

ED: 02 DATE: 20.12.2013

PAGE. 3/3

Approved

At the meeting of the Faculy Council **Medicine nr. 2** Minutes Nr. 3 of 25.02.2014

Approved

At the meeting of the chair **Emergency Medicine** Minutes Nr. 11 of 28.01.2014

Dean of the Faculty **Medicine nr. 2** PhD, associate professor **M.Betiu** 

Head of the chair **Emergency Medicine**, PhD, professor **Gh.** Ciobanu

SILLABUS FOR STUDENTS OF THE

**FACULTY MEDICINE NR. 2** 

Name of the course: EMERGENCY MEDICINE

Code of the course: S.02.0.016

Type of course: compulsory

Total number of hours 34,

lectures 17 hours, practical lessons 17 hours

Number of credits provided for the course: 2

Lecturers teaching the course:

Gh.Ciobanu, PhD, university professor, Lev Crivceanschii, PhD, associate. prof., L.Rezneac, PhD, associate. prof., Natalia Scurtov, MD, assist. prof., Ala Rabovila, MD, assist. prof., Eugenia Ciubotaru, MD, assist. prof., Natalia Catanoi, MD, assist. prof., Victoria Petrachi, MD, assist. prof.,

Chisinau 2014



ED: 02
DATE: 20.12.2013

**PAGE. 3/3** 

### I. Aim of the discipline

Education and training in cardiovascular, neurological, traumatological and paediatric emergencies, especially in training on assessment, diagnosis and early measures of stabilization of the patient.

### II. Objectives obtained in teaching the discipline

- At the level of knowledge and understanding
- 1. Initial examination at the scene of the accident. Evaluation of vital signs.
  - To determine if the scene is safe to enter
  - To discuss the components of primary survey
- 2. Cardiopulmonary resuscitation in pre-hospital condition:
  - To describe methods of opening the airway: Head-tilt, Chin-lift Maneuver and Jaw-thrust Maneuver
  - To describe how to ventilate a patient with a (pocket) resuscitation mask or barrier device
  - To describe the difference of ventilation of an infant or a child and an adult
  - To list the steps in providing mouth-to-mouth and mouth-to-nose ventilation
  - To describe how to measure and insert an a nasopharyngeal and oropharyngeal airway
  - To describe how to clear a foreign body airway obstruction in a responsive patients (adult and child) with complete or partial obstruction, or complete airway obstruction and poor air exchange
  - To describe each link in the chain of survival in adults and children
  - To describe the technique of external chest compression on an adult, on an infant and on a child

### 3.Bleeding and soft-tissue injuries:

- To differentiate between arterial, venous and capillary bleeding
- To state the emergency medical care for external bleeding
- To list the signs of internal bleeding
- To list the steps in the emergency medical care of patients with signs and symptoms of internal and external bleeding
- To describe the emergency medical care of the patient with a soft-tissue injury

### 4. Medical emergencies:

- To identify a patient who presents with a general medical complaint (chest pain, hypotension...), medical complaint of seizures and altered mental status
- To explain the steps in providing emergency medical care to a patient with a general medical complaint (chest pain, hypotension...), medical complain of seizures and altered mental status

#### At the level of application

- 1. Primary examination at the scene of the accident. Evaluating of the vital signs.
  - To demonstrate the techniques to assess mental status



