

SYLLABUS

INTERNATIONAL EUROPEAN
UNIVERSITY



SCHOOL OF
MEDICINE

ANESTHESIOLOGY AND
INTENSIVE CARE

2023



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Discipline



ANAESTHESIOLOGY AND INTENSIVE CARE

Teacher(s)



Sukhonos Roman Yevhenovych

Profile of the teacher(s)



<https://medicine.ieu.edu.ua/pro-yemsh/kafedry/kafedra-klinichnykh-dystsyplin>

Consultations

Face-to-face consultations



Second Thursday of the month from 15:00 to 16:00

Online consultations



Fourth Friday of the month from 15:00 to 16:00

Contact phone number



+380 935972594

E-mail



sukhonosroman@ieu.edu.ua

Discipline page



<https://medicine.ieu.edu.ua/pro-yemsh/kafedry/kafedra-klinichnykh-dystsyplin>

Form of final control

offset

differentiated offset

exam

☐☒☐

1 Brief summary of the discipline

Anaesthesiology and intensive care as an academic discipline is an integral part of clinical medicine, so studying the basic principles of this field of science is an important aspect of training a doctor of any speciality. The course lays the foundation for students to study anaesthesiology and intensive care of emergencies that arise in the clinic of internal medicine, paediatrics, surgery, traumatology and orthopaedics, neurosurgery, urology, obstetrics and gynaecology and other disciplines where methods of anaesthesia and intensive care are used, which involves the integration of teaching with these disciplines and the development of skills to apply knowledge in the process of further study and professional activity.

2 Prerequisite for the course

A prerequisite for studying the discipline "Anaesthesiology and Intensive Care" is that the discipline is based on the knowledge gained by students in the study of such fundamental disciplines as human anatomy; histology, biochemistry, physiology, pathomorphology; pathophysiology; propedeutics of internal medicine, paediatrics, pharmacology and is integrated with these disciplines.

3 Purpose and objectives of the discipline

The purpose of teaching the discipline "Anaesthesiology and Intensive Care" is to master theoretical and practical knowledge of the etiology, pathogenesis, classification, clinical manifestations, diagnostic methods, intensive care of major syndromes accompanying severe disorders of vital functions. Study of the etiology, pathogenesis, pathophysiology of clinical death and terminal conditions and mastering the elements of cardiopulmonary and cerebral resuscitation, which allows to restore the adequate functioning of life support systems. Acquisition of knowledge and professional skills in anaesthetic support of surgical interventions in various fields of medicine.

The main objectives of studying the discipline "Anaesthesiology and Intensive Care" are: to teach students the main syndromes that accompany severe disorders of vital functions; to diagnose and provide medical care in emergency conditions; to interpret the general principles of intensive care in emergency conditions; to draw up an examination plan and interpret the results of laboratory and instrumental examination methods; to demonstrate the ability to perform the necessary medical procedures; to be able to diagnose clinical death and to conduct

4 Learning outcomes

PLO-1	Have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integrating knowledge. Be responsible for responsibility for professional development, the ability to further professional training with a high level of autonomy.
PLO-3	Specialised conceptual knowledge that includes scientific achievements in the field of healthcare and is the basis for research, critical thinking in the field of medicine and related interdisciplinary issues.
PLO-4	Identify and identify the leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary anamnesis data patient's history, examination data, knowledge of the person, his/her organs and systems, to establish a preliminary clinical diagnosis of the disease (list 2).



