



Syllabus on the discipline “Anesthesiology”

1. General information	
Faculty Faculty of Post-graduate Education	medical
Educational program (field, specialty, level of higher education, form of education)	22 Healthcare, 222 Medicine, second (Master’s) level of higher education, full-time
Academic year	5th
Discipline name, code (electronic identification at the Danylo Halytskyi Lviv National Medical University website)	OK 42.1. Anesthesiology and intensive care
Department (name, address, phone, e-mail)	Department of Anesthesiology and intensive care, 70010, Lviv, 7 Chernihivska str.
Chair of the Department (e-mail)	Verbovsky R.M., MD, PhD, associate professor kaf_anesthesiology_FPGE@meduniv.lviv.ua
Educational year (year of the discipline study)	5th
Semester (semester of the discipline study)	IX-X
Type of the discipline/module (mandatory/optional)	Mandatory
Teaching staff (names, surnames, scientific degrees and titles, e- mails)	Olha Filyk, MD, PhD, associate professor, doctor_555@ukr.net Volodymyr Mishchuk, MD, PhD, associate professor, mishchukdoc@gmail.com Myroslava Harbar, MD, PhD, associate professor, mirasvit@yahoo.com Oleksandr Kolupayev, MD, assistant professor, kolupayevs@gmail.com Ostap Turkevych, MD, assistant professor, turkevychostap@gmail.com
Person, responsible for syllabus (the person to whom comments on the syllabus should be given, e-mail)	Olesya Ilchyshyn, MD, assistant professor, head teacher, lesja.rav@gmail.com Myroslava Harbar, MD, PhD, associate professor, mirasvit@yahoo.com
Number of ECTS credits	3,0
Number of hours (lectures / practical classes / self-reliance work)	90 (lectures – 10, practical classes – 36, self-work – 44)
Language	Ukrainian, English
Information on the consultations	Consultations are held in accordance with the schedule approved by the Chair of the department
Address, telephone and rules of operation of the clinical base, office	Lviv Regional Clinical Hospital, 79010, Lviv, Chernihivska str., 7, ph. +38(032) 2368470; +38 (050)5379519; +38 (067) 7314938 First Medical Union St. Panteleimon Hospital, Lviv,

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2. Short resume of the discipline

Studying anesthesiology and intensive care will help students to get a complete understanding of anesthesiology and intensive care as an independent section of clinical discipline that studies and develops the theory and practice of protecting the body from extreme influences (aggression) and uses common methods for regulating or temporarily substitution of vital functions when they are injured (terminal states, anesthesia, special research methods, etc.).

3. Objective and tasks of the discipline

Anesthesiology and intensive care as an academic discipline is an integral part of clinical medicine, so the study of the basic principles of this field of science is an important point in training a doctor of any specialty.

It is based on the study of human anatomy, histology, biochemistry, physiology, pathomorphology, pathophysiology, pharmacology of internal medicine, pediatrics and integrates with these disciplines.

This discipline is a fundamental for students concerning intensive care and emergencies that occur in the clinic of internal medicine, pediatrics, surgery, traumatology and orthopedics, neurosurgery, urology, obstetrics and gynecology and other disciplines, which use methods of anesthesia and intensive care. This involves the integration of teaching with these disciplines and the formation of skills to apply knowledge in the process of further study and professional activities.

The study the discipline provides an opportunity to gain practical skills and develop professional skills for diagnosis, emergency and intensive care in clinical practice.

4. Goals and Objectives of the discipline

1. Goals. The purpose of the course is developing student's competence in the field of clinical medicine. The study of anesthesiology and intensive care will help students gain a holistic view of anesthesiology and intensive care as an independent section of clinical disciplines, which studies and develops the theory and practice of protecting the body from extreme influences (aggression) and uses common methods of regulation or temporary replacement of vital functions in cases of their violation (terminal conditions, anesthesia, special research methods, etc.).

2. Objectives. Acquisition of knowledge by students, in particular, to be able to interpret the main clinical manifestations and laboratory data of disorders of vital functions; be able to plan examinations and treatment of patients with disorders of vital functions; demonstrate mastery of diagnosis and care for major syndromes; diagnose signs of clinical death and terminal conditions, perform cardiopulmonary resuscitation; apply general principles and methods of anesthesiological support of various surgical interventions; use the basic principles of emergency care for victims of man-made and natural disasters; apply the basic algorithms of intensive care of emergencies.

3. Competencies and results of course completion, the formation of which provides the study of the discipline (general and specific competencies).

General:

- Ability to abstract thinking, analysis and synthesis.
- Ability to apply knowledge in practical situations.
- Ability to conduct research at the appropriate level.
- Ability to learn and master modern knowledge.
- Ability to identify, pose and solve problems.
- Ability to team work.

Specific (professional, subject):

- To know etiology, pathogenesis, pathophysiology of clinical death and terminal states;
- To know diagnostic methods and clinical course of the main syndromes, which

- accompany serious violations of vital functions;
- To know algorithms of intensive care of urgent states;
 - To know general principles and methods of anesthetic provision of surgical interventions;
 - To be able to establish a diagnosis of clinical death and conduct reanimation measures;
 - To be able to determine the scope of surveys and to evaluate them in case of violations of vital functions;
 - To be able to make an intensive care plan for urgent conditions;
 - To be able to must acquire practical skills:
 - To be able to ensure airways patency;
 - To be able to intubate of the trachea on the mannequin;
 - To be able to perform mechanical ventilation of the lungs by the simple techniques ("mouth to mouth", "mouth to nose");
 - To be able to perform mechanical ventilation of the lungs with the Ambu bag;
 - To be able to perform chest compressions;
 - To be able to perform defibrillation of the heart;
 - To be able to calculate and correct daily water balance;
 - To be able to calculate deficiencies and correct the main electrolytes (potassium, sodium, chlorine);
 - To be able to determine and correct the type of acid-bace disorders.

4. Course prerequisites

To successfully exquisite and master the competencies of this discipline, it is advisable to obtain knowledge in such disciplines as: "Human Anatomy", "Histology", "Biochemistry", "Physiology", "Pathomorphology", "Pathophysiology", "Pharmacology of Internal Medicine", "Pediatrics".

5. Study results according to the Program

Code of the result of study. (categories: <i>Kn – knowledge,</i> <i>Ab – ability,</i> <i>C – competence,</i> <i>AR – autonomy and</i> <i>responsibility).</i>	Content of the study result	Link to the code in the matrix of competencies. <i>Symbol of the Program</i> <i>Result of study Code in the Higher Education Standard.</i>
Kn-1	Knowlegy on the etiology, pathogenesis, pathophysiology of clinical death and terminal conditions	PR-1
Kn-2	Knowlegy on the methods of diagnosis and clinical course of the main syndromes that accompany severe disorders of vital functions	PR-2
Kn-3	Knowlegy on the algorithms of intensive care of emergencies	PR-3
Kn-4	Knowlegy on the general principles and methods of anesthesiological support of surgical interventions	PR-4
Ab-1	Ability to diagnose clinical death and conduct resuscitation	PR-5
Ab-2	Ability to determine the scope of examinations and evaluate them in violation of vital functions	PR-6
Ab-3	Ability to make a plan of intensive care in emergencies;	PR-7
Ab-4	Ability to learn and master modern knowledge	PR-8

Ab-5	Ability to identify, pose and solve problems	PR-9
Ab-6	Ability to work independently with the protocols of the Ministry of Health of Ukraine and international and regional standards in the field of health care	PR-10
Ab-7	Ability to ensure airway patency	PR-11
Ab-8	Ability to intubate the trachea on a mannequin	PR-12
Ab-9	Ability to perform mechanical lung ventilation with an Ambu bag	PR-13
Ab-10	Ability to perform chest compressions and defibrillation of the heart	PR-14
Ab-11	Ability to calculate and adjust the daily water balance	PR-15
Ab-12	Ability to determine the type of disorders of acid-base status and their correction	PR-16
C-1	Ability to analyse medical information.	PR-17
C-2	Ability to do research at the appropriate level.	PR-18
Ar-1	To work independently with the modern Ukrainian and international protocols.	PR-19
Ar-2	To create clinical cases for group discussion.	PR-20

