

Ministry of Health of Ukraine
Odessa national medical university

Department of surgery №2

"Approve"
Acting vice-rector for scientific and pedagogical work
Svitlana KOTYUZHYNKA



" " " 2022 year.

WORKING PROGRAM

Industrial medical practice

"Basic duties and professional actions of a doctor of a surgical department of a hospital"

for students of higher education 4th year of the medical faculty

Level of higher education: second (master's)

Field of knowledge: 22 "Health care"

Specialty: 22 "Medicine"

Educational and professional program: Medicine

The work program is compiled on the basis of the educational and professional program "Medicine" for the training of specialists of the second (master's) level of higher education in the specialty 222 "Medicine" of the field of knowledge 22 "Health care", approved by the Scientific Council of ONMedU (protocol No. 9 of June 23, 2022).

Developers: Doctor of Medicine, Professor B.S. Zaporozhchenko, Doctor of Medicine, Associate Professor Borodaev I.E., Doctor of Medicine, Associate Professor Muravyov P.T.

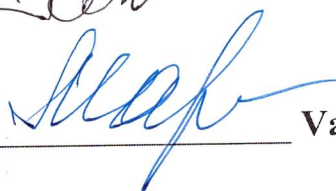
The work program was approved at the meeting of the Department of Surgery No.

2

Protocol No. _____ dated June 27, 2022.



Borys Zaporozhchenko



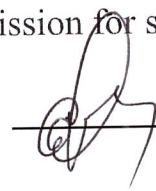
Agreed with the guarantor of OPP _____

Valery Marichereda

Approved by the subject cyclical methodical commission for surgical disciplines of ONMedU

Protocol No. ____ dated June 30, 2022.

Head of the subject cycle methodical commission for surgical disciplines, Doctor of Medicine. professor



Vasyl Mishenko

Revised and approved at the department meeting _____

Protocol № _____ from « ____ » _____ 20 ____ y.

Head of Department _____

Revised and approved at the department meeting _____

Protocol № _____ from « ____ » _____ 20 ____ y.

Head of Department _____

1. Explanatory message

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the academic discipline
The total number of: Credits – 2.0 Hours – 60 Content modules-1	Branch of knowledge 22 "Health care" Specialty 222 "Medicine" Level of higher education second (master's)	<i>Full-time education. Mandatory educational component</i>
		<i>Year of training: 4</i>
		<i>Semesters VII-VIII</i>
		<i>Lectures (0 hours)</i>
		<i>Seminars (0 hours)</i>
		<i>Practical (22 hours)</i>
		<i>Laboratory (0 hours)</i>
		<i>Independent work (35 hours)</i>
		<i>including individual tasks (0 hours)</i>
		<i>Form of final control - differential settlement (3 hours)</i>

2. The purpose and tasks of the practice

The purpose of conducting medical practice is to consolidate practical skills within the goals defined in the educational and professional training program for a specialist in specialty 222 "Medicine" in the surgical direction.

Task:

- formation of abilities and skills of working in a team of doctors in the process of providing medical assistance;
- make the student a participant in the process of providing medical care from the moment the patient is hospitalized until discharge from the hospital;
- acquiring practical skills for diagnosis and differential diagnosis in various surgical pathological processes, acquiring skills in choosing a treatment program and means of prevention in surgical pathology;
- mastering professional practical skills in diagnosing the pathology of abdominal organs;
- assimilation of knowledge about the peculiarities of the application of various transplants, about deontological and legal aspects of transplantation;
- acquisition of skills and abilities for examination of a surgical patient and registration of results in the relevant medical documentation;
- to form personal responsibility for acquiring knowledge and skills.
- formation of moral, ethical and deontological qualities during professional communication with the patient.

The process of passing the practice is aimed at forming elements of the following competencies:

- general (GC):

GC 3 Ability to apply knowledge in practical situations.

GC 4 Knowledge and understanding of the subject area and understanding of professional activity.

GC 5 Ability to adapt and act in a new situation.

GC 6 Ability to make informed decisions.

GC 7 Ability to work in team.

