



**Pomeranian Medical University in Szczecin[PUM]
COURSE SYLLABUS**

Name of Course: Elective - Specialized procedures in emergencies	
Type of course	Elective
PUM Faculty	Faculty of Medicine and Dentistry
Field of study	Medicine
Specialization	-
Level of study	Long-term studies
Form of study	full-time/ part-time
Year of study /semester	V
Number of ECTS credits allocated	0,75
Forms of teaching (number of hours)	Practical Exercises
Methods of verification and assessment of learning outcomes *	<p>X Graded credit:</p> <ul style="list-style-type: none"> <input type="checkbox"/> descriptive credit X test credit <input type="checkbox"/> practical credit <input type="checkbox"/> oral credit <p><input type="checkbox"/> credit without grade</p> <p><input type="checkbox"/> final exam:</p> <ul style="list-style-type: none"> <input type="checkbox"/> descriptive credit <input type="checkbox"/> test credit <input type="checkbox"/> practical credit <input type="checkbox"/> oral credit
Head of Unit	Prof. dr. hab. med. <i>Romuald Bohatyrewicz, Prof, Ph.D</i>
Teaching assistant professor or person responsible for the course	Dr. hab. n. med. Joanna Sołek-Pastuszka, Prof. Ph.D. mgr Jakub Wiśniewski, MA
Name and contact details of unit	Department of Anaesthesiology and Intensive Care PUM
Unit's website	e-mail: kaiit.pum@gmail.com
Language of instruction	Polish/English

Detailed information

Course objectives		The objective of the course is to gain the necessary knowledge and skills in the field of advanced resuscitation in adults (ALS) based on the guidelines of the European Resuscitation Council. During the course the student will learn and apply the principles of cardiopulmonary resuscitation, defibrillation, cardioversion, electrical stimulation, pharmacotherapy of emergencies, and passive and active oxygen therapy, using simple devices to establish an airway, and alternative devices to secure the airway. They know the principles of endotracheal intubation and are able to perform it. Student acquires skills of working in a team, in a situation of sudden cardiac arrest in an adult, as well as sudden illness and deterioration of patient's condition. The student knows and understands the indications and principles of intensive care. He/she recognizes agony and declares death of a patient.
Preliminary requirements in terms of	Knowledge	Has knowledge of: <ul style="list-style-type: none"> • anatomy and physiology - mainly respiratory and cardiovascular physiology in an adult • pharmacotherapy • premedical first aid • advanced resuscitation
	Skills	Can perform non-instrumental cardiopulmonary resuscitation, can use simple devices to establish an airway. Can apply supraglottic devices for securing airways.
	Social competences	Cooperates in a group

LEARNING OUTCOMES			
Number of learning outcome	A student who has completed the Course knows/knows/can:	SYMBOL (reference to) learning outcomes for the faculty of study	Way of verifying the learning outcomes*
W01	knows the current guidelines for adult cardiopulmonary resuscitation	K_F.W7	practical skills test, case study
W02	knows the principles of operation of the integrated state medical rescue system	K_F.W8	practical skills test, case study
W03	knows the basic principles of pharmacotherapy	K_C.W37	practical skills test, case study
W04	knows and understands the causes, symptoms, principles of diagnosis and therapeutic management in relation to the most common internal diseases occurring in adults, and their complications: cardiovascular diseases, including: ischemic heart disease, heart failure (acute and chronic), respiratory diseases, including: respiratory failure (acute and chronic), allergic diseases, including: anaphylaxis and anaphylactic shock water-electrolyte and acid-base disorders: dehydration, conductivity, electrolyte disturbances, acidosis and alkalosis	K_E.W7	practical skills test, case study

