Odessa National Medical University
Faculty of Medicine
Department of Surgery №3

Syllabus course "Surgery"

Amount	4,0 credits / 120 hours
Semester, year of study	IX-X semester, V year of study
Days, time, place	According to the schedule on the basis of the Department of Surgery №3: Center for reconstructive and restorative medicine, Tenista street, 8
Teacher (s)	All teachers of the department. Head of the Department Volodimir Bondar, doctor of Medical Sciences, Professor
Contact phone	050-928-05-05
E-mail	volodymyr.bondar@onmedu.edu.ua
Workplace	Classrooms of the Department of Surgery №3: Tenista street, 8
Consultations	*Eye consultations*: Wednesday from 15:00 to 17:00; Saturday from 9.00 to 13.00 *Online consultations:* Wednesday from 15.00 to 17.00; Saturday from 9.00 to 13.00 via MC Teams, Zoom

COMMUNICATION

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

COURSE ANNOTATION

The subject of the study is the definition of diagnostic methods, algorithms for conservative and surgical treatment of surgical diseases, depending on the characteristics of their Clinical manifestations; study of differential diagnosis of diseases of the chest organs; diseases of the abdominal organs, endocrine organs and vascular diseases. Identification of the principles of surgical treatment and rehabilitation of patients with surgical pathology; study of risk factors for complications; study of the results of laboratory and instrumental studies.

Prerequisites of the course: human anatomy - determination of topographic and anatomical relationships of organs and body systems; microbiology: virology and immunology - interpretation of the biological properties of pathogenic and non-pathogenic microorganisms; surgery - to provide emergency medical care for the most common surgical conditions.

Postrequisites of the course: the formation of the ability to apply knowledge of surgery in the process of further training in professional activities.

The goal of the course is to master the methods of diagnosis, treatment and prevention of surgical diseases; primarily the most common and urgent.

The task of the discipline:

- determine methods of diagnosis, algorithm of conservative and operative treatment of surgical diseases of the digestive system, cardiovascular and respiratory systems, depending on the occurrence and occurrence of features of their Clinical manifestations;
- learn the differential diagnosis of diseases of the organs of the abdominal cavity, extraperitoneal space and chest;
- determine the principles of postoperative treatment and rehabilitation of patients with surgical pathology;
- to identify modern methods of diagnosis and treatment, postoperative supervision and rehabilitation of surgical diseases;
- learn riSC factors for complications of diseases of the digestive system, cardiovascular and respiratory systems;
- interpret the results of laboratory and instrumental research of the digestive system, cardiovascular and respiratory systems;
- demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination in surgery;
- to carry out a prognosis of life and working capacity in case of surgical diseases of the digestive system, cardiovascular and respiratory systems;
- interpret the general principles of treatment, rehabilitation and prevention of the most common surgical diseases of the digestive system, cardiovascular and respiratory systems;
- demonstrate the ability to maintain medical documentation in the Clinics of surgical diseases;
- provide emergency medical care for urgent diseases of the digestive system, cardiovascular and respiratory systems.

Expected results:

- demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination in general surgery;
- determine the most common Clinical symptoms and syndromes in
- surgical diseases;
- to analyze the results of examination of dental patients with general surgical pathology;
- apply methods of statistical analysis of medical and biological data;
- carry out basic methods of general Clinical examination of the patient (interview, examination, palpation, percussion, auscultation), determine a certain amount of additional research and analyze the obtained data to establish a preliminary diagnosis;

- perform general medical manipulations (bandages, injections, washing of the stomach and intestines, stopping bleeding, transport and medical immobilization for dislocations and fractures of bones, local infiltration and conduction anesthesia, transfusion of blood and blood substitutes) and decide on the issue of referring the patient to a specialist ;
- provide the necessary assistance in case of short-term loss of consciousness, collapse, shock, coma, allergic reactions, asphyxia, acute abdomen, trauma, bleeding, burns, frostbite;
- carry out resuscitation measures in terminal conditions and refer patients to a specialized department;

COURSE DESCRIPTION

Forms and methods of teaching

The course will be presented in the form of practical lessons (58 hours), organization of students' independent work (65 hours). Provides for individual and group consultations on the study of practical skills in the office of practical skills.