GC 8 Ability for interpersonal interaction.

GC 12 Determination and persistence in relation to assigned tasks and responsibilities.

- special (professional, subject) competencies

SC 1 - to conduct surveys and physical examinations of patients and analyze their results

SC 2 - to plan the scheme of inspection of the concrete patient depending on features of a clinical course of a disease. - to analyze results of the basic laboratory and instrumental methods of research.

SC 3 - to determine the leading pathological symptoms and syndromes in the most common diseases.

SC 4 - to make a differential diagnosis and make a preliminary diagnosis of the most common diseases.

SC 5 - to interpret the general principles of treatment, rehabilitation and prevention of the most common diseases.

SC 6 - to participate in the provision of emergency medical care in emergencies.

SC 7- to acquire knowledge of moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic.

SC 8. Ability to perform medical manipulations, use modern medical equipment.

SC 9- Ability to plan and conduct medical and evacuation measures.

SC 10 – Ability to perform medical manipulations.

SC 11 - Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility.

SC 13 - Ability to conduct an examination of the ability to work in patients.

SC 14 - Ability to keep medical records.

Program learning outcomes (PLO):

PLO3 - Specialized conceptual knowledge, which includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems.

PLO4 - Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).

PLO5 - Collect complaints, life anamnesis and diseases, assess the psychomotor and physical development of the patient, the state of organs and systems of the

body, based on the results of laboratory and instrumental studies, evaluate information about the diagnosis (according to list 4), taking into account the age of the patient.

PLO6 - To establish a final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis, observing the relevant ethical and legal norms, under the control of the managing physician in the conditions of a health care institution (according to list 2).

PLO7 - Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).

PLO8 - Determine the main clinical syndrome or symptom that determines the severity of the victim's/victim's condition (according to list 3) by making a reasoned decision about the person's condition under any circumstances (in the conditions of a health care facility, outside its boundaries), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.

PLO9 - Determine the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the age of the patient, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to justify personalized recommendations under the control of the head physician in the conditions of a medical institution.

PLO10 - Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLO14 - Determine tactics and provide emergency medical care in emergency situations (according to list 3) in limited time conditions according to existing clinical protocols and standards of treatment.

PLO15 - To organize the provision of medical aid and medical evacuation measures to the population and military personnel in emergency situations and hostilities, including in field conditions.

PLO17 - Perform medical manipulations (according to list 5) in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.

PLO24 - To organize the necessary level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.

As a result of passing the practice, the getter of higher education must:

Know:

- clinic, diagnosis, treatment of the most common surgical diseases of the abdominal cavity;
- modern concepts of domestic and foreign theoretical and practical surgery;
- basic principles of organizing surgical care for the population of Ukraine;
- the basics of organizing a rational regimen and treatment of a surgical patient;
- general elements of care for surgical patients;
- clinical manifestations of terminal conditions, their diagnosis, stages and measures during cardiopulmonary resuscitation;
- general issues of oncology and transplantology;
- theoretical aspects of chronic diseases of abdominal organs;
- general issues of surgery and HIV infection;
- the method of examining a patient, features of examining a patient with surgical pathology;
- the structure of the medical card of an inpatient.

Be able:

- to collect anamnesis and correctly assess the condition of the surgical patient;
- to conduct a physical examination of all organs and systems;
- to assess pulse and blood pressure indicators;
- to make an individual diagnostic program;
- to draw up an individual program of postoperative management of the patient;
- to make bandages; take care of drains; wash drains and inject drugs into them; remove drains; remove sutures;
- to do a cleansing enema; drain and wash the stomach;
- to inject intravenously drugs, to install an intravenous catheter;
- correctly assess the presence, localization and degree of tenderness and defense of the muscles of the anterior abdominal wall and lumbar region.;
- to demonstrate the symptoms of acute appendicitis (Rovzing, Sitkovsky, Voskresensky, Kocher-Volkovich, Bartomier-Michelson, Jaure-Rozanov) and evaluate their severity (negative, weakly positive, positive, strongly positive);
- to demonstrate the Shetkin-Blumberg symptom and evaluate its severity (negative, weakly positive, positive, strongly positive);
- to interpret the results of laboratory and instrumental studies (x-ray, ultrasound, CT);
- to determine indications for surgical intervention;
- to assist in the performance of appendectomy and perform separate stages of surgical intervention;

