

Danylo Halytsky Lviv National Medical University
Medical Faculty №2
Department of Surgery №2

«APPROVED»

first vice-rector
on educational and pedagogical affairs at
Danylo Halytsky Lviv
National Medical University
Associate prof. Irina SOLONINKO



Syllabus of the discipline "Surgery"
for 4th year students

“APPROVED”

meeting of the Department of Surgery №2
Report №17

«22»/01/2024

Head of Department of Surgery №2

_____prof. Igor KOBZA

“APPROVED”

at the meeting of the Surgical Methodological
Commission of Danulo Halytsky Lviv National
Medical University Report №23

«25»/01/2024

Chief of the Surgical Methodological Commission

_____prof. Victor ANDRYUSCHENKO

Prepared:

Professor Kobza II

Associate Professor Koval AA

Assistant of the department Savchenko AA

Ukraine, Lviv-2024

SYLLABUS of Discipline "Surgery"	
1. General information	
Name of the Faculty	Medicine
Educational program <i>(branch, specialty, level of higher education, form of education)</i>	22 Healthcare, 221 Medicine, 228 Pediatrics second (master's) level of higher education, full-time
Academic year	Fourth
Name of discipline, code <i>(e-mail address on the website of Danylo Halatsky LMU)</i>	Surgery "OK 39", professional training https://new.meduniv.lviv.ua/
Department <i>(name, address, phone, email)</i>	Surgery № 2 79010, Lviv, street Chernihivska 7 tel. (032)276-91-13; kaf_surgery_2@meduniv.lviv.ua
Head of the department <i>(contact email)</i>	Ph.D., MD., Professor Igor Ivanovich Kobza ihor_kobza@ukr.net
Year of study <i>(year in which the study of the discipline)</i>	4th year, medical faculty
Semester <i>(semester in which the study of the discipline is implemented)</i>	VII – VIII
Type of course / module <i>(compulsory / optional)</i>	Professional training, required
Teachers <i>(names, surnames, scientific degrees and titles of teachers who teach the discipline, contact e-mail)</i>	PhD., Professor Orel YH, yuriyorel@ukr.net ; PhD., Professor Kulik LV, lubkul@mail.lviv.ua ; PhD, Professor Mazur YI, PhD., Associate Professor Koval AI, PhD., Associate Professor Zhuk RA, zhuk@gmail.com ; PhD., Associate Professor Yeliseyev GY, ag_servis@ukr.net ; PhD., Associate Professor Trutyak RI, trutyak_ro@yahoo.com ; PhD., Associate Professor Savchenko AA., Assistant Slabiy OM, oslabyy@yahoo.com ; PhD., Assistant Vykhtyuk TI, vykhtyuk@gmail.com ; PhD., Assistant Mota YS, yuliamota@gmail.com ; Assistant, PhD Melen AP, melandro7@ukr.net ; Assistant Khorkavy YZ, khorkavyy@gmail.com ;
Erasmus <i>yes/no (availability of the discipline for students within the Erasmus + program)</i>	No
Person responsible for the syllabus <i>(person to be commented on the syllabus, contact e-mail)</i>	Koval Andriy Ivanovych, PhD, Associate Professor doct.koval@gmail.com
Number of ECTS credits	135 hours, 4.5 credits
Number of hours <i>(lectures / practical classes / independent work of students)</i>	Lectures - 12, practical classes - 68, independent (off-class) work - 55
Language of instruction	Ukrainian, English
Information about consultations	According to the established schedule
Address, telephone and rules of operation of the clinical base, office	79010, Lviv, Chernihivska 7 Str. tel. (032)276-91-13; kaf_surgery_2@meduniv.lviv.ua
2. Short annotation to the course	

General characteristics, brief description of the course, features, benefits.

The working curriculum in the discipline "Surgery" for students of the 4th year of the Medical Faculty № 1 in the specialty 1101 "Medicine" is developed on the basis of a standard curriculum in the discipline "Surgery" for higher medical institutions of Ukraine III-IV levels of accreditation. Department of Surgery No. 4 of the National Medical University named after OO Bogomolets, supporting in the discipline of "Surgery", taking into account the end-to-end standard program in the discipline of "Surgery" from 2008, standard programs in faculty, hospital surgery, discipline "Surgical Diseases" and pediatric surgery program for specialty 7.12010001, "Medical "Medical and preventive work".

