Semmelweis University, Faculty of Medicine - single, long-cycle medical training Name of the host institution (and any contributing institution):

Traumatológiai Klinika, Ortopédiai Klinika

Name of subject: Traumatológia és ortopédia in English: Traumatology and Orthopedics in German: Traumatologie und Orthopädie

Credit value: 5

Semester: 7. szemeszter, 8. szemeszter

(in which the subject is taught according to the curriculum)

| Hours per week | Lecture | Practical lesson | Seminar | |
|----------------|---------|------------------|---------|--|
| 5.0 | 1.0 | 4.0 | 0.0 | |

| Hours per semester | Lecture | Practical lesson | Seminar |
|--------------------|---------|------------------|---------|
| 0.0 | 0.0 | 0.0 | 0.0 |

Type of course:

obligatory

Academic year:

2025/26

Language of instruction (for optional and elective subjects):

Course code:

AOKTRA1115 1A

(in the case of a new course, to be completed by the Dean's Office, following approval)

Course coordinator name: Dr. Bodzai Tamás János (klinikaigazgató)

Course coordinator location of work, telephone availability: Semmelweis University Clinic for

Traumatology, e-mail: office.trauma@semmelweis.hu, Tel: 06 20/825-8680 **Course coordinator position:**Head of department, associate professor

Course coordinator Date and number of habilitation: 2025.03.12. 37995/HABIZ/2025

Objective of instruction and its place in the curriculum:

Traumatology as a specialty deals with the treatment of injured patients, independent of the injured organ, patient's age or previous diseases. In developed countries, the 4-5th leading cause of death is injury, while in the actively working population, the rate of death is even higher. Morbidity in children and in the elderly is also high. Traumatology treatment for the most part deals with extremity surgery in correlation to orthopedics, however cranial, thoracic, abdominal, spinal and pelvic injuries as well as the treatment of polytraumatized patients also belong to the field of trauma care.

Orthopedics is an integral part of the limb surgery branch of the surgical curriculum. Practitioners of almost any discipline encounter orthopedic issues, making it essential to understand the diagnosis and treatment options for fundamental conditions. Equally important is the timely recognition of specific, urgent, or potentially surgically treatable conditions. The field of orthopedics intertwines with and organically integrates knowledge from other disciplines, requiring above-average "lateral thinking" skills and synthetic thinking from students. This is what we aim to focus on.

Method of instruction (lecture, group work, practical lesson, etc.):

Lecture + practice. Small group work during the practice sessions. Clinical practice at the bedside.

During the 14 hours of lectures, the topics of the subject are presented, which the student supplements with the required literature and the lecture materials available on Moodle.

The lecture materials can be found on the Semmelweis University E-learning portal (Moodle).

https://itc.semmelweis.hu/moodle/

Competencies acquired through completion of course:

Traumatology

During practices, students will have the opportunity to learn the following: physical examination of injured patients, bandaging, suturing, casting techniques, and the uses of orthesises and splints. Students will have the opportunity to enter the operating theater, scrub in for operations, and become acquainted with special instruments used in Traumatology. Consultation of typical and the more frequent trauma cases, radiologic diagnostics, as well as videos in the operative theater are also part of the curriculum. During on duty shifts, students will have an opportunity to examine and participate in the trauma care of patients under supervision.

Orthopedics

Clinical examination competency. Proficiency in the indications for non-physical diagnostics in orthopedics. Confident group diagnosis and therapy of urgent and/or severely damaging conditions. Surgical and conservative treatment options for orthopedic conditions, their advantages and disadvantages, and limitations. Upon completing the course, the student will be able to use examinations to identify patients in need of urgent orthopedic care. They will be able to select patients who do not require urgent care but will need assistance from an orthopedic specialist in the future. The student will also be able to conservatively manage basic conditions that do not require orthopedic intervention. They will understand the correlations of major orthopedic conditions.

Course outcome (names and codes of related subjects):

Prerequisites for course registration and completion: (CODE):

Basic Surgical Techniques, Pathology II, Microscopic Anatomy and Embryology II, Internal Medicine - Propedeutics

In the case of multi-semester courses, position on the possibility of and conditions for concurrent registration:

The number of students required to start the course (minimum, maximum), student selection method:

Since Traumatology is a compulsory subject, there is no minimum number of students.

Maximum number of students is 18 students/block

Detailed course syllabus (if the course can be divided into modules, please indicate): (Theoretical and practical instruction must be broken down into hours (weeks), numbered separately; names of instructors and lecturers must be listed, indicating guest lecturers/instructors. It cannot be attached separately! For guest lecturers, attachment of CV is required in all cases!)

Traumatology lectures are available on Semmelweis University's E-learning portal (Moodle)

Lectures

Traumatology lectures are available on Semmelweis University's E-learning portal (Moodle)

Monday

- 1. Introduction to Traumatology Soft tissue injuries, wound healing, and bone healing
- 2. Polytrauma Chest, rib fractures, abdominal trauma Neurotrauma
- 3. Pelvic and femur fractures Lower leg and ankle fractures Upper and lower ankle joint and foot injuries

Tuesday

4. Shoulder, upper arm, and elbow injuries - Forearm and wrist injuries - Hand injuries

- 5. Pediatric Trauma
- 6. Open fractures, septic and non-septic complications
- 2 theoretical day, 3 practical days, and 1 practical exam day.

The Traumatology Department reserves the right to make changes in the lecture schedule and practical lessons schedule during the academic year.

Orthopedics Orthopedics e-learning material is available on Semmelweis University's e-learning portal (Moodle system).

- 1. General Orthopedics
- 2. Metabolic Bone Diseases
- 3. Diseases of the Spine
- 4. Diseases of the Shoulder Girdle
- 5. Diseases of the Wrist and Hand
- 6. Hip Joint Diseases in Adulthood
- 7. Diseases of the Knee Joint
- 8. Diseases of the Foot
- 9. Developmental Abnormalities of the Skeletal System
- 10. Neuromuscular Diseases
- 11. Pediatric Orthopedics
- 12. Tumors of the Musculoskeletal System

4 mixed theoretical and practical days, and 1 practical exam day.

The Orthopedic Department reserves the right to make changes in the lecture schedule and practical lessons schedule during the academic year.

Lecturers

Dr. Abonyi Bence, Dr. Andrónyi Kristóf Dániel, Dr. Balsai Tamás, Dr. Bodzai Tamás János, Dr. Boros Roxána Krisztina, Dr. de Jonge Róbert, Dr. Dobrean Levente, Dr. Dorony Balázs, Dr. Drajkó Balázs Márk, Dr. Frank Monika, Dr. Gál Tamás, Dr. Gámán György, Dr. Gömöri Kristóf, Dr. Holnapy Gergely, Dr. Horváth Nikoletta Judit, Dr. Kardos Dániel, Dr. Károlyi Fanni, Dr. Kaszap Balázs, Dr. Keszég Miklós Attila, Dr. Koczka Dániel, Dr. Kocsis Koppány Péter, Dr. Kopniczky Zsolt Tibor, Dr. Kotán Krisztián Balázs, Dr. Kovács Krisztián Balázs, Dr. Léderer Szilvia, Dr. Lestár Péter, Dr. Ludas István Tamás, Dr. Máté Miklós, Dr. Mátyás Viktor, Dr. Mayer Lilla, Dr. Naphegyi Andrea Ilona, Dr.

Orosz-Szabó Gabriella, Dr. Pahlavanyali Afshin, Dr. Pap Károly, Dr. Poór Valentin, Dr. Sallai Imre, Dr. Sárdy Balázs László, Dr. Sinkovits Bence, Dr. Soproni István Boldizsár, Dr. Stubnya Bence Gusztáv, Dr. Szabó Gergely Balázs, Dr. Szabó Miklós Károly, Dr. Szalay Zoltán, Dr. Szatmári Attila, Dr. Szendrői Miklós, Dr. Szerb Imre, Dr. Szilágyi Gábor Sándor, Dr. Szmola Dániel, Dr. Szőcs Gyula Ferenc, Dr. Terebessy Tamás, Dr. Ujvári Béla, Dr. Varga Csaba, Dr. Vezér Mátyás Attila, Dr. Weninger Viktor, Farkas Katalin, Fehér Ágnes Anna, Herpai Áron Ambrus, Kalmár Máté, Kóborné Nyakas Dóra Éva, Sevcsik Orsolya, Tarsoly Dorottya

Other courses with overlapping topics (obligatory, optional, or elective courses) in interdisciplinary areas. To minimalize overlaps, topics should be coordinated. Code(s) of courses (to be provided):

Requirements for attendance, options for making up missed sessions, and method of absence justification:

Based on the 39/2023. (V.25.) Semmelweis University Organizational and Operating Regulations amended by university's Senate – III. BOOK Student Requirements – III.2. PART Academic and Examination Regulations, Section 29. § 4, which states: "......absences must be assessed together for lectures, seminars and practices requiring attendance, and may not exceed 10% during the block schedule of 4th-5th year Faculty of Medicine students..."

Only 7 academic hours of absence can be accepted in Traumatology and orthopedics for 4th year students during their Traumatology and orthopedics block of 70 hours!,

The date of signing the attendance sheets for the given day is the responsibility of the hospitals' department.

Any student who, for whatever reason, needs to be absent for a maximum of 7 academic hours, but whose attendance has not yet been checked that day, should notify the teacher that he/she wishes to sign the attendance sheet and indicate the exact time spent at the department on that day (the exact time of arrival and departure).

Make up of absences:

Make up of absences can be done in a later block, but only within the semester. Students need
to make up the same day they were absent in the original block (practice day or lectures). The
student can only take the semi-final exam after make-up of the absence - at the earliest in that
block that he/she made up in. Scheduling of make-up of absence during traumatology days and

making an appointment for the postponed examination needs to be confirmed by e-mail through the Clinic for Traumatology. Scheduling of make-up of absence during orthopedic days and making an appointment for the postponed examination needs to be confirmed by e-mail through the Clinic for Orthopedics.

- If the absence were to occur in the last block of the first semester, then make-up of the absence can be done in the second semester, but the student needs to reapply for the course as "only exam" in the second semester. The earliest at which a student can take the exam is at the end of the block in which the student made-up the absence. Scheduling of absence during traumatology days and making an appointment for the postponed examination needs to be confirmed by e-mail through the Clinic for Traumatology. Scheduling of make-up of absence during orthopedic days and making an appointment for the postponed examination needs to be confirmed by e-mail through the Clinic for Orthopedics.
- If the absence were to occur in the last block of the second semester, then make-up of the absence can be done in the first semester of the following year. In this case, the student needs to reapply for the course as "only exam" in the following year. The earliest at which a student can take the exam is at the end of the block in which the student made-up the absence. Scheduling of absence during traumatology days and making an appointment for the postponed examination needs to be confirmed by e-mail through the Clinic for Traumatology. Scheduling of make-up of absence during orthopedic days and making an appointment for the postponed examination needs to be confirmed by e-mail through the Clinic for Orthopedics.

Assessment methods during semester (number, topics, and dates of midterms and reports, method of inclusion in the course grade, opportunities for make-up and improvement of marks):

(number, topics, and dates of midterms and reports, method of inclusion in the course grade, opportunities for make-up and improvement of marks)

Within the short course of the Traumatology and Orthopedics block, there will be no formal assessment of students. The interactive practices and seminars allow for evaluation of students' knowledge of the subject.

Number and type of individual assignments to be completed, submission deadlines:

Practical exam: Patient examination (in case of tramatology on Tuesday of the second week of the block, in case of orthopedics in wednesday of the third week).

Completing the traumatology and orthopedics practical exams is required for the signature, and for the final exam.

Evaluation of the practical exam: successful/ not successful.

Due to holidays the dates of the practical exam may change.

Requirements for the successful completion of the course:

| Minimum required active attendance of the block seminars and practices and completion of the practical exams. |
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| Type of assessment: kollokvium_en |
| Examination requirements (list of examination topics, subject areas of tests, lists of mandatory parameters, figures, concepts and calculations, practical skills, optional topics for the project assignment recognized as an exam and the criteria for its completion and evaluation) |
| The knowledge of the given textbook, uploaded lecture material in Moodle and practice material. |
| Topics: see "Detailed course syllabus " |
| Method and type of grading (Share of theoretical and practical examinations in the overal evaluation. Inclusion of the results in the end-of-term assessment. Possibilities of and conditions for offered grades.): (Share of theoretical and practical examinations in the overall evaluation, Inclusion of the results in the end-of-term assessment, Possibilities of and conditions for offered grades) |
| Completing the traumatology and orthopedics practical exams is required for the signature, and for the final exam. |
| Evaluation of the practical exam: successful/ not successful (Practice test available.) In case of a failing (1) or satisfactory (2) grade, the Clinic provides the possibility of an oral exam. |
| Written MCQ electronic exam. 5 scale grading (1-5). |
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| List of coursebooks, textbooks, study aids and literature facilitating the acquisition of knowledge to complete the course and included in the assessment, precisely indicating which requirement each item is related to (e.g., topic by topic) as well as a list of important technical and other applicable study aids; possibility of individual or group student consultation, if available: Online resources: |
| Required Yes |
| Title |

| | https://itc.semmelweis.hu/moodle/ |
|---------------------|--|
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| inted resources | : |
| Required | Yes |
| Author | Editors: Andrew B. Peitzman Michael Rhodes C. William Schwab Donald M. Yealy Timothy C. Fabian |
| Title | The Trauma Manual: TRAUMA AND ACUTE CARE SURGERY Third edition |
| Publisher | Wolters Kluwer / Lippincott Williams & Wilkins |
| Year of publication | 1 1 |
| ignature of habi | litated instructor (course coordinator) announcing the course: |
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