- to detect and assess jaundice, skin pigmentation from the use of heating pads, dilatation of the veins of the anterior abdominal wall ("jellyfish head");
- to detect and evaluate the protective tension of the muscles in the area of the right hypochondrium, an enlarged painful gallbladder or infiltrate, the presence of fluid in the abdominal cavity;
- to demonstrate the presence of symptoms in acute cholecystitis (Zakhar'ina, Kera, Courvoisier, Murphy, Obraztsova, Ortner, Musi-Georgievskiy) and their degree of expression (negative, positive);
- to carry out differential diagnosis;
- to determine indications for urgent (2-4 hours from the moment of hospitalization) and urgent (24-48 hours from the moment of hospitalization) operations;
- to assist in cholecystectomy operations and perform separate stages of surgical intervention (including minimally invasive and laparoscopic);
- to draw up a medical history, write a preoperative epicrisis and a protocol of the operation;
- to provide correct recommendations in the postoperative period (diet, work activity);
- to choose the most characteristic signs of acute pancreatitis from the anamnesis data;
- to detect and correctly assess the degree of severity (negative, weakly positive, positive, strongly positive) of the following symptoms: Kerte, Mayo-Robson, Shetkin-Blumberg, Johnson-Kullen-Grunwald, Mondor;
- to establish the presence or absence of multiple organ failure syndrome (dysfunction):
 - acute respiratory failure;
 - acute cardiovascular failure;
 - acute liver failure;
 - acute renal failure;
 - acute insufficiency of the gastrointestinal tract;
 - encephalopathy;
- to carry out differential diagnosis with other acute diseases of abdominal organs, other organs and systems;
- to determine the indications for conservative treatment, surgical interventions (mini-invasive and "open" depending on the complications of the disease);
- to determine the indications for performing minimally invasive and "open" surgical interventions;
- to determine the term, scope and place of conservative therapy (surgical department, anesthesiology and resuscitation department) of preoperative preparation according to available indications;
- to determine the most characteristic clinical signs of ulcer bleeding;
- to determine the indications for choosing the optimal method of treatment, the scope of operative treatment depending on the localization of the ulcer, the intensity of bleeding, the degree of blood loss;

- to prepare the patient for surgery;
- to select the most significant signs of intestinal obstruction from the anamnesis data;
- to identify the syndrome and assess its severity (Schotkin-Blumberg, Val, Kivul, Mathieu-Sklyarov, Schlange, Vils, Chuguyev, Shimon-Dans, Zege-von Manteifel, Gold);
- to perform a siphon enema and evaluate its diagnostic and therapeutic significance;
- to substantiate indications for surgery;
- to select the most characteristic signs of acute peritonitis from the anamnesis data;
- to establish the presence or absence of multiple organ failure syndrome (dysfunction);
- to determine the indications for minimally invasive and "open" surgical interventions depending on the prevalence of peritonitis;
- to determine indications for the formation of a laparostomy;
- to diagnose various types of abdominal hernias;
- to conduct a finger examination of the inguinal canal to determine the state of the external and internal rings, the relationship of the hernia sac to the elements of the spermatic cord;
- to determine the size of the hernial gate;
- to palpate and auscultate to determine the contents of the hernial sac;
- to diagnose a pinched hernia;
- to determine surgical tactics in case of pinched, inflamed and injured hernia;
- to determine intraoperatively the type of entrapment and surgical tactics depending on it;
- drawing up a medical card of an inpatient, an extract from the medical card of an inpatient, a letter of incapacity for work, a referral letter for LTEK, a sanatorium-resort card, an emergency notification about an infectious disease, a notification about a patient with a malignant tumor;
- peculiarities of providing emergency care to patients with HIV infection;
- reading X-rays: X-ray examination of abdominal organs, chest X-ray (pneumothorax, hydro- or hemothorax);
- reading x-rays: X-ray examination of the esophagus and stomach, large and small intestine;
- digital examination of the rectum;
- assessment of rectoromanoscopy results.

