

Course title: Emergency Medical Conditions I

Course coordinator: Assistant Professor Goran Hauser, MD., PhD.

Department: Internal medicine

Study programme: Integrated undergraduate and graduate university study of Medicine in English

language

Study year: 4th

Academic year: 2020/2021

SYLLABUS

COURSE DESCRIPTION:

Course **Emergency medicine I** is compulsory course in the 4th year of the Integrated Undergraduate and Graduate Study of Medicine in English. It consists of 96 hours of exercises, individual assignment and group seminar paper (7 ECTS credits). The course is held in the premises of the Department for Emergency Medicine, University Hospital Center Rijeka.

Course objectives:

Adopt theoretical knowledge in the field of internal medicine, neurology, pediatrics, infectology and psychiatry. Students are going to apply knowledge during practical work in Emergency medicine department through 12 hours shifts. It is expected that students adopt process of triage, interviewing, physical examination and assessing of emergency level in critically ill patients. In addition, it is expected to understand principal indications for laboratory, imaging and endoscopic procedures in emergency department.

Course content:

Approach to the emergency patient, importance of anamnestic data and physical examination, basics of emergency medicine and introduction in the most common emergency conditions in internal medicine, neurology, pediatrics, infectology and psychiatry. Importance of diagnostic methods in radiology, laboratory diagnostics and endoscopy. Basic introduction in other non-surgical medical fields like dermatovenerology and oncology. Differential diagnosis and multidisciplinary approach. Fieldwork are going to be organized as assistance for medical transportation in ambulance car.

Teaching:

Classes are organized in the form of exercises, with no seminars and lectures. Exercises are supervised by emergency medicine physicians, while students are actively involved in patient treatment in Department of Emergency medicine. Teachers discuss with students the specifics of each exercise. By completing all teaching activities, the student's attendance on exercises acquires 7.0 ECTS credits.

Assigned reading:

- 1. Dan Longo et.al. Harrison's Principles of Internal Medicine, McGraw-Hill 19th edt, 2015
- 2. Vesna Degoricija i sur. Emergency Medicine, MMM Marketing, Zagreb 2011

Optional/additional reading:

- 1. Tintinalli J.E. et.al. Tintinalli's Emergency medicine, a comprehensive study guide. McGrawHill, 9th edt, 2020.
- 2. Wyatt J. et al. Oxford Handbook of Emergency Medicine, Oxford University Press, 4th edt, 2012.
- 3. Marino PL, et.al. ICU book, 4rd edition, LWW, Philadelphia 2013

COURSE TEACHING PLAN:

Lectures:

Not applicable.

Exercises - practical teaching:

Exercises are organized through 12-hour shifts in the Department for Emergency Medicine, University Hospital Center Rijeka. Students are active participants in the care of patients, learning while working with the doctor on duty.

Individual assignment: students are required to write a case report of one patient in whose treatment they participated.

Group assignment: Students are required to write a group seminar paper (1 group = 4 students) on one of the following topics:

- 1. Differential diagnosis and treatment of patients with chest pain in Department for Emergency Medicine
- 2. Differential diagnosis and treatment of patients with abdominal pain in Department for Emergency Medicine
- 3. Differential diagnosis and treatment of patients with dyspnea in Department for Emergency Medicine
- 4. Approach to the jaundice patient in Department for Emergency Medicine
- 5. Approach to a patient with a consciousness disorder in Department for Emergency Medicine
- 6. Monitoring in emergency medicine
- 7. Ultrasound appliance in emergency medicine, FAST protocol
- 8. Polytraumatized patient in Department for Emergency Medicine
- 9. Differential diagnosis and treatment of fever in Department for Emergency Medicine
- 10. Approach to a patient with headache in Department for Emergency Medicine
- 11. Approach to a patient with CVI in Department for Emergency Medicine
- 12. Patient with GIT bleeding in Department for Emergency Medicine
- 13. Patient with respiratory bleeding in Department for Emergency Medicine
- 14. Initial treatment of patients with hyperglycemia in Department for Emergency Medicine
- 15. Hematology emergencies in Department for Emergency Medicine
- 16. Laboratory processing in Department for Emergency Medicine
- 17. ECG in Department for Emergency Medicine
- 18. ABS in emergency medicine

- 19. Shock and shock management in emergency medicine
- 20. Algorithm for the management of anaphylaxis and anaphylactic shock in Department for Emergency Medicine
- 21. Resuscitation algorithm
- 22. Triage in emergency medicine
- 23. Respiratory care in emergency medicine
- 24. Emergencies in neurology
- 25. Emergencies in psychiatry
- 26. Urological emergencies
- 27. Hypertensive emergency and urgency
- 28. Neurosurgical emergencies
- 29. Emergencies in pulmonology
- 30. Radiological processing in OHBP
- 31. Neurological emergencies
- 32. Bleeding in patients on oral anticoagulant therapy
- 33. Bleeding from the upper GIT
- 34. Acute pancreatitis
- 35. Acute chronic liver failure
- 36. Initial approach to the patient with acute myocardial ischemia
- 37. Pulmonary edema and acute care
- 38. Aortic dissection
- 39. Pulmonary thromboembolism, recognition and acute care
- 40. Application of therapy in Department for Emergency Medicine and selection of drug administration (inhalation, sublingual, IV, IO, CVK)
- 41. Approach and initial care of intoxicated patient
- 42. Legal medical problems in Department for Emergency Medicine

Individual case reports and group seminar papers are submitted using official e-mail addresses via the Merlin e-learning system.

Student's obligations:

Attendance on exercises and work with doctors at the Department for Emergency Medicine is mandatory. Individual assignment in form of case report of one patient in whose treatment they participated is mandatory. Group assignment in form of group seminar paper is mandatory.

Use of official e-mail addresses for communication with teacher staff through e-learning system Merlin is mandatory.

Student assessment:

There is no final exam. Attendance at the scheduled 8 shifts and timely submitted case report and group seminar paper is mandatory for passing the course. In exceptional cases of force majeure, it is possible to replace students on duty, but on a "one for one" basis due to the space constraints of the Center for Emergency Medicine. Substitutions are possible only with the prior written consent of the course teacher or assistants. On-call recoupment are possible in reserved terms in September.

Other remarks (related to the course) which are important for students:

Teaching content and all information related to the course as well as exam dates can be found on the Merlin e-learning system and on the web pages of the Department of Internal Medicine. Any communication between the teaching staff and students will take place through the Merlin e-learning system with the possibility of arranging consultations during working hours. All student inquiries, regarding the course and possible problems, remarks and inquiries are provided exclusively using the official e-mail addresses via the Merlin e-learning system. Seminar papers and case reports are submitted through the Merlin e-learning system.

COURSE SCHEDULE (FOR ACADEMIC YEAR 2020 / 2021)

Date	Lectures (time and place)	Seminars (time and place)	Exercises-practical teaching (time and place)	Teacher
According to the duty schedule	NP	NP	Department for Emergency Medicine, University Hospital center Rijeka	izv.prof.dr.sc. Goran Hauser,dr.med. dr.sc. Ivana Žitinić, dr.med.
According to the duty schedule	NP	NP	Department for Emergency Medicine, University Hospital center Rijeka	izv.prof.dr.sc. Goran Hauser,dr.med. dr.sc. Ivana Žitinić, dr.med.
According to the duty schedule	NP	NP	Department for Emergency Medicine, University Hospital center Rijeka	izv.prof.dr.sc. Goran Hauser,dr.med. dr.sc. Ivana Žitinić, dr.med.
According to the duty schedule	NP	NP	Department for Emergency Medicine, University Hospital center Rijeka	izv.prof.dr.sc. Goran Hauser,dr.med. dr.sc. Ivana Žitinić, dr.med.
According to the duty schedule	NP	NP	Department for Emergency Medicine, University Hospital center Rijeka	izv.prof.dr.sc. Goran Hauser,dr.med. Ana Tancabel Mačinković, dr.med.
According to the duty schedule	NP	NP	Department for Emergency Medicine, University Hospital center Rijeka	izv.prof.dr.sc. Goran Hauser,dr.med. Ana Tancabel Mačinković, dr.med.
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According to the duty schedule	NP	NP	Department for Emergency Medicine, University Hospital center Rijeka	izv.prof.dr.sc. Goran Hauser,dr.med. Ana Tancabel Mačinković, dr.med.

List of lectures, seminars and exercises:

	LECTURES (topics)	Teaching hours	Location
P1	Not applicable		
	Total hours of lectures		

	SEMINARS (topics)	Teaching hours	Location
S1	Not applicable		
	Total hours of seminars		

	EXERCISES – practical teaching	Teaching hours	Location
V1	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
V2	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
V3	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
V4	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
V5	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
V6	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
V7	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
V8	12-hours shift in Department for Emergency	12	Department for Emergency Medicine, University Hospital center Rijeka
	Total hours of exercises	96	

	EXAM TIMETABLE
1.	12.05.2021.
	09.06.2021.
	07.07.2021.
	07.09.2021
	21.09.2021