

Odesa National Medical University
Department of Surgery No. 1 with postgraduate
training

Syllabus
SURGERY

Amount	12 credits / 360 hours
Semester, year of study	4th semester, 2nd year of study
Days, time, place	According to with schedule in the audience department surgery No. 1 with postgraduate training. St. Zabolotny, 26/32.
Teacher(s)	Grubnik Volodymyr Volodymyrovych, Doctor of Medicine, professor, Head of Department of Surgery No. 1 with postgraduate training
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Workplace	Office of the head of the department of surgery No. 1 with postgraduate training, str. Zabolotny, 26/32.
Consultations	<i>Face-to-face consultations:</i> Monday, Thursday - from 09.00 to 12.00; <i>Online consultations: upon agreement</i> <i>MicrosoftTeams</i> 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 academic discipline "Surgery" is etiology, pathogenesis, methods of diagnosis and treatment of surgical diseases.

Course prerequisites and post-requisites (The place of the discipline in the educational program)

The study of the academic discipline "surgery" is based on the students' study of normal and pathological clinical anatomy, general and clinical pathological physiology, microbiology, pharmacology, propaedeutics of internal diseases and therapy, infectious diseases, family medicine, phthisiopulmonology, internal medicine,

traumatology and orthopedics, which involves integration with these disciplines and form the ability to apply knowledge in the process of further education and professional activity.

The purpose of the course

The purpose of studying pharmacology is to acquire theoretical information and receive practical training on issues of etiology, pathogenesis, clinic, diagnosis (including differential), treatment and prevention of the main surgical diseases and related pathologies that are most common, creation of clinical thinking, ethical attitude to the patient, which will allow to fully improve general professional, specialized professional, research, analytical competences in surgery for high-quality planning and execution of original scientific research, for solving significant problems in the field of professional activity, science and/or innovation, expansion and reassessment already existing knowledge and professional practice.

Tasks of the discipline:

- to gain in-depth knowledge and systematic understanding of surgery by direction and topic of research in relation to future professional activity;
- acquisition of theoretical knowledge, abilities, skills and other competences sufficient for the production of new ideas, solving complex problems in the practical sphere of health care in the field of surgery;
- independently collect, analyze and summarize the results of patient surveys and examinations; - master the terminology in surgery and from the researched scientific direction;
- to study in depth the newest methods of research in surgery, to apply a wide range of additional methods of diagnosis of surgical diseases according to the chosen topic of research work: molecular genetic, biochemical, immunological, histological and immunohistochemical;
- analyze the clinical picture of the most common surgical diseases, identify their complications;
- draw up a patient examination plan and analyze the data of laboratory and instrumental examinations for surgical diseases and their complications, evaluate the prognosis for the life and working capacity of patients;
- determine the tactics of patient management in case of surgical diseases and their complications, as well as in case of combination with other nosologies;
- to be able to apply a wide range of methods of theoretical and empirical analysis of medical phenomena and processes

Expected results

According to the results of studying the discipline, graduate students should

know:

- to be aware and understand the general trends in the development of surgery;
- to demonstrate knowledge of basic concepts, understanding of theoretical and practical problems, history of development and current state of scientific knowledge in surgery, mastery of terminology from the researched scientific direction;

- know the basics of applying elements of theoretical and experimental research in professional activity, demonstrate systematic perception and understanding of the system of theoretical or practical knowledge in the field of research;
- to create and explain new knowledge by conducting research, to expand advanced areas of the field of knowledge;
- awareness of the importance and need for continuous improvement of professional knowledge, abilities, skills and pedagogical skills.

be able:

