

**Odesa National Medical University**  
**Department of anesthesiology, intensive care**  
**and emergency medicine**

**Syllabus of selective discipline**  
**"Fundamentals of analgesia and intensive care in emergency and**  
**planned abdominal surgery"**

<b>Amount</b>	4 credits / 120 hours
<b>Semester, year of study</b>	2 year of study, 4 semester
<b>Days, time, place</b>	According to the schedule in the auditorium of the Department of Anesthesiology, IC and Emergency Medicine, Zabolotny str., 26
<b>Teacher(s)</b>	Oleg Oleksandrovych Tarabrin, Z.D.N.T. of Ukraine, doctor of medicine, professor, head departments of anesthesiology, IT and the Ministry of Emergency Situations
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<b>Workplace</b>	Studying rooms of the Department of Anesthesiology, IC and Emergency Medicine, Zabolotny str., 26
<b>Consultations</b>	Face-to-face consultations: Friday - from 14:00 till 16:00, online consultations: Friday - from 14:00 till 16:00 Microsoft Teams or via Telegram/Viber

**COMMUNICATION.**

Communication with graduate students is carried out through face-to-face meetings. In case of transition to distance learning, communication with graduate students will be carried out using e-mail and programs: Microsoft Teams, Moodle, Telegram and Viber.

## **COURSE ABSTRACT.**

### ***Subject of discipline study***

**The subject of study of the VND "Fundamentals of analgesia and intensive therapy in urgent and planned abdominal surgery" is ethics, methodology, methods of scientific research, etiology of diseases, risk factors, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, principles of treatment of patients.**

***Prerequisites and post-requisites of the course (the place of the discipline in the educational program):*** are based on the study of human anatomy, medical biology, histology, cytology and embryology, pathomorphology, physiology, pathophysiology, medical and biological physics, bioorganic and biological chemistry, microbiology, virology and immunology, pharmacology, clinical pharmacology and clinical pharmacy, propaedeutics of internal medicine, infectious diseases, general practice (family medicine), anesthesiology and intensive care, which involves "vertical" integration with these disciplines and the formation of skills to apply knowledge in the process of further education and in professional activities.

### ***The purpose of discipline***

The purpose is to acquire and deepen knowledge, skills, and other competencies necessary in professional activities, to form research and development skills, to obtain new facts and to implement them in practical medicine and other spheres of social life.

### ***With discipline***

- 1) in-depth study of specialty issues, mastering of modern methods of disease prevention, clinical examination, complex treatment and rehabilitation of patients with abdominal pathology;
- 2) assimilation of principles of deontological approach to patients, basics of methods of comprehensive examination and treatment of patients, formulation of expert conclusions;
- 3) mastering the basics of health care legislation and the main provisions of directive documents defining the activities of health care bodies;
- 4) knowledge of etiological and pathogenetic factors of the most common abdominal pathologies in emergency and planned surgery;
- 5) knowledge of various clinical options and complications of the most common abdominal pathologies in emergency and planned surgery;
- 6) knowledge of patient management tactics, principles of non-drug and

drug treatment, prognosis and working capacity of patients with the most common abdominal pathologies;

7) the ability to conduct surveys and physical examinations of patients, analyze a typical clinical picture, draw up a patient examination plan, analyze data from laboratory and instrumental research methods, diagnose and provide emergency medical care to patients with abdominal pathologies in urgent and planned surgery.

***Expected results:***

*A graduate student (applicant) should know:*

- clinical physiology and pathophysiology of the gastrointestinal tract
- peculiarities of preoperative preparation and anesthesia in planned abdominal surgery
- peculiarities of preoperative preparation and anesthesia in urgent abdominal surgery
- features of intensive therapy in planned and urgent abdominal surgery

*A graduate student (applicant) must be able to:*

- carry out pre-operative preparation for patients in planned and urgent abdominal surgery
- provide anesthesia for various types of surgical interventions in abdominal surgery
- to master methods of intensive therapy for patients with gastrointestinal tract pathology
- to carry out prevention of possible complications in case of gastrointestinal tract pathology and surgical interventions

## **COURSE DESCRIPTION**

### ***Forms and methods of education***

The educational discipline "Fundamentals of analgesia and intensive care in emergency and planned abdominal surgery" consists of 4 ECTS credits (120 hours): 60 praktikal hours and 60 hours for self-education work.

Teaching *in practical classes* is provided by methodological developments for each practical lesson, visual teaching aids for each lesson (presentations, educational films), information resource of the department, algorithms for performing practical skills and structured algorithms for skill control.

