MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Petro Mohyla Black Sea National University

Medical Institute
Department therapeutic and surgical Dr ysts yplin

"APPROVE "
The first vice-rector
Ishchenko NM

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CURRICULUM WORK PROGRAM

GENERAL SURGERY

Industry knowledge 22 "Health Care "
Specialty 222 "Medicine"

Developer	Frolov Yu. A.
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Guarantor of the educational program	Klimenko MO
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1. Description of the discipline

Characteristic	**Characteristics of the discipline**	
Name of discipline	General surgery	
Branch of knowledge	22 "Health care"	
Specialty	222 "Medicine"	
Specialization (if any)		
Educational program	Medicine	
Level of higher education	Master	
Discipline status	Normative	
Curriculum	3 rd	
Academic year	2021 /2022	
Semester numbers:	Full-time	Correspondence form
	5th - 6th	-
Total number of ECTS credits / hours	4.5 credits / 1 35 hours	
Course structure: - l ektsiyi - practical classes - hours of independent work of students	Full-time	Correspondence form
	17.5 (7.5 / 10) 55 (15 / 40) 63 (37 / 26)	
Percentage of classroom load	54%	
Language of instruction		
Form of intermediate control (if any)	Certification for the 5th semester	
Form of final control	Exam - 6th semester	

2. Purpose, tasks and planned results of studying the discipline

The purpose of teaching / studying the discipline "General Surgery" is for students to master the measures for the organization of the sanitary-epidemic regime in the surgical clinic; types of dressings and methods of its application. Know the types of bleeding and ways to stop it temporarily and finally; transfusion of donor blood components, complications of blood transfusion and their prevention; basics of anesthesiology and resuscitation; clinic, diagnosis, first aid. Principles of treatment for traumatic injuries; general issues of surgical infection; clinic, diagnosis, treatment, prevention of certain types of surgical infection; basics of transplantology, basics of clinical oncology; methodology of examination of a surgical patient.

Learning objectives:

- acquisition by the student of competences, knowledge, abilities and skills for implementation of professional activity on a specialty concerning:
- mastering systematic knowledge on the organization of surgical care and prevention of the spread of nosocomial infection;
- formation of practical skills in the use of dressings;
- mastering the skills of caring for surgical patients;
- acquaintance with the principles of local and general anesthesia, mastering the algorithms for diagnosing terminal conditions, clinical death and conducting activities for basic life support;
- acquaintance with the basics of transfusiology and mastering the methods of transfusion of donor blood components and ensuring the prevention of blood transfusion complications;
- mastering the ability to diagnose various traumatic injuries and provide them with first aid, mastering the principles of treatment of traumatic injuries in the hospital;
- mastering general knowledge about surgical infection, the ability to diagnose surgical infectious diseases; mastering the principles and features of treatment of various surgical infectious processes and methods for their prevention;
- acquaintance with the basics of transplantology;
- mastering knowledge of the basics of clinical oncology;
- formation of practical skills for examination of a surgical patient and registration of its results in the medical card of an inpatient.

Prerequisites for studying disciplines and (interdisciplinary connections).

The discipline "General surgery" is based on the knowledge obtained by students in the study of basic subjects , like anatomy, histology, physiology, pathological morphology , pathophysiology, propaedeutics internal medicine, pharmacology, and lays the foundation for the study of clinical surgery, traumatology and orthopedics, urology , neurosurgery, obstetrics and gynecology, anesthesiology, resuscitation and other disciplines involving the use of surgical treatments.