6. Discipline format and scope

Discipline format (full-time/parttime)	Full-time	
Type of classes	Number of hours	Number of groups
lectures	10	9
practical classes	36	1
self-work	44	

7. Topics and scope of the discipline

Code of the class type	Topic	Scope of study	Code of the result of study	Teaching staff
L-1 (lecture)	Basics of Anesthesiology.	Presentation of lecture material using multimedia support. Outlining problematic issues. Providing answers to questions.	Kn-1, Kn-2, Kn-3, Kn-4, Ab-1, Ab-2, Ab-4, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, C-1	Prof. Fesenko U.A. Assos.Prof. Filyk.O.V.
L-2	Violation of water-electrolyte balance and acid-base balance.	Presentation of lecture material using multimedia support. Outlining problematic issues. Providing answers to questions.	Kn-2, Kn-3, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-11, Ab-12, C-1	Prof. Fesenko U.A. Assos.Prof. Filyk.O.V.

L-3	Intensive care for acute renal failure and liver failure.	Presentation of lecture material using multimedia support. Outlining problematic issues. Providing answers to questions.	Kn-2, Kn-3, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-11, C-1	Prof. Fesenko U.A. Assos.Prof. Filyk.O.V.
L-4	General principles of intensive care of acute poisoning.	Presentation of lecture material using multimedia support. Outlining problematic issues. Providing answers to questions.	Kn-1, Kn-2, Kn-3, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-7, Ab-8, C-1, Ar-1	Prof. Fesenko U.A. Assos.Prof. Filyk.O.V.
L-5	Intensive care acute respiratory failure.	Presentation of lecture material using multimedia support. Outlining problematic issues. Providing answers to questions.	Kn-2, Kn-3, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ar-1	Prof. Fesenko U.A. Assos.Prof. Filyk.O.V.
P-1 (<i>practical class</i>)	Cardio-Pulmonary and Cerebral Resuscitation	1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control. 3. Solving clinical cases. 4. Clarification of problematic issues. 5. Summarizing the class	Kn-1, Kn-2, Kn-3, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-12, C-1, C-2, Ar-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
P-2	General Anesthesiology	1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control. 3. Solving clinical cases. 4. Clarification of problematic	Kn-1, Kn-2, Kn-4, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ab-10, C-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD

		issues. 5. Summarizing the class		
P-3	Clinical Anesthesiology	1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control. 3. Solving clinical cases. 4. Clarification of problematic issues. 5. Summarizing the class	Kn-2, Kn-3, Kn-4, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ab-10, C-1, Ar-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
P-4	Diagnosis and Management of Fluid, Electrolyte and Acid-Base Disorders	1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control. 3. Solving clinical cases. 4. Clarification of problematic issues. 5. Summarizing the class	Kn-2, Kn-3, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-11, Ab-12, C-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
P-5	Acute Renal Failure. Acute Hepatic Failure.	1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control. 3. Solving clinical cases. 4. Clarification of problematic issues. 5. Summarizing the class	Kn-1, Kn-2, Kn-3, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-11, C-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
P-6	Acute Poisonings and Comatose Conditions.	1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of	Kn-2, Kn-3, Ab-2, Ab-5, Ab-6, Ab-6, Ab-11, Ab-12, Ar-1, Ar-2, C-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD,