The program is developed in accordance with the following regulations:

- educational and qualification characteristics and educational and professional programs of training, approved by the order of the Ministry of Education and Science of Ukraine from 16.04.2003 No 239 "On approval of constituent industry standards of higher education in the field of training 1101" Medicine ";
- Order of the Ministry of Health of Ukraine dated 31.01.2005 №52 "On approval and introduction of a new curriculum for training specialists of educational - qualification level" specialist "qualification" doctor "in higher educational institutions of III-IV levels of accreditation of Ukraine in" medical business ", "Pediatrics", "medical and preventive work";
- Order of the Ministry of Health of Ukraine №414 of 23.07.2007 "On Amendments to the Order of the Ministry of Health of Ukraine of 31.01.2005 No 52" On approval and introduction of a new curriculum for training specialists of educational qualification level "specialist" qualification "doctor" in higher education institutions III -IV levels of accreditation of Ukraine in the specialties "medical business", "pediatrics", "medical and preventive business";
- recommendations on the development of curricula of disciplines, approved by the order of the Ministry of Health of Ukraine from 24.03.2004 on № 152 "On approval of recommendations on the development of curricula of disciplines" with changes and additions made by the order of the Ministry of Health of Ukraine of 12.10.2004 on № 492 and additions to the recommendations for the development of curricula of academic disciplines ”;
- by the order of the Ministry of Health of Ukraine dated 31.01.2003 under №148 “On measures to implement the provisions of the Bologna Declaration in the system of higher medical and pharmaceutical education”.

The program of the discipline "Surgery" is divided into sections, which, in turn, are divided into subdivisions. In the fourth year for students of the medical faculty it is planned to study the section of surgery - “Urgent abdominal surgery. Surgical gastroenterology. Proctology. Transplantology ”.

3. The purpose and objectives of the course

The purpose of the course is to acquire theoretical and practical knowledge of etiology, pathogenesis, typical and atypical clinical manifestations, diagnostic methods, conservative and surgical treatment, rehabilitation of surgical pathology within the limits of training of a general practitioner taking into account the peculiarities of his specialty:

- learn the anatomical and physiological features of the abdominal organs;
- interpret the etiology, pathogenesis and classification, clinical picture of urgent diseases of the abdominal cavity;
- determine the methods of diagnosis, algorithms for conservative and surgical treatment of these diseases;
- master the differential diagnosis with other acute diseases of the abdominal cavity, extraperitoneal space and chest;
- distinguish the principles of postoperative treatment and rehabilitation of patients with urgent abdominal pathology;
- master the indications for urgent, urgent (24-48 hours) operations;
- identify indications for minimally invasive (under the control of ultrasound and laparoscopic) interventions;
- identify risk factors for complications;
- interpret the results of laboratory and instrumental research;
- demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in surgery;
- to forecast life and ability to work in urgent abdominal surgical diseases;
- interpret the general principles of treatment, rehabilitation and prevention of the most common surgical diseases;
- demonstrate the ability to maintain medical records in the clinic of surgical diseases;
- provide emergency medical care for urgent abdominal surgical diseases.

Learning objectives:

- Identify the most common clinical symptoms and syndromes in the clinic of surgical diseases.
- Identify the main etiological and pathogenetic factors of the most common surgical diseases.
- Demonstrate the ability to perform the necessary medical manipulations.
- Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in surgery.
- Diagnose and provide medical care in emergencies in the surgical clinic.
- Provide a prognosis of life and ability to work in the most common surgical diseases. • Classify and analyze the typical clinical picture of the most common surgical diseases. • Make a plan of examination and analyze the data of laboratory and instrumental examinations in the typical course of the most common surgical diseases.
- Interpret the general principles of treatment, rehabilitation and prevention of the most common surgical diseases.
- To determine the tactics of management (principles of surgical interventions and conservative treatment, rehabilitation measures) for the most common surgical diseases and their complications.
- Identify different clinical variants and complications of the most common surgical diseases.
- Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in surgery.
- Provide emergency medical care for the most common surgical diseases.
- Plan the examination of the patient, interpret the results of laboratory and instrumental studies in the most common surgical diseases and their complications.
- Carry out differential diagnosis, substantiate and formulate a preliminary diagnosis in the most common surgical diseases.
- Carry out primary and secondary prevention of the most common surgical diseases.
- Determine a plan for conservative and surgical treatment of surgical diseases depending on pathogenetic factors and the severity of the patient's condition.
- Demonstrate the ability to keep medical records in the clinic of surgical diseases.
- Diagnose complicated and atypical forms of the most common surgical diseases.

- Provide medical care for emergencies in the surgical clinic and perform emergency surgical manipulations and operations.
- Plan a scheme of examination of a particular patient depending on the features of the clinical course of the disease.
- Carry out differential diagnosis of the most common surgical diseases in emergency and planned surgery.

General competencies:

- Ability to abstract thinking, analysis and synthesis.
- Ability to learn and master modern knowledge.
- Ability to apply knowledge in practical situations.
- Knowledge and understanding of the subject area and understanding of professional activity.
- Ability to adapt and act in a new situation.
- Ability to make informed decisions.
- Ability to work in a team.
- Interpersonal skills.
- Information and communication technology skills.
- Definiteness and perseverance in terms of tasks and responsibilities.

