#### REQUIREMENTS

## Semmelweis University, Faculty of Medicine

Name of the managing institute (and any contributing institutes): Asklepios Campus Hamburg (ACH) of the Semmelweis University

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Name of the subject:

in English: Clinical Emergencies

in German: Klinische Notfälle

Credit value: 1

Number of lessons: 2 blocks, in total 14 x 45 min lecture: 4 x 45 min practical course: 10

x 45 min seminar: -

Subject type: compulsory course <u>elective course</u> optional course

Academic year: 3, 4 and 5

Subject code:

(In case of a new subject, it is filled by the Dean's Office, after approval)

Name of the course leader:

Prof. Dr. Thoralf Kerner

Dr. Oliver Haupt

Vincent Duske

## His/her workplace, phone number:

Asklepios Klinikum Harburg, Eißendorfer Pferdeweg 52, 21075 Hamburg, Tel: +49 (0)40 181886-2501

**Position:** 

Chief Physician, MD, Anesthesiology, Intensive Care, Emergency Medicine, Pain Therapy

Date and registration number of their habilitation:

Granting of licence to teach ("Lehrbefugnis") at 17.07.2003

#### Objectives of the subject, its place in the medical curriculum:

The objective of this course is to deepen and strengthen the practical skills of students, to react appropriately, experienced and professionally to clinical emergency situations. Already in the 6<sup>th</sup> year rotation students will be confronted with emergency cases, to which they have to react fast and confidently, maybe also alone in a night shift. Therefore, it is of outmost importance, to train students practically for these situations.

Place where the subject is taught (address of the auditorium, seminar room, etc.): Asklepios Campus Hamburg

Successful completion of the subject results in the acquisition of the following competencies:

- Competent and confident handling of the following emergency situations:
- o Myocardial infarction
- o Cardiac arrhythmia, tachyarrhythmia absoluta (TAA)
- Asystole (-> Cardiopulmonary Resuscitation)
- Exacerbated chronic obstructive pulmonary disease (COPD) / Pneumonia
- o Status asthmaticus

## o (Opioid) intoxication

- o Apoplexy
- Intracerebral hemorrhage
- Postoperative secondary hemorrhage
- Anaphylactic shock
- Foreign body aspiration (shortness of breath)

## **Course prerequisites:**

• Completion of the pre-clinical phase, intended for students in their 5<sup>th</sup> to 10<sup>th</sup> semester.

# Number of students required for the course (minimum, maximum) and method of selecting students:

Smallest number of participants: 5

Largest number of participants: 10

Method of selecting the participants: Students that applied for the course will be selected by a random number generator, if necessary

## How to apply for the course:

• Online registration via O365 at a definite time

#### **Detailed curriculum:**

(Theoretical and practical lessons shall be given separately by numbering the lessons (by weeks). Please provide the names of the teachers of the lectures and practical lessons and indicate guest lecturers. Do not use attachments!

Always attach a CV for guest lecturers!)

Block 1 (lecture, 4x 45 min): Theoretical introduction in clinical emergencies (Duske/Haupt) Introduction into the most common clinical emergency situations including pathophysiology, diagnostics(both physical examination and apparative diagnostics) and therapy. Explanation of clinical algorithms in emergency management. Theoretical introduction to

Block 2 (practical course, 10x45 min): Case simulations of typical clinical emergencies I (Duske/Haupt)

Introduction into the simulation cases

Simulation case 1 (disoriented patient) Possible differential diagnoses: hypo-/hyperglycemia, hyponatremia, postoperative delir, stroke

Simulation case 2 (Patient with trouble breathing) Possible differential diagnoses: arterial embolism, ACS, psychosomatic pathological breathing, allergic reaction)

Simulation case 3 (Patient in shock) Possible differential diagnoses: allergic reactions, cardiogenic shock, hypovolemic shock,

Simulation case 4(Patient with acute pain) Possible differential diagnoses: ruptured abdominal aortic aneurysm, bowel perforation, abdominal trauma, acute appendicitis

Simulation case 5 (cardiac arrhythmia / TAA). Possible differential diagnoses: Cardiac arrhythmia, infarction, electrolyte imbalance, (medical/opioid) intoxication

Simulation case 6 (Exacerbated COPD) Possible differential diagnoses: COPD, pneumonia, asthma, pneumothorax....

Simulation case 7 (Unconscious patient, intracerebral hemorrhage) Possible differential diagnoses: Apoplexy, intoxication, intracranial pressure, meningitits.... Block 3: (practical course, 5x45 min): Case simulations of typical clinical emergencies II including practical exams (Duske/Haupt).

Similar cases as in Block 2 will be presented, the differential diagnosis will be varied.

Other subjects concerning the border issues of the given subject (both compulsory and optional courses!). Possible overlaps of themes:

• Emergency medicine

## Special study work required to successfully complete the course:

(E.g. field exercises, medical case analysis, test preparation, etc.)

#### Requirements for participation in classes and the possibility to make up for absences:

• 75% attendance

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• Missed classes will be made up for in self-study.

## Methods to assess knowledge acquisition during term time:

(E.g. homework, reports, mid-term test, end-term test, etc., the possibility of replacement and improvement of test results)

Oral contributions

## **Requirements for signature:**

- 75% attendance
- Signed register

## Type of examination:

Practical exam

## **Requirements of the examination:**

(In case of a theoretical examination, please provide the topic list; in case of a practical exam, specify the topics and the method of the exam)

• In the practical exam the students will be presented with different clinical emergency cases, to which they have to react accordingly.

## Method and type of evaluation:

(Method of calculating the final mark based on the theoretical and practical examination. How the mid-term test results are taken into account in the final mark.)

- 25% Oral contribution
- 75% practical exam

## How to register for the examination?:

• 75 % attendance is sufficient as a basic requirement to be admitted to the exam

## Possibilities for exam retake:

• 2 times

Printed, electronic and online notes, textbooks, guides and literature (URL address for online material) to aid the acquisition of the material:

Thomas Fleichmann, Fälle Klinische Notfallmedizin, Die 100 wichtigsten Diagnosen. Elsevier/ Urban&Fischer

Marcus Frimmel, Klinische Notfälle griffbereit - Internistische Akutsituationen auf einen Blick. Schattauer

Signature of the habilitated instructor (co	ourse leader) who announced the subject:
Kn 29.06.21	/ .A
Signature of the Director of the Managing J	ASKLEPIOS
	Eißendorfer Pferdeweg 52 · 21075 Hamburg Tel.: (040) 1818-86 2253
Hand-in date: 28 <sup>th</sup> of June, 2021	Fax: (040) 1818-86 2127

Opinion of the competent committee(s):

Comments of the Dean's Office:

Dean's signature: