

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN Faculty of Medicine

48SJ-EMEDM

Course sylabus - part A Emergency Medicine with Elements of Disaster Medicine

ECTS: 4.00 CYCLE: 2023L

SUBJECT MATTER CONTENT

LECTURE

Advanced life support (ALS) in adults and children according to ERC 2021. Post-resuscitation care. Prehospital care of trauma patient-, Stay and play" or "Scoop and run"? Head trauma in ED. Musculoskeletal trauma radiological diagnostics and treatment in ED. The role of ED in care and diagnostics of patients with acute ischemic stroke.

SEMINAR

SEMINARS: Multi-organ injuries, the role of the Trauma Centre and Trauma Team. Multi-organ casualty – discussion of the medical case based on Evidence Based Medicine. Bases of fluid therapy. Practical basis of ECG. Introduction to Disaster Medicine. Bioterrorism in the world- threat, Role of Emergency Medical Services in Distaster Management and Preparedness

CLASSES

The specificity of work in the emergency department (ED. Triage in the emergency department. Patients monitoring in the ED. Advanced life support (ALS) in adults and children including electrotherapy. Dealing with trauma patients in the emergency department. Patients with impaired circulation and respiration - diagnosis and treatment of ED. Acute neurological conditions including CNS trauma, seizures and stroke. Therapeutic procedures in the emergency department. Diagnostic procedures in the emergency department with particular emphasis on radiological examination. Introduction to ITLS. Prehospital care of trauma patients. The preliminary survey, fast trauma examination. Treatment of patients with head trauma, and cervical spine injury. Diagnostic imaging in trauma in Emergency Department. Spine injuries- transport safety, diagnosis, initial stabilization in ED. Pelvic trauma. Musculoskeletal injuries- X-ray imagining, initial treatment. Dislocations and sprains diagnosis and treatment. Hypovolemic shock- fluid therapy and blood therapy in ED. Treatment of patients with burns. Emergencies in ACS-diagnosis, procedures. ECG analysis. Cardiogenic cardiology: pulmonary edema. Cardiogenic shock- use of vasopressors. Pulmonary dissection. Tachyarrhythmias, embolism. aortic bradyarrhythmiasanalysis of ECG, external pacing and cardioversion. Advanced life support-ERC guidelines 2021 (exercises using phantoms). ALS in children (exercises using phantoms) . Triage -START and Jump- START systems. Donning and Doofing of PPE. Role of Emergency Medical Services in **Distaster Management and Preparedness**

TEACHING OBJECTIVE

The aim of the course is to acquaint students with the specifics of the medical work in the emergency department and to prepare students for performing the diagnosis and treatment of primary and most common emergencies. The aim of the course is to prepare the student to making quick, accurate and critical decisions while working in the emergency

Legal acts specifying learning outcomes: 672/2020 **Disciplines:** medical sciences Status of the course:Obligatoryjny Group of courses:B przedmioty kierunkowe Code: ISCED 0912 Field of study: Medicine Scope of education: Profile of education: General academic, Practical Form of studies: full-time Level of studies: uniform master's studies Year/semester: 5/10

Types of classes: Lecture, Seminar, Classes Number of hours in semester:Lecture: 20.00, Seminar: 10.00, Classes: 50.00 Language of

instruction:English Introductory subject: anathomy, physioloy, internal medicine, pediatrics, neurology, anesthesiology and intensive care **Prerequisites:** basic information from the enumerated subjects

Name of the organisational unit conducting the course:Katedra Medycyny Ratunkowej Person responsible for the realization of the course:dr n. med. Rakesh Jalali e-mail: rakesh.jalali@uwm.edu.pl

Additional remarks:

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING **OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE** POLISH OUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes	M/NM+++, M/NMA_P7S_KR+++, M/NMA_P7S_KO+++, M/NMA_P7S_WG+++, M/NMA_P7S_UW+++	
related to the discipline:		

Symbols for outcomes

F.U7.+, F.W10.+, K.2.+, F.U21.+, F.W1.+,
 Symbols for outcomes
 F.U1.+, F.W10.+, N.2.+, F.021.+, F.W1.+, E.U14.+, K.5.+, F.U8.+, K.3.+, F.W7.+, F.U22.+, F.U11.+, F.U10.+

LEARNING OUTCOMES: **Knowledge:**

W1 – causes, symptoms, principles of diagnostic and therapeutic procedures for the most common diseases requiring surgical intervention, both adults and children, in particular: 1) acute and chronic abdominal diseases, 2) chest diseases, 3) limb and head diseases, 4) bone fractures and organ injuries;

W2 - He knows the current guidelines for cardiopulmonary resuscitation of newborns, children and adults

the issues of the contemporarily employed imaging tests, W3 especially: 1) radiological symptomatology of the basic diseases, 2) the instrumental methods and imaging techniques used in medical surgeries, 3) the indications, contraindications, and patient preparation for individual types of imaging tests, and contraindications against the use of contrast agents;

Skills:

U1 -Performs basic resuscitation procedures using an automatic external defibrillator and other rescue operations and first aid

U2 - act in accordance with the algorithm of advanced resuscitation procedures:

U3 - assess the condition of an unconscious patient in accordance with international point scales;

U4 - recognise symptoms of growing intracranial pressure;

U5 - recognise immediately life-threatening conditions

U6 - assess the results of radiological tests for the most frequent types of fractures, especially long bone fractures;

U7 - immobilise a limb temporarily, select the type of immobiliser necessary in typical clinical situations, and control the correct blood flow in the limb once the immobilising dressing has been applied;

Social competence:

K1 - Respects medical confidentiality and patient's rights.

K2 – noticing and recognizing own limitations and self-assessment of deficits and educational needs

K3 – Guided by the good of the patient putting them in the first place.

TEACHING FORMS AND METHODS:

Lecture(W1;W2;W3;U1;U2;U3;U4;U5;U6;U7;K1;K2;K3;):multimedia presentation

Seminar(W1;W2;W3;U1;U2;U3;U4;U5;U6;U7;K1;K2;K3;):multimedia presentation, case report, discussion

Classes(W1;W2;W3;U1;U2;U3;U4;U5;U6;U7;K1;K2;K3;):CLINICAL CLASSES

FORM AND CONDITIONS OF VERIFYING LEARNING

OUTCOMES: Lecture (Evaluation of the work and cooperation in the group) - Evaluation of the work and cooperation in the group - Seminar (Evaluation of the work and cooperation in the group) - Evaluation of the work and cooperation in the group - Classes (Colloquium test) - Single-choice test -	
BASIC LITERATURE: 1. ERC, <i>GUIDELINES 2021</i> , Wyd. ERC, R. 2021	

Detailed description of ECTS credits awarded - part B 48SJ-EMEDM Emergency Medicine with Elements of Disaster ECTS: 4.00 Medicine CYCLE: 2023L

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

- participation in: Lecture	20.0 h
- participation in: Seminar	10.0 h
- participation in: Classes	50.0 h
- consultation	2.0
	Total: 82.0 h

2.	Indep	pendent	work	of a	student:	
				0.0	beddener	

Zgłębianie wiedzy przedmiotowej	10.00 h
Przygotowanie do zaliczenia przedmiotu	8.00 h

Total: 18.0 h

contact hours + independent work of a student Total: 100.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = 100.0 h : 25.0 h/ECTS = 4.00 ECTS on average: 4.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: