |
| --- |
| | **No** | **Program Competencies/ Outcomes** | **Level of Contribution[[1]](#footnote-0)\*** | | | | | | --- | --- | --- | --- | --- | --- | --- | | **1** | **2** | **3** | **4** | **5** | | **1** | Able to explain the normal structure and functions of the organism. |  |  | **x** |  |  | | **2** | Able to explain the pathogenesis, clinical and diagnostic features of psychiatric disorders |  |  |  |  | **x** | | **3** | Able to take history and perform mental status examination. |  |  |  | **x** |  | | **4** | Able to perform first step interventions and refer and transfer cases in life threatening emergency situations. |  |  |  |  | **x** | | **5** | Able to perform necessary basic medical interventions for the diagnosis and treatment of mental |  |  |  | **x** |  | | **6** | Able to perform preventive measures and forensic practices. |  | **x** |  |  |  | | **7** | Having sufficient knowledge about the structure and process of the National Health System. |  |  | **x** |  |  | | **8** | Able to define legal responsibilities and ethical principles. |  |  | **x** |  |  | | **9** | Able to perform first step care of most prevalent disorders in the community with effective evidence based medical methods. |  |  | **x** |  |  | | **10** | Able to organize and implement scientific meetings and projects |  |  | **x** |  |  | | **11** | Able to use a major foreign language sufficient for follow up of literature and update of medical knowledge; able to use computer and statistical skills for the evaluation of scientific studies. |  |  |  | **x** |  | |

| **PHASE 5 MED 505 ORTHOPEDICS AND TRAUMATOLOGY CLERKSHIP  COURSE LIST AND RANKING** |
| --- |
| | **Number** | **Course/Competence** | **Lecturer** | | --- | --- | --- | | 1 | Introduction to Orthopedics - Terminology and History (Theoretical: 1 hour) | Prof. Dr. Ender Ugutmen | | 2 | Fracture Complications (Theoretical: 1 hour) | Prof. Dr. Ender Ugutmen | | 3 | Approach to the patient with polytrauma (Theoretical: 1 hour) | Prof. Dr. Ender Ugutmen | | 4 | Sports injuries (Theoretical: 1 hour) | Prof. Dr. Ender Ugutmen | | 5 | Pediatric trauma (Theoretical: 1 hour) | Assoc. Prof. Ömer Kays Ünal | | 6 | Pediatric orthopedics (Theoretical: 1 hour) | Assoc. Prof. Ömer Kays Ünal | | 7 | Lower Extremity Fractures (Theoretical: 1 hour) | Assoc. Prof. Ömer Kays Ünal | | 8 | Pelvis and Spine Fractures (Theoretical: 1 hour) | Assoc. Prof. Ömer Kays Ünal | | 9 | Scoliosis (Theoretical: 1 hour) | Assoc. Prof. Ömer Kays Ünal | | 10 | Kyphosis (Theoretical: 1 hour) | Assoc. Prof. Ömer Kays Ünal | | 11 | Upper Extremity Fractures (Theoretical: 1 hour) | Assoc. Prof. Mirza Zafer Dağtaş | | 12 | Osteoarthritis (Theoretical: 1 hour) | Assoc. Prof. Mirza Zafer Dağtaş | | 13 | Osteomyelitis and Septic Arthritis (Theoretical: 1 hour) | Assoc. Prof. Mirza Zafer Dağtaş | | 14 | Orthopedic Dislocations (Theoretical: 1 hour) | Assoc. Prof. Mirza Zafer Dağtaş | | 15 | Hand injuries (Theoretical: 1 hour) | Assoc. Prof. Mirza Zafer Dağtaş | | 16 | Bone Tumors (Theoretical: 1 hour) | Assoc. Prof. Mirza Zafer Dağtaş | |