Expected learning outcomes. As a result of studying the discipline, students have:

- ahis her you're basically and measures and necessary and to organize work in the surgical department and the Prevention of emergence and spread of nosocomial infections
- acquire a practical and navych ing with bandager with various dressing materials
- acquire a practical and navych pocket for first aid in conditions such as bleeding, closed damage soft tissues, bone fracture, dislocation syndrome long stys ment, wounds, burns, frostbite
- acquire a practical and navych ing for preparing and carrying gear sfuziyi components of blood donor
- learned you have knowledge ing the foundations of local and general anesthesia, and gain the ability to choose the method of anesthesia depending on the patient and available surgical pathology
- acquire a practical and navych and for the diagnosis and differential diagnosis in a variety of surgical infection, obtain skills for choosing treatment program and means pro aktyky with surgical infection

- learned you knowledge tion of application features various grafts of ethical and Juridical ychni aspects of transplantation
- Acquired and navych ing and BMI ting for examination and surgical patient registration results ve dpovidniy medical records forming ethical and deontological

- ***KNOW*** :
  - modern concepts of domestic and foreign theoretical and practical surgery
  - basic principles of organization of surgical care for the population of Ukraine
  - basics of the organization of a rational mode and treatment of the surgical patient
  - general elements of care for surgical patients
  - theoretical aspects of dressings and methods of its application
  - theoretical foundations of modern antiseptics
  - theoretical aspects of prevention of the occurrence and spread of in-hospital
  - infections; classification, clinical manifestations, consequences of bleeding, methods of temporary and final stop
  - bleeding, theoretical and practical aspects of transfusion of donor blood products and blood substitutes
  - complications during blood transfusion, measures for their prevention and treatment;
  - basics of anesthesiology
  - basics of resuscitation, clinical manifestations of terminal conditions, their diagnosis, stages and measures
  - during cardiopulmonary resuscitation; general issues of traumatology , oncology and transplantology
  - means and methods of transport immobilization
  - theoretical aspects of wounds and wound process, wound healing
  - general issues of surgery and HIV infection
  - clinic, diagnosis and treatment of certain purulent-inflammatory soft tissue diseases,
  - tendons, bones and joints; methods of examination of the patient, features of examination of the patient with surgical pathology
  - the structure of the inpatient medical card ;

- ***BE ABLE TO:***
  - apply a bandage to different parts of the body
  - apply a plaster splint
- Choose a vehicle for transport immobilization, put on a tire Cramer, Diterix
- To disinfect various tools and care items
- To organize appropriate sanitary and epidemiological conditions for different premises of the surgical department
- Perform subcutaneous, intramuscular injections, perform venipuncture, make
- Intravenous catheter, set up a system for transfusion of blood substitutes and donor blood components; perform catheterization of the bladder with a soft catheter, put a cleansing and siphon
- Enema, gastric lavage with a probe; prepare the operating field;
  - apply measures to prevent bedsores;
  - to carry out differential diagnosis at bleeding, to reveal signs of development of hemorrhagic
  - shock; apply methods of temporary cessation of bleeding, choose a method for final cessation
  - bleeding; to determine the blood group according to the ABO and Rh system , to conduct tests for individual compatibility
  - blood of the recipient and donor, select compatibility tests for transfusion of donor blood components, organize and conduct transfusion of erythrocyte mass, fresh-frozen plasma; choose an adequate method of anesthesia for a particular intervention;
  - to carry out diagnostics of terminal states, to carry out measures of elementary support
  - life; diagnose various traumatic injuries;
  - provide first aid for various traumatic injuries;

- choose surgical tactics in the treatment of various stages of the wound process;
- to choose means for local application at treatment of wounds depending on a stage
- wound process; to diagnose various infectious surgical processes, to carry out between them
- differential diagnosis; to diagnose a purulent-necrotic stage of development of an infectious surgical disease;
- choose appropriate surgical tactics for different stages of surgical infection;
- to make the medical program at various infectious surgical diseases;
- to collect anamnesis and objective examination of the surgical patient;
- to issue a card of an inpatient for a patient with surgical pathology.

COMPETENCE :

The developed program corresponds to the ***educational-professional program (OPP)*** and is focused on the formation of ***competencies:***

- general (GC) - GC1-GC 3 OPP :

GC 1. Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge.

GC 2. Ability to apply knowledge in practical situations.

GC 3. Knowledge and understanding of the subject area and understanding of professional activity.