Special competencies:

- Patient interviewing and clinical examination skills.
- Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
- Ability to establish a preliminary and clinical diagnosis of the disease.
- Ability to determine the required mode of work and rest in the treatment of diseases.
- Ability to determine the nature of nutrition in the treatment of diseases.
- Ability to determine the principles and nature of disease treatment.
- Ability to diagnose emergencies.
- Ability to determine tactics for providing emergency medical care.
- Emergency care skills.
- Ability to carry out medical and evacuation measures
- Skills to perform medical manipulations.
- Ability to conduct a health examination.
- Ability to keep medical records.
- Ability to analyze the activities of a doctor, department, health care institution, take measures to ensure the quality of medical care and improve the efficiency of medical resources.

3. Prerequisites of the course

The discipline "**Surgery**" is based on the knowledge acquired by students during the study of such fundamental disciplines as anatomy, histology, physiology, pathological anatomy, pathological physiology, propaedeutics of internal medicine, pharmacology, and lays the foundations for the study of clinical surgery, traumatology and orthopedics. neurosurgery, obstetrics, gynecology, anesthesiology, resuscitation and other disciplines involving the use of surgical treatments

3. Program learning outcomes

List of learning outcomes

Learning Outcome Code	Learning Outcome Content	Reference to the competency matrix code
<i>The code is created when filling in the syllabus</i>	<i>Learning outcomes determine that the student must know, understand and be able to perform,</i>	<i>Symbol of the Program Learning</i>

<i>(category: Kn- knowledge, Ab-ability, C-competence, AR - autonomy and responsibility)</i>	<i>after completing the discipline. Learning outcomes follow from the set learning goals. To enroll in the discipline, it is necessary to confirm the achievement of each learning outcome</i>	<i>Outcome Code in the Higher Education Standard</i>
Kn-1	Know the possible complaints and the sequence of collecting information about the disease in the patient	PLO-1
Ab-1	Be able to consistently collect all information about the disease from the patient's words	PLO -2
C-1	Ability to communicate with the patient during an objective examination	PLO -3
AR- 1	Be responsible for the implementation of ethical and deontological norms	PLO-4
Kn-2	Know the diagnostic program and treatment tactics	PLO-5
Ab-2	Be able to recognize an atypical clinical picture	PLO-6
C-2	Ability to communicate with the patient during an objective examination	PLO-7
AR-2	Be responsible for the correctness of the conduct and interpretation of the results of the objective examination	PLO-8
Kn-3	Have knowledge of the clinical course of the disease	PLO-9
Ab-3	Be able to conduct differential diagnosis and treatment tactics	PLO-10
C-3	Use information and communication technologies in professional activities	PLO-11
AR-3	Be responsible for the interpretation of the results obtained in assessing the clinical course of the disease	PLO-12
Kn-4	Have knowledge of the clinical manifestations of mechanical jaundice and PHES	PLO-13
Ab-4	Have specialized knowledge of methods of laboratory and instrumental research	PLO-14
C-4	Be able to analyze the results of laboratory and instrumental research methods	PLO-15
AR-4	Be responsible for the correctness and timeliness of relevant research and interpretation of their results	PLO-16
Kn-5	Have knowledge of the etiology, pathogenesis, classification of acute pancreatitis	PLO-17
Ab - 5	Have knowledge of the clinical manifestations of mild and severe acute pancreatitis	PLO-18
C- 5	Be able to perform differential diagnosis	PLO-19
AR - 5	It is reasonable to form and bring to the patient and specialists the conclusions of the results of differential diagnosis	PLO-20
Kn - 6	Know the principles of modern treatment tactics	PLO-21
Ab - 6	Providing care for the seriously ill	PLO-22
C - 6	Have the skills to care for the patient in a hospital, be able to determine and assess the general condition of the patient, the basic parameters of his life	PLO-23
AR - 6	Effectively form a communication strategy in contact with the patient, enter information into the relevant documentation	PLO-24
Kn - 7	Have knowledge about the complications of chronic pancreatitis	PLO-25
Ab - 7	Be able to perform all regulated methods of examination in the appropriate sequence and evaluate the results	PLO-26

