



Pomorski Uniwersytet Medyczny w Szczecinie

SYLLABUS of the MODULE (SUBJECT)

General information

Module title: ANAESTHESIOLOGY AND RESUSCITATION	
Module type	Obligatory
Faculty PMU	Medicine and Dentistry (WLS)
Major	Medicine and Dentistry (KLD)
Specialty	-
Level of study	long-cycle
Mode of study	full-time/part-time
Year of studies, semester e.g. Year 1, semester (I and II)	Year 3 semester V
ECTS credits (incl. semester breakdown)	1
Type/s of training	seminars 5 godzin, practical classes 10 h
Form of assessment	graded assessment
Head of the Department/ Clinic, Unit	Dr hab. n. med. Maciej Żukowski prof PUM
Persons conducting classes with indication of a tutor or person responsible for the module	Dr hab. n. med. Maciej Żukowski prof. PUM dr n. med. Katarzyna Kotfis dr n. med. Małgorzata Zegan-Barańska dr n. med. Arkadiusz Greczan current members of the anaesthetic team
Department's/Clinic's/Unit's website	https://www.pum.edu.pl/wydzialy/wydzial-lekarski/klinika-anestezjologii,-intensywnej-terapii-i-ostrych-zatruc
Language	Polish/English

Detailed information

Module objectives		<ul style="list-style-type: none"> — Familiarisation with the specifics of the work of anaesthesiologists — Familiarisation and deepening of knowledge in the field of anaesthesiology and intensive care. — Monitoring of vital signs — Qualifying patients for anaesthesia. — Application of advanced treatment techniques in the ICU — Recognition of life-threatening causes and management and care of the critically ill patient — Learning and consolidation, and practical application of international algorithms for basic resuscitation (BLS) and advanced resuscitation (ALS). — Familiarisation with techniques of central venous cannulation, intubation, tracheostomy, pleural puncture, arterial cannulation. — Elements of ethics.
Prerequisite /essential requirements	Knowledge	<ul style="list-style-type: none"> — Fundamentals of anatomy. — Pathophysiology of diseases of the cardiovascular system, respiratory system, nervous system, digestive system and excretory system. — Principles of qualification and assessment of patients in life-threatening conditions. — Knowledge of clinical pharmacology. — Fundamentals of ALS and BLS algorithms. — Principles of radiological imaging basics. — Laboratory diagnostics. — Knowledge of the Code of Medical Ethics
	Skills	Hand disinfection, cannulation of peripheral veins, clinical examination of a patient, assessment of vital signs.
	Competences	<ul style="list-style-type: none"> - shows habit of self-education and lifelong education - accepts need of standards of conduct and legislation regarding medical practice - Ethical standards, medical secrecy, self-education, teamwork skills, communication with the family of a seriously ill patient, empathy in the relationship with the patient and the family. Perceives the rights of the patient. Perceives patients' rights.

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the module (subject) knows /is able to /can:	SYMBOL (referring Assumed Learning Outcomes	Means of verification of learning outcomes*
W01	understands relationship between morphological anomalies and function of organs and systems, clinical symptoms and capacity of diagnostics and treatment	K_E.W01	<p>student's active participation and attitude assessment</p> <p>Continuous assessment in classes</p> <p>demonstrates knowledge of the subject at each class</p> <p>can describe the principles of medical procedures and treatments according to the topics of classes</p> <p>assessment in the last class</p>
W02	knows basic methods of medical examination and importance of additional examination with regard to diagnosis, monitoring, prognosis and prophylaxis of organ and systemic disorders in particular its effect on oral cavity tissues	K_E.W02	
W03	knows etiopathogenesis and symptomatology of diseases of respiratory system, circulatory system, genitourinary system, hematopoietic system, immunological system, alimentary system, motor system and endocrine system with particular focus on disease whose symptoms occur in oral cavity	K_E.W03	
W04	knows causes and mechanisms of circulatory and respiratory arrest and rules of resuscitation and post-resuscitation proceeding	K_E.W17	
W05	knows life-threatening states	K_E.W18	
U01	assesses and explains mental and somatic state of patient	K_E.U02	
U02	interprets results of laboratory examination	K_E.U04	
U03	identifies life-threatening risk	K_E.U08	
U04	explains and recognizes symptoms of shock and acute circulatory failure	K_E.U09	
U05	performs basic procedures and operations: body temperature measurement, sphygmometry, non-invasive blood pressure measurement, oxygen therapy, forced and supportive ventilation, introduction of mouth-throat tube, preparation of operating field, hygienic and surgical disinfection of hands, intravenous, intramuscular and subcutaneous injections, drawing peripheral venous blood, nose, throat and skin swabs, simple strip tests and glucose concentration measurement	K_E.U20	

