

Subject name Emergency Medicine and Disaster Medicine		ECTS Code																	
Name of unit teaching the subject THE ZBIGNIEW RELIGA FACULTY OF MEDICAL SCIENCES IN ZABRZE, THE UNIVERSITY OF TECHNOLOGY IN KATOWICE																			
Studies																			
Field of study	degree	mode	major																
medical	Uniform Master's	stationary																	
Surname of instructor (instructors)																			
Type of class, method of implementation and specified number of hours		Amount of ECTS points																	
A. Type of class <ul style="list-style-type: none"> • lecture, • exercise classes, • clinical exercise classes • seminars, • design classes • laboratories, • lectureship, • diploma seminar, • professional internship.* * mark where applicable		Description of awarding ECTS points: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="padding: 5px;">Activity</th> <th style="padding: 5px;">Student workload</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Participation in lectures</td> <td style="padding: 5px;">15 hours</td> </tr> <tr> <td style="padding: 5px;">Participation in practical classes</td> <td style="padding: 5px;">30 hours</td> </tr> <tr> <td style="padding: 5px;">Preparation for practical classes and colloquiums</td> <td style="padding: 5px;">15 hours</td> </tr> <tr> <td style="padding: 5px;">Test preparation</td> <td style="padding: 5px;">20 hours</td> </tr> <tr> <td style="padding: 5px;">Consultations</td> <td style="padding: 5px;">10 hours</td> </tr> <tr> <td style="padding: 5px;">Total number of hours</td> <td style="padding: 5px;">90 hours / 30</td> </tr> <tr> <td style="padding: 5px;">Amount of ECTS points per module</td> <td style="padding: 5px;">3ETCS</td> </tr> </tbody> </table>		Activity	Student workload	Participation in lectures	15 hours	Participation in practical classes	30 hours	Preparation for practical classes and colloquiums	15 hours	Test preparation	20 hours	Consultations	10 hours	Total number of hours	90 hours / 30	Amount of ECTS points per module	3ETCS
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B. Amount of hours in accordance with the approved curriculum Lecture – 10h Exercise classes – 30h																			
Didactic cycle 5th year, 10th semester																			
Subject status <ul style="list-style-type: none"> • mandatory / facultative 		Language of instruction Polish																	
Didactic methods Lectures Demonstration of clinical cases Demonstrations with the use of a computer Demonstrations with the use of a phantom Case analysis Situational method, staging Didactic discussion		Forms and methods of passing and general grading criteria or examination requirements <hr style="border-top: 1px dashed black;"/> A. Method of passing <ul style="list-style-type: none"> • examination • passing with a grade* * mark where applicable <hr style="border-top: 1px dashed black;"/> B. Forms of passing: <ul style="list-style-type: none"> • written examination: test / with open questions (exercises)/longer written statement • oral assessment • oral test/colloquium • completion of a semester assignment: preparation of a design or presentation/conducting research and presenting its results(written/oral)/completion of a specified practical work • agreeing on a passing grade based on partial grades received during the course of the semester* * mark where applicable																	

C. Basic grading criteria

Evaluating participation in exercise classes, evaluating preparation for classes, constant observation, partial assessment, oral, written, practical assessment, oral examination

Definition of preparatory subjects and initial requirements

Required familiarity with

- current guidelines of cardiorespiratory resuscitation of newborns, children, and adults
- principles of functioning of the integrated system of state emergency medicine
- principles of qualification for and performing the most common surgical and invasive procedures and their complications
- principles and guidelines for using intensive therapy

Subject aim

The aim of the subject is familiarizing the students with how to behave in life threatening situations of internal and surgical origin, how to treat a victim of mass events and plan diagnostic treatment in medical emergencies, assessment of the patient's condition as well as group work

Curriculum

The history of the development of emergency medicine. Emergency medicine in health care systems

Legal conditions of the system of the State Emergency Medical Services in Poland

Introduction to clinical procedures of emergency medicine

Introduction to emergency treatment of multiple and multi-organ bodily injuries

Techniques and technologies in an emergency medicine clinic

Structure and financial of the hospital emergency medicine ward

Life-threatening conditions of children

Natural and man-made disasters. The organization of rescue services during mass casualty incidents events and disasters