3. Contents of the program

The main duties and professional actions of the doctor of the surgical department of the hospital:

Topic 1. Principles of organization of planned and emergency surgical care in Ukraine.

Topic 1. Improving the skills of clinical, laboratory-instrumental diagnostics and treatment tactics of the main surgical diseases in hospital conditions.

Topic 2. Mastering the skills of providing emergency medical care for urgent surgical diseases.

Topic 3. Application of the principles of ethics and deontology in the practice of the doctor of the surgical department.

Topic 4. Provision of emergency medical care for urgent surgical diseases in wartime conditions.

4. Structure control

Topic	Hours					
	Total	Including				
		Lectures	Seminars	Practical	Laboratoric	SWS
Topic 1. Principles of organization of planned and emergency surgical care in Ukraine.	12			6		6
Topic 1. Improving the skills of clinical, laboratory-instrumental diagnostics and treatment tactics of the main surgical diseases in hospital conditions.	10			4		6
Topic 2. Mastering the skills of providing emergency medical care for urgent surgical diseases.	14			6		8
Topic 3. Application of the principles of ethics and deontology in the practice of the doctor of the surgical department.	14			4		10
Topic 4. Provision of emergency medical care for urgent surgical diseases in wartime conditions.	7			2		5
<i>Practical skills exam</i>	3			3		
Total	60			25		35

5. Topics of lectures / seminars / practical / laboratory classes

5.1. Topics of lectures

Lectures are not provided.

5.2. Topics of seminar classes

Seminar classes are not provided.

5.3. Topics of practical classes

№	Topic	Hours
1	Topic 1. Principles of organization of planned and emergency surgical care in Ukraine	5
2	Topic 1. Improving the skills of clinical, laboratory-instrumental diagnostics and treatment tactics of the main surgical diseases in hospital conditions.	5
3	Topic 2. Mastering the skills of providing emergency medical care for urgent surgical diseases.	5
4	Topic 3. Application of the principles of ethics and deontology in the practice of the doctor of the surgical department	5
5	Topic 4. Provision of emergency medical care for urgent surgical diseases in wartime conditions	2
6	<i>Practical skills exam</i>	3
Total hours		25

5.4. Topics of laboratory classes

Laboratory classes are not provided.

6. Independent work of a getter of higher education

№	Practical skills	Hours
1	Anamnesis data evaluation, patient's examination: inspection, palpation, percussion, auscultation, rectal finger research	4
2	Evaluation of instrumental and laboratory investigations data (X- ray, USR, CT, FECS, colonoscopy)	4
3	Establishment and formulation of clinical diagnosis, conducting of differential diagnostics of abdominal organs diseases	4
4	Determination of conservative and operative treatment plan depending on pathogenic factors and patient's condition.	1
5	Peculiarities of assistance during planned and urgent operations	1
6	Peculiarities of assistance in dressing- room: wound care, stitches removing treatment of purulent wound, dressing, drainage tubes care	2
7	Taking part in diagnostics and internal bleeding arrest, septic shock, etc., correction of water- electrolytes disturbances	18

8	Taking part in diagnostic and curative procedures (paracentesis, pleural puncture, immobilizing bandages creation)	1
	Total	35

7. Teaching methods

Practical classes: when conducting a practical class, an oral interview, solving situational problems, solving typical and atypical situational problems are expected, training of relevant practical skills and professional skills on simulation models takes place under the supervision of the teacher.

Independent work: independent work with recommended basic and additional literature, with electronic information resources, independent work with the Step-2 test task bank, independent mastering of communication algorithms with surgical patients.

8. Evaluation criteria

Control methods and criteria for evaluating learning outcomes

Current control: oral survey, testing, assessment of performance of practical skills, solution of situational clinical tasks, assessment of activity in class.

Final control: testing, differential assessment.