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Результати навчання

PLO-5	Collect complaints, anamnesis of life and disease, assess the patient's psychomotor and physical development, the state of organs and body systems, and evaluate information on the basis of laboratory and instrumental studies regarding the diagnosis (according to list 4), taking into account the patient's age.
PLO-6	Establish the final clinical diagnosis by making an informed decision and analysing the obtained subjective and objective data of clinical, additional examination, differential diagnosis, following the relevant ethical and legal standards, under the supervision of a supervising physician in the conditions of healthcare facility (according to list 2).
PLO-7	Prescribe and analyse additional (mandatory and optional) methods of examination (laboratory, functional and/or instrumental) (according to list 4), patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
PLO-8	Determine the main clinical syndrome or what causes the severity of the victim's/injured person's condition (according to list 3) by making an informed decision and assessing the person's condition in any circumstances (in a healthcare facility, outside the healthcare facility), healthcare facility, outside of it), including in an emergency situation and hostilities, in the field, in conditions of lack of information and limited time.
PLO-9	Determine the nature and principles of treatment of patients (conservative, surgical) with diseases (according to list 2), taking into account the patient's age, in a health care facility, outside it and at the stages of medical evacuation, including in the field, based on a preliminary clinical diagnosis, observing the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes, if necessary, expand the standard scheme, be able to justify personalised recommendations under the supervision of a medical supervisor
PLO-10	Determine the necessary work, rest and nutrition regime based on the final clinical diagnosis, in compliance with relevant ethical and legal standards, by making an informed decision according to existing algorithms and standardised schemes.
PLO-14	Determine the tactics and provide emergency medical care for urgent conditions (according to list 3) in a time-limited environment in accordance with existing clinical protocols and treatment standards.
PLO-17	Perform medical manipulations (according to List 5) in a healthcare facility, at home or at work based on a preliminary clinical diagnosis and/or patient's condition indicators by making an informed decision, in compliance with the relevant ethical and legal standards.
PLO-18	Determine the state of functioning and limitations of a person's vital activity and the duration of disability with the preparation of relevant documents in a healthcare facility based on data on the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical records for the patient and population based on regulatory documents.
PLO-21	Find the necessary information in professional literature and databases from other sources, analyse, evaluate and apply this information.
PLO-22	Apply modern digital technologies and specialised software, statistical methods of data analysis to solve complex healthcare problems.
PLO-24	To organise the necessary level of individual safety (own and of persons under his/her care) in the event of typical dangerous situations in the individual field of activity.
PLO-25	Clearly and unambiguously communicate own knowledge, conclusions and arguments on healthcare and related issues to specialists and non-specialists.
PLO-27	Communicate fluently in the state language and English, both orally and in writing, to discuss professional activities, research and projects.



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5 ECTS Credits

The discipline takes 90 hours of 3 ECTS credits to study.

6 Structure of the discipline

Topic	Number of hours			Individual work
	Lect.	Pract.	Ind.	
Content module 1: General resuscitation and anaesthesiology				
1. Cardiopulmonary and cerebral resuscitation.	-	4	4	During the module, a review of scientific literature on topics of your choice: "Brain death. Clinical and deontological problems" "History of the development of pain relief methods"
2. General issues of anaesthesiology	-	2	6	
3. Clinical anaesthesiology	2	4	4	
Content module 2. General issues of intensive care				
4. Methods of diagnostics and correction of disorders of water-electrolyte metabolism and acid-base state (ABC)	-	4	4	"Intracranial pressure as a criterion for the adequacy of intensive care of comatose states" "Modern methods of efferent therapy"
5. Acute renal failure (ARF) and liver failure	2	4	4	
6. Acute poisoning and coma.	2	4	4	
Content module 3: Intensive care of emergencies				
7. Acute respiratory failure (ARF)	2	3	4	"Acute respiratory distress syndrome of newborns" "Tactics of infusion therapy in shock states"
8. Diseases and lesions of the respiratory system		3	4	
9. Acute circulatory disorders.	-	3	4	
10. Shock states and traumatic injuries.	2	3	4	
Final control		4		Differentiated offset
Total hours - 90	10	38	42	

7 Signs of discipline

Duration of teaching	Semester	International disciplinary integration	Course (year of study)	Cycles: general training/vocational training/free choice
0,5 years	IX	Yes	5st	vocational training



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Evaluation system and requirements

Current control is carried out on the basis of control of theoretical knowledge, practical skills and abilities. The forms of current control are: oral questioning (frontal, individual, combined), interview; practical testing of the formed professional skills (conducted on the basis of the results of solving clinical cases, working with medical documentation, performing practical skills, working at the patient's bedside); test control ("open" and "closed" test tasks).

Current control is mandatory. When assessing the mastery of each topic in all disciplines of the curriculum, the student is given grades on a 4-point (traditional) scale for current learning activities, taking into account the approved assessment criteria for the discipline. All types of work provided by the curriculum are taken into account. The student must receive a grade for each topic. The teacher conducts a survey of each student in the group at each lesson and gives a grade in the student's attendance and progress record on a traditional scale ("5", "4", "3", "2").

When assessing a student's current learning activities, 20% of the grade is based on the student's independent work, which takes into account the knowledge of the topic of the independent lesson and the work in the notebook.

The final (summative) control is carried out: in the form of a written control work, which includes test tasks, theoretical questions; control of practical skills (solving clinical cases, defending a medical history, assessing the correctness of practical skills - a practice-oriented exam).

In accordance with the specifics of professional training, preference is given to test and practice-oriented control.

Differential test is a form of final control of student's mastering of theoretical and practical material in the discipline.