International cooperation in mass casualty incidents and disasters

General principles of behavior at the site of an accident and with a patient in life and health threatening conditions

Organization of rescue services in danger zones in road, railway, construction, marine, ecological, and aviation accidents

Organization of medical aid during mass casualty incidents and disasters. Humanitarian aid

Triage in mass casualty incidents and disasters

Segregation systems used for adults and children

Chemical disasters

Bioterrorism

Radiation accidents and disasters. Acute radiation syndromes in mass casualty incidents and disasters

Regional plans of medical safety during disasters

Medical safety during mass events

Infrastructure disasters. Cooperation of medical rescue services at the site of a mass casualty incident or a disaster

Etiology of sudden circulatory arrests

Basic resuscitative actions for adults

Basic resuscitative actions for children

Basic resuscitative actions for newborns

Advanced cardiorespiratory resuscitation

Adult medical emergencies

Principles of behavior in multiple bodily injuries. Shock

Child medical emergencies

Initial treatment of burns. Hyperbaric oxygen therapy

Basic resuscitative actions for adults. Monitoring of functions

Advanced resuscitative actions for adults

Acute coronary syndrome. Stroke

Mass casualty incident – securing the place of the incident, pre-hospital segregation, pre-hospital transport

Multiple bodily injuries – diagnosis and treatment in a medical ward

Basic resuscitative actions for adults

Advanced resuscitative actions for adults

Medical segregation

Segregation of road accident victims. Preparation for transport

Medical emergency activities for children

Literature

- Andres J.: Specjalistyczne zabiegi resuscytacyjne podręcznik dla kursu .. Specjalistyczne zabiegi resuscytacyjne u osób dorosłych. Polska Rada Resuscytacji, Kraków 2007
- Andres J.: Zaawansowane zabiegi resuscytacyjne u dzieci, Polska Rada Resuscytacji, Kraków 2005
- Brongel I.: Podstawy współczesnej chirurgii urazowej. Wydawnictwo Medyczne, Kraków 2008
- Ciećkiewicz J.: Ratownictwo medyczne w wypadkach masowych. Górnicki, Wrocław 2006
- Jakubaszko J.: Medycyna Ratunkowa. Nagłe zagrożenia pochodzenia wewnętrznego. Wydawnictwo Medyczne Górnicki, Wrocław 2003
- Jakubaszko J.: ABC postępowania w urazach. Wydawnictwo Medyczne Górnicki, Wrocław 2003
- Kokot F.: Ostre stany zagrożenia życia w chorobach wewnętrznych. PZWL 2007
- Zawadzki A.: Medycyna ratunkowa i katastrof. Podręcznik dla studentów uczelni medycznych. Wydawnictwo Lekarskie PZWL, Warszawa 2007
- Brongel I, Duda K.: Mnogie i wielonarządowe obrażenia ciała PZWL, Warszawa 2001
- Campbell J.E.: Basic Trauma Life Support dla paramedyków i ratowników medycznych Medycyna Praktyczna, Kraków 2006
- Colquhoun M, Handley A., Evans T.: ABC resuscytacji. Wydawnictwo Medyczne Górnicki 2006
- Cline D., O John Ma, Tintinalli J, Kelen D.: Medycyna ratunkowa. Urban & Partner, Wrocław 2003
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- Ferber J.: Wytyczne leczenie zachowawcze ciężkich urazów czaszkowo-mózgowych u dorosłych. Urban & Partner, Wrocław 2003
- King Ch., Henretig F.: Podręczny atlas zabiegów ratunkowych u dzieci. Urban & Partner, Wrocław 2003
- Kowalczyk M.: Medycyna katastrof chemicznych. PZWL 2000
- Larsen R.: Anestezjologia.. Urban & Partner, Wrocław 2003
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- Plantz S., Wipfler E. (edited by) Jakubaszko J.: Medycyna Ratunkowa. Urban & Partner, 2008.
- Singer M., Grant I.: ABC intensywnej terapii, Wydawnictwo Medyczne Górnicki, Wrocław 2004
- Strange G, Ahrens W, Schafermeyer R, Toepper W. (ed. by) Jakubaszko J.: Medycyna ratunkowa wieku dziecięcego. Urban & Partner, Wrocław 2003
- Szajewski J.: Leksykonostrych zatruc, PZWL 2000
- Szajner Mozart I.: Ostre zatrucia u dzieci, PZWL. 2000

Educational effects:

Effect no	Description of an educational effect	Reference to field of study related effects	Reference to areas of effects
Knowledge:			
W1	Knows the principles of qualifying a patient for the basic surgical and invasive diagnostic and medicinal procedures, how to perform them, and their most common complications	F.W3	
W2	Knows postoperative treatment along with analgesic therapy and postoperative monitoring	F.W5	
W3	Knows the recommendations and principles for using intensive therapy	F.W6	
W4	Knows the current guidelines of cardiorespiratory resuscitation of newborns, children, and adults	F.W7	
W5	Knows the principles of the functioning of the integrated system of State Emergency Medical Services	F.W8	
W6	Knows the aspects of contemporarily performed imaging examinations, especially: <ul style="list-style-type: none"> a) radiologic symptomatology of individual diseases b) instrumental methods and imaging techniques used in performing medicinal procedures 	F.W10	

	c) indications, contraindications, and preparation of patients for individual types of imaging examinations and the contraindications to using contrast agents				
W7	Knows and understands the causes, symptoms, principles of diagnosis and therapeutic treatment in case of the most common diseases of the central nervous system as far as: <ol style="list-style-type: none"> 1. cerebral edema and its effects, with particular emphasis placed on emergencies 2. other types of intracranial tightness and its effects 3. Craniocerebral traumas, 4. Vascular defects of the central nervous system 5. Cancerous tumors of the central nervous system 6. Diseases of the spine and the spinal cord 	F.W13			
W8	To a basic degree knows aspects of procedural transplantology, recommendations for transplanting permanently damaged organs and tissues as well as the procedures connected with it	F.W14			
W9	Knows the principles of suspecting and diagnosing brain death	F.W15			
W10	Knows the algorithm of behavior for individual stadia of accidental and posttraumatic hypothermia	F.W16			
W11	Knows the most common life-threatening conditions for children and the principles of behavior in such conditions	E.W6			
Abilities:					
U1	Follows the principles of asepticism and antisepticism	F.U3			
U2	Treats simple wounds and puts on and changes a sterile surgical bandage	F.U4			
U3	Inserts a peripheral venous catheter	F.U5			
U4	Evaluates the result of a radiologic examination as far as the most common types of fractures, especially fractures of long bones	F.U7			
U5	Performs a temporary immobilization of a limb, selects the type of immobilization to be used in typical clinical situation and controls the appropriate perfusion after putting on the immobilizing bandage	F.U8			
U6	Treats external bleeding	F.U9			
U7	Performs the basic resuscitative procedures with the use of automated external defibrillator and other rescue activities and provides first aid	F.U10			
U8	Acts in accordance with the current algorithm of advanced life support	F.U11			
U9	Evaluates the condition of an unconscious patient in accordance with the international points scales	F.U21			
U10	Diagnoses the symptoms of increasing intracranial pressure	F.U22			
Social competencies:					
K1	Recognizes his own diagnosis and treatment limitations, educational needs, plans his educational activities				
K2	Can work in a professional team, in a multi-cultural and multi-national environment				
K3	Implements principles of professional collegueship and collaboration with representatives of other professions as far as healthcare				
Methods used in the verification of educational effects					
Educational effect	Type of grade				
	colloquiums	Solving problems during exercise classes	Solving problems in groups	Oral/practical assessment	Written examination
W1-W11	X	X	X	X	
U1		X	X	X	

U2		X	X	X	
U3		X	X	X	
U4		X	X	X	
U5		X	X	X	
U6		X	X	X	
U7		X	X	X	
U8		X	X	X	
U9		X	X	X	
U10		X	X	X	

Criteria of evaluating educational effects					
Educational effect	For a grade of 3	For a grade of 3.5	For a grade of 4	For a grade of 4.5	For a grade of 5
W1-W11	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U1	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U2	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U3	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U4	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U5	Exhibits knowledge of the educational content on a level of 60%-	Exhibits knowledge of the educational content on a level of 70%-	Exhibits knowledge of the educational content on a level of 77%-	Exhibits knowledge of the educational content on a level of 85%-	Exhibits knowledge of the educational content on a level of 93%-100%

	69%	76%	84%	92%	
U6	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U7	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U8	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U9	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U10	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%