The content of the discipline

Theme 1 Chest trauma.

Rib fractures. Classification. Early and late complications. Clinics and diagnostics of pneumothorax, hemothorax Special research methods: echocardiography, ultrasound scanning, heart sounding, cinecardiography, thoracocentesis. Differential diagnosis. First medical aid and treatment tactics. Diagnostic program for heart damage. Triad of symptoms of heart injury. Unified Clinical -diagnostic and treatment-surgical program for heart injuries. Determination of penetrating and non-penetrating cardiac injuries. Classification of heart damage. Pathogenesis. Diagnosis and differential diagnosis of penetrating and non-penetrating wounds of the heart.

Theme 2 Purulent diseases of the lungs and pleura.

Abscess and gangrene of the lungs, bronchiectasis. Acute and chronic pleural empyema, pyopneumothorax. Etiology, pathogenesis, diagnosis. Features of the Clinical course. Differential diagnosis. Specific research methods. Methods of conservative and surgical treatment.

Theme 3 Diseases of the mediastinum.

Acute and chronic mediastinitis. Etiology, pathogenesis. Classification. Clinical picture. Diagnostics. Differential diagnosis. Methods of surgical treatment. Benign tumors and cysts. Etiology, pathogenesis. Classification. Clinical picture. Diagnostics. Specific research methods. Differential diagnosis. Methods of surgical treatment.

Theme 4 Diseases and injuries of the esophagus.

Benign tumors and cysts. Achalasia cardia, Burns. Diverticula of the esophagus. Gastroesophageal reflux. Other diseases of the esophagus: foreign bodies, injuries, BARRETT's esophagus. Etiology, pathogenesis. Classification. Clinical picture. Diagnostics. Specific research methods. Differential diagnosis. Methods of surgical treatment.

Theme 5 Hiatus hernia.

Etiology, pathogenesis. Classification. Clinical picture. Diagnostics. Specific research methods. Differential diagnosis. Methods of surgical treatment.

Theme 6 Euthyroid and toxic goiter.

Classification. Etiology, pathogenesis. Plan of examination of a patient with goiter. Clinical picture. Rules for palpation of the thyroid gland. Specific research methods. Diagnostics. Differential diagnosis. Preoperative preparation. Surgical treatment.

Theme 7 Diseases of the breast (dyshormonal, tumors).

Mastitis. Etiology, pathogenesis. Classification. Specific research methods. Diagnostics.

Differential diagnosis. Conservative therapy. Surgical treatment. Mastopathy and benign breast tumors. Etiology, pathogenesis. Classification. Specific research methods. Diagnostics. Differential diagnosis. Conservative therapy. Surgical treatment.

Theme 8 Arterial thrombosis and embolism.

Etiology, pathogenesis. Classification of acute limb ischemia. Clinical stages of the course. Clinical picture. Specific research methods. Diagnostics. Rules for palpation of the pulse in the peripheral arteries. Differential diagnosis. Methods of surgical treatment.

Theme 9 Chronic ischemia of the lower extremities.

Obliterating atherosclerosis and endarteritis. Buerger's disease. Raynaud's disease. Classification of chronic ischemia and levels of occlusion of the aorta and arteries of the lower extremities. Clinical stage of the course. Diagnostics. Functional tests. Specific research methods. Differential diagnosis. Methods of conservative and surgical treatment.

Theme 10 Diabetic foot.

Etiology, pathogenesis. Classification. Wagner classification. Clinical picture. Specific research methods. Comparative diagnosis of different forms of diabetic foot. Differential diagnosis. Conservative therapy. Surgical treatment.

Theme 11 Pulmonary embolism.

Etiology, pathogenesis. Pathological and Clinical classification. Clinics s, diagnosis, treatment. Modern endovascular surgical interventions. Means of prevention.

Theme 12 Aneurysm of the aorta and peripheral arteries.

Etiology, pathogenesis. Classification. Clinical picture. Clinical variants. Specific research methods. Diagnostics. Differential diagnosis. Conservative therapy. Preoperative preparation. Surgical treatment.

Theme 13 Abdominal ischemic syndrome.

Etiology, pathogenesis. Classification. Clinical picture. Specific research methods. Clinical variants. Diagnostics. Differential diagnosis. Complications. Methods of conservative treatment. Prevention Rehabilitation.