QR Code: <https://ieu.edu.ua/docs/pol-ornzvoems.pdf>

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Conditions for admission to the final control

Students who have completed all types of work and assignments provided for in the curriculum for the semester in accordance with the discipline, attended all classes provided for in the curriculum, written and submitted a medical history and have an average score for current academic activities of at least "3" (72 points on a 120-point scale) are admitted to the semester final control.

QR Code: <https://ieu.edu.ua/docs/pol-ornzvoems.pdf>

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Discipline policy

A prerequisite for a successful educational process is personal compliance by each student of a higher education institution with the rules of conduct accepted both at the university and in society. The future doctor must have a high level of behavioural culture, behave with dignity, tact, and self-control.

The student must be on time for classes and wear academic medical uniform (white coat or surgical suit). The student must adhere to the schedule of the educational process, come to class prepared on the topic of the class. During the class, the student must not leave the classroom without the permission of the teacher; use a mobile phone and other means of communication and information without the permission of the teacher, engage in outside activities, distract other students. When writing different types of papers, students must adhere to the rules of academic integrity.

The teacher must adhere to the implementation of the curriculum, objectively assess students' knowledge and skills. During the educational process, the teacher must be aware of anti-corruption measures and not engage in corrupt activities.

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Policy on absences and late assignments

A student who, for valid reasons, confirmed by documentary evidence, was not subject to current control has the right to pass the current control within two weeks after returning to study.

A student who was absent from classes without valid reasons, did not participate in the current control



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activities, did not eliminate academic debt, is not allowed to take the final semester control of knowledge in this discipline, and on the day of the exam, the academic staff member gives the grade "not admitted" in the examination record. Retaking the differentiated test in the discipline is assigned subject to the completion of all types of educational, independent (individual) work provided for in the working curriculum of the discipline and is carried out in accordance with the schedule of liquidation of academic debt approved by the directorate.

QR Code: <https://ieu.edu.ua/images/AndreyContent/docs/16.pdf>

12 Academic integrity policy

Participants in the educational process are guided by the principles of academic integrity

QR Code: <https://ieu.edu.ua/images/AndreyContent/docs/16.pdf>

13 Recommended sources of information

Main (basic)

1. Glumcher F.S. "Anaesthesiology and Intensive Care. Fourth edition" 2021 Kyiv
2. Chepyki L.P., Novytska-Usenko L.V., Tkachenko R.O. Anaesthesiology and intensive care. Textbook for higher education institutions of III-IV accreditation levels. K.: Vysha Shkola, 2003. - 399 p.
3. Anaesthesiology and Intensive Care, edited by Prof. I.P. Shlapak. -Kyiv, "Medicine", -2015, volume 2. -550 p.
4. Anaesthesiology, intensive care and emergency conditions: a textbook: edited by Prof. Vladyka A.S. Odesa: ONMedU, 2016.
5. Simulation medicine. Experience. Achievements. Prospects: a textbook / Zaporozhan V.M., Tarabrin O.O. Odesa: University book, 2018.
6. Edited by Prof. Glumcher F.S. Anaesthesiology and intensive care. - Kyiv, VSV "Medytsyna", 2018 -450 p.
7. Miller R. Encyclopedia of Anaesthesiology New York -2018. -600c
8. Morgan JE, Mikhail MS Clinical anaesthesiology. McGraw-Hill Education Medical; 6th Edition, 2018.
9. Paul G.Barash, Bruce F. Cullen Clinical anaesthesia. LWW; 8th Edition, 2017

Additional:

1. Jean- Louis Vincen, Edward Abraham Textbook of critical care. Elsevier; 7 th Edition, 2017
2. Edward Scarth Drugs in anesthesia and intensive care. 5 th Revised Edition, 2016

Information resources:

1. Surviving Sepsis Campaign. <https://www.sccm.org/SurvivingSepsisCampaign/Home>.
2. <https://amusing-anesthesiology.com/uk-ua/books>
3. European Respiratory Society (ERS) <https://www.ersnet.org/>

14 Tips for successful studying on the course

If you want to be successful in this discipline, you need to:

1. Be active, persistent, inquisitive, consistent
2. Be tidy and polite
3. Systematically prepare for practical classes
4. Perform tasks for independent work and defend them in class.
5. To be present at the class in a medical gown
6. To solve tests and tasks independently, to work actively in class.
7. Prepare presentations and crosswords on the discipline. Participate in student scientific conferences and engage in research work in the department's scientific circles.

I wish you perseverance, dedication and motivation to learn. And then success will come to you! See you in class!

Don't forget your medical gowns!