		<p>issues for self-control.</p> <p>3. Solving clinical cases.</p> <p>4. Clarification of problematic issues.</p> <p>5. Summarizing the class</p>		<p>PhD</p> <p>Ostap</p> <p>Turkevych, MD</p> <p>Volodymyr</p> <p>Mishchuk, MD,</p> <p>PhD</p>
P-7	Acute Respiratory Failure	<p>1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control.</p> <p>3. Solving clinical cases.</p> <p>4. Clarification of problematic issues.</p> <p>5. Summarizing the class</p>	<p>Kn-2, Kn-3, Ab-2, Ab-5, Ab-6, Ab-6, Ab-7, Ab-8, Ab-9, Ar-1, Ar-2, C-1</p>	<p>Kolupayev</p> <p>Oleksandr, MD</p> <p>Olha Filyk, MD,</p> <p>PhD</p> <p>Myroslava</p> <p>Harbar, MD,</p> <p>PhD</p> <p>Ostap</p> <p>Turkevych, MD</p> <p>Volodymyr</p> <p>Mishchuk, MD,</p> <p>PhD</p>
P-8	Diseases of the Respiratory System	<p>1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control.</p> <p>3. Solving clinical cases.</p> <p>4. Clarification of problematic issues.</p> <p>5. Summarizing the class</p>	<p>Kn-2, Kn-3, Ab-2, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ar-1, Ar-2, C-1</p>	<p>Kolupayev</p> <p>Oleksandr, MD</p> <p>Olha Filyk, MD,</p> <p>PhD</p> <p>Myroslava</p> <p>Harbar, MD,</p> <p>PhD</p> <p>Ostap</p> <p>Turkevych, MD</p> <p>Volodymyr</p> <p>Mishchuk, MD,</p> <p>PhD</p>
P-9	Acute Disorders of Circulation	<p>1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control.</p> <p>3. Solving clinical cases.</p> <p>4. Clarification of problematic issues.</p> <p>5. Summarizing the class</p>	<p>Kn-1, Kn-3, Kn-2, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-10, Ab-11, Ar-1, Ar-2, C-1</p>	<p>Kolupayev</p> <p>Oleksandr, MD</p> <p>Olha Filyk, MD,</p> <p>PhD</p> <p>Myroslava</p> <p>Harbar, MD,</p> <p>PhD</p> <p>Ostap</p> <p>Turkevych, MD</p> <p>Volodymyr</p> <p>Mishchuk, MD,</p> <p>PhD</p>

P-10	Shock and Traumatic Injuries	1. Checking the mastering of the list of questions from the thematic plan. 2. Discussion of issues for self-control. 3. Solving clinical cases. 4. Clarification of problematic issues. 5. Summarizing the class	Kn-1, Kn-2, Kn-3, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-10, Ab-11, Ar-1, Ar-2, C-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-1 (<i>self-work</i>)	Intensive care in trauma, crash-syndrome, electric shock	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-1, Kn-2, Kn-3, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-12, C-1, C-2, Ar-1	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-2	Clinic and Diagnosis of Acute heart failure and arrhythmias. Basic principles of intensive care.	List of questions to the topic processing. Preparation of answers to self control questions. Preparation of clinical cases.	Kn-1, Kn-2, Kn-3, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ab-10, C-1, C-2, Ar-1, Ar-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-3	Intensive care of seizures and hyperthermia.	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-1, Kn-2, Kn-3, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, C-1, C-2, Ar-1, Ar-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-4	Brain death. Clinical and deontologic	List of questions to the topic processing.	Kn-1, Kn-2, Kn-3, Ab-2, Ab-5, Ab-6, Ar-1, Ar-2,	Kolupayev Oleksandr, MD Olha Filyk, MD,

	problems.	Preparation of answers to selfcontrol questions. Preparation of clinical cases.	C-1, C-2	PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-5	Adult Respiratory Distress Syndrome.	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-2, Kn-3, Ab-2, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ar-1, Ar-2, C-1, C-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-6	Newborn Respiratory Distress Syndrome.	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-2, Kn-3, Ab-2, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ar-1, Ar-2, C-1, C-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-7	History of Anesthesia.	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-2, Kn-3, Kn-4, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-7, Ab-8, Ab-9, Ab-10, Ar-1, C-1, C-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-8	Tactic in infusion therapy in shock.	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-1, Kn-3, Kn-2, Ab-1, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-10, Ab-11, Ar-1, Ar-2, C-1, C-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD

				Volodymyr Mishchuk, MD, PhD
SW-9	Intracranial Pressure as a criterion of adequacy of intensive care in coma.	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-2, Kn-3, Ab-2, Ab-5, Ab-6, Ab-11, Ab-12, Ar-1, Ar-2, C-1, C-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD
SW-10	Current methods of extracorporeal detoxication.	List of questions to the topic processing. Preparation of answers to selfcontrol questions. Preparation of clinical cases.	Kn-1, Kn-2, Kn-3, Ab-2, Ab-3, Ab-4, Ab-5, Ab-6, Ab-11, C-1, C-2	Kolupayev Oleksandr, MD Olha Filyk, MD, PhD Myroslava Harbar, MD, PhD Ostap Turkevych, MD Volodymyr Mishchuk, MD, PhD

8. Results of study verification

Current control

is carried out during the training sessions and aims to check the assimilation of educational material by students (it is necessary to describe the forms of current control during the training sessions). Forms of assessment of current educational activities should be standardized and include control of theoretical and practical training. The final grade for the current educational activity is set on a 4 point (national) scale

Result of study code	Code of the class	Result of study verification method	Enrollment criteria
Kn-1	L-1, L-4, P-1, P-5, P-9, p-10, SW-1, SW-2, SW-3, SW-4, SW-8, SW-10	Attending lectures and practical classes. Execution of written tasks on the topic (questions for self-control and creative tasks). Participation in discussions, discussion of issues submitted for independent study.	To enroll in the study of the discipline it is necessary: to comply with the requirements of the curriculum; to solve tasks both in class and those offered for independent study correctly.
Kn-2	L-1, L-2, L-3, L-4, L-5, P-1, P-2, P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-9, SW10		
Kn-3	L-1, L-2, L-3, L-4, L-5, P-1, P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-		

	9, SW10		
Kn-4	L-1, P-2, P-3, SW-7		
Ab-1	L-1, L-4, L-5, P-1, P-3, P-9, P-10, SW-1, SW-2, SW-3, SW-7, SW-8, SW-9		
Ab-2	L-1, L-2, L-3, L-4, L-5, P-1, P-2, P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-9, SW10		
Ab-3	L-2, L-3, L-4, L-5, P-1, P-2, P-3, P-4, P-5, P-9, P-10, SW-1, SW-2, SW-3, SW-7, SW-8, SW10		
Ab-4	L-1, L-2, L-3, L-4, L-5, P-1, P-2, P-3, P-4, P-5, P-9, P-10, SW-1, SW-2, SW-3, SW-7, SW-8, SW10		
Ab-5	L-1, L-2, L-3, L-4, L-5, P-1, P-2, P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-9, SW10		
Ab-6	L-1, L-2, L-3, L-4, L-5, P-1, P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-9, SW10		
Ab-7	L-1, L-4, L-5, P-2, P-3, P-7, P-8, SW-2, SW-5, SW-6, SW-7		
Ab-8	L-1, L-4, L-5, P-2, P-3, P-7, P-8, SW-2, SW-5, SW-6, SW-7		
Ab-9	L-1, L-5, P-2, P-3, P-7, P-8, SW-2, SW-5, SW-6, SW-7		
Ab-10	P-2, P-3, P-9, P-10, SW-2, SW-7, SW-8		
Ab-11	L-2, L-3, L-4, L-5, P-6, P-9, SW-8, SW-9		
Ab-12	L-2, P-1, P-4, P-6, SW-1		
C-1	L-1, L-2, L-3, L-4, L-5, P-1, P-3, P-4, P-5,		