C - 7	Ability to communicate with the patient during an objective examination	PLO-27
AR - 7	Be responsible for the correctness of the conduct and interpretation of the results of the objective examination	PLO-28
Kn - 8	Have knowledge of the types of surgical interventions for complications of peptic ulcer of the stomach and duodenum	PLO-29
Ab - 8	Be able to make a differential diagnosis of complications of peptic ulcer of the stomach and duodenum	PLO-30
C - 8	Preoperative preparation of patients	PLO-31
AR - 8	It is reasonable to form and bring to the patient and specialists the conclusions of the results of differential diagnosis	PLO-32
Kn - 9	Know the treatment tactics of gastrointestinal bleeding	PLO-33
Ab - 9	Providing emergency medical care	PLO-34
C - 9	Be able to perform a medical procedure or perform medical manipulation according to the algorithm	PLO-35
AR - 9	Be responsible for the quality of a medical procedure or manipulation	PLO-36
Kn-10	Know the clinical course of various forms of acute intestinal obstruction	PLO-37
Ab-10	Detect and evaluate acute surgical conditions	PLO-38
C-10	Be able to choose and apply the appropriate treatment or drug to prevent and reduce pain and its consequences	PLO-39
AR-10	Be responsible for the timeliness and correctness of appropriate measures and drugs to prevent and reduce the symptoms of pain	PLO-40
Kn-11	Know the etiology and pathogenesis, classification of acute peritonitis	PLO-41
Ab-11	Be able to timely and correctly apply appropriate treatment or surgery	PLO-42
C-11	Be able to identify peritoneal symptoms	PLO-43
AR-11	Effectively form a communication strategy in contact with the patient, enter information into the relevant documentation	PLO-44
Kn-12	Know the classification of abdominal hernias.	PLO-45
Ab-12	Be able to consistently collect all information about the disease from the patient's words	PLO-46
C-12	Ability to communicate with the patient during an objective examination	PLO-47
AR-12	Be responsible for the implementation of ethical and deontological norms	PLO-48
Kn-13	Know the principles of conservative and surgical treatment of portal hypertension and its complications.	PLO-49
Ab-13	Transfusion of donor blood components	PLO-50
C-13	Be able to organize an appropriate sanitary-epidemic regime in the surgical department	PLO-51
AR-13	Be responsible for the correctness and timeliness of relevant research and interpretation of their results	PLO-52
Kn-14	Know the etiology, clinic, methods of examination, complications, treatment tactics of liver disease	PLO-53
Ab-14	Carrying out medical manipulations and procedures	PLO-54
C-14	Ability to communicate with the patient during an	PLO-55

	objective examination	
AR-14	Be responsible for the timely detection and assessment of surgical pathology in the patient	PLO-56
Kn-15	Know the principles of conservative therapy of nonspecific ulcerative colitis and Crohn's disease	PLO-57
Ab-15	Be able to make a differential diagnosis of diseases of the small intestine	PLO-58
C-15	Be able to quickly detect and diagnose complications, organize an appropriate diagnostic program	PLO-59
AR-15	It is reasonable to form and bring to the patient and specialists the conclusions of the results of differential diagnosis	PLO-60
Kn-16	Know the clinical symptoms of diseases of the rectum	PLO-61
Ab-16	Be able to conduct a diagnostic program, instrumental methods of research	PLO-62
C-16	Know the possible complaints and the sequence of collecting information about the disease in the patient	PLO-63
AR-16	Be able to consistently collect all information about the disease from the patient's words	PLO-64
Kn-17	Ability to communicate with the patient during an objective examination	PLO-65
Ab-17	Be responsible for the implementation of ethical and deontological norms	PLO-66
C-17	Know the diagnostic program and treatment tactics	PLO-67
AR-17	Be able to recognize an atypical clinical picture	PLO-68

6. Format and scope of the course

Course format (specify full-time or part-time)	Full-time	
Kind of occupations	<i>Hours</i>	<i>Group</i>
Lectures	12	11
Practical classes	68	11
Seminars	-	-
Independent student's work	55	11

7. Topics and content of the course

Code type to borrow	Topic	Learning content	Learning outcome code	Teacher
L-1 (lecture 1)	Acute appendicitis and its complications.	Informational lecture, visualization tables, drawings, videos	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI
P-1 (practical lesson 1)	Acute appendicitis. Anatomical and physiological data, etiology, pathogenesis, classification, clinical signs, presentation, diagnosis, differential diagnosis, treatment.	Written survey, tests, situational tasks, practical skills training	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-1 (independent student's	Acute appendicitis. Anatomical and physiological data, etiology, pathogenesis,	Preparation for practical classes. Preparation and	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants

work 1)	classification, clinical signs, presentation, diagnosis, differential diagnosis, treatment.	training of practical skills.		Savchenko AA, Mota YS, Chorkaviy YZ.
L-2 (lecture 2)	Acute complications of the peptic ulcer disease of stomach and duodenum.	Informational lecture, visualization tables, drawings, videos	Kn1-9, Ab 1-9, C 1-9, AR1-9	Associate Professor Trutyak RI
P-2 (practical lesson 2)	Atypical clinical picture of acute appendicitis. Complications of acute appendicitis and appendectomy, diagnostic program and treatment.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-2 (independent student's work 2)	Atypical clinical picture of acute appendicitis. Complications of acute appendicitis and appendectomy, diagnostic program and treatment.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
L-3 (lecture 3)	Acute bowel obstruction.	Informational lecture, visualization tables, drawings, videos	Kn1-9, Ab 1-9, C 1-9, AR1-9	Associate Professor Trutyak RI
P-3 (practical lesson 3)	Etiology and pathogenesis, classification of perforated gastroduodenal ulcers. Clinical picture of typical and atypical perforated ulcer. Differential diagnosis. Diagnostic program and treatment in perforated gastroduodenal ulcers.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-3 (independent student's work 3)	Etiology and pathogenesis, classification of perforated gastroduodenal ulcers. Clinical picture of typical and atypical perforated ulcer. Differential diagnosis. Diagnostic program and treatment in perforated gastroduodenal ulcers.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
L-4 (lecture 4)	Cirrhosis hepatitis and its complications. Principles of treatment of portal hypertension and its complications. Liver transplantantation.	Informational lecture, visualization tables, drawings, videos	Kn1-9, Ab 1-9, C 1-9, AR1-9	Professor Kobza II, Associate Professor Trutyak RI, Assistant Savchenko AA.
P-4 (practical lesson 4)	Etiology and pathogenesis, classification of ulcerative gastroduodenal bleeding. Manifestations of ulcerative bleeding. Laboratory and endoscopic diagnostic criterias. Differential diagnosis. Treatment of ulcerative gastroduodenal bleeding.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-4	Etiology and pathogenesis,	Preparation for	Kn-1-9,	Associate Professor

(independent student's work 4)	classification of ulcerative gastroduodenal bleeding. Manifestations of ulcerative bleeding. Laboratory and endoscopic diagnostic criterias. Differential diagnosis. Treatment of ulcerative gastroduodenal bleeding.	practical classes. Preparation and training of practical skills.	C-1-9, AR-1-9	Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
L-5 (lecture5)	Acute and Chronic Visceral Ischemia.	Informational lecture, visualization tables, drawings, videos	Kn1-9, Ab 1-9, C 1-9, AR1-9	Professor Orel YG, Associate Professor Trutyak RI, Assistant Mota YS.
P-5 (practical lesson 5)	Acute cholecystitis. Anatomical and physiological features of the biliary tract. Etiology and pathogenesis. Classification. Presentation, signs, diagnostics, differential diagnosis. Medical tactics. Methods of surgical treatment. Complications of acute cholecystitis and cholecystectomy. Diagnosis and surgical treatment.	Written survey, tests, situational tasks, training of practical skills ZN	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-5 (independent student's work 5)	Acute cholecystitis. Anatomical and physiological features of the biliary tract. Etiology and pathogenesis. Classification. Presentation, signs, diagnostics, differential diagnosis. Medical tactics. Methods of surgical treatment. Complications of acute cholecystitis and cholecystectomy. Diagnosis and surgical treatment.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
L-6 (lecture 6)	Essentials of transplantology.	Informational lecture, visualization tables, drawings, videos	Kn-6, Ab-6, C-6, AR-6	Professor Kobza II, Associate Professor Trutyak RI, Associate Professor Zhuk RA.
P-6 (practical lesson 6)	Etiology and pathogenesis, classification of acute pancreatitis. Presentation of mild and severe acute pancreatitis. Methods of diagnosis of acute pancreatitis. Differential diagnosis. Complications. Modern medical tactics. Conservative therapy. Indications for surgical treatment. Methods of minimally invasive and open surgical interventions.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-6 (independent	Etiology and pathogenesis, classification of acute	Preparation for practical classes.	Kn-1-9, C-1-9,	Associate Professor Trutyak RI, Assistants

student's work 6)	pancreatitis. Presentation of mild and severe acute pancreatitis. Methods of diagnosis of acute pancreatitis. Differential diagnosis. Complications. Modern medical tactics. Conservative therapy. Indications for surgical treatment. Methods of minimally invasive and open surgical interventions.	Preparation and training of practical skills.	AR-1-9	Savchenko AA, Mota YS, Chorkaviy YZ.
P-7 (practical lesson 7)	Abdominal wall hernias. Classification. Etiology. Pathogenesis. Clinic of the disease. Principles of surgical treatment. Complications of hernias.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-7 (independent student's work 7)	Abdominal wall hernias. Classification. Etiology. Pathogenesis. Clinic of the disease. Principles of surgical treatment. Complications of hernias.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-8 (practical lesson)	Acute bowel obstruction. Etiology and pathogenesis. Classification. Clinical picture. Diagnostic methods. Differential diagnosis. Peculiarities of the clinical course of various forms of acute bowel obstruction. Medical tactics. Principles of conservative and surgical treatment of various forms of acute bowel obstruction.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-8 (independent student's work 8)	Acute bowel obstruction. Etiology and pathogenesis. Classification. Clinical picture. Diagnostic methods. Differential diagnosis. Peculiarities of the clinical course of various forms of acute bowel obstruction. Medical tactics. Principles of conservative and surgical treatment of various forms of acute bowel obstruction.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-9 (independent student's work 9)	Penetrating and blunt traumatic injuries of liver, spleen, pancreas, stomach, duodenum, small and large bowel.	Independent written processing of the topic. Defence of written work.	Kn 1-9, C 1-9, AR 1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-10 (independent student's work 10)	Curation of the thematic patient. Writing of the student's history of the disease.	Control of the curation process, defence of the history of the	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA,

