



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)

valid from the academic year 2017/2018

General Information

Module title	Anesthesiology and Resuscitation
Module type	Obligatory
Faculty	Faculty of Medicine and Dentistry
Field of study	Medicine and Dentistry
Major	Not applicable
Level of study	long-cycle (S2J)
Mode of study	intramural
Year of studies, semester	Year III, semester V
ECTS credits (incl. semester breakdown)	1
Type/s of training	seminars (5h), practical (10h)
Form of assessment	<p>- graded assessment: *</p> <ul style="list-style-type: none"> <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral <p>X - non-graded assessment *</p> <p>- final examination: *</p> <ul style="list-style-type: none"> <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral
Head of the Department/ Clinic, Unit	Maciej Żukowski MD, PhD prof PUM
Tutor responsible for the module	Maciej Żukowski MD, PhD prof. PUM Katarzyna Kotfis MD, PhD Małgorzata Zegan-Barańska MD, PhD Arkadiusz Greczan MD, PhD Currently employed doctors, members of anesthetic team
Department's/ Clinic's/ Unit's website	https://www.pum.edu.pl
Language	English

*replace ☐ with X where applicable

Detailed information

Module objectives		<ul style="list-style-type: none"> — Understanding the specifics of an anesthesiologist's work — to familiarize with and broaden knowledge in the field of anesthesiology and intensive care. — learn to monitor of vital signs — to qualify and assess patients for anesthesia (ASA Physical Status Classification). — introduction advanced intensive care treatment techniques — Identification leading cause of life threatening how to treat it — basic life support and advances — practical ability to apply international algorithms in basic resuscitation activities (BLS) and advanced resuscitation activities (ALS). — to familiar with of central vein cannulation, intubation, tracheostomy, pleural puncture, arterial cannulation. — Elements of ethics.
Prerequisite /essential requirements	Knowledge	<ul style="list-style-type: none"> — basics of anatomy — pathophysiology of diseases of the circulatory, respiratory, nervous, gastrointestinal system — knowledge of clinical pharmacology — algorithms of BLS and ALS — principle regarding the radiological imaging — laboratory diagnostics — knowledge of the code of medical ethics
	Skills	Proper hand disinfection, peripheral vein cannulation, examination of the patient, monitoring vital sinus
	Competences	<ul style="list-style-type: none"> -shows the habit of self-education -follow ethics code and legal conditions related to the profession -respects medical confidentiality -teamwork skills -the ability to talk to a family of a critically ill patients -empathy in relation to the patients and their family -respects the patient's rights

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards) ZEK	Method 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	
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	K_E.W03	

	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		-assessment of the student's activity and attitude -reviewing constantly -present knowledge of the subject on practical classes -can describe the medical procedures
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	K_K08	

	examiner/examined relationship		
K09	understands need for keeping professional secrecy and showing respect to patients' rights	K_K09	

Table presenting learning outcomes of the subject/module in relation to the form of classes

No.	SYMBOL (referring the standards) ZEK	Type/s of training						
		Lecture	Seminar	Practical classes	Clinical classes	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			
9.	K_E.U09				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			

Module (subject) contents no.	Description of teaching programme	No. of hours	References to learning outcomes
	Seminars:	5	
TK 01	Intensive care: qualification for admission. Diagnosis and treatment In intensive care	1	W 01,02,03,04,05 K 02,06,09
TK 02	Ambulatory anaesthesia.	1	W 02,03,04,05
TK 03	Local anesthetic agent – mechanism of action	1	W 01,04,05
TK 04	Difficult Airways. Endocarditis.	1	W 03,04,05
TK 05	Basic life suport. Anaphylaxis.	1	W 04,05 K 01, U 03,04
	Practical classes:	10	
TK 01	Criteria for admission to intensive care. Etiology of the most common diseases	2	W 01,02,03,04,05

	that are the reason for admission to the intensive care unit. Dealing with unconscious patients. Assessment of vital signs. Documentation in the intensive care unit. Using scales and scoring of the patient's condition. Evaluation imaging (RTG, CT etc). Interpretation of laboratory tests in relation to patient's condition. The use treatment for particular organ failures. Indication for the use of mechanical ventilation. Supporting the cardiovascular system. Renal replacement therapy. Indication and application of invasive procedures.		U 01,02,03,04,05 K 01-09
TK 02	Qualification of patients for general anaesthesia. Safety of anaesthesia in outpatient settings. Cooperation between dentist and anaesthesiologist in a common operating field. Postural hypotension. Working condition in outpatient clinic. List of anaesthetics drugs and tools used in outpatient clinic. Anaesthetics gases.	2	W 02,03,04,05 U 03,04,05 K 01-09
TK 03	Indication and contraindication for administration of local anaesthetics. Diagnosis and management in case of local anaesthetics overdoses. Diagnosis and management of anaphylaxis.	2	W 01,04,05 U 01,02,03,04,05 K 01-09
TK 04	Recognition of Airways obstruction and management. Methods and tools using for open the Airways. Successful ventilation and oxygenation. Aspiration and foreign body airway obstruction – management. Antibiotics prophylaxis. SIRS. Sepsis- definition, diagnosis and treatment.	2	W 01, 04,05 U 01,02,03,04,05 K 01-09
TK 05	Initial assessment and treatment of unresponsive patients –use BLS algorithm and perform resuscitation. Introduction into advance life support. Defibrillation –how safe to do it. Fluid therapy. Drugs used during cardio-pulmonary arrest.	2	W 04 U 03,04,05 K 01-09

Booklist			
Obligatory literature:			
1. Basic Life Support. WWW.erc.edu– current guidelines (PDF)			
2. Materials from the seminar.			
3. Local Anesthesia for Dental Professionals (2nd Edition) by Kathy Bassett, Arhur DiMarco, Doreen Naughton. Pearson 2014			
4. The ICU Book by Paul L.Marino. LWW. Fourth edition 2013.			
5. Anesthesia Crash Course by Charles Horton. Oxford University Press 2009			
Supplementary literature:			
1. Handbook of Nitrous Oxide and Oxygen Sedation by Morris S. Clark and Ann Brunick. Mosby;4 edition (March 14, 2014)			
2. Techniquws for Successful Local Anaesthesia DVD-ROM by Royann Royer, Carlene Paarmann. Pearson; 1 edition (September 23,2011).			
Student’s workload (balance sheet of ECTS credits)			
Form of student’s activity (in-class participation; activeness, produce a report, etc.)	Student’s workload [h]		
	Tutor	Student	Average
Contact hours with the tutor	15		
Time spent on preparation to seminars/ practical classess	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 subject (in total)	1		
Remarks			

* 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...