

SYLLABUS

INTERNATIONAL EUROPEAN
UNIVERSITY



SCHOOL OF
MEDICINE

SURGERY

2023



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Discipline				
		SURGERY		
Teacher(s)				
		Gennadiy Dmitrievich Babenkov		
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				
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E-mail				
		genadiybabenkov@ieu.edu.ua		
Discipline page				
		https://medicine.ieu.edu.ua/pro-yemsh/kafedry/kafedra-klinichnykh-dystsyplin		
Form of final control		offset	differentiated credit	exam
		☐	☐	☐

1 Brief summary of the discipline

"Surgery is a branch of science that studies the etiology and pathogenesis of surgical diseases, develops and improves methods of early diagnosis, treatment and prevention of diseases, improves methods of correction of surgical diseases; develops measures aimed at reducing the period of temporary disability and disability.

2 Prerequisite for the course

The prerequisite for studying the discipline "Surgery" is the main manifestations of surgical diseases, diagnosis, differential diagnosis and basic principles of treatment of patients with surgical pathology.

3 Purpose and objectives of the discipline

The purpose of teaching the discipline "Surgery" is to acquire theoretical and practical knowledge of the etiology, pathogenesis, typical and atypical clinical manifestations, methods of diagnosis, conservative and surgical treatment, rehabilitation of surgical pathology.

The main objectives of the discipline "Surgery" are to acquire knowledge, skills and abilities to ensure students' adaptation to surgical patients; the ability to make a diagnosis, choose appropriate medical and diagnostic procedures, and provide care to patients with surgical pathology.

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. To be responsible for professional development, the ability to further professional and the ability to further professional learning 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); by standard methods, using preliminary data from the patient's history, examination of the patient, knowledge of the person, his/her organs and systems, to establish a preliminary clinical diagnosis of the disease (list 2).
PLO-5	Collect complaints, anamnesis of life and disease, assess the patient's psychomotor and physical development, the state of organs and body systems, based on the results of laboratory and instrumental studies, evaluate information on 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 physician as a supervisor in the conditions of healthcare facility (according to list 2).
PLO-7	To prescribe and analyse additional (mandatory and optional) methods of examination (laboratory, functional and/or instrumental) (according to the list 4), patients with diseases of organs and systems of the body for differential diagnosis of diseases (according to list 2).



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Результати навчання

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), including in an emergency situation and hostilities, in the field, under conditions of 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 (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, following 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 under the supervision of a supervising physician in a medical institution.
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, the specifics of the person's professional activity, etc. Maintain medical records for the patient and the population on the basis of 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, specialised software, statistical methods of data analysis to solve complex healthcare problems.
PLO- 24	Organise the necessary level of individual safety (own and those he/she cares for) in the event of typical hazardous 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.
PLO- 28	Make effective decisions on healthcare issues, assess the resources required, and consider social, economic and ethical implications.



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5 ECTS Credits

The discipline takes 12 ECTS credits and 360 hours to study.

6 Structure of the discipline

Topic	Lecture	Practice	Individual
Section 1/course 4. Abdominal surgery.			
Subsection 1. "Emergency abdominal surgery"			
Topic 1: Acute appendicitis. Atypical clinical picture of acute appendicitis	2	3	1
Topic 2: Acute cholecystitis.	2	3	2
Topic 3: Complications of acute cholecystitis	-	3	1
Topic 4: Etiology, pathogenesis and classification of acute pancreatitis	2	3	2
Topic 5: Complications of acute pancreatitis.	-	3	1
Topic 6: Chronic pancreatitis.	-	3	2
Subsection 2: "Surgical gastroenterology, proctology and transplantology"			
Topic 7: Complications of gastric and duodenal ulcers. Gastrointestinal bleeding.	-	3	2
Topic 8: Acute intestinal obstruction	2	3	2
Topic 9: Etiology, pathogenesis, classification of acute peritonitis.	-	3	2
Topic 10: Classification of abdominal hernias	2	3	1
Topic 11: Diseases of the liver	1	3	2
Topic 12: Abscesses and cysts of the liver.	1	4	2
Topic 13: Diseases of the small and large intestine.	2	3	2
Topic 14: Diseases of the rectum and perineum.	-	3	2
Topic 15: Credits lesson. Defence of medical history		2	2
Total hours	14	45	26
Section 2 / course 5. Thoracic, cardiovascular, endocrine surgery			
Subsection 1 "Thoracic, cardiac, endocrine surgery"			
Topic 1: Injuries of the chest. Purulent diseases of the lungs and pleura. COVID 19.	1	5	4
Topic 2: Coronary heart disease. Acquired heart disease.	2	5	4
Topic 3: Surgical pathology of the interstitium.	-	4	4
Topic 4: Euthyroid and toxic goiter. Cancer of the thyroid gland. Thyroiditis.	0,5	4	4
Topic 5: Tumours of the adrenal glands.	0,5	4	5
Subsection 2 "Vascular surgery"			
Topic 6: Aortic aneurysm. Bleeding and blood loss.	2	4	4
Topic 7: Acute and chronic ischaemia of the lower extremities.	1	4	4
Topic 8: Abdominal ischaemic syndrome. Varicose varicose veins of the lower extremities.	1	4	4

6 Structure of the discipline

Topic 9: Thrombosis of the great veins. Post thrombophlebitic syndrome. Thromboembolism of the pulmonary artery.	2	4	5
Topic 10. Lymphadema of the extremities. Protection of medical history.	-	5	4
Total hours	10	43	42
<i>Section 3 / course 6 "Symptoms and syndromes in surgery"</i>			
Topic 1: New technologies in surgery. Modern methods of diagnosis and treatment. Principles of transplantation, clinical manifestations of decompensation of vital organs of vital organs.		5	6
Topic 2. Sepsis in surgical patients. Systemic inflammatory response syndrome. Pathogenesis and significance in various diseases and injuries. Diagnosis and treatment.		5	6
Topic 3: Shock in surgical patients, diagnosis, treatment. Principles of transfusiology.		5	6
Topic 4. Critical conditions in surgical patients: multiple organ failure syndrome, acute respiratory distress syndrome, acute cardiovascular failure syndrome, acute renal failure. Clinic, diagnosis, treatment.		5	6
Topic 5. Acute liver failure. Acute respiratory disease COVID 19. Etiology, clinic, diagnosis, treatment.		5	6
Topic 6. Bleeding and blood loss. Classification, clinical picture of bleeding and acute blood loss. Methods of determining the amount of blood loss. Means of stopping bleeding. Blood transfusion.		5	6
Topic 7. Purulent diseases of the skin and soft tissues. Mastitis. Tuberculosis of tissues and organs. Diagnosis, differential diagnosis. Methods of conservative and surgical treatment.		5	7
Topic 8: AIDS in the surgical clinic: peculiarities of examination and surgical care of patients. Prevention of intraoperative injury and infection of surgeons		5	6
Topic 9: Peculiarities of the course of surgical diseases in pregnant women and the elderly. Diagnosis and differential diagnosis of acute diseases of the abdominal cavity, features of examination, surgical tactics, prevention of premature birth.		5	6



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6 Structure of the discipline

Topic 10. Modern surgical trauma in disasters, emergencies and hostilities, principles of evacuation measures. Classification of injuries. Pathomorphology of the wound process, clinical picture, treatment of gunshot wounds. Primary and secondary surgical treatment of wounds.		5	7
Topic 11. Acute abdominal syndrome. Diagnosis, differential diagnosis and treatment tactics. Differential diagnosis of acute diseases of the abdominal cavity. Surgical complications in patients with infectious pathology. Differential diagnosis between acute surgical and infectious diseases.		5	6
Topic 12: Bleeding from the digestive tract. Causes, clinic, diagnosis, differential diagnosis, treatment.		5	6
Topic 13: Abdominal injuries. Symptoms of injuries to of the abdominal cavity and retroperitoneal space, diagnostic methods, treatment tactics.		5	6
Topic 14: Differential diagnosis and treatment of diseases of the rectum and pararectal space.		5	7
Topic 15: Differential diagnosis and treatment of fistulas of the digestive tract		5	6
Topic 16. External and internal abdominal hernias. Classification, clinic, diagnosis, treatment.		5	7
Exam			
Total	6,0 credits / 180 hours	80	100
Total from the discipline	12,0 credits/ 360 hours	24	168

7 Signs of discipline

Duration of teaching	Semester	International disciplinary integration	Course (year of study)	Cycles: general training/vocational training/free choice
3 years	7,9, 11	Yes	4,5,6 kypc	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.

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 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>

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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>

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Recommended sources of information

Main (basic)

1. General surgery: [a textbook for students of higher educational institutions of the Ministry of Health of Ukraine] / edited by Y.S. Bereznitsky, M.P. Zakharash, V.G. Mishalov [and others] - Vinnytsia: Nova Knyha, 2018. 342 p.
2. General Surgery: a basic textbook [for students of higher education institutions - medical universities, institutes and academies] / edited by S. D. Khimich, M. D. Zheliba ; S. D. Khimich, M. D. 26 Zheliba, I. D. Gerich [et al.
3. Surgery. In 2 volumes: textbook [for students of higher medical schools]. Vol. 1 / edited by P. Kondratenko, V. Rusin; S. Boyko, O. Boldizhar, P. Boldizhar [et al: New Book, 2019. 702 p.
4. Surgery: a textbook in two volumes [for students enrolled in higher medical schools and postgraduate education institutions of the Ministry of Health of Ukraine in the specialties of "Medical care" and "Nursing"]. Vol. 1: General surgery with the main types of surgical pathology. Treatment of a patient in a surgical hospital / R.O.Sabadyshyn, V.O.Ryzhkovskiy, O.V.Markovych [et al: Nova Knyha, 2018. 782 p.
5. Surgery: a textbook in two volumes [for students enrolled in higher medical schools and postgraduate education institutions of the Ministry of Health of Ukraine in the specialties of "Medical care" and "Nursing"]. T. 2 : Special surgery / R.O. Sabadyshyn, V.O. Ryzhkovskiy, O.V. Markovych [et al: Nova Knyha, 2018. 588 p.
6. Surgical diseases: [a textbook for students, interns and doctors attending institutions (faculties) of postgraduate education in the speciality "General practice - family medicine"] / edited by P. D. Fomin, Y. S. Bereznitsky ; Y. S. Bereznitsky, O. A. Viltanyuk, M. D. Zheliba [et al.
7. Vascular and Endovascular Surgery at a Glance / by Morgan Mcmonagle, Matthew Stephenson/2014/160 p.
8. Maingot's Abdominal operations. 13th edition/ Stanly W. Ashley, Michael G.Zinner/ 2018

Additional:

1. Diagnostics of injuries of the digestive tract in case of mechanical trauma: monograph / O. Babkina, I. Korobko - 2018.
2. Babkina O. P. Study of abdominal trauma by laboratory methods: monograph / O. Babkina. - 2018.

13 Recommended sources of information

3. Danchyn A.O. Principles of medical triage, medical care, and determination of the order of evacuation of wounded with combat neurosurgical injuries in the system of medical evacuation support of the Armed Forces of Ukraine: method. Guidelines / A. Danchyn, O. Danchyn ; edited by I. Khomenko - Kyiv : Lazurit-Polygraph, 2016. 40 p. : tables, illustrations.
4. Emergency medical care for servicemen at the prehospital stage in armed conflicts : a textbook / M. I. Badiuk [et al.
5. General surgery with the main types of surgical pathology. Treatment of a patient in a surgical hospital / R. Sabadyshyn [et al.
6. Application of innovative technologies in the surgical treatment of purulent-necrotic wounds of soft tissues / O. M. Petrenko [et al. Kyiv : LAT and K, 2018. 254 p. : tab.
7. Clinical laboratory diagnostics: a textbook / O. I. Voloshyn [et al.
8. Protocols for the provision of emergency medical care at the level of basic life support (BLS) - "First on the scene" : a textbook / [G. Roschin et al.
9. Surgery: textbook in two volumes. Vol. 1 General surgery with the main types of surgical pathology. Treatment of a patient in a surgical hospital / R.O. Sabadyshyn [et al: Nova Knia, 2018. 782 p. : tab.
10. Surgery of purulent-necrotic complications in diabetic foot syndrome : monograph / I. Dzyubanovskiy [et al: Ukrmedkn., 2018. 316 p.
11. Surgery of injuries. Provision of emergency medical care in the trauma centre of a multidisciplinary hospital: manual / I. Vorobey [et al.
12. Surgery. Vol. 2. Special surgery / R.O. Sabadyshyn [et al. Human anatomy: a textbook for students of higher medical schools. IV level of accreditation: in 3 vols. Vol. 2 / A. S. Holovatskyi [et al.] ; ed:
13. Shkvarkovskyi I.V. Surgical treatment of inguinal hernias / I.V. Shkvarkovskyi, A.G. Iftodii, O.P. Moskaliuk ; Bukovinian State Medical University - Chernivtsi: BSMU, 2018. 146 p. : tab.
14. Choudhury S. R. Pediatric Surgery: a quick guide to decisionmaking / S. R. Choudhury: Springer, 2018. - XXXI, 401 p.
15. Fundamentals of Pediatric Surgery / eds: P. Mattei [et al. 2nd ed: Springer, 2017. - XXV, 935 p. : il
16. Levine M. D. The Washington Manual of Emergency Medicine / M.D. Levine, W. S. Gilmore. - Philadelphia [etc.]: Wolters Kluwer, 2018. - XXII, 668 p. - (Lippincott manual)
17. Principles and Practice of Surgery / eds: J. O. Garden, R. W. Parks. - 7th ed. - Edinburgh: Elsevier, 2018. - XII, 568 p. : il. - (International edition).
18. The Mont Reid Surgical Handbook / University of Cincinnati Surgical Residents ; eds: Jeffrey M. Sutton [et al. 7th ed: Elsevier, 2018. - XIV, 400 p. : il
19. Current Diagnosis & Treatment: Surgery. 15th edition (2020). Edited by Gerard
20. M. Doherty. Copyright © 2020 by McGraw-Hill Education.
21. Schwartz's Principles of Surgery 11th Edition, (2 Vols. Set) International Edition. F. Charles Brunicaudi. Copyright © 2020 by the McGraw-Hill Companies.
22. USMLE Step 2 CK Lecture Notes 2022: 5-book set (Kaplan Test Prep)

13 Recommended sources of information

Information resources:

Coursera

Lectures by world-class professors and reinforced through interactive exercises. coursera.org CSurgeries

Library of surgical procedures created by surgeons for surgeons. csurgeries.com DNA Tube

Videos, animations, and slideshows from scientific studies, lectures, and seminars. dnatube.com EyeTube

High quality ophthalmic surgical videos and panel discussions. eyetube.net Free Medical Videos

Archive of popular and engaging medical videos from around the Internet. freemedicalvideos.com

FutureLearn: Healthcare and Medicine

Offers a diverse selection of courses from leading European universities. futurelearn.com - Geeky Medics

Free videos, revision notes, OSCE guides, and MCQs for medical students. geekymedics.com GrepMed

Community-sourced medical image and video repository. grepmed.com HealthTalk.org

Videos of patients sharing real life experiences with various health conditions. healthtalk.org Khan Academy

Academic videos and lectures on medicine and the healthcare system. khanacademy.org Mayo Clinic Videos



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Surgical procedure videos and interviews with Mayo Clinic doctors, sorted by specialty.
medprofvideos.mayoclinic.org
MedicalVideos.com
Library of medical videos covering everything from anesthesia to vascular x-ray imaging. medicalvideos.com
Medscape Video
Expert interviews and perspectives as well as procedure videos. medscape.com MEDtube
Education platform offering thousands of videos for healthcare professionals. medtube.net MIT Open CourseWare
Lectures and course materials for students, teachers, and self-learners. ocw.mit.edu OnlineMedEd
70+ hours of whiteboard lessons covering 250+ topics across 19 specialties. onlinemeded.org PBS: Health Videos
Free videos from your favorite PBS programs, including NOVA and Frontline. pbs.org TED Health
Fascinating presentations by the world's leading thinkers and doers. ted.com The Doctor's Channel
Short and to-the-point video clips on the latest medical news, ideas, and information. thedoctorschannel.com
VuMedi
Physician only site providing thousands of videos from leading institutions. vumedi.com - Registration Required
WebSurg
European site created by surgeons for surgeons, in order to help with surgical training. websurg.com

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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 neat 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 scientific circles of the department.

I wish you perseverance, determination and motivation to learn. And then success will come to you!

See you in class!

Don't forget your medical gowns!