- professional competence and (PC) - PC 1- PC 9, 11, 14, 15 , 18 OPP :

- Patient interviewing 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 treatment of diseases.
- Ability to diagnose emergencies.
- Ability to determine the tactics of emergency medical care.
- Skills in providing emergency medical care.
- Skills to perform medical manipulations.
- Ability to carry out sanitary and hygienic and preventive measures.
- Ability to plan and conduct preventive and anti-epidemic measures against infectious diseases.
- Ability to keep medical records.

Program learning outcomes (PLO). PLO 11, 13 - 18, 22, 25, 28 , 30, 32, 33, 35, 41

- Collect data on patient complaints, medical history, life history (including professional history), in a health care facility, its unit or at the patient's home, using the results of the interview with the patient, according to the standard scheme of the patient. Under any circumstances (in the health care facility, its unit, at the patient's home , etc.), using knowledge about the person, his organs and systems.
- In a health care facility, its unit and among the attached population: be able to identify and record the leading clinical symptom or syndrome by making an informed decision, using preliminary history of the patient, physical examination of the patient, knowledge about the person, his organs and systems, Being able to establish the most probable or syndromic diagnosis of the disease by making an informed decision, for the patient and the patient's examination, based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.
- Determine the necessary mode of work and rest in the treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field, on the basis of preliminary clinical diagnosis, using knowledge about a person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.
- Determine the necessary medical nutrition in the treatment of the disease (according to list 2), in a health care facility, at home of the patient and at the stages of medical evacuation, including in the field

on the basis of previous clinical diagnosis, using knowledge about the person, its bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- To determine the nature of treatment (conservative, operative) of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a previous clinical diagnosis, using knowledge of man, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.
- To determine the principles of treatment of the disease (according to list 2), in a health care facility, at home and at the stages of medical evacuation, including field conditions, based on a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.
- Establish a diagnosis (according to list 3) by making an informed decision and assessing the human condition, under any circumstances (at home, on the street, health care facilities, its units), including in emergencies, in the field conditions, in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.
- Perform medical manipulations (according to list 5) in a medical institution, at home or at work on the basis of previous clinical diagnosis and / or indicators of the patient's condition, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by adopting reasonable solutions and using standard techniques.
- To form, in the conditions of a health care institution, its division on production, using the generalized procedure of an assessment of a state of human health, knowledge of the person, its bodies and systems, adhering to the corresponding ethical and legal norms, by acceptance of the reasonable contingent, among the fixed contingent people:

dispensary groups of patients;

groups of healthy people subject to dispensary supervision (newborns, children, adolescents, pregnant women, representatives of professions that must undergo a mandatory dispensary examination)

- Organize secondary and tertiary prevention measures among the assigned contingent of the population, using a generalized procedure for assessing human health (screening, preventive medical examination, seeking medical care), knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms , by making an informed decision, in a health care facility, in particular:

to form groups of dispensary supervision;

to organize medical and health-improving measures differentiated from the group of medical examination.

- Carry out in the conditions of a health care institution, its subdivision:

detection and early diagnosis of infectious diseases (according to list 2);

primary anti-epidemic measures in the center of an infectious disease.

- In the health care institution, or at the patient's home on the basis of the obtained data on the patient's health, using standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making an informed decision:
  - determine the tactics of examination and secondary prevention of patients subject to dispensary supervision;
  - determine the tactics of examination and primary prevention of healthy individuals subject to dispensary supervision;
  - calculate and prescribe the necessary food for children in the first year of life

- To determine the presence and degree of restrictions on life, type, degree and duration of disability with the issuance of relevant documents in a health care institution on the basis of data on the disease and its course, features of professional activity.

- On the territory of service according to standard methods of descriptive, analytical epidemiological and medical-statistical researches:
  - conduct screening for the most important non-communicable diseases;
  - evaluate in the dynamics and in comparison with the average static data indicators of morbidity, including chronic non-communicable diseases, disability, mortality, integrated health indicators;

  identify risk factors for the occurrence and course of diseases;

  to form risk groups of the population.
- In the conditions of a health care institution or its subdivision according to standard methods:
  - select and use unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine;
  - participate in the development of local protocols for medical care;
  - control the quality of medical care on the basis of statistical data, expert evaluation and sociological research data using indicators of structure, process and results of activities;
  - identify factors that hinder the improvement of the quality and safety of medical care.