| **PHASE 5 MED 505 ORTHOPEDICS AND TRAUMATOLOGY CLERKSHIP SCHEDULE** | | | | | |
| --- | --- | --- | --- | --- | --- |
| 1st Week | | | | | |
| Days | Monday | Tuesday | Wednesday | Thursday | Friday |
| 8.30-9.30 | Bedside Education | Bedside Education | Bedside Education | Bedside Education | Bedside Education |
| 9.30-10.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice |
| 10.30-11.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice |
| 11.30-12.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice |
| 12.30-13.30 | Lunch Break | Lunch Break | Lunch Break | Lunch Break | Lunch Break |
| 13.30-14.30 | Course: Introduction to Orthopedics - Terminology and History | Lesson: Fracture Complications | Lesson: Approach to the patient with polytrauma | Lesson: Sports injuries | Lesson: Pediatric trauma |
| 14.30-15.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |
| 15.30-16.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |
| 16.30-17.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |
|  |  |  |  |  |  |
|  | | | | | |
| 2nd Week | | | | | |
| Days | Monday | Tuesday | Wednesday | Thursday | Friday |
| 8.30-9.30 | Bedside Education | Bedside Education | Bedside Education | Bedside Education | Bedside Education |
| 9.30-10.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice |
| 10.30-11.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice |
| 11.30-12.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice |
| 12.30-13.30 | Lunch Break | Lunch Break | Lunch Break | Lunch Break | Lunch Break |
| 13.30-14.30 | Course: Pediatric orthopedics | Lesson: Lower Extremity Fractures | Lesson: Pelvis and Spine Fractures | Lesson: Scoliosis | Lesson: Kyphosis |
| 14.30-15.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |
| 15.30-16.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |
| 16.30-17.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |
|  |  |  |  |  |  |
| 3th Week | | | | | |
| Days | Monday | Tuesday | Wednesday | Thursday | Friday |
| 8.30-9.30 | Bedside evaluation | Bedside evaluation | Bedside evaluation | Bedside evaluation | Written examination |
| 9.30-10.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice | Oral examination |
| 10.30-11.30 | Outpatient practice | Outpatient practice | Outpatient practice | Outpatient practice |  |
| 11.30-12.30 | Outpatient practice | Outpatient practice | Outpatient practice | Plaster – Splint application practice |  |
| 12.30-13.30 | Lunch Break | Lunch Break | Lunch Break | Lunch Break |  |
| 13.30-14.30 | Lesson: Upper Extremity Fractures | Lesson: Osteoarthritis | Lesson: Osteomyelitis and Septic Arthritis | Lesson: Orthopedic Dislocations |  |
| 14.30-15.30 | Lesson: Hand injuries | Lesson: Bone Tumors | Lesson study time out of class | Lesson study time out of class |  |
| 15.30-16.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |  |
| 16.30-17.30 | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class | Lesson study time out of class |  |
|  |  |  |  |  |  |

NOTE: Prepare this table for each week of your course.

| **EDUCATIONAL METHODS GUIDE** |
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| | **CODE** | **METHOD NAME** | **EXPLANATION** | | --- | --- | --- | | **EM1** | Amphitheatre lesson | These are the courses applied in preclinical education where the whole class is together. | | **EM2** | Class lesson | These are courses applied in small groups during the clinical period. | | **EM3** | Lab application | These are laboratory courses applied in the preclinical period. | | **EM4** | Skill Training App | It is the work that the student does on a model or mannequin before meeting with the real patient, which will be done in the Virtual Clinic or other environment. | | **EM5** | Clinic Education | These are activities that provide clinical competence by applying bedside training with real patients or models under the supervision of trainers. | | **EM6** | Independent Study Hours | These are the periods in the curriculum for the student to repeat what they have learned and to prepare for new lesson sessions. | | **EM7** | Community Based Education Application | Field practices, non-unit professional practices, etc. includes. | | **EM8** | Problem Based Learning | Problem based learning. | | **EM9** | Private Study module | These are applications that will enable the student to gain in-depth knowledge about a subject individually or as a group. | | **EM10** | Scientific Research study | These are applications aimed at improving the scientific research competence of the student. | | **EM11** | Other | If this code is used, the training method should be written in detail. | |

| **MEASUREMENT EVALUATION METHODS GUIDE** |
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| | **CODE** | **METHOD NAME** | **EXPLANATION** | | --- | --- | --- | | **ME1** | Theoretical Exam ( Multiple Elective , Multiple Optional etc Questions containing ) | The committee is the exam used in the final exams. | | **ME2** | Practical exam | It should be used for laboratory applications. | | **ME3** | Classical Verbal |  | | **ME4** | Structured Oral | It is an oral exam in which questions and answers are prepared on a form beforehand. | | **ME5** | OSCE | Objective Structured Clinical Examination | | **ME6** | CORE | Clinical Act Execution Exam | | **ME7** | ICE ( Business head Evaluation ) | It is the evaluation made by the trainer on the student at the bedside or during the practice. | | **ME8** | Other | A statement must be made. | |

1. \*1 lowest, 2 low, 3 fair, 4 high, 5 highest. [↑](#footnote-ref-0)