The structure of the current assessment in the practical session:

1. Evaluation of theoretical knowledge on the subject of the lesson:

- methods: survey, solving a situational clinical problem, test tasks;
- maximum score – 5, minimum score – 3, unsatisfactory score – 2.

2. Evaluation of practical skills and manipulations on the subject of the lesson:

- methods: assessment of the correctness of the performance of practical skills
- maximum score – 5, minimum score – 3, unsatisfactory score – 2;

3. Evaluation of work with the patient on the subject of the lesson:

- methods: assessment of: a) communication skills of communicating with the patient and his parents, b) clinical examination methods; c) the correctness of the appointment and assessment of laboratory and instrumental studies, d) compliance with the differential diagnosis algorithm, e) substantiation of the clinical diagnosis, e) drawing up a treatment plan - maximum score – 5, minimum score – 3, unsatisfactory score – 2;

The grade for the lesson is the arithmetic average of all components and can only have an integer value, namely 5, 4, 3, 2.

Current assessment criteria for practical training:

Mark	Evaluation criteria
«excellent» «5»	The student of higher education is fluent in the material, actively participates in the discussion and solution of the situational clinical problem, test tasks, confidently demonstrates practical skills during the examination of a

	surgical patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking
«good» «4»	The student of higher education has a good command of the material, participates in the discussion and solution of the situational clinical problem, test tasks, demonstrates practical skills during the examination of a surgical patient and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the topic classes that demonstrate clinical thinking
«satisfactorily» «3»	Estimation "satisfactorily" belongs to the getter on the basis of his knowledge of all volume of the program from an object and satisfactory level of understanding of him. A getter is able to decide the simplified tasks by the resulted questions; decides tasks and executes practical skills, feeling complications in simple cases; notable independently systematic to lay out answer, but on the straight put questions answers correctly
«unsatisfactorily» «2»	Estimation is «unsatisfactorily» proposed in the cases when knowledge of ability of getters are not correspond to the requirements of "satisfactory" estimations.

The structure of the assessment of independent individual work - educational history of a surgical patient:

1. Evaluation of work with the patient:

- a) communicative skills of communication with the patient, b) correctness of the algorithm of clinical examination of a surgical patient, c) appointment and evaluation of laboratory and instrumental studies, d) compliance with the algorithm of differential diagnosis, e) substantiation of the clinical diagnosis, e) drawing up a treatment plan;

- maximum score – 5, minimum score – 3, unsatisfactory score – 2;

2. Evaluation of medical documentation management: e) quality and consistency of medical history of a surgical patient:

- maximum score – 5, minimum score – 3, unsatisfactory score – 2;

The score for medical history is the arithmetic mean of all components and can only have an integer value, namely 5, 4, 3, 2.

Assessment of learning outcomes during differentiated assessment

The applicant is admitted to the differential credit provided that the requirements of practice are fulfilled and if he received at least 3.00 points for the current educational activity.

Differential crediting is carried out upon completion of industrial medical practice. Differential assessment is carried out at the last lesson, through an oral and written survey, two situational and practical problems.

Each candidate must demonstrate 2 practical skills on a patient at the request of the curator (a list of skills is attached), interpret the data of laboratory and instrumental studies of patients presented in the practice diary, and justify the principles of diagnosis and treatment.

Criteria for evaluating the results of practical training by students during differentiated assessment

