Course Information Sheet

Higher education institution: Slovak Medical University in Bratislava

Faculty: Faculty of Medicine

Kód predmetu: *GM 027A* **Course title:** Anesthesiology and Intensive Medicine (1)

Type, extent and method of educational activity:

Number of hours per semester: 34 Lectures: 14/1 hours per week Practices: 20/1 hours per week (Total work load of the student is 50 h)

Method of the education activity: full-time study (distance study)1

Pediatrics AIM 3/5

Number ofcredits: 2 credits

Recommended semester/trimester: 7 th. semester

Level of higher educaion study 1. + 2. level

Prerequisite courses (subjecs):-

Requirements for completion of the course:

Method of completion of the course: completing of the course by 85% participation in lectures, 100% participation in practical exercises. Final test: minimum success rate: 70%.

Student workloadis 16 hours.

Learning outcomes:

The student is able to characterize anesthesiology, basic anesthetic techniques, procedures, aids. He shows knowledge on pre-anesthetic examination, pre-medication, pharmacology of anesthetics, basic techniques of regional anesthesia. He shows knowledge of general and regional anesthesia management, drug side effects, and complications in anesthetic practice. Demonstrates knowledge of the basic techniques of artificial lung ventilation used in the management of general anesthesia. Shows knowledge on basic cardiopulmonary resuscitation and brain death.

Brief content of the course (syllabus):

Introduction, position of anesthesiology and inensive medicine., Basic anesthetic techhiques, modes of general and local anesthesia, influencing the central nervous and vegetative system medical technology used in anesthetic practic.e Monitoring the patient during anesthesia (biochemical, clinical, apparatus monitoring). General and special preparation of the patient prior to the operation. Pre-anesthetic examination, premedication. Pharmacology of anesthetics and adjuvant drugs used in anesthetic practice. Basic techniques of regional anesthesia. Bases of cardiopulmonary resuscitation, Organ removal from cadavers, brain death.

Pediatrics AIM 3/5 - History and characteristics of pediatric anesthesiology, specifics of childhood, preparation of the child before anesthesia, premedication, airway management, monitoring of the child during anesthesia, methods of general and local anesthesia in children and newborns. Special anesthetic procedures and their possible complications.

Recommended literature:

RONALD MILLER LARS ERIKSSON LEE FLEISHER JEANINE WIENER-KRONISH NEAL COHEN WILLIAM YOUNG: Miller's Anesthesia: 1 and 2-Volume Set ,8th Edition. Published: 14th October 2014 ,Saunders eBook ISBN: 9780323352192

LARSEN, R. 2004. Anestezie. Praha: Grada Publishing, 2004. 1392 s.

Language requirements:-

Notes:

The course runs in Slovak and English language.

Course assessment

Assessed students in total: 0

Α	В	С	D	E	FX	
0%	0%	0%	0%	0%	0%	

Lecturers:

MUDr. Jaroslava Macková, MUDr. Matúš Paulíny, PhD.

MUDr. Matej Mezey MUDr. Michal Liška. PhD.

MUDr. Jakub Vallo

Dáte of last modification: 10.3. 2022

Supervised by: person responsible for realization, development and ensuring of the study program quality prof. MUDr. Iveta Šimková, CSc

Course Information Sheet

Higher education institution:Slovak Medical University in Bratislava

Faculty: Faculty of Medicine

Course Code: GM 027B Course title: Anesthesiology and Intensive Medicine (2)

Type, extent and method of educational activity:

Number of hours per semesters: 34 Lectures: 14/1 hours per week Practices: 20/1 hours per week

(Total work load of the student is 50 h)

Method of the education activity: full-time study (distance study)1

Pediatrics AIM 3/5

Number of credits: 3 credits

Recommended semester/trimester: 8. th

Level of higher education study 1. + 2. level

Prerequisite courses: Anestesiology and intensive medicine (1)

Requirements for completion of the course:

Method of assessment and completion of the course 85% participation in lectures, 100% participation in practical exercises.

Oral exam. A, B, C, D, E, FX Student workloadis 16 hours.

Learning outcomes:

The student can characterize intensive medicine in differential curative care. He shows knowledge on respiratory system, cardiovascular system, on monitoring at the Department of anesthesiology and intensive medicine, acquires knowledge on acid-base balance, ARDS and sepsis. He shows knowledge on body fluids, shock

Brief content of the course (syllabus):

Definition and role of intensive medicine in differential curative care, relation to emergency pre-hospital care and emergency hospital care, respiratory system – minute ventilation, blood gas exchange, bases of artificial pulmonary ventilation. Cardiovascular system - cardiac output. Oxygen transport- basic principles. Monitoring of hemodynamic and oxygenation parameters and their basic interpretation. Acid-base balance – basic disorders and their managemen, Water and electrolyte metabolism and their disorders, principles and management. ARDS – pathophysiology and treatment, sepsis, shock, multiple organ failure, definitions and treatment, intoxications.

Pediatrics AIM 3/5 - History and characteristics of pediatric intensive care medicine, basics of CPR in children and newborns, clinical examination, diagnostic procedures, monitoring of vital functions, therapeutic procedures - airway management, access to the venous system, access to the arterial system, oxygen therapy, infusion therapy, parenteral and enteral nutrition, UVP. Selected acute conditions in children - disorders of consciousness, suffocation, convulsions, shock conditions. Sudden conditions characteristic of childhood.

Recommended literature:

VARON, J., ACOSTA, P: Handbook of Critical and Intensive Care Medicine, Second Edition, Spinger 2010 CIVETTA, TAYLOR AND KIRBY'S Manual of Critical Care (4th edition) A. Gabrelli, A. J. Layon, M. Yu, (Eds) Lippincott, Williams & Wilkins, Philadelphia, ISBN 0-7817-6915-9, 1017 pp.

Language requirements:-

Notes:

The course runs in Slovak and English language.

Course assessment

Assessed students in total: 0

Α	В	С	D	E	FX			
0%	0%	0%	0%	0%	0%			

Lecturers:

MUDr. Jaroslava Macková,

MUDr. Matúš Paulíny, PhD.

MUDr. Matej Mezey

MUDr. Michal Liška. PhD.

MUDr. Jakub Vallo

Date of last modification: 1. 12. 2021

Supervised by: person responsible for realization, development and ensuring of the study program quality prof. MUDr. Iveta Šimková, CSc