

<i>Course</i>	Anesthesiology and reanimatology			Code	
<i>Study programme / cycle</i>	University integrated (undergraduate and graduate) study of medicine			Year of study	IV
<i>ECTS credits:</i>	6	<i>Semester</i>	VIII	Hours per semester (1+e+s)	20+35+5
<i>Course Status:</i>	Mandatory	<i>Course Prerequisites:</i>	Successful completion of Year 3	<i>Co-requisites:</i>	
<i>Course Enrollment:</i>	4th year medical students			<i>Course Term:</i>	According to Schedule
<i>Course Leader/Lecturer:</i>	Professor Slobodan Mihaljević, MD, PhD				
<i>Contact, consultation hours:</i>	During the course: 8-9 a.m.				
<i>E-mail adress & telephone number:</i>	smsmihaljevic@gmail.com 00385915024223				
<i>Teaching Assistant</i>	Zoran Karlović, MD, MSc Mara Šimić, MD Boris Matić, MD Anita Kosjerina, MD Edita Bjelanović, MD Dalibor Đurasović, MD				
<i>Contact, consultation hours:</i>					
<i>E-mail adress & telephone number:</i>					
Course objectives:	The objectives of this course are: To provide students with theoretical and practical knowledge about regional and general anesthesia, and resuscitation of critically ill patients.				
Learning Outcomes (general and specific skills):	<ul style="list-style-type: none"> • Applying the skills of critical thinking in scientific attitude • Synthesis of knowledge of human physiology and pathophysiology, pharmacology, and cutting edge technology quickly and thoroughly to provide safe and compassionate care to all patients • Remembering and understanding the importance of ability to work with others (teamwork skills) but also personal characteristic of successful health care professional needed in treatment of all patients (empathy, motivation, communication, honesty, integrity and ethical awareness) • Applying valuable knowledge and skills gained in diagnosis and treatment of patients in need of emergent resuscitation (airway, breathing, and circulation) • Understanding how medical knowledge in addition to modern anesthetic and perioperative care can effect positive outcomes for patients undergoing surgery 				

	<ul style="list-style-type: none"> • Understanding the signs of sudden cardiac arrest • Applying the basic and advanced measures of cardiopulmonary resuscitation (CPR) • Applying the basic and advanced principles of airway management • Understanding the basic principles and techniques of general and regional anesthesia, including risks and benefits of various techniques • Remembering the specific agents used for induction and maintenance of anesthesia and analyzing their advantages and disadvantages (IV agents, inhalational agents, neuromuscular blocking agents) • Understanding the monitoring techniques both non-invasive (EKG, BP, Pulse Oximetry) and invasive • Understanding the management of critically ill patients (CPR, IV fluid resuscitation, and mechanical ventilation) • Evaluating and analyzing the management of issues unique to critically ill patients including different types of shock, techniques of invasive monitoring, hemodynamic and respiratory support, airway management, basic cardiovascular, pulmonary, renal physiology and pharmacology • Understanding etiology, pathophysiology, symptomatology and treatment of shock • Applying the practical skills on medical simulation mannequins (start IVs, intubation techniques, nasogastric tube insertion, urethral catheterization etc.) • Analyzing and understanding complications of regional and general anesthesia, and propose treatment options <p>Learning outcomes will be evaluated and contribute to student's final grade.</p>			
<i>Syllabus Content /Course Information (summary):</i>	The course consists of lectures, seminars and practicals during period of 4 weeks.			
<i>Different formats of Course</i>	Lectures	Practicals	Seminars	Homework
	Consultations	Mentorship	Field work	Other
	Remarks:			
<i>Student obligations</i>	Class Attendance, excused absences may not exceed 20% of the class meetings			

Evaluation of the student	Attending Classes	In-Class Activity	Seminars	Practical assignments
	Oral exam	Paper test	Continuous assessment	Essay
Detailed evaluation overview <i>European Credit Transfer System</i>				
STUDENT OBLIGATIONS	HOURS (ESTIMATION)	ECTS credits	Grading %	
In-Class Participation	50	1,5		
Seminars	45	1,5	20%	
Colloquium(2) or Test paper	50	2	60%	
Oral exam	30	1	20%	
Additional explanations:				
<p>Grades are based on the following percentages:</p> <p>A = 91-100% 5</p> <p>B = 79 to 90% 4</p> <p>C = 67 to 78% 3</p> <p>D = 55 to 66% 2</p> <p>F = 0 to 54% 1</p>				
Compulsory literature:	1. Mihaljević S. et al. Kardiopulmonalna reanimacija.			
Supplementary literature:	<p>1. Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija. Medicinska naklada, Zagreb</p> <p>2. European Resuscitation Council Guidelines for Resuscitation 2005. Resuscitation 2005.</p>			
Additional Course Information:	<p>Monitoring methods of teaching quality:</p> <ul style="list-style-type: none"> - student questionnaire - quality analysis by students and teachers - exam results analysis - report of the office for teaching quality - external evaluation (visit of team for quality control) 			

ENCLOSURE: Course Calendar

<i>Number of Lesson unit</i>	Topics and Literature
I.	Topic: Basic Life Support
	Summary: Familiarization with the basics of resuscitation
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
II.	Topic: Algorithm of Advanced Life Support
	Summary: Familiarization with expanded resuscitation measures
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
III.	Topic: Pediatric Basic Life Support and Resuscitation of Newborn
	Summary: Familiarization with reanimation of children and newborns
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
IV.	Topic: Complications of CPR
	Summary: Familiarization with with reanimation complications
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
V.	Topic: Postresuscitation syndrome
	Summary: Familiarization with post-reanimation problems
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
VI.	Topic: Brain death
	Summary: Determining death
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
VII.	Topic: Anaphylaxis
	Summary: Recognition, diagnosis and treatment of anaphylaxis
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
VIII.	Topic: Resuscitation in pregnancy – Specific difficulties
	Summary: Recognition and resuscitation process in pregnant women
	Literature: Kardiopulmonalna reanimacija Mihaljević S . et al.
IX.	Topic: Anesthetic Monitoring
	Summary: Familiarization with the basics of patient monitoring in anesthesia
	Literature: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb
X.	Topic: Establishing vascular access in anesthesiology
	Summary: The proceedings for the venous pathways using ultrasound
	Literature: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb
XI.	Topic: Anesthesiology Machine
	Summary: Familiarization with the work of machines
	Literatura: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb
XI.	Topic: Intravenous Anesthetics
	Summary: Familiarization with pharmacodynamics and pharmacokinetics of i.v. anesthetics
	Literature: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb

XII.	Topic: Inhalational Anesthetics
	Summary: Familiarization with pharmacodynamics and pharmacokinetics of inhalation anesthetics
	Literature: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb
XIII.	Topic: Other pharmacological agents in anesthesiology
	Summary: Familiarization with medicines used in anesthesiology
	Literature: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb
XIV.	Topic: Shock
	Summary: Familiarization with the types of shock and therapy
	Literature: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb
XV.	Topic: Regional Anesthesia
	Summary: Application of regional anesthesia
	Literature: Marko Jukić, Višnja Majerić-Kogler et al. 2010. Klinička anesteziologija.Medicinska naklada, Zagreb