The study of the discipline is implemented on the basis of the following teaching methods:

- by dominant means of education: verbal, visual;

- blitz survey;
- group discussions on problematic issues;
- individual control interview;
- logical exercises;
- situational tasks

### ***Content of the academic discipline.***

- Topic 1. Clinical physiology of the gastrointestinal tract, liver and pancreas.
- Topic 2. Features of functional changes in the pathology of the gastrointestinal tract, their role in the selection of means and methods of intensive therapy.
- Topic 3. Physiological changes occurring during various types of abdominal surgical interventions
- Topic 4. Components of preoperative preparation. Objectives of premedication in abdominal surgery
- Topic 5. Choice of anesthesia method, intraoperative period in planned abdominal surgery
- Topic 6. Patient management tactics and features of the postoperative period in abdominal surgery
- Topic 7. Possible complications of the postoperative period in abdominal surgery
- Topic 8. Pathophysiological aspects of acute abdominal pathology (gastrointestinal bleeding, jaundice, acute pancreatitis and pancreatic necrosis, acute intestinal obstruction, peritonitis)
- Topic 9. Peculiarities of preoperative preparation for urgent abdominal interventions. The problem of "full stomach", prevention and treatment
- Topic 10. Anesthetic care and peculiarities of the intraoperative period during urgent abdominal interventions
- Topic 11. Features and possible complications of the postoperative period of urgent abdominal surgery
- Topic 12. Intensive therapy for intestinal obstruction, peritonitis
- Topic 13. Intensive therapy for pancreatitis, pancreatic necrosis
- Topic 14. Intensive therapy for gastrointestinal bleeding
- Topic 15. Chronic pain after operations in abdominal surgery
- Topic 16. Methods of treatment of postoperative pain

### **Recommended literature**

#### **Basic:**

- 1.A. Ilko Anesthesiology, intensive care and resuscitation. Medicine

2018. 39-45. 4. Anesthesiology and intensive care / L. P. Chepkii, L. V. Usenko, Yu. Yu. Kobelyatskyi, S. O. Dubrov; edited by FS Glumcher. - Kyiv: VSV "Medicine" 2021, pp. 310-318.
2. Anesthesiology and intensive care: textbook / F.S. Glumcher, L.P. Chepky, L. V. Usenko, etc.; ed. F.S. Glumcher – 4th edition, - K.: VSV "Medicine", 2021. – 360 p.
3. Emergency and urgent medical care. In VI Vol. IV. Clinical routes (protocols) of the patient during the provision of emergency medical care at the pre-hospital stage: textbook for students. Higher Education Closed / Krylyuk V.O. etc. - Kyiv: Ozhiva. - 2020. - 300 p.
4. Clinical routes and clinical guidelines for acute surgical pathology stomach "Order of the Department of Health Protection of the Odesa Regional State Administration dated April 6, 2018." military serviceman in tactical medicine. - K.: "MP Lesya", 2015. - 148 p.
5. Order of the Moz of Ukraine No. 446 dated 22.02.2019 "Some issues of continuous professional development of doctors".
6. Order of the Ministry of Health of Ukraine dated 18.05.2022 No. 823 " On approval of the Standard of medical care "Rational use of antibacterial and antifungal drugs for therapeutic and preventive purposes ".

### **Additional:**

1. Helsinki declaration of the World Medical Association "Ethical principles of medical research involving a person as a research object" dated June 1, 1964, last access October 28, 2021, [https://zakon.rada.gov.ua/laws/show/990\\_005#Text](https://zakon.rada.gov.ua/laws/show/990_005#Text) .
2. Notes on Clinical Airway Management. D. John Doyle. January 2018.- 150 p.
3. Atlas of common pain syndromes. Steven D. Waldman. Fourth edition. Philadelphia, PA: Elsevier, 2019. – 555 p.
4. Complications of Regional Anesthesia: Principles of Safe Practice in Local and Regional Anesthesia. Brendan T. Finucane, Ban CH Tsui/ Springer Internat. Publ. 2017. – 494 p.
5. Hiroyuki S, Eichi I. General anesthesia for elective cesarean section in resource-limited settings. J World Fed Soc Anaesth. 2019 September
6. Pediatric Anesthesiology Review: Clinical Cases for SelfAssessmentRobert Holzman, Thomas Mancuso, Joseph Cravero, James DiNardoEdition 3 (2021)

## Information resources

1. Ministry of Health of Ukraine - <https://moz.gov.ua/>
2. Association of Anesthesiologists of Ukraine - <https://aa ukr.org/>
3. Official website of the American Association of Anesthesiologists  
<http://www.asahq.org/homepageie.html>
4. Official website of the American Association of Pediatric Anesthesiology  
<http://www.pedsanesthesia.org>
5. Official website of the Association of Anesthesiologists of Kyiv  
<http://http://criticalcare.kiev.ua>
6. The official website of the Association of Anesthesiologists of Ukraine -  
<http://aay.org.ua>
7. The official website of the British scientific periodical "British Journal of Anaesthesia" - <http://www.bja.oupjournals.org>
8. The official website of the British scientific periodical "British Medical Journal" - <http://www.bmj.com>
9. The official site of the British scientific periodical "History of Anesthesia Society" - <http://www.histansoc.org.uk>
10. Official website of the European Association of Anesthesiologists  
<http://www.euroanesthesia.org>
11. Official website of the European Intensive Care Association  
<http://www.esicm.org>
12. The official website of the European Association of Parenteral and Enteral nutrition - <http://www.espen.org>
13. Official website of the European Association of Regional Anesthesia  
<http://www.esraeurope.org>
14. The official website of the Canadian scientific periodical "Canadian Journal of Anaesthesia" - <http://www.cja-jca.org>
15. The official website of the international scientific periodical "Anesthesiology" - <http://www.anesthesiology.org>
16. The official website of the international scientific periodical "Anesthesia and Analgesia" - <http://www.anesthesia-analgesia.org>
17. The official website of the international scientific periodical "The Lancet" - <http://www.thelancet.com>
18. Search resource of medical literature: section "Anesthesiology and Intensive therapy"  
<http://www.twirpx.com/files/medicine/anaesthesiology/anesthesiology/>
19. Search resource of medical literature "Cochrane Collaboration"  
<http://www.cochrane.org>
20. Medical literature search resource "PubMed"