Curriculum of the discipline

The educational process is organized according to the European Credit Transfer and Accumulation System (ECTS).

The curriculum consists of two blocks:

BLOCK 1. INTRODUCTION TO SURGERY. DESMURGY. FUNDAMENTALS OF SANITARY AND EPIDEMIC REGIME IN THE SURGICAL CLINIC. URGENT SURGICAL CONDITIONS. FUNDAMENTALS OF TRANSFUSIOLOGY, ANESTHESIOLOGY AND RESUSCITATION

Section 1. Desmurgia. Antisepsis. Asept ika. Bleeding. Blood transfusion. T traumatic injuries.

Topics :

1 **.** Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest.

2. Desmurgia. Bandages on the abdomen, perineum, lower extremity. Plaster technique.

3. Antiseptics. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.

4. Nosocomial infection. Sanitary epidemic - logical mode. Asepsis.

5. Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.

Section 2. Bleeding, blood loss. Fundamentals of transfusiology

Topics:

6. Bleeding and blood loss. Methods of temporary and final cessation of bleeding.

7. Blood transfusion. Determination of blood groups by ABO and Rh-factor systems. Samples for individual compatibility by ABO and Rh-factor systems, biological test.

8. Operation hemotrans - fusion. Features of transfusion of various components of blood.

9. Complications hemotran - sfuziyi and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application.

Section 3 . Fundamentals of anesthesiology and resuscitation

Topics:

10. Local znebolyuvan - tion. See. Indications, protypoka - Zanni, complications.

11. General znebolyuvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention.

12. Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation.

Section 4 . Traumatic injuries

Topics:

13. Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment.

14. Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of treatment

15. Polytrauma. Multiple injuries combined and combi - President dieter f injury. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment

16. Wounds, definition, classification. Wound structure and course of the wound process. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially treatment.

17. Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound.

18. Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures.

19. Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.

20. Freezing. Classes - fikatsiya. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features.

Block 2 **SURGICAL INFECTION. MORTIFICATION. FUNDAMENTALS OF TRANSPLANTOLOGY AND CLINICAL ONCOLOGY. METHODS OF EXAMINATION OF SURGICAL PATIENTS**

Section 1 . Traumatic injuries

Topics:

21. General questions of surgical infection, classi - tion; surgical infectious pathogens - tion; translocation. Pathogenesis of local and general reactions of the organism during surgical - It infection. Principles diag - tics and treatment. Abscess, Flag - Mona.

22. Acute suppurative incidence - ing soft tissues boil, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas

23. Felon. Phlegmons of the hand. Features of the anatomical structure of the hand. Etiology, patohe - Nez, clinical diagnostics, medi - ting. Lymphangitis, lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment.

24. Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention

25. To spend. Anthrax. Wound diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations.

26. Surgical sepsis (Sepsis-3): definition, etiolo - Gia, classification, pathogenesis, clinical manifestations, diagnosis, treatment. Septic shock. Multiple organ failure syndrome. Dezintoksyka - tional therapy and immunotherapy.

27. Mortification. Necrosis. Gangrene. Ulcers. Fistulas. Causes. Clinical manifestations, diagnosis, treatment

Section 2 . Fundamentals of transplantology and clinical oncology.

Topics:

28. Transplantology. Classification of grafts. Features of application of different types of grafts. Deontological aspects, legal bases of transplantation.

29. Tumors. Etiology, pathogenesis. Benign and malignant tumors. Histohene - cal, morphological, clinical and International (TNM) classification. Clinical groups of cancer patients. Clinical manifestations. Diagnostic methods. Principles of treatment.

Section 3 . Methods of examination and supervision of a surgical patient.