ED: 02
DATE: 20.12.2013

**PAGE. 3/3** 

• To demonstrate the techniques to assess the airway

- To demonstrate the techniques to assess if the patient is breathing
- To demonstrate the techniques to assess if the patient has a pulse
- 2. Cardiopulmonary resuscitation in a pre-hospital:
  - To demonstrate the steps in the head-tilt, chin-lift and jaw-thrust
  - To demonstrate the steps in mouth-to-mouth and mouth-to-nose ventilation
  - To demonstrate how to use a (pocket) resuscitation mask to ventilate a patient
  - To demonstrate how to measure and insert an a nasopharyngeal and oropharyngeal airway
  - To demonstrate how to clear a foreign body airway obstruction in a responsive patients (adult and child) with complete obstruction or partial, or complete airway obstruction and poor air exchange
  - To demonstrate the proper technique of chest compression on an adult manikin, on a child manikin and on an infant manikin
- 3. Bleeding and soft-tissue injuries:
  - To demonstrate direct pressure as a method of emergency medical care of external bleeding
  - To demonstrate the use of diffuse pressure (pressure dressing) as a method of emergency medical care of external bleeding
  - To demonstrate the use of pressure points as a method of emergency medical care for external bleeding
  - To demonstrate the care of the patient exhibiting signs and symptoms of internal bleeding
  - To demonstrate the steps in the emergency medical care of open soft-tissue injuries

### 4. Medical emergencies:

Demonstrate the steps in providing emergency medical care to a patient with a general medical complaint, medical complaint of seizures and altered mental status

### At the level of integration

- To appreciate the importance of medical emergencies in the context of medicine.
- To find a creative approach in problems of clinical medicine.
- To deduct connections between Emergency medicine and other clinical disciplines.
- Familiar with the use and integration of knowledge and practical exercises used in critical situations in clinical disciplines
- Be able to assess and self-assess knowledge in the discipline
- Be able to assimilate new advances in clinical disciplines.



ED: 02 DATE: 20.12.2013

PAGE. 3/3

## III. Provisional terms and conditions:

### TRAINING PROGRAM

the Department of "Emergency Medicine"
I year students, faculties of "Medicine 2", Stomatology and Pharmacy

N	Theme	Total number of	Lectures	Practical
		hours		classes
1	Cardio-Pulmonary and Cerebral	4	2	2
	Resuscitation. Sudden Cardiac Death			
	(Cardiac Arrest)			
1.1	Basic Life Support The ABC of CPR.		2	
1.2	Basic Life Support in Adults(BLS)			2
2	Pediatric Basic Life Support	4	2	2
2.1	Basic Life Support in Children. The ABC of CPR.		2	
2.2	Basic Life Support in Children (BLS)			2
3	Airway.	4	2	2
3.1.	Airway. Airway Control; Opening the		1	1
	Airway. Head Tilt-Chin Lift Maneuver.			
	Jaw-Thrust Maneuver Airway adjuncts.			
	Oropharyngeal Adjuncts,			
	Nasopharyngeal Adjuncts.			
	Airway Foreign Body Airway			
	Obstruction Management.			
3.2.	Pulmonary Resuscitation. Rescue		1	1
	Breathing. Mouth-to-Mouth Ventilation,			
	Mouth-to-mouth Ventilation, Mouth-to-			
	Nose Technique. Mouth-to-Stoma.			
	Oropharyngeal Airways Nasopharyngeal			
	Airways Portable Suction Units. Pocket			
	Face Mask. Bag-Valve-Mask Ventilator			
	Equipment and Supplies for Oxygen			
	Therapy			
4	Patients with multiple trauma Shock and	4	2	2
	Fluid Replacement in Trauma			
4.1	Primary and Secondary Survey of a		2	2
	patients with multiple trauma			
5.	Bleeding. Wound Management and	4	2	2
	Bleeding Control. Types of Soft Tissue			
	Injury			
5.1	Bleeding. Wound Management and		2	2
	Bleeding Control. Types of Soft Tissue			
	Injury			



ED: 02 DATE: 20.12.2013

PAGE. 3/3

6.	Cardiovascular Emergencies	4	2	2
6.1	Acute Myocardial Infarction.		2	2
	Hypertension. Hypotension.			
7.	Coma Seizures and Other Alterations of	4	2	2
	Consiousness. Glasgow Coma Scale			
7.1	Coma Seizures and Other Alterations of		2	2
	Consiousness Glasgow Coma Scale			
8	Psychiatric Emergency.	4	2	2
8.1	Anxiety. Psyhomotorial Agitation		2	2
9	Theoretical and practical	2	1	1
	examination. Final test in theory and			
	practical skills.			
10	Total	34	17	17