<http://www.ncbi.nlm.nih.gov/PubMed/>

21. Search resource of scientific literature "Scopus" - <https://www.scopus.com>

Search resource of scientific literature "Web of Science"

<http://ipsience.thomsonreuters.com/product/web-of-science/>

## EVALUATION

**Current control** is carried out in practical classes in accordance with formulated tasks for each topic. When evaluating educational activities, preference is given to standardized control methods: oral survey, structured written works, discussions, role-playing games, reports. When mastering each topic for the current educational activity, the student is given grades on a 4-point traditional scale. The current academic performance is calculated as the average current score, i.e., the arithmetic average of all grades received by the graduate student (student) on a traditional scale, rounded to 2 (two) decimal places, for example 4.75.

### *Evaluation of current discipline control:*

The meaning of the "**excellent**" rating : the graduate student shows special creative abilities, knows how to acquire knowledge independently, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to solve problems, is able to produce innovative ways of solving problems, convincingly argues answers, independently reveals his own gifts and inclinations.

The value of the "**good**" grade : the graduate student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects the mistakes made, the number of which is insignificant.

The value of the rating is "**satisfactory**" : the graduate student is able to master a significant part of the theoretical material, but mainly in a reproductive form, demonstrates knowledge and understanding of the main provisions, can analyze the educational material with the help of the teacher, correct errors, among which there are a significant number of essential ones.

The value of the rating is "**unsatisfactory**" : the graduate student has mastered the material at the level of individual fragments, which constitute a small part of the educational material. Only those graduate students who have no academic debt and have an average score for the current educational activity of at least 3.00 are admitted to the final certification.

### *Forms and methods of final control*

The final control of the discipline "Fundamentals of analgesia and intensive therapy in emergency and planned abdominal surgery" is a credit.

Evaluation of the success of the study of subjects of the discipline is carried out according to the traditional 4-point scale.

At the end of the study of the discipline, the current success rate is calculated as the average current score, that is, the arithmetic average of all the grades received by the graduate student on a traditional scale, rounded to two decimal places . Post-graduate students (seekers) who have completed the curriculum in the discipline in full, have no academic debt, their current grade point average is 3.00 or more, receive credit in the last class, which is presented as "passed" / "failed". Conversion of the traditional national assessment into multi-point (maximum 200 points) is mandatory. The obtained average score for the discipline is converted into a score on a 200-point scale by multiplying the arithmetic average by 40.

The discipline is credited to a graduate student (seeker) if he has scored at least 120 points.

#### Scale for assessing the level of mastery of the discipline

Assessment on a 200-point scale	Evaluation on a national scale	
185 - 200	Perfectly	5
151 - 184	Fine	4
120-150	Satisfactorily	3
<120.0	Unsatisfactorily	2

#### ***Evaluation of self-education work:***

Assessment of students' self-education work, which is provided for in the topic along with classroom work, is carried out during the current control of the topic in the corresponding classroom session, as well as at the final control (credit).



## **COURSE POLICY** ("rules of the game")

### ***Deadlines and Rescheduling Policy***

Tasks must be completed on time according to the deadline. For untimely completion of the assignment, the graduate student receives an unsatisfactory grade. If the student of higher education was absent from classes for any reason, then the practice is carried out within the deadlines set by the teacher in accordance with the "Regulations on the organization of the educational process at ONMedU" (link to the regulations on the university's website <https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnijproces.pdf>) . Reassembly is carried out in accordance with the approved schedule. Policy on academic integrity The policy of the educational component is based on the principles of academic integrity (link to the regulations on the university website <https://onmedu.edu.ua/wp-content/uploads/2020/07/polozhennja-prodobrochesnist.pdf> ) and is determined by the system of requirements, which the teacher presents to the applicant when studying the educational component:

- independent performance of educational tasks, tasks of current and final control of learning results (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities);
- references to sources of information in the case of using ideas, developments, statements, information.

### ***Attendance and Tardiness Policy***

To obtain a satisfactory grade, it is mandatory to attend and work in classroom classes. A graduate student is allowed to be late for no more than 10 minutes.

### ***Mobile devices***

It is permissible to use mobile devices during the lesson with the teacher's permission.

### ***Behavior in the audience***

While in the audience, the following values should be cultivated: respect for colleagues; tolerance for others; receptivity and impartiality; argumentation of agreement or disagreement with the opinion of other participants in the discussion, as well as one's own opinion; respecting the dignity of the opponent's personality during communication; compliance with the ethics of academic relationships.