- demonstrate continuous development of one's own intellectual and general cultural level, self-realization;
- interpret and analyze information using the latest information technologies, think critically, apply methods of analysis and synthesis, interpret, generalize the results of research activities;
- identify unsolved problems in physiology, formulate questions and determine ways to solve them;
- critically use scientific theories and acquired theoretical knowledge when solving practical research tasks, choose and use appropriate tools for research construction;
- search for information in scientific and methodical literature, using various resources: magazines, databases, online resources, archival materials;
- create and publish scientific publications in the main scientific journals magazines;
- determine the task of research search and effectively plan time to obtain the necessary results, organize and analyze your research and search activity;
- to improve one's pedagogical knowledge in order to apply it creatively in the theory and practice of teaching and educating students

COURSE DESCRIPTION

Forms and methods of education

the study discipline "Surgery" consists of 12 ECTS credits (360 hours): each credit has 15 classroom hours and 15 hours for independent work; a total of 180 classroom hours and 180 hours for independent work.

Teaching methods

In the process of holding lectures and seminars, it is assumed application of the following training methods:

- according to the dominant means of education: verbal, visual;
- drawing up graphic schemes;
- solving situational problems;
- discussions on problematic situations;
- performance of written tasks;
- individual control interview;
- knowledge control tests.

Content of the academic discipline

Topic	Lectures	Seminar. occupati on	SRS
<i>Content module 1. Thoracic surgery</i>			
1. Diseases of the lungs and pleura		4	6
2. Diseases of the mediastinum, esophagus and diaphragm	2	4	6
3. Chest injury	2	3	3
<i>Content module 2. Thoracic surgery</i>			
1. Surgical diseases of the stomach and duodenum	2	4	6
2. Surgical diseases of the liver	2	6	6
3. Biliary tract surgery	2	4	6
4. Pancreatic disease.	2	4	7
5. Abdominal hernias	2	5	8
6. Abdominal trauma	2	4	6
7. Modern surgical technologies in abdominal surgery	2	4	6
<i>Content module 3. Proctology</i>			
1. Inflammatory diseases of the anorectal region	2	4	6
2. Hemorrhoids, perianal thrombosis	2	4	6
3. Colon disease	2	4	6
4. Colonic bleeding	2	4	6
5. Modern surgical technologies in colorectal surgery	2	4	6
<i>Content module 4. Surgical vascular diseases</i>			
1. Diseases of the venous system	2	4	6
2. Diseases of the arterial system	2	4	6
3. Diabetic foot	2	4	6
4. Isolated hyperthermic chemoperfusion and chemoinfusion of limbs	2	4	6
5. Modern surgical technologies in vascular surgery	2	4	6
<i>Content module 5. Surgical diseases of endocrine organs</i>			
1. Surgical treatment of diseases of the thyroid gland	2	4	6
2. Surgical treatment of parathyroid gland diseases	4	8	12
3. Surgical treatment of diseases of the insular apparatus of the pancreas	2	4	6
4. Adrenal gland surgery	2	4	6
<i>Content module 6. Purulent surgical diseases</i>			
1. Wounds	2	4	6
2. Local purulent inflammatory processes	2	4	6
3. Purulent disease brushes and the feet (pararitis, phlegmons)	2	4	6
4. Peritonitis and residual abdominal abscesses	4	8	12
Together:	60 hours	120 hours	180 hours

Note: classroom load – 50%, SRS – 50%

Thematic plan of lectures

No s/p	Topic name	Number hours
1.	Complication ulcerative diseases: perforation, bleeding, stenosis, penetration, malignization, internal fistulas	2
2.	Lumbar disease. Modern views on the causes of malignancy and its prevention. Peculiarities of intervention in the case of connective tissue obstruction	2
3.	Cysts(non-parasitic and parasitic) liver. Laparoscopic operations	2
4.	Acutecholecystitis	2
5.	Chronic pancreatitis. Cysts of the pancreas (real and pseudo-arrive). Mini-invasive operations	2
6.	clumsy, pinched hernia. Features surgicaltreatment	2
7.	Trauma parenchymatousorgans: liver, spleen	4
8.	Place robotic operational intervened in modernsurgery	4
9.	Spontaneouspneumothorax	2
10.	Endoscopic and electric welding technologies in thoracic surgery	2
11.	Myasthenia as surgicalproblem	2
12.	Burnsesophagus	2
thirteen.	Types of pneumothorax: closed, open, tense. Mediastinal emphysema	2
14.	Intraoperative visualization: fluoroscopy, ultrasound, X-raynological studies	4
15.	Chronicparaproctitis – fistula of the rectum.	4
16.	Hardware and endoscopic operations in proctology	2
17.	Diverticula thick intestines diverticulosis,diverticulitis	2
18.	Place robotic operational intervened inproctology	4
19.	Diabetes and surgical diseases, preoperative featurespreparation, choice of anesthesia and management of the postoperative period	4
20.	Embolism and acute thrombosis arteries lower oneslimbs	6
21.	Transplantationimmunology.	4
	TOGETHER	60

Thematic plan of seminar classes

N o. z/p	Topic name	Number of hours
1	Surgicaldiseases of the stomach and duodenum	2
2	Complications of peptic ulcer disease: perforation, bleeding, stenosis, penetration, malignization, internal fistulas	2
3	Indications and rationale for surgical methods of ulcer treatmentdiseases and their assessment. Laparoscopic operations	4
4	sharpintestinal obstruction	4
5	Lumbar disease. Modern views on the causes of malignancy and its prevention. Peculiarities of intervention in the case of ligamentous obstruction	3
6	Thrombosis and embolism of mesenteric vessels	2
7	Acuteappendicitis	2
8	Complications of acute appendicitis: appendicular infiltrate, peri-pendicular abscess, peritonitis, abscess of the abdominal cavity, phlebitis	4

9	Technique of surgical interventions in acute appendicitis. Laparoscopic for appendectomy	2
10	Surgical disease liver	2
11	Cysts (non-parasitic and parasitic) liver. Laparoscopic operations	2
12	Liver abscesses. Mini-invasive operations	4
thirteen	Surgical disease bileways	2
14	Gallstone disease and its complications. Cholangitis: etiology, pathogenesis, methods of diagnosis, features of preoperative preparation of patients, the place of endoscopic methods in the complex of preoperative diagnosis and treatment	3
15	Surgical methods of treatment for mechanical jaundice: indications for choledochotomy, technique of its execution and completion; indications and technique of operations on the large duodenal nipple; complications during operations on the biliary tract and after the operation (early and late). Laparoscopic and minimally invasive operations	4
16	Acute cholecystitis	4
17	Chronic (calculous and stoneless) cholecystitis. Laparoscopic operations	4
18	Disease pancreatic glands	4
19	Conservative and surgical treatment of acute pancreatitis	4
20	Complication sharp pancreatitis	4
21	Chronic pancreatitis. Cysts of the pancreas (true and pseudo-cysts). Mini-invasive operations	4
22	Hernias stomach	4
23	Surgical methods of treatment of hernias: inguinal, femoral, umbilical, periumbilical, white line of the abdomen. Laparoscopic hernioplasty	4
24	Features treatment of postoperative hernias	4
25	clumsy, pinched hernia. Features surgical treatment	4
26	Hernias of rare locations and internal abdominal hernias (preperitoneal, extraperitoneal, intraperitoneal)	4
27	Trauma stomach	4
28	Trauma parenchymatous organs: liver, spleen	8
29	Trauma hollow bodies	4
30	Combined trauma: stomach and skulls, stomach and musculoskeletal system	2
31	Laparoscopy in urgent abdominal surgery	2
32	Modern surgical technologies in abdominal surgery	4
33	Modern species electrosurgical, ultrasonic equipment	4
34	Place robotic operational intervened in modern surgery	4
35	Intraoperative visualization: fluoroscopy, ultrasound, X-rays scientific studies	8
Together		120

Individual work

Thematic plan of the student's independent work (SRS)

No · z/p	Topic name	Number of hours
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27	Phlegmons retroperitoneal space and pelvis	2
28	Purulent disease brushes and the feet (panarices, phlegmon)	2
29	<i>Peritonitis and residual abscesses of the abdominal cavity</i>	2
30	Clinic and diagnosis of peritonitis	2
31	Treatment of widespread purulent peritonitis and abdominal sepsis	4
32	Acute burn toxemia (pathogenesis, clinic, treatment). Burn Septicotoxemia (pathogenesis, clinic, treatment)	4
33	Medical care for large burns and local treatment at various stages of burn disease. Staged necrosectomies and criteria for readiness for autotransplantation. Use of auto-homo- and heterografts for wound closure. Local treatment in wards with bacteria-free and temperature-controlled air	4
34	Symptoms and differential diagnosis of frostbite. Complications, accompanying diseases and injuries during frostbite. Factors contributing to frostbite and freezing. Treatment for frostbite and frostbite	6
35	Lung abscess and gangrene: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, conservative treatment methods, indications and contraindications for surgical treatment and its methods; types of operations, complications and their prevention during surgery and long-term postoperative periods, rehabilitation	6
36	Spontaneous pneumothorax	4
37	Legenvebleeding	6
38	Pleurisy Empyema pleura Acute pyopneumothorax	4
39	Endoscopic and electric welding technologies in thoracic surgery	4
40	Disease mediastinum, esophagus and diaphragm	4
41	Myasthenia as surgical problem	2
42	Hernia diaphragm	6
43	Burns esophagus	6
44	Trauma chest cells	6
45	Types of pneumothorax: closed, open, tense. Emphysema of the mediastinum	6
TOGETHER		180

List of recommended literature:

The main one

1. General surgery: a basic textbook [for higher medical students. education institutions of the IV level of accreditation] / edited by M. D. Zheliba, S. D. Khimicha; M. D. Zheliba, S. D. Khimich, I. D. Gerych, and others. - 2nd ed., ed. - K.: Medicine, 2016. - 448 p.
2. Operative surgery and topographical anatomy: [textbook for higher medical students. education institutions of the IV level of accreditation] / edited by M.P. Kovalskyi; Yu. T. Akhtemiichuk, Yu. M. Vovk, S. V. Doroshenko, and others. - 3rd ed., ed. - K.: Medicine, 2016. - 503 p.
3. Surgery. In 2 vols.: a textbook [for students of higher medical schools. education

- institutions]. Vol. 1 / edited by: P. G. Kondratenko, V. I. Rusyna, S. O. Boyko, O. O. Boldizhar, P. O. Boldizhar and others. - Vinnytsia: New book, 2019. - 702 p.
4. Surgery. In 2 vols.: a textbook [for students of higher medical schools. education institutions]. Vol. 2 / edited by: P. G. Kondratenko, V. I. Rusyna, S. O. Boyko, O. O. Boldizhar, P. O. Boldizhar and others. - Vinnytsia: New book, 2019. - 702 p.
5. Clinical anatomy and operative surgery: educational and methodological manual for practical classes of interns of obstetrician-gynecologists [and trainee doctors of institutions (fac.) post-diploma. Ministry of Education of Ukraine] / S. M. Bilash, O. M. Pronina, M. M. Koptev, A. V. Pyrog-Zakaznikova; Ministry of Health of Ukraine, UMSA. - Poltava: Myron I. A., 2019. - 113 p.
6. Bereznytskyi Y.S., Zakharash M.P., Mishalov V.G., Shidlovskiy V.O. Surgery, Tom I. – 2006, Textbook. 2. Bereznytskyi J.S., Zakharash M.P., Mishalov V.G. Surgery, Volume II. – 2007, Textbook.
7. Kovalchuk L.Ya., Saenko V.F., Knyshov G.V. Clinical surgery. In 2 volumes. Ternopil: Ukrmedknyga, 2000. 2000, 286 p.–Ternopil: Ukrmedknyga.–
8. Radzihovsky A.P., Babenko V.I. Emergency surgery of abdominal organs. Kyiv. "Phoenix", 2002. - 319 p.
9. Zakharash M.P., Poida O.I., Kucher M.D. Surgery: textbook. - K.: Medicine, 2006. - 656 p.
10. Surgery: a textbook / edited by LA. Kovalchuk Ternopil: TDMU, 2010. - 1056 p.
11. Surgery: Textbook, volume III (basic textbook for primary specialization in surgery), book 2 (clinical surgery) / Ed. Bereznytskyi Y.S., Zakharasha M.P., Mishalova V.G. - Dnipropetrovsk: RVA "Dnipro-UAB", 2011. - 782 p.
12. Lectures on hospital surgery: Education. manual / edited by V.G. Mishalova. - 2nd ed., add. and processing - K.: "Ascania" Publishing House, 2008. - Vol. 1. - 287 p.
13. Lectures on hospital surgery: Education. manual / edited by V.G. Mishalova. - 2nd ed., add. and processing - K.: Publishing House "Askania", 2008. - Vol. 2. - 382 p.