Theme 14 Mesentery thrombosis.

Etiology, pathogenesis. Classification. Clinical picture. Clinical variants. Specific research methods. Diagnostics. Differential diagnosis. Complications. Methods of conservative treatment. Prevention Rehabilitation.

Theme 15 Varicose veins.

Varicose veins. Etiology. Pathogenesis. Classification. Complications. Diagnostics. Functional tests. Specific research methods. Methods of conservative treatment. Compression therapy. Methods of surgical treatment. Treatment of varicose ulcers. Diagnosis and treatment of bleeding from a varicose vein.

Theme 16 Thrombosis of the main veins.

Etiology. Pathogenesis. Classification. Clinics. Diagnostics. Differential diagnosis. Methods of conservative and surgical treatment. Ileofemoral thrombosis. White and blue phlegmasia. Clinics s. Diagnostics. Differential diagnosis. Methods of conservative and surgical treatment.

Theme 17 Postthrombophlebetic syndrome.

Etiology. Pathogenesis. Classification. Clinical picture. Functional tests.

Theme 18 Postthrombophlebetic syndrome.

Diagnostics. Specific research methods. Features of compression therapy. Conservative and surgical treatment.

Theme 19 Limb lymphedema.

Etiology. Pathogenesis. Classification. Lymphedema stages. Complications. Diagnostics. Specific research methods. Methods of conservative treatment. Compression therapy. Conservative therapy. Methods of surgical treatment

Theme 20 Patient examination & Case history.

Structure and scheme of the medical history of a surgical patient. The procedure for collecting complaints, anamnesis of the disease and life. Features of the physical examination of

the patient by systems. Examination of the site of the disease. The role of additional methods of examination in the diagnosis. Diagnosis and determination of treatment tactics for the patient. Curation of thematic patients and writing training case history. Defense of the training case history.

Theme 21

Test-control

List of recommended reading

Basic literature

1. Surgery = Хірургія : textbook for students of higher medical educational institutions of Ministry of Health of Ukraine / K. M. Amosova [et al.] ; ed.: Ya. S. Bereznyts'kyy, M. P. Zakharash, V. G. Mishalov. - 3rd ed. - Vinnytsya : Nova Knyha, 2021. - 712 p.
2. Clinical anatomy and operative surgery = Клінічна анатомія та оперативна хірургія : textbook for English-speaking foreign students / O. V. Tsyhykalo. - Vinnytsia : Nova knyha, 2020. - 528 p. : fig. - Бібліогр.: с. 527.
3. General surgery : [пер. з укр.]/ [V. P. Andriushchenko et al.] ; ed. by Bereznytsky Ya. S. [et al.] . - 2nd ed. - Vinnytsia : Nova Knyha, 2020. - 327 p.
4. General surgery : [textbook]: [пер. з укр.] / V. P. Andriushchenko et al.; ed. by Bereznytsky Ya. S. [et al.] . - 2nd ed. - Vinnytsia: Nova Knyha, 2020. - 327 p.: fig., tab.
5. General surgery = Загальна хірургія : textbook for students of the higher medical education of the Ministry of Health of Ukraine / V. P. Andriushchenko [et al.] ; ed. Ya. S. Bereznytskyy [et al.]. - 2nd ed. - Vinnytsia : Nova Knyha, 2020. - 328 p. : il.
6. General surgery = Загальна хірургія : textbook for students of higher educational institutions / V. P. Andriushchenko [et al.] ; ed. Ya. S. Bereznytsky [et al.]. - Vinnytsya : Nova Knyha, 2019. - 328 p. : il.
7. General surgery = Загальна хірургія : textbook for students of higher medical educational establishments / S. D. Khimich [et al.] ; ed.: S. D. Khimich, M. D. Zheliba. - Kyiv : AUS Medicine Publishing, 2019. - 536 p.: il.
8. General surgery =Загальна хірургія : / V. P. Andriushchenko [et al.] ; ed. By Ya. S. Bereznytskyi, M. P. Zakharash, V. G. Mishalov, V. O. Shidlovskyi. - Vinnytsia : Nova knyha, 2019. - 327 p.
9. Clinical Anatomy and operative surgery = Клінічна анатомія та оперативна хірургія : textbook for students of higher medical education establishments / O. M. Slobodian [et al.] ; ed. V. Yu. Yershov. - Kyiv : AUS Medicine Publishing, 2018. - 504 p. : il.
10. Sidawy, Anton N. and Perler, Bruce A., "Rutherford's Vascular Surgery and Endovascular Therapy" (2018). Faculty Bookshelf. -133 p.