Mark	Evaluation criteria
«excellent» «5»	The student completed all the tasks correctly, accurately and completely, clearly and logically answered the questions posed by the examiners (defense of the history of the surgical patient). Thinks logically and constructs an answer, freely uses acquired theoretical knowledge when analyzing practical tasks. When demonstrating medical manipulations from surgery (according to list 5) on phantoms, he correctly demonstrated the implementation of practical skills, strictly followed the algorithm of their implementation.
«good» «4»	The student completed all the tasks in a sufficiently complete manner, clearly and logically answered the questions posed by the examiners (defense of the history of the surgical patient). Thinks logically and constructs an answer, uses acquired theoretical knowledge when analyzing practical tasks. But when teaching some questions, there is not enough depth and argumentation, it makes insignificant mistakes, which are eliminated by the applicant himself when the examiner points them out. During the demonstration of medical manipulations from surgery (according to list 5), he made minor errors in the algorithm and technique of performing the skills, which were corrected at the instruction of the teacher.
«satisfactorily» «3»	The learner incompletely completed all the tasks, the answers to additional and leading questions are vague and vague (protection of the history of the surgical patient). Experiences significant difficulties in constructing an independent logical answer, in applying theoretical knowledge in the analysis of practical tasks. There are significant errors in the answers. During the demonstration of medical manipulations from surgery (according to list 5), significant errors were made in the algorithm and technique of performing the skill.
«unsatisfactorily» «2»	The student did not complete the task, in most cases did not answer additional and leading questions of the examiners (protection of the history of the surgical patient). Answers to questions are fragmentary, inconsistent, illogical, cannot apply theoretical knowledge when analyzing practical tasks. There are a significant number of gross errors in the answers. When demonstrating medical manipulations from surgery (according to list 5), he did not demonstrate or made gross mistakes in the algorithm and technique of performing skills.

9. Distribution of points received by higher education applicants

The grade for the discipline consists of 50.0% of the grade for current academic performance and 50.0% of the grade for differential credit.

The average score for the discipline is translated into a national score and converted into points on a multi-point scale (200-point scale).

The conversion of a traditional grade for a discipline into a 200-point grade is carried out by the information and computing center of the university using the "Contingent" program according to the formula:

Average success score (current success in the discipline) x 40

National score for a discipline	Sum of points for a discipline
«5»	185-200
«4»	151-184
«3»	120-150

According to the ECTS rating scale, the achievements of students from the educational component who are studying in the same course of the same specialty are evaluated, according to the points they received, by means of ranking, namely:

Conversion of the traditional grade from the discipline and the sum of points on the ECTS scale

Evaluation on the ECTS scale	Statistical indicator
A	Top 10% achievers
B	The next 25% of earners
C	The next 30% of earners
D	The next 25% of earners
E	The next 10% of earners

10. Methodological support

- Working program of the academic discipline.
- Syllabus.
- Methodical developments for practical classes.
- Methodical recommendations for independent work of higher education applicants.
- Multimedia presentations.
- Situational clinical tasks.
- Scenarios of role-playing games (if necessary).
- Electronic bank of test tasks by subdivisions of the discipline.

11. Questions for preparing for the final control:

1. Principles of providing surgical care in Ukraine in peacetime and wartime.
2. Medical care for a surgical patient.
3. Clinical, laboratory-instrumental diagnostics and treatment tactics in abdominal surgery.
4. Emergency conditions in emergency surgery (acute bleeding, open and closed abdominal trauma, pneumothorax)
5. Clinical, laboratory-instrumental diagnostics and treatment tactics for acute appendicitis.

6. Clinical, laboratory-instrumental diagnostics and treatment tactics for acute cholecystitis and mechanical jaundice.
7. Clinical, laboratory-instrumental diagnostics and treatment tactics for acute pancreatitis.
8. Clinical, laboratory-instrumental diagnostics and tactics of treatment of acute intestinal obstruction.
9. Clinical, laboratory-instrumental diagnostics and treatment tactics for a pinched hernia.
10. Clinical, laboratory-instrumental diagnostics and treatment tactics for gastrointestinal bleeding.
11. Determination of the plan of conservative and operative treatment depending on the pathogenetic factors and severity of the patient's condition.
12. Provision of emergency medical care for traumatic pneumothorax.
13. Provision of emergency medical aid in case of a closed abdominal injury (rupture of a parenchymal organ).
14. Provision of emergency medical care for bleeding in the abdominal cavity.
15. Provision of emergency medical aid for soft tissue injuries and external bleeding.
16. Provision of emergency medical aid in case of an open injury of the abdominal cavity.
17. Provision of emergency medical aid in case of an open chest injury.
18. Method of performing laparocentesis.
19. Pleural puncture technique.
20. Principles of ethics and deontology in the practice of a surgical department doctor.