Additional

1. Emergency Surgery Course (ESC®) Manual: The Official ESTES/AAST Guide/ ISBN-10: 3319213377.-2016 .- 252 pages.
2. Harold Ellis and Sir Roy Calne, "General Surgery, 13th Edition" / ISBN: 1118742052.- 2016 .- 424 pages.
3. Mamta Swaroop (Editor), Sanjay Krishnaswami .Academic Global Surgery/ ISBN-10: 3319142976 .- 2016 .- 144 pages.
4. Lim, COL Robert B. Surgery During Natural Disasters, Combat, Terrorist Attacks, and Crisis Situations / ISBN-10: 3319237179.- 2016.- 228 pages.
5. TK Chattopadhyay. GI Surgery Annual: Volume 22 / ISBN: 9811020094.- 2017.- 237 Pages.
6. Order of the Ministry of Health of Ukraine No. 329 dated 15.06.2007 "On the approval of clinical protocols for the provision of medical care for the prevention of thrombotic complications in surgery, orthopedics and traumatology, obstetrics and gynecology."
7. Order of the Ministry of Health of Ukraine No. 502 dated August 29, 2008 "On the approval of the clinical protocol for antibacterial therapy in surgery, traumatology, obstetrics and gynecology."

EVALUATION

Current control is carried out in seminar classes in accordance with formulated tasks on 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.

Assessment of current discipline control:

The meaning of the "excellent" assessment: 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 meaning of the grade "good": the graduate student has a good command of the studied material, applies it in practice, 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 assessment 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 is an exam.

The grade for the discipline is the arithmetic average of two components:

- 1) average current score as the arithmetic average of all current grades;
- 2) traditional assessment for the exam.

The obtained average grade for the discipline by multiplying it by 40 (the obtained grade is rounded to whole numbers) is converted into a grade on a 200-point scale, which, in turn, is converted into a traditional grade on a discipline on a 4-point scale.

Average score for discipline	Rating from the discipline on a 200-point scale	Rating from the discipline on a 4-point scale (traditional assessment)
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4.62–5.0	185–200	5
3.77–4.61	151–184	4
3.0–3.76	120–150	3

Individual work

Assessment of the independent work of graduate students and applicants, 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 (exam).

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 in the terms 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/osvitnij-process.pdf>). Reassembly is carried out in accordance with the approved schedule.

Academic Integrity Policy

Policy educational components is based on principles academic integrity (link on position on site university <https://onmedu.edu.ua/wp-content/uploads/2020/07/polozhennja-pro-dobrochesnist.pdf>) and is determined by the system of requirements that the teacher presents to the student 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 case of use of ideas, developments, statements, information.

Attendance and Tardiness Policy

Attendance and work in classroom classes (lectures and seminar classes) is mandatory for obtaining a satisfactory grade. 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.