



**Karolinska  
Institutet**

Kursplan för

## **Klinisk rotation i akutmedicin, 6 hp**

Clinical rotation in Emergency Medicine, 6 credits

Denna kursplan gäller från och med höstterminen 2009.

Kurskod	2EE090
Kursens benämning	Klinisk rotation i akutmedicin
Hp	6 hp
Utbildningsform	Högskoleutbildning, 2007 års studieordning
Huvudområde	Medicin
Nivå	AV - Avancerad nivå
Betygsskala	Utmärkt, mycket bra, bra, tillfredsställande, tillräckligt, otillräcklig, helt otillräcklig
Kursansvarig institution	Institutionen för klinisk forskning och utbildning, Södersjukhuset
Beslutande organ	Programnämnden för läkarprogrammet
Datum för fastställande	2009-11-16
Kursplanen gäller från	Höstterminen 2009

### **Särskild behörighet**

The student must have a good command of English (or Swedish) in written and oral communicative skills. successfully fulfilled 3 years of a study programme in Medicine (including internal medicine) and basic scientific and IT-skills. The design of the course demands fulltime participation in theory and clinical practice as well as preparation prior to the rotation and studies at home during the rotation.

### **Mål**

After completing the rotation the student should be able to: 1) Recognize and validate disturbances in the airways, breathing and circulation 2) Initially treat these disturbances by securing the airways, giving infusions and performing cardiopulmonary resuscitation. 3) Use and validate diagnostic tools available at the ED, such as arterial blood gases, X-ray and ECGs. 4) Take a relevant history. 5) Present a case to a colleague or supervisor. 6) Present and discuss relevant differential diagnoses. 7) Present a plan for treatment. 8) Work in a team around the acutely ill patient in the trauma room. 9) Order and judge the need of the different tests available at the ED, such as wide range of x-ray methods. 10) Get an understanding of when and why relevant clinical tests, blood tests or other tests be ordered and what the clinical consequences of these tests may be. 11) Get a basic knowledge of prehospital emergency medicine. Diseases which will be part of the course in a more detailed manner: - Acute coronary syndrome and myocardial infarction - Pulmonary embolism and deep venous thrombosis - Congestive heart failure - Sepsis - Chronic obstructive pulmonary disease, asthma and pneumonia - Stroke - Appendicitis - Bowel obstruction - Diseases of the gall bladder and biliary system - Acute abdomen -

Gastrointestinal bleeding - Aortic aneurysm and dissection - Hip fractures - Wrist fractures - Ankle fractures - Kidney stones - Infection of the urinary tract - Basic knowledge of trauma care Clinical skills that will be part of the course in a more detailed manner: - venous and arterial puncture - open airway with and without airway devices - ventilate a patient - performance of cardiopulmonary resuscitation - interpretation of arterial blood gases - surgical suture of injuries - treatment distal fractures of the radius - examination and treatment of the injured knee - examination of the injured ankle - good knowledge and clinical use of Wells sore, Ottawa knee, ankle and foot rules, Nexus and Canadian cervical spine rules - clinical examination of the abdomen - interpretation of the ECG - insertion a nasogastric tubes - insertion peripheral venous catheters - use a intraosseus needle

## Innehåll

Emergency Medicine and working at the Emergency Department (ED) demands broad knowledge and skills of the staff. In the ED one has to recognize a broad spectrum of disease and disturbances of the vital functions in the human organism in an effective and rapid matter. Sometimes this has to be done in very short time, under complex circumstances. Consequently, in a clinical rotation the most of the teaching in the subject will involve the transformation of knowledge into clinical skills. Such clinical skills will have to be remembered and ready to use in a situation where the physician or medical student works under the pressure, treating a patient with life threatening conditions.

## Arbetsformer

The main objective of this course is to transform clinical knowledge into clinical skills. As much as possible teaching in the practical clinical situation will be used. Bed side teaching will be supplemented by discussions in groups, simulator training in groups and training of clinical skills such as suturing or airway management on a individual basis using simulator dummies or other devices. Lectures will be held sparingly. Each medical student will be attached to an emergency physician who will be responsible for the bed side teaching of the student and will act as personal contact for the student. If necessary, and if possible, the student will be attached to an other physician such as a surgeon or a cardiologist. All teaching models will based on individual tutoring, guidance and feedback.

## Examination

Compulsory attendance: The student is expected to adhere to normal codes of conduct in working life (call to explain if ill or otherwise absent from work, stay until the days task are finished or else give reason). The supervisor decides how the student should compensate for any failure to attend.

Examination: The course will be completed by a complex examination. This examination will be held at the end of the course and will contain the following parts: - bed side examination, random patient ( to asses the bed side skills, skills in taking a history and skills in clinical examination), - theoretical oral examination, assessing the knowledge and understanding of differential diagnosis and clinical test (X-ray, arterial blood gases, blood tests etc), - theoretical written examination (multiple choice format), - practical examination of the clinical skills in cardiopulmonary resuscitation, including the use of medication and defibrillator, - practical examination at the simulator center, as a member of a team of professionals working at the ED, assessing the clinical skills in the situation of treating a acute ill patient with a potential life threatening condition.

## Övriga föreskrifter

The course will be evaluated in accordance with the guidelines established by the Program Committee. A students work-based education may be ended immediately if the student demonstrates such a serious lack in terms of knowledge, skills or attitude that patient safety or patients confidence in medical care is jeopardised. If the work-based education is ended in this way, an individual action plan should be drawn up detailing the activities and knowledge checks required before the student may continue with

work-based education. A student who has failed the work-based education due to such a serious lack in terms of knowledge, skills or attitude that patient safety or patients confidence in medical care is jeopardised is qualified to a new opportunity only when the individual action plan has been completed.

## Litteratur och övriga läromedel

### Literature and teaching aids

Besides the articles that will be provided with the pretest paper, we recommend the following books, presented in a random order:

*Collier, J. A. B.; Longmore, J. M.q (J. Murray); Brinsden, Mark*

#### **Oxford handbook of clinical specialties**

7. ed. : Oxford : Oxford University Press, 2007 - 842 s.

ISBN:0-19-853085-4 LIBRIS-ID:10610320

[Sök i biblioteket](#)

#### **Oxford handbook of accident and emergency medicine**

*Wyatt, Jonathan P.*

2. ed. : Oxford : Oxford University Press, 2005 - xi, 714 s.

ISBN:0-19-852623-7 LIBRIS-ID:9899950

[Sök i biblioteket](#)

#### **Oxford handbook of clinical medicine**

*Hope, R. A.*

3. [rev.] ed. : Oxford : Oxford Univ. Press, 1993 - 837 s.

ISBN:0-19-262115-7 LIBRIS-ID:8276597

[Sök i biblioteket](#)

*Tintinalli, Judith E.; Kelen, Gabor D.; Stapczynski, J. Stephan*

#### **Emergency medicine : a comprehensive study guide**

London : McGraw-Hill, 2004-

LIBRIS-ID:9991458

URL:

<http://ezproxy.its.uu.se/login?url=http://www.accessmedicine.com/resourceTOC.aspx?resourceID=40z>  
[Tillgänglig för användare inom Uppsala universitet](#)

Leonard R. Frank and Kathleen A. Jobe, Admission and Discharge Decision in Emergency Medicine