	P-6, P-7, P-8, P-9, P-10, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-9, SW10		
C-2	P-2, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-9, SW10		
Ar-1	L-4, L-5, P-1, P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8, SW-9		
Ar-2	P-6, P-7, P-8, P-9, P-10, SW-2, SW-3, SW-4, SW-5, SW-6, SW-8, SW-9		
Final control			
General evaluation system		Participation to the classes during the semester - 100% on a 200-point scale	
Evaluation scales scale		Traditional 4-point scale, multi-point (200-point) scale, ECTS rating	
Conditions of admission to the final control		The student attended all practical (laboratory, seminar) classes and received at least 120 points for current performance	
Type of final control		Methods of final control	Enrollment criteria
Credit		It is necessary to enroll all topics submitted for current control. Grades from the 4-point scale are converted into points on a multi-point (200-point) scale in accordance with the Regulation "Criteria, rules and procedures for evaluating the results of students' learning activities".	The maximum number of points is 200. The minimum number of points is 120.
Criteria for assessing the exam/differentiated test			
Exam	<i>In this field it is necessary to describe the order and a technique of carrying out final control / all its stages</i>	<i>It is necessary to define in points evaluation criteria for each concrete stage of final control</i>	
Differentiated test			
The maximum number of points that a student can score for the current academic activity for admission to the test is 200 points. The minimum number of points that a student must score for the current academic activity for admission to the test is 120 points. The calculation of the number of points is based on the grades obtained by the student on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (CA), rounded to two decimal places. The resulting value is converted into points on a multi-point scale as follows: $X = (CA \times 200) / 5$			
9. Policy of the discipline			
Academic Integrity: Students' work is expected to be their original research or reasoning. Lack			

of references to sources used, fabrication of sources, copying, interference in the work of other students, etc. are examples of possible academic dishonesty. Identification of signs of academic dishonesty in the student's work is the basis for non-enrollment by the teacher, regardless of the extent of plagiarism or deception. Sources of training: the source base can be provided by the teacher exclusively for educational purposes without the right to transfer it to third parties. Students are encouraged to use other literature that is not listed in available thematic plans.

10. Literature

1. Anesthesiology and intensive care 2nd Edition. Edited by Hlumcher F.S. - Kyiv AUS Medicine Publishing. – 2017. - 312 p.
2. European Resuscitation Council Guidelines for Resuscitation 2015 / Koenraad G. Monsieura, Jerry P. Nolan et al on behalf of the ERC Guidelines 2015 Writing Group // Resuscitation. – 2015. - Vol. 95. - P.1-80. <https://cprguidelines.eu/>
3. Intensive Care Medicine, 6th Edition. Irwin R.S., Rippe J.M. – Lippincott Williams & Wilkins. – 2008;
4. ICU Book, 3rd Edition. P. Marino. – Lippincott Williams & Wilkins. – 2007;
5. Clinical Anesthesia, 6th Edition. P.G.Barash, B.F.Cullen et al. – Lippincott Williams Wilkins. – 2009;
6. Miller`s Anesthesia 2 volume set, 7th edition. R. Miller, L. Eriksson, L. Fleisher et al.- Churchill Livingstone.- 2010.- 3312p.;
7. Acute Respiratory Distress Syndrome. The Berlin Definition / V. Marco Ranieri, Gordon D. Rubinfeld, B. Taylor Thompson et al. // JAMA. – 2012. – Vol. 307(23). – P. 2526-2533. doi:10.1001/jama.2012.5669.
8. Pneumonia in adults: diagnosis and management Clinical guideline. NICE 2014. P. 1-28. Published: 3 December 2014. nice.org.uk/guidance/cg191.
9. ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure 2012. The Task Force for the Diagnosis and Treatment of Acute and Chronic Heart Failure 2012 of the European Society of Cardiology. Developed in collaboration with the Heart Failure Association (HFA) of the ESC. European Heart Journal. - 2012. – Vol. 33. – P. 1787–1847. doi:10.1093/eurheartj/ehs104
10. Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016 / Andrew Rhodes, Laura E. Evans, Waleed Alhazzani [et al] // Critical Care Medicine. - March 2017. – Vol.45 (3P). – P. 1-67. <http://www.survivingsepsis.org/About-SSC/Pages/Leadership.aspx>.

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