12. Recommended literature

Main:

1. Bailey & Love's Short Practice of Surgery, 27th Edition ,Edited By Norman S. Williams, P. Ronan O'Connell, Andrew McCaskie, ISBN 9781498796507; Published March 21, 2018 by CRC Press; 1632 Pages
2. Schwartz's principles of surgery. Brunicaudi, F. C., Andersen, D. K., Billiar, T. R., Dunn, D. L., Hunter, J. G., Kao, L. S., Matthews, J. B., ... Pollock, R. E. (2019). New York: McGraw-Hill. 2069 pages
3. Sabiston Textbook of Surgery – Elsevier eBook on VitalSource, 20th Edition by Courtney M. Townsend, JR,MD, R. Daniel Beauchamp, MD, B. Mark Evers, MD and Kenneth L. Mattox, MD; 2176 pages
4. Atlas of General Surgical Techniques by Courtney M. Townsend Jr., B. Mark Evers; Published March 5th 2010 by W.B. Saunders Company; 1200 pages

Adittional:

1. Principles and Practice of Infectious Diseases. 2-Volume set / J.E. Bennet, R. Dolin, M.J. Blaser – 8-th edition : Saunders Publisher.- 2014.
2. USMLE Step 2 CK Lecture Notes.- Internal Medicine (Kaplan Test Prep). - 2016. -Published by Kaplan Medical. - 474 pages.

13. Electronic information resources

- a. <https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-proces.pdf>
- b. [https://onmedu.edu.ua/wp-content/uploads/2020/08/Navchalnij-plan Medicina.pdf](https://onmedu.edu.ua/wp-content/uploads/2020/08/Navchalnij-plan_Medicina.pdf)
- c. <https://surgical-school.com.ua/index.php/journal/issue/view/37>
- d. <https://surgical-school.com.ua/index.php/journal/issue/view/38>
- e. <https://www.modscires.pro/index.php/msr/issue/view/msr13-02>
- f. <https://www.msmanuals.com/uk/professional/injuries-poisoning/abdominal-trauma/overview-of-abdominal-trauma>
- g. <https://ojs.tdmu.edu.ua/index.php/surgery/article/download/11793/11156>
- h. <http://dspace.zsmu.edu.ua/bitstream/123456789/2589/1/%D0%9D%D0%95%D0%92%D0%86%D0%94%D0%9A%D0%9B%D0%90%D0%94%D0%9D%D0%90%20%D0%A5%D0%86%D0%A0%D0%A3%D0%A0%D0%93%D0%86%D0%AF%20.pdf>
- i. <https://resource.odmu.edu.ua/chair/download/117027/Ikurywq-rifJSyLzArpKFQ.doc>

Addition 1

Report about practice passing on surgery (Current control)

Student of the _____ group _____ faculty
Course _____
Hospital _____ City _____

List of skills and abilities	Amount of skills	Marks
1 . Daily patients observation	1-2	
2. Making diagnosis, preparing cases of histories	1-3	
3. Urgent duties	1	
4. Assistance during planed and urgent operations	1-2	
5. Laboratory data evaluation (blood and urine tests) and biochemical data (bilirubin, proteins, amylase, electrolytes, coagulation, etc.) in surgical department	1-3	
6. Instrumental data evaluation (X- ray, CT, USR, FGDS, colonoscopy etc.) in surgical department	1-3	
7. Working in dressing- room: treatment of purulent wound, dressing, drainage tubes care	1	
8. Working in dressing- room: wound care, stitches removing	1-2	
9. Patient's preparing for planned and urgent operative treatment	1-2	
10. Taking part in diagnostics and internal bleeding arrest, septic shock, etc.	1-2	
Total		

Master's signature _____

Addition 2

Diary of practice passing on surgery

Student of the _____ group _____ faculty

Course _____

Time of practice passing: from _____ 202_ till _____ 202_.

Place of practice passing: _____ City _____

Base master _____

Principal doctor _____

Date	Done work	Done practical skill

Master's signature _____