Additional literature.

1. Topographical anatomy and operative surgery : textbook for English-speaking foreign students / O. V. Tsyhykalo. - 3rd ed. - Vinnytsia : Nova Knyha, 2018. - 528 p.
2. Topographical anatomy and operative surgery Топографічна анатомія та оперативна хірургія : textbook for English-speaking foreign students / O. V. Tsyhykalo. - 3rd ed. - Vinnytsya : Nova Knyha, 2018. - 528 p. : il. Beynon, J.,
3. Harris, D.A., Davies, M., Evans, M. (Eds.) Coloproctology. A Practical Guide. Springer 2017. - 338 p.
4. Surgery : [textbook for students of higher med. educational institutions] / [Kateryna M. Amosova et al.] ; ed. by Bereznyts'kyy Ya. S., Zakharash M. P., Mishalov V. G. - Vinnytsia : Nova Knyha, 2016. - 711 p. : fig. - (Національний підручник).

EVALUATION

Different forms of control of classes in this discipline are used in teaching (oral, written, combined, testing, practical skills, etc.). The results of students' academic success are presented in the form of assessment on the national scale, 200-point and ECTS scale and have standardized generalized criteria for assessing knowledge:

national scale:

- Mark "**excellent**". The applicant for education correctly, accurately and completely completed all the tasks received, clearly and logically answered the questions posed. Thoroughly and comprehensively knows the content of theoretical issues, is fluent in professional and scientific terminology. Thinks logically and builds an answer, freely uses the received theoretical knowledge in the analysis of practical problems. When solving a Clinical problem, he correctly interpreted the anamnesis data, the results of Clinical , laboratory and instrumental studies, correctly answered all the questions posed and convincingly substantiated his point of view, could offer an alternative solution to individual issues. When solving a practical problem, he correctly demonstrated the implementation of practical skills, accurately adhered to the algorithm for their implementation.
- Mark "**good**". The applicant completed all the tasks received quite fully, clearly and logically answered the questions posed. Sufficiently deep and comprehensive knowledge of the content of theoretical issues, owns professional and scientific terminology. Thinks logically and builds an answer, uses the acquired theoretical knowledge in the analysis of practical problems. Nevertheless, when presenting some questions, there is not enough depth and argumentation, he makes minor mistakes that are eliminated by the applicant himself when the examiner points them out. When solving a Clinical problem, he made minor errors or inaccuracies in the interpretation of the anamnesis data, the results of Clinical , laboratory and instrumental studies, answered all the questions without significant errors, fully substantiated his point of view, however, the proposal of an alternative variant caused difficulty. When solving a practical problem, he made minor errors in the algorithm and technique for performing the skill, corrected at the direction of the teacher.
- Mark "**satisfactory**". The applicant for education incompletely completed all the tasks received; the answers to additional and leading questions are fuzzy, vague. Possesses the bulk of theoretical knowledge, uses professional and scientific terminology inaccurately. Experiencing significant difficulties in constructing an independent logical answer, in applying theoretical knowledge in the analysis of practical problems. There are significant errors in the answers. When solving a Clinical problem, he interpreted the anamnesis data, the results of Clinical , laboratory and instrumental studies with errors, did not know individual details, made inaccuracies in answering questions, did not correctly substantiate his answers and interpreted the wording, experienced difficulties in completing tasks and offering alternatives. When solving a practical problem, he made significant errors in the algorithm and technique for performing the skill.
- Mark «**unsatisfactory**". The applicant for education did not complete the tasks received, in most cases did not answer the additional and leading questions of the

examiners. He did not master the main body of theoretical knowledge, revealed a low level of professional and scientific terminology. Answers to questions are fragmentary, inconsistent, illogical, cannot apply theoretical knowledge in the analysis of practical problems. There are a significant number of gross errors in the answers. When solving a Clinical problem, he could not interpret the obtained data of the anamnesis, the results of Clinical , laboratory and instrumental studies, answer the questions posed or made significant errors in the answers; could not substantiate his decisions or did it not convincingly. Did not offer any alternatives. When solving a practical problem, he did not demonstrate or made gross mistakes and inaccuracies in the algorithm and technique of performing the skill.