Topics:

30. Survey surgical - tion of the patient. Collection of complaints, Anam - imperfecta disease and life. Objective examination of the head, neck, chest. Abdomen, musculoskeletal system, blood vessels, lymph nodes.
31. Curation of a surgical patient (first lesson).
32. Curation of a surgical patient
33. Protection of medical history

BLOCK 1.

INTRODUCTION TO SURGERY. DESMURGY. FUNDAMENTALS OF SANITARY AND EPIDEMIC REGIME IN THE SURGICAL CLINIC. URGENT SURGICAL CONDITIONS. FUNDAMENTALS OF TRANSFUSIOLOGY, ANESTHESIOLOGY AND RESUSCITATION

Section 1. Desmurgia. Antisepsis. Asepsis. Bleeding. Blood transfusion. Traumatic injuries.

Topics and :

1. Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest.

D e surgery as a section of surgery. History. Bandage and dressing. Dressing material. Klasifikatsiya: t ysnuchi bandages , and mmobilizuyuchi, for oryhuyuchi, at klyuziyni, Mr ov'yazky of recovery. Dependent on material and localization. Types and properties of dressings. Rules for applying bandages. Typical bandages are circular, spiral, eye, bridle .

2. Desmurgia. Bandages on the abdomen, perineum, lower extremity. Plaster technique.

Visimkopodibna or crosswise, for olosopodibna bandage . Bandage on the thumb . Bandage Deso, Vilpo, Hippocrates. Bentless bandages: adhesive, scarves, leukocyte . Suspensory. Tire bandages. Types of plaster bandages: splint, circulatory, window, bridge , corset, crib . Technique of applying mouth bandages. Basic requirements for plaster casts.

3. Antiseptics. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.

Ant and septic tanks, history of development: Abu Ali Ibn Sina (Avicenna), 980-1037, Paracelsus (1493–1541), Ambroise Paré (1510–1590), M.I. Pirogov (1810–1881), Joseph Lister, Semmelweiss, Louis Pasteur (1822–1895) Types of antiseptics: physical, mechanical, chemical, biological. Types of antiseptics: halides (halide-containing), alcohol-containing, oxidants, dyes, acids, alkalis, salts of heavy metals, aldehyde-containing preparations, surfactants (detergents), guanide-containing preparations, phenol-containing preparations, antiseptics of natural origin. The use of antiseptics in the treatment of: premises, tools, hands of a medical worker, biological materials.

4. Nosocomial infection. Sanitary epidemic - logical mode. Asepsis.

Nosocomial infection as a problem of a surgical hospital. Reasons: violation of the rules of personal hygiene, disinfection of tools, air disinfection, personal protective equipment (masks, respirators, gloves, goggles).

Sanitary and anti-epidemic regime - as a set of organizational, sanitary-preventive, hygienic and anti-epidemic measures aimed at preventing nosocomial infection. Methods of infection transmission: contact, airborne, transmissible (with the introduction of drugs, blood, food, through a living vector) .

A sept i ka. At AIN and purposes as : protection of the patient and especially wounds from contact with the outer bacterial contaminated environment; destruction of microorganisms by physical, chemical, biological and mechanical methods on anything that may come into contact

with the patient's wound, as well as on objects that can be a source of nosocomial infection. The basic law of asepsis "Everything that comes into contact with the wound must be free of bacteria."

5. Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.

The concept of surgery. Classification of surgical operations by features of performance, purpose, purpose, stages, etc. The main stages of surgery. Determination of the preoperative period, its duration and tasks. Features of preparation of patients for emergency, urgent and planned operations. Preoperative period: skin care of the patient, rehabilitation of the oral cavity, shaving hair, bowel cleansing with enemas, hygiene of linen and clothing of patients. The main aspects of patient care in the postoperative period, prevention of possible complications. Nutrition of patients. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery

Section 2. Bleeding, blood loss. Fundamentals of transfusiology.