		disease.		Mota YS, Chorkaviy YZ.
P-9 (practical lesson 9)	Etiology and pathogenesis, classification of acute peritonitis. Presentation, clinical signs, diagnosis and treatment tactics for acute peritonitis.	Written survey, tests, situational tasks, training of practical skills	Kn-9, Ab-9, C-9, AR-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-11 (independent student's work 11)	Etiology and pathogenesis, classification of acute peritonitis. Presentation, clinical signs, diagnosis and treatment tactics for acute peritonitis.	Preparation for practical classes. Preparation and training of practical skills.	Kn-9, Ab-9, C-9, AR-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-10 (practical lesson 10)	Complications of the peptic ulcer disease of the stomach and duodenum. Conservative and surgical management. Types of operations. Diseases of the operated on stomach. Diagnosis and treatment.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-12 (independent student's work 12)	Complications of the peptic ulcer disease of the stomach and duodenum. Conservative and surgical management. Types of operations. Diseases of the operated on stomach. Diagnosis and treatment.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-11 (practical lesson 11)	Jaundice as a surgical problem. Gallstone disease. Etiology and pathogenesis. Clinical manifestations. Diagnostic methods. Differential diagnosis. Principles of treatment. Surgical options. Postcholecystectomy syndrom.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-13 (independent student's work 13)	Jaundice as a surgical problem. Gallstone disease. Etiology and pathogenesis. Clinical manifestations. Diagnostic methods. Differential diagnosis. Principles of treatment. Surgical options. Postcholecystectomy syndrom.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-12 (practical lesson 12)	Liver Diseases. Fibrosis and cirrhosis hepatis. Diagnosis and treatment of portal hypertension and its complications. Liver insufficiency. Indications and contraindications for liver transplantation. Methods of donor selection. Techniques of liver transplantation. Conditions of storing donor's liver and transportation.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-14	Liver Diseases. Fibrosis and	Preparation for	Kn-1-9,	Associate Professor

(independent student's work 14)	cirrhosis hepatis. Diagnosis and treatment of portal hypertension and its complications. Liver insufficiency. Indications and contraindications for liver transplantation. Methods of donor selection. Techniques of liver transplantation. Conditions of storing donor's liver and transportation.	practical classes. Preparation and training of practical skills.	C-1-9, AR-1-9	Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-13 (practical lesson 13)	Liver abscesses, parasitic and non-parasytic focal hepatic lesions. Aetiology, pathogenesis, clasiification. Clinical manifestations. Diagnostic studies, differential diagnosis. Complications. Methods of treatment.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-15 (independent student's work 15)	Liver abscesses, parasitic and non-parasytic focal hepatic lesions. Aetiology, pathogenesis, clasiification. Clinical manifestations. Diagnostic studies, differential diagnosis. Complications. Methods of treatment.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-14 (practical lesson 14)	Chronic pancreatitis. Clinical picture. Diagnosis. Complications. Treatment. Pancreatic cysts and fistulas. Diagnosis and surgical treatment. Spleen diseases – classification, diagnosis and treatment. Indications for transplantation of the pancreas and technique of procedure.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-16 (independent student's work 16)	Chronic pancreatitis. Clinical picture. Diagnosis. Complications. Treatment. Pancreatic cysts and fistulas. Diagnosis and surgical treatment. Spleen diseases – classification, diagnosis and treatment. Indications for transplantation of the pancreas and technique of procedure.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-15 (practical lesson 15)	Acute and chronic visceral ischemia. Aetiology, pathogenesis, clasiification. Clinical manifestations. Diagnostic program, differential diagnosis. Methods of treatment.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-17 (independent student's work 17)	Acute and chronic visceral ischemia. Aetiology, pathogenesis, clasiification.	Preparation for practical classes. Preparation and	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants

work 17)	Clinical manifestations. Diagnostic program, differential diagnosis. Methods of treatment.	training of practical skills.		Savchenko AA, Mota YS, Chorkaviy YZ.
P-16 (practical lesson 16)	Diseases of the small and large intestines. Classification of the surgical diseases of the small bowel. Ulcerative colitis. Crohn's disease. Diverticular colonic disease. Polyps and polyposis of colon. Presentation. Diagnosis. Differential diagnosis. Complications. Treatment. Indications for intestinal transplantation and technique of procedure.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-18 (independent student's work 18)	Diseases of the small and large intestines. Classification of the surgical diseases of the small bowel. Ulcerative colitis. Crohn's disease. Diverticular colonic disease. Polyps and polyposis of colon. Presentation. Diagnosis. Differential diagnosis. Complications. Treatment. Indications for intestinal transplantation and technique of procedure.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
P-17 (practical lesson 17)	Disease of the rectum – hemorrhoids, rectal prolapse, paraproctitis and rectal fistulas, anal fissure. Perineal soft-tissue diseases. Pilonidal sinuses. Presentation. Diagnosis. Treatment. Complications. Differential diagnosis. Treatment.	Written survey, tests, situational tasks, training of practical skills	Kn-1-9, Ab-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-19 (independent student's work 19)	Disease of the rectum – hemorrhoids, rectal prolapse, paraproctitis and rectal fistulas, anal fissure. Perineal soft-tissue diseases. Pilonidal sinuses. Presentation. Diagnosis. Treatment. Complications. Differential diagnosis. Treatment.	Preparation for practical classes. Preparation and training of practical skills.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-20 (independent student's work 20)	Curation of the thematic patient. Writing of the student's history of the disease.	Control of the curation process, defence of of the student's history of the disease.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-21 (independent student's	Surgical aspects of infectious and parasitic diseases.	Independent written processing of the thopic. Defence of	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants

work 21)		written work.		Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-22 (independent student's work 22)	Primary sclerosing cholangitis.	Independent written processing of the thopic. Defence of written work.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-23 (independent student's work 23)	Syndromes of a malabsortion and maldigestion.	Independent written processing of the thopic. Defence of written work.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-24 (independent student's work 24)	Abdominal compartment-syndrom.	Independent written processing of the thopic. Defence of written work.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-25 (independent student's work 25)	Relaparotomy and laparostomy in the treatment of the diffuse purulent peritonitis.	Independent written processing of the thopic. Defence of written work.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-26 (independent student's work 26)	Differential diagnosis of ascites.	Independent written processing of the thopic. Defence of written work.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-27 (independent student's work 27)	Differential diagnosis of hepato-lienal syndrome.	Independent written processing of the thopic. Defence of written work.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.
ISW-28 (independent student's work 28)	Differential diagnosis of colites.	Independent written processing of the thopic. Defence of written work.	Kn-1-9, C-1-9, AR-1-9	Associate Professor Trutyak RI, Assistants Savchenko AA, Mota YS, Chorkaviy YZ.

It is necessary to present the system of organization of classes, the use of interactive methods, educational technologies used for the transfer and acquisition of knowledge, skills and abilities.

8. Verification of learning outcomes

Current control is carried out during training sessions and aims to check the assimilation of students of educational material (it is necessary to describe the forms of current control during training sessions). Forms of assessment of current educational activities should be standardized and include control of theoretical and practical training. The final grade for the current educational activity is set on a 4-point (national) scale

Learning outcome	Code of the type of classes	Method of verification of learning outcomes	Enrollment criteria
Kn 1 – Kn 17, Ab 1 – Ab 17, C 1 – 17, AR 1 – AR 17	PL 1, PL 2, PL 3... - PL17	Oral and written questioning, solving test tasks (to control the initial and final level of knowledge), solving typical and atypical situational problems, under the control of the teacher is training relevant practical skills and professional skills The teacher uses interactive teaching methods such as "Microphone", "Incomplete sentence", "Discussion", "Competitive group method", "Brainstorming", "Case", etc....	The student independently performed this or that practical skill, clearly chose the necessary way to provide assistance in a particular clinical situation - "5"; The student independently performed this or that practical skill, but at the same time made two, three insignificant mistakes - "4"; The student can not independently choose an adequate way to help in a particular clinical situation,