The multi-point scale characterizes the actual success of each student in mastering the discipline. Conversion of the traditional grade from the discipline to 200-point is performed by the information and computer center of the university program "Contingent" by the formula:

grade point average (current / discipline) x 40

National mark	Balls
“5”	185 - 200
“4”	151 - 184
“3”	120 - 150

The differential credit test is carried out at the last lesson of the discipline based on the results of the final interview with the mandatory performance by the student of all types of study provided for in the working curriculum and evaluated for current educational activities on average not less than 3.00. The grade obtained for the answer on the differential test and the score of the average current performance during the study of the discipline are used to calculate the arithmetic mean, which is the overall grade for the discipline. In the student's record book the teacher put the grade in the discipline on the traditional and 200-point scales.

The ECTS rating scale evaluates the achievements of students in the discipline who study in one course of one specialty, in accordance with the points obtained by them, by ranking, namely:

ECTS assessment	**Statistical indicator**
«A»	the best 10% of students
«B»	the next 25% of students
«C»	the next 30% of students
«D»	the next 25% of students
«E»	the last 10% of students

The ECTS scale establishes the student's belonging to the group of the best or worst among the reference group of classmates (faculty, specialty), i.e. his rating. When converting from a multi-point scale, as a rule, the limits of grades "A", "B", "C", "D",

"E" do not coincide with the limits of grades "5", "4", "3" on the traditional scale. Grade "A" on the ECTS scale cannot be equal to grade "excellent", and grade "B" - grade "good" and so on.
Students who receive grades "Fx" and "F" ("2") are not included in the list of ranked students. Such students automatically receive a score of "E" after retake.
The grade "Fx" is given to students who scored the minimum number of points for the current educational activity, but who did not pass the final control. Grade "F" is given to students who have attended all classes in the discipline, but did not score an average score (3.00) for current academic activities and are not admitted to the final control.
Criteria for assessing the current performance of students is reflected in the work program in the disciplines, indicating a clear structure of student receipt in the assessment class.

Independent study of students.

Independent study of students, which is provided by the topic of the lesson along with classroom work, is assessed during the current control of the topic in the corresponding lesson. The assimilation of topics that are taken out only for independent study is checked at the last lesson.

Topics of independent study of students:

1. Modern methods of diagnostics, minimally invasive surgical treatment of heart diseases. Endoscopic coronary artery bypass grafting.
2. Acquired heart defects. Classification. Diagnostics. Indications for surgical treatment. Surgical methods. Complications. Diseases of the pericardium. Classification. Diagnostics. Differential diagnosis. Surgical treatment methods.
3. Ischemic heart disease. Diagnostics. Indications for surgical treatment. Surgical methods. Myocardial infarction, heart aneurysm, conduction disorders. Indications for surgical treatment. Surgical methods.
4. Diseases of the parathyroid glands. Classification. Special research methods. Diagnostics. Differential diagnosis. Preoperative preparation. Surgery.
5. Diseases of the adrenal glands. Classification. Special research methods. Diagnostics. Differential diagnosis. Preoperative preparation. Surgery.

COURSE POLICY

Policy regarding deadlines and retakes: tasks are completed on time, prepare daily. For late completion of the task, the student receives an unsatisfactory grade. The retake of the lesson is carried out according to the work schedule

Academic Virtue Policy:

• The student must independently complete homework, tasks of current and final control, tasks of Krok-2.

• Rely on sources of information when using ideas, developments of other authors

Attendance and late arrivals policy.

To obtain a satisfactory grade, it is compulsory to attend and work during the classroom. A student is allowed to be late for no more than 10 minutes.

Mobile devices: students can use mobile devices in class with the teacher's permission.

Classroom behavior:

While in the classroom, the following are important: respect for colleagues; tolerance towards others; sensitivity and impartiality; the ability to agree with the opinion, but respect the personality of the opponent / s (during discussions); careful argumentation of your opinion; adherence to ethics of academic relations.