6. Bleeding and blood loss. Methods of temporary and final cessation of bleeding.

Definition and classification of bleeding. Determination of blood loss, methods for determining the amount of blood loss, classification of blood loss depending on its size. Adaptive pathophysiological changes in blood loss. The mechanism of self-stopping bleeding. Methods of temporary cessation of bleeding (finger pressure, pressure bandage, twist, tourniquet, etc.). Methods of final cessation of bleeding: mechanical, physical, biological. The concept of vascular suture. Ways to restore the integrity of the damaged main channel.

7. Blood transfusion. Determination of blood groups by ABO and Rh-factor systems. Samples for individual compatibility by ABO and Rh-factor systems, biological test.

History of blood transfusion. Aspects of the doctrine of blood groups. Methods for determining blood group by ABO and Rh-factor systems. The method of determining the individual compatibility of the ABO system, options for determining the individual compatibility of the Rh-factor system. Biocompatibility testing.

8. Operation blood transfusion. Features of transfusion of various components of blood .

Indications and contraindications to blood transfusion and its components. Ways and methods of blood transfusion .. The mechanism of action of transfused blood and its components. Macroscopic determination of blood product quality before transfusion. Classification of drugs containing blood components. Organization and conduct of blood transfusion surgery. Filling in the blood transfusion protocol.

9. Complications of blood transfusion and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application.

Complications during transfusion of blood components, their classification, pathogenesis, clinic, differential diagnosis. Blood transfusion shock, clinic, diagnosis, principles of treatment. Prevention of complications during blood transfusion. Aspects of prevention of infectious disease transmission by transfusion of blood components. Blood substitutes, their classification, indications for use, methods of application.

Section 3. Fundamentals of Anesthesiology and Intensive Care.

10. Local anesthesia. See. Indications, contraindications, complications.

Determination of local anesthesia. Varieties of local anesthesia (superficial, layered infiltrative, regional, subarachnoid, epidural, intraosseous). Drugs and their doses for local

anesthesia. Indications, contraindications for the use of various methods of local anesthesia. Possible complications during local anesthesia and their prevention.

11. General anesthesia. Inhalation and non-inhalation anesthesia. Indications and contraindications. Complications and their prevention.

Determination of general anesthesia. Varieties of general anesthesia. Indications and contraindications for different types of anesthesia. The concept of premedication. Preparations for inhalation and non-inhalation anesthesia. Mask anesthesia, methods. Stages of ether anesthesia. Structure of the device for inhalation anesthesia. Types of respiratory circuits. Algorithm for endotracheal anesthesia. Varieties of non-inhalation anesthesia, application. Features of non-inhalation anesthesia. Possible complications of general anesthesia and their prevention.

12. Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation.

Definition of resuscitation. Urgent conditions and their clinical manifestations. Clinical death: clinic, diagnosis. Stages of resuscitation measures in clinical death according to Safar and their purpose. Indications and techniques for basic life support (CAB). Monitoring the effectiveness of basic life support measures. Testing the algorithm of actions in the diagnosis of clinical death and carrying out measures of basic life support. Ethical and legal aspects of resuscitation.

Section 4. Traumatic injuries.

13. Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment.

The concept of injury. Types of soft tissue damage: bruising, concussion, rupture. Pathomorphological and pathophysiological aspects of closed soft tissue injuries. Clinical manifestations, diagnosis, differential diagnosis of closed soft tissue injuries. Clinical manifestations of closed damage to the brain, chest organs, abdominal organs, organs of the urinary system. First aid and features of transportation of victims with various closed soft tissue injuries. Prevention of traumatic shock. Principles of treatment of soft tissue injuries in the hospital.

14. Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of treatment.

Determination of bone fracture. Classification of fractures. The mechanism of fracture and its effect on the displacement of bone fragments. Pathophysiological and pathomorphological aspects of bone regeneration in fracture. Clinical manifestations of cat fractures, methods of instrumental diagnosis of fractures. Tasks and algorithm of first aid for bone fractures. Prevention of traumatic shock at the prehospital stage of care for the victim with a fracture. Means of transport immobilization and features of their application at bone fractures. