

REQUIREMENTS

Semmelweis University, Faculty of General Medicine – single, long-cycle medical training programme

Name of the host institution (and any contributing institutions):

Department of Traumatology

Name of the subject: Traumatology

in English: Traumatology

in German: Traumatologie

Credit value: 0

Semester: I-II.

(as defined in the curriculum)

Total number of classes per week: 40	lectures: -	practical lessons: 40	seminars: -
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Type of subject: compulsory optional elective

(PLEASE UNDERLINE AS APPLICABLE)

Academic year: 2023/2024

Language of instruction, for optional or elective subjects: English

Course code: AOKTRA651_SA

(In the case of a new subject, this cell is filled in by the Dean's Office, following approval)

Course coordinator: Prof. Dr. Hangody László

Place of work, phone number:

Semmelweis University Traumatology Department

Tel: 06 1 467 3851

Position: Head of Department

Date and number of habilitation: May 24, 2003; Reference number: 10/2003

Objectives of the course and its place in the medical 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. Since the patient examination and therapeutic algorithm somewhat differ from the previously taught examination and treatment methods in the curriculum, our aim is to offer a general and practical approach to treating trauma patients for students. The prerequisite for 6th year Traumatology is the material and exam from the 5th year in Traumatology, to be used in a more practical manner. Beside this, familiarization and active participation in the daily routine of a Traumatology department play a role in the students' curriculum.

Place of instruction (address of lecture hall or seminar room etc.):

- Uzsoki Hospital, Department of Orthopedics-Traumatology, Conference room (ground floor)
1145 Budapest, Uzsoki street 29-41.
- Dr. Manninger Jenő Traumatology Center, Conference room (8th floor)
1081 Budapest, Fiumei street 17.
- In the Member States of the European Union (and in Switzerland and Norway), clinical practice is accepted and recognized if it is earned at a Traumatology or Orthopedic-Traumatology department at state-accredited university clinics or teaching hospitals – the legal ground for this is the mutual recognition of diplomas issued by the accredited institutions.
- Abroad at a Traumatology or Orthopedic-traumatology department of an accredited teaching hospital accredited by the Hungarian Accreditation Committee – HAC (this can be checked on the following website:
<https://semmelweis.hu/registrar/medicine/rotation/approved-institutes/>
- Abroad in the country of students' choice, which has been approved by the department (which meet the requirements posted on the Traumatology Department's website).

Competencies acquired through the completion of the course:

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. Consultation of typical and the more frequent trauma cases, radiologic diagnostics, as well as shadowing, observing and/or assisting in the operating theater are also part of the curriculum. In the ER, students will have an opportunity to examine and participate in the trauma care of patients under supervision.

Prerequisites for course registration and completion:

Traumatology IV
According to the academic and examination regulations of Semmelweis University.

Conditions for concurrent course registration and permission thereof in the case of a multi-semester subject:

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Student headcount conditions for starting the course (minimum, maximum) and method of student selection:

Minimum: Since Traumatology is a compulsory subject, there is no minimum number of students.
Maximum: (Depends on each teaching hospital's capacity)

Detailed course description:

(Theoretical and practical instruction must be broken down into lessons (weeks), numbered separately. Please provide the names of lecturers in both types of lessons, indicating guest lecturers. This information is not to be attached separately. CVs of guest lecturers, however, must be attached.)

- 1.) Daily attendance of morning conference. After becoming acquainted with the introduced cases, students will have the opportunity to examine the hospitalized patients and familiarize

themselves with patient's documentation.

- 2.) Assisting or observing in the operative theater, depending on the operative program.
- 3.) Students shall participate in patient admission, examination, follow and help in the evaluation of the diagnostic examinations, and take part in the acute treatment of traumatized patients during on duty shifts.
- 4.) Participating in grand rounds, patient presentation, and following up on referrals.
- 5.) Consultation with attending tutor of actual clinical cases, planning the treatment and the course of patient follow up.
- 6.) Taking part in patient follow up examinations. Examining the range of motion, function, evaluating x-rays and CT scans. Identification and treatment of complications.

Detailed syllabus:

1. First Aid
2. Evaluation of the mental-stage/orientation with the Glasgow-score
3. Evaluating and management of external wounds
4. Termination of bleeding
5. Transportation of trauma patient
6. Transient fixating bandage of traumatic part of body
7. Preparation of the surgical area
8. Surgical scrub-in and clothing
9. Infiltrational anaesthesia
10. Incision and drainage
11. Management of infected, necrotic wound
12. Closure
13. Stitch removal
14. Applying pressure-bandage
15. Reuniting closed fractures
16. Fracture stabilization
17. Reduction of dislocation
18. Transient fixation of broken extremities
19. Insertion of Foley's catheter in men
20. Insertion of Foley's catheter in women
21. Venous-cannulating
22. Pain management
23. Assisting surgical procedures

Related subjects due to interdisciplinary fields (both compulsory and elective) and potential overlaps between subjects:

Orthopedics, First aid, Sports Medicine, Neurotraumatology, Hand Surgery, General Surgery, First Aid, Special aspects of the treatment of the multiple injured patients, Artificial Intelligence in Diagnostics and Surgery Planning

Attendance requirements; conditions under which students can make up for absences and the method of absence justification:

Duration of the practice: 1 week (40 hours)

The certificate (for students spending the practice abroad) or attendance sheet (students spending the practice in Budapest) must be handed in or scanned and emailed to the Traumatology Department upon completion of the practice.

No absence of the practice is allowed.

In case of illness, 10 hours of absence is allowed if the student can provide documents of medical treatment, and this absence can be made up at a later time which is convenient for the tutor. Absence

of more than 10 hours cannot be made up and we cannot accept the practice for the student.

Form of assessment in the study period:

(including the number, topics and scheduling of oral and written tests, their share in the overall evaluation, make-up tests and improvement tests)

The interactive seminars and practices allows for the assessment of students' progress. There will be no formal test/quiz during the practice week.

Number and type of assignments for individual work and the deadline for submission:

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Requirements to obtain the teacher's signature:

Attendance of the practice (one week - 40 hours), as well as the signed and stamped attendance sheet (and/or certificate) according to the directions written on the department's website (based on where the student spends their practice)

Type of assessment (*comprehensive examination, end-term examination, term-grade, term-grade on a three-grade rating scale, coursework project, no examination*)

Final exam – oral exam

The exam for 6th year students is organized by the Traumatology Department following the one week Traumatology practice as part of the 6 week surgery practice. The prerequisite for the surgery exam is that the student takes both the Traumatology and Vascular Surgery examinations prior to the General Surgery examination. The average of the 3 partial grades (Traumatology, Vascular Surgery and General Surgery) constitutes the score of the final exam.

Examination requirements:

(*list of examination topics, subject areas of tests / examinations, lists of mandatory parameters, figures, concepts and calculations, practical skills and the optional topics for exam-equivalent coursework projects, their criteria of completion and assessment*)

Oral examination. One of the following topics is chosen by the student. The knowledge of the topic is based on material of the textbook, lecture material uploaded in Moodle, and knowledge acquired during practices from both 4th and 6th years.

Topic list

1. Treatment of the open fractures, guidelines, methods
2. Nonoperative treatment methods of fractures (traction, functional treatment, external fixation, guidelines of the treatment of fractures)
3. Osteosynthesis, methods
4. Mechanism, diagnosis and treatment of joint dislocations
5. Clinical symptoms of fractures, diagnosis
6. Primary and immediate care of skull and brain injuries, in-hospital diagnostic examination methods
7. Classification of skull fractures, and treatment principles
8. Concussion and contusion of the brain and their treatment
9. Epidural, subdural and intracerebral hematoma; symptoms, diagnosis and treatment
10. Examination of spinal injuries; diagnosis. Surgical indications in the management of spinal injuries
11. Fixation of vertebral fractures. Rehabilitation of spinal injuries
12. Rib fracture classification, treatment and prognosis

13. Treatment and diagnosis of hemo- and pneumothorax
14. Guidelines for observing patient with blunt abdominal injuries, diagnosis and treatment of parenchymal and bowel injuries
15. Types and treatment of the injuries of the shoulder girdle (soft tissue and bony lesions)
16. Treatment of humeral fractures (humerus neck and diaphysis)
17. Diagnosis and treatment of olecranon fractures
18. Treatment of forearm fractures in adults
19. Typical radial bone fracture (distal radius fracture) principals and treatment methods
20. Perilunul luxation and fracture of the scaphoid bone. Therapy of Bennett's fracture. Metacarpal and phalangeal fractures.
21. Soft tissue and tendon injuries of the hand. Septic hand.
22. Types, treatment and associated injuries of pelvic fractures.
23. Types, therapy and probable complications of hip fractures (femoral neck and intertrochanteric fractures)
24. Diagnosis, treatment, complications and prognosis of intracapsular fractures of the femoral neck
25. Principles of endoprosthesis replacement (arthroplasty) surgery
26. Diaphyseal fractures of the femur
27. Intraarticular fractures of the knee and treatment methods
28. Diagnosis and treatment of patellar fractures
29. Ligament injuries of the knee – injury mechanism, diagnosis and treatment
30. Cartilage injuries of the knee joint (including meniscus injuries). Principles of arthroscopy
31. Open and closed tibia fractures – treatment and rehabilitation
32. Ankle sprain injuries – examination and treatment methods. Complications of ankle fractures and their treatment methods.
33. Types and treatment of ankle fractures
34. Calcaneal fracture and its therapy
35. Symptoms and therapy of Achilles tendon ruptures
36. Compartment syndrome of the lower extremity – diagnosis and treatment

Method and type of grading:

(Share of theoretical and practical examinations in the overall evaluation. Inclusion of the results of the end-of-term assessment. Possibilities of and conditions for offered grades.)

Grading is based on a 5 scale grading system (1-5). The grade of the oral exam in Traumatology is a partial grade of the Surgery final exam.

(See above: "The prerequisite for the surgery final exam is that the student takes both the Traumatology and Vascular Surgery examinations prior to the General Surgery examination. The average of the 3 partial grades (Traumatology, Vascular Surgery and General Surgery) constitutes the score of the final exam.")

List of course books, 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:

Name of Textbook:

The Trauma Manual:
 TRAUMA AND ACUTE CARE SURGERY
 Third edition

Editors:

Andrew B. Peitzman
 Michael Rhodes

C. William Schwab
Donald M. Yealy
Timothy C. Fabian

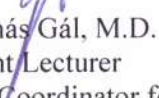
Publisher:

Wolters Kluwer / Lippincott Williams & Wilkins

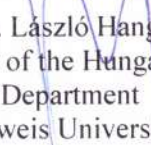
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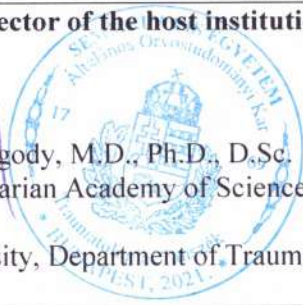
The lecture material can be downloaded from Semmelweis University's E-learning portal
<https://itc.semmelweis.hu/moodle>

Signature of habilitated instructor (course coordinator) announcing the course:


Dr. Tamás Gál, M.D.
Assistant Lecturer
Course Coordinator for English language students
Semmelweis University, Department of Traumatology

Signature of the director of the host institution:


Prof. Dr. László Hangody, M.D., Ph.D., D.Sc.
Member of the Hungarian Academy of Sciences
Head of Department
Semmelweis University, Department of Traumatology



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