# IV. Main theme of the course:

## A. Lectures:

N.	Theme	Hours
1.	Cardio-Pulmonary and Cerebral Resuscitation. Sudden Cardiac Death	5
	(Cardiac Arrest). Basic Life Support in Adults.	
2.	Basic Life Support in Children and newborns.	
3.	Airway Management. Airway obstruction with a foreign body. Corecting 2	
	Airway Obstruction. Drowning.	
4.	Patients with multiple Trauma. The primary survey at the place of accident.	2
5.	Bleeding and wounds. Bleeding control and wounds management. Types 2	
	of Soft Tissue Injury.	
6.	Cardiovascular Emergencies. Chest Pain and Possible Heart Attacks.	2
7.	Coma, Seizures and other Alteration of Consciousness.	2

## B. Practical lessons:

N.	Theme	Hours
1.	Cardio-Pulmonary and Cerebral Resuscitation. Sudden Cardiac Death	5
	(Cardiac Arrest). Basic Life Support in Adults.	
2.	Basic Life Support in Children and newborns.	
3.	Airway Management. Airway obstruction with foreign body. Corecting Ayrway Obstruction. Drowning.	2
4.	Patients with multiple Trauma. The primary survey at the place of accident.	2
5.	Bleeding and wounds. Bleeding control and wounds management. Types of Soft Tissue Injury.	2
6.	Cardiovascular Emergencies. Chest Pain and Possible Heart Attacks.	2
7.	Coma, Seizures and other Alteration of Consciousness.	2



ED:	02
DATE:	20.12.2013

**PAGE. 3/3** 

### V. Recommended literature:

- A. compulsory:
- **1.** European Resuscitation Council Guidelines for Resuscitation, 2010. Resuscitation, 81(2010), 1219 1276.
- 2. Emergency First Responder. Medical Teams International 2008.
- 3. First responders. J. David Bergeron, Gloria Bizjak. Fifth Edition. 2002
- **4.** Lectures "Emergency Medicine"
  - B. additional:
- 1. Pre-hospital Emergency Medical Care. Northwest Teams 2005.

### VI. Teaching and learning methods

The discipline "Emergency Medicine" is taught in the classical manner: lectures and practical classes. The lectures are read by professors of the department. In practical classes students learn practical maneuvers used in emergency conditions. The Department reserves the right to conduct some practical classes in an interactive way.

## VII. Suggestions for individual activity

From the pedagogical point of view, one of the least effective methods of learning is a passive attendance of the course, even when it is structured and illustrated very thoroughly.

Obtaining practical skills is more effective than reading about how to do, but it is more efficient to teach others to do the same.

If you want to succeed in medical emergencies it is important to work actively with the material. This means:

• Read the material on the subject thoroughly. Take notes. Try to formulate your own highlights. Study the diagrams and pictures in handbook and notebooks.

Attend lectures and practical classes, but not only to be present. Doing so it is unlikely you will meet requirements.

### VIII. Methods of assessment

Assessment of knowledge of the discipline "Emergency Medicine" is done at the end of the course in the final test on the theory and demonstration of practical skills.

The list of questions for the exam (practical maneuvers list) is approved at the meeting of the Department and are available for the students at the beginning of the course.

Absence at the exam without no reasons are recorded as "absent.":



ED: 02
DATE: 20.12.2013

PAGE. 3/3

## Methods of mark rounding

The average of current and final marks	Final mark
5	5
5,1-5,5	5,5
5,6-6,0	6
6,1-6,5	6,5
6,6-7,0	7
7,1-7,5	7,5
7,6-8,0	8
8,1-8,5	8,5
8,6-9,0	9
9,1-9,5	9,5
9,6-10	10

Absence on examination without good reason shall be recorded as "absent" and is equivalent to 0 (zero). The student has the right to re-take the failed exam twice.

# IX. Language of study:

Romanian, Russian, English, French