K01	shows habit of self-education and lifelong education	K_K01	
K02	accepts need of standards of conduct and legislation regarding medical practice	K_K02	
K03	can co-operate with team members and care about occupational safety	K_K03	
K04	shows respect to human body	K_K04	
K05	shows respect to patient, social groups and cares for their goodwill and security	K_K05	
K06	recognizes need for complete understanding of physical phenomena in aspects of human body	K_K06	
K07	understands sense of responsibility for entrusted property	K_K07	
K08	understands proper examiner/examined relationship	K_K08	
K09	understands need for keeping professional secrecy and showing respect to patients' rights	K_K09	

Table presenting LEARNING OUTCOMES in relation to the form of classes

item	SYMBOL (referring to) Assumed Learning Outcomes	Form of didactic classes							
		Lecture	Seminars	Laboratory classes	Design classes	Clinical classes	Practical classes	Practice	other ...
1.	K_E.W01		X			X			
2.	K_E.W02		X			X			
3.	K_E.W03		X			X			
4.	K_E.W17		X			X			
5.	K_E.W18		X			X			
6.	K_E.U02					X			
7.	K_E.U04					X			
8.	K_E.U08			X		X			
9.	K_E.U09			X		X			
10.	K_E.U20					X			
11.	K_K01		X			X			
12.	K_K02					X			
13.	K_K03					X			
14.	K_K04		X			X			
15.	K_K05					X			
16.	K_K06		X			X			
17.	K_K07					X			
18.	K_K08					X			
19.	K_K09		X			X			

item	Description of learning content	Number of hours	References to learning outcomes for the module
	Seminars:	5	
TK 01	Intensive care : eligibility for admission. Treatment and diagnosis in the intensive care setting.	1	W 01,02,03,04,05 K 02,06,09
TK 02	Anaesthesiology in the outpatient setting.	1	W 02,03,04,05
TK 03	Local anaesthetic drugs - principles of action.	1	W 01,04,05
TK 04	Difficult airways. Infective endocarditis.	1	W 03,04,05
TK 05	Basic life-saving interventions. Anaphylaxis.	1	W 04,05 K 01 U 03.04
	Practical classes	10	
TK 01	Criteria for patient admission to the intensive care unit. Aetiology of the most common diseases causing admission to the ICU. Management of the unconscious patient. Monitoring and documentation in the intensive care unit. Use of scales in relation to the patient's condition. Use of imaging studies in the intensive care unit. Interpretation of laboratory tests in relation to serious conditions. Application of treatment for individual organ failure. Indications for mechanical ventilation. Cardiovascular support. Renal replacement therapy. Application of invasive procedures.	2	W 01,02,03,04,05 U 01,02,03,04,05 K 01-09
TK 02	Qualification of patients for general anaesthesia. Safety of anaesthesia in the outpatient setting. Dentist-anaesthesiologist cooperation in the common surgical field. Postural hypotension. Local conditions, equipment. Drugs used in general anaesthesia. Anaesthetic gases.	2	W 02,03,04,05 U 03,04,05 K 01-09
TK 03	Types of general anaesthetic drugs. Indications and contraindications for the administration of local anaesthetic drugs. Recognition and management of intoxication with local anaesthetic drugs. Recognition of acute circulatory failure and shock.	2	W 01,04,05 U 01,02,03,04,05 K 01-09
TK 04	Recognition of airway obstruction, management. Prosthetic airways - methods, devices. Maintenance of airway patency and effective ventilation. Choking, foreign bodies in the airway. Antibiotic prophylaxis. SIRS. Sepsis- definition and recognition	2	W 01, 04.05 U 01,02,03,04,05 K 01-09
TK 05	Principles of performing basic life-saving procedures. Introduction to advanced resuscitation procedures. Defibrillation. Principles of fluid therapy. Pharmacotherapy during sudden cardiac arrest. Recognition and management of anaphylaxis.	2	W 04 U 03,04,05 K 01-09

Booklist:
Obligatory literature
1. Polska Rada Resuscytacji – Aktualnie obowiązujące Wytyczne Rady Resuscytacji 2. Materiały z seminariów. 3. Podstawy anestezjologii i intensywnej terapii, pod redakcją prof. Z. Kruszyńskiego, skrypt AM w Poznaniu, rok wydania 2010 r 4. P.L.Marino „Intensywna Terapia” Elseviere Urban&Partner, wyd. IV 2016
Supplementary literature:
Anestezjologia. Seria Crash Course Author: Mark Weinert, red. wyd. pol. Andrzej Kubler Wydawca: Elsevier Urban & Partner.

Nakład pracy studenta (bilans punktów ECTS)			
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]		
	Tutor	Student	Mean
Contact hours with the tutor	15		
Time spent on preparation to seminars/ practical classes	5		
Time spent on reading recommended literature	5		
Time spent on writing report/making project			
Time spent on preparing to colloquium/ entry test			
Time spent on preparing to exam			
Other			
Student's workload in total	25		
ECTS credits for the module/subject	1		
Notes			

* Selected examples of methods of assessment:

EP – written examination

EU - oral examination

ET – test examination

EPR – practical examination

K – colloquium

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O - student's active participation and attitude assessment

SL - lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedial presentation

other...