			makes gross mistakes in performing practical skills - "3"; The student does not show knowledge of ways to provide assistance in a particular clinical situation, can not give any correct answer to the question - "2"
Final control			
General evaluation system	Participation in the work during the semester / exam - 60% / 40% on a 200-point scale		
Rating scales	traditional 4-point scale, multi-point (200-point) scale, ECTS rating scale		
Conditions of admission to the final control	The student attended all practical (laboratory, seminar) classes and received at least 120 points for current performance		
Type of final control	Methods of final control	Enrollment criteria	
Test Maximum number of points - 200. The minimum number of points - 120	All topics submitted for current control must be included. Grades from the 4-point scale are converted into points on a multi-point (200-point) scale in accordance with the Regulation "Criteria, rules and procedures for evaluating the results of students' learning activities"	<i>The maximum number of points - 200.</i> <i>The minimum number of points - 120.</i>	
<p>For the discipline "Surgery" the form of final control is a test:</p> <p>The maximum number of points that a student can score for the current educational activity in the study of the discipline is 200 points.</p> <p>The minimum number of points that a student must score for the current academic activity to enroll in the discipline is 120 points.</p> <p>The calculation of the number of points is based on the student's score on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (CA), rounded to two decimal places. The resulting value is converted into points on a multi-point scale as follows:</p> $x = \frac{CA \times 120}{5}$			
Criteria for assessing the objective structured practical (clinical) exam / Complex of practice-oriented exam Master's thesis			
9. Course policy			
<i>The program of the discipline "Surgery" is divided into sections, which, in turn, are divided into subdivisions. In the fourth year for students of the medical faculty it is planned to study the section of surgery - "Abdominal surgery"; subdivisions: "Urgent abdominal surgery" and "Surgical gastroenterology, proctology and transplantology". The subject of the discipline "Surgery" is the acquisition of theoretical and practical knowledge of etiology, pathogenesis, typical and atypical clinical manifestations, diagnostic methods, conservative and surgical treatment, rehabilitation of surgical pathology within the limits of training of a general practitioner taking into account his specialty.</i>			
10. Literature			
<p>1. Surgery: textbook for students of higher medical educational institutions / K.M. Amosova, Y.S. Bereznytsky, A.O Burka [et al.]; edited by: Bereznytsky Y.S., Zakharash M.P., Mishalov V.G. – Vinnytsia: Nova Knyha, 2016. – 712 p.</p> <p>2. Hospital Surgery / Edited by L. Kovalchuk, V. Saenko, G. Knyshov, M. Nychytailo. – Ternopil: Ukrmedknyha, 2004. – 472 p.</p>			

3. Захараш М.П., Пойда О.І., Кучер М.Д. Хірургія: підручник. – К. : Медицина, 2006. – 656 с.
4. Хірургічна гастроентерологія: Навчальний посібник / М.П. Павловський, Н.І. Бойко, С.М. Чуклін та ін. – Львів: «Кварт», 2010. – 432 с.
5. Хірургія: в 2-х томах. Т. 1: підручник / [С. О. Бойко, О. О. Болдіжар, П. О. Болдіжар та ін.] ; за ред.: П. Г. Кондратенка, В. І. Русина. – Вінниця: Нова Книга, 2018. – 704 с.
6. Хірургія: підручник / За ред. Л.Я. Ковальчука. – Тернопіль: ТДМУ, 2010. – 1056 с.
7. Хірургія. Том II / За редакцією Я.С. Березницького, М.П. Захараша, В.Г. Мішалова. – Дніпропетровськ: РВА «Дніпро-VAL», 2007. – 628 с.
8. Клінічна хірургія, том 2 / За ред. Л.Я. Ковальчука, В.Ф. Саєнка, Г.В. Книшова. – Тернопіль: Укрмедкнига, 2000. – 504 с.
9. Стандарти організації та професійно орієнтовані протоколи надання медичної допомоги хворим з невідкладною хірургічною патологією органів живота / Науково-методичне видання // За редакцією Я.С. Березницького, П.Д. Фоміна. – К.: ТОВ «Доктор-Медіа», 2010. – 470 с.

11. Equipment, logistics and software of the discipline / course

1. Methodical recommendations.
2. Sets of tasks for test control of knowledge.
3. Test tasks, methodical recommendations and selected materials of lectures on the platform for distance learning Misa.
4. Training class of the department:
 - Mannequin for cardiopulmonary resuscitation - 1
 - Mannequin for providing FMC in case of injury - 1
 - Dummy for stoma care, bladder catheterization, rectal and vaginal examination -1
 - Ambu breathing bag - 1
 - Air ducts - 4
 - Model for gastric lavage - 1
 - Probe for gastric lavage - 4
 - Model for catheterization of the bladder - 1
 - Urinary catheters: metal - 1, Foley catheter - 3.
 - Model of the upper extremity for venous puncture - 1
 - Model of a limb wound - 1
 - Model of a brush with burns of various degrees - 1
 - Model of pathology of the breast - 5
 - Step ladder for immobilization - 4
 - Pneumatic immobilizer - 1
 - Dieterichs immobilization splint - 1
 - Means for metal osteosynthesis - 3
 - Needle with adapter for puncture of the pleural cavity - 2
 - Blood grouping kit - 2
 - Negatoscope - 1
5. Multimedia presentations, videos.

Ukraine, Lviv – 2021

Syllable stacker

Associate Professor Koval AA

(Signature)

Head of Department

Kobza Igor Ivanovich Ph.D., Professor

(Signature)