W05	knows the indications and principles of application of intensive therapy	K_F.W6	practical skills test, case study
U01	recognizes life-threatening conditions	K_E.U14	practical skills test, case study
U02	performs basic medical procedures and treatments including: (a) measurement of body temperature, measurement of heart rate, non-invasive measurement of blood pressure, b) monitoring of vital parameters with the help of cardiomonitor, pulse oximetry, c) oxygen therapy, assisted and replacement ventilation d) inserting an oropharyngeal tube, e) intravenous, intramuscular and subcutaneous injections, cannulation of peripheral veins. f) standard resting electrocardiogram with interpretation, electrical cardioversion and cardiac defibrillation, (g) simple strip tests and blood glucose measurements	K_E.U29	practical skills test, case study
U03	recognises the patient's agony and declares the patient dead	K_E.U37	practical skills test, case study
U04	places a peripheral puncture	K_F.U5	practical skills test, case study
U05	supplies external bleeding	K_F.U9	practical skills test, case study
U06	performs basic resuscitation using automated external defibrillator and other emergency procedures and give first aid	K_F.U10	practical skills test, case study
U07	operates in accordance with the current advanced resuscitation algorithm	K_F.U11	practical skills test, case study
U08	assesses the condition of the unconscious patient and determines according to current international scoring scales	K_F.U21	practical skills test, case study
U09	seeks to avoid making a medical error in its own actions	K_G.U6	practical skills test, case study
U10	implements basic medical procedures in acute poisonings	K_E.U33	practical skills test, case study
U11	monitors the condition of a patient poisoned by chemicals or drugs	K_E.U34	practical skills test, case study
U12	recognizes the state after consumption of alcohol, drugs and other substances	K_E.U15	practical skills test, case study
U13	performs medical interview with an adult patient	K_E.U1	practical skills test, case study
U14	performs a complete and focused physical examination of the adult patient	K_E.U3	practical skills test, case study

K01	cooperates with team members; can cooperate in a group taking up different roles	K_K04	practical skills test, case study
K02	is aware of the patient's rights	K_K11	practical skills test, case study
K03	can maintain medical confidentiality	K_K14	practical skills test, case study
K04	is able to take care of his own safety, as well as that of his surroundings and colleagues	K_K15	practical skills test, case study
K05	is able to appropriately determine priorities in order to accomplish a task defined by him/herself or others	K_K16	practical skills test, case study
K06	shows leadership and entrepreneurship, is able to organise teamwork	K_K18	practical skills test, case study
K07	is aware of religious feelings and other people's beliefs about the human body	K_K19	practical skills test, case study

Table of learning outcomes in relation to the form of classes								
Number of learning outcome	Learning outcomes	Form of the classes						
		Lecture	Seminar	Practical	Clinical exercises	Simulations	E-learning	Other forms
W01	K_F.W7			X		X		
W02	K_F.W8			X		X		
W03	K_C.W37			X		X		
W04	K_E.W7			X		X		
W05	K_F.W6			X		X		
U01	K_E.U14			X		X		
U02	K_E.U29			X		X		
U03	K_E.U37			X		X		
U04	K_F.U5			X		X		
U05	K_F.U9			X		X		
U06	K_F.U10			X		X		
U07	K_F.U11			X		X		
U08	K_F.U21			X		X		
U09	K_G.U6			X		X		
U10	K_E.U33			X		X		
U11	K_E.U34			X		X		
U12	K_E.U15			X		X		
U13	K_E.U1			X		X		
U14	K_E.U3			X		X		
K01	K_K04			X		X		
K02	K_K11			X		X		
K03	K_K14			X		X		
K04	K_K15			X		X		
K05	K_K16			X		X		
K06	K_K18			X		X		
K07	K_K19			X		X		

TABLE OF CURRICULUM			
Curriculum number	Curriculum content	Number of hours	Reference to the learning outcomes for the CLASSES
Practical exercises and simulations			
TK01	Resuscitation- an introduction.	3h	W01,W02, U06, U13, K01
TK02	Oxygen therapy.	3h	W01, W02,
TK03	Cardiac arrest.	3h	W01, W02, W03,W04, W05, U01, U02, U07, K01, K04,
TK04	Advanced resuscitation in special situations part 1.	3h	W01,W02, W03, W04, W05, U01, U02, U07, U08, U09, U14, K04
TK05	Advanced resuscitation in special situations part 2.	3h	W01, W02, W03, W04, W05, U01, U02, U03, U04, U05, U07, U09, U10, U11, U12, U14, K01, K02, K03, K04, K05, K06, K07

Recommended Literature:
Reference literature
1. prc.krakow.pl/wytyczne.html

Student workload	
Form of student workload (class participation, activity, report preparation, etc.)	Student workload in h in the teacher's assessment (opinion)
Contact hours with the teacher/instructor	15h
Preparation for exercise/seminar	5h
Reading the indicated literature	5h
Writing a lab/exercise report/preparing a project/reference, etc.	
Preparation for the test/short test	
Preparing for the exam	
Preparation for the test	3h
Total student workload	23h
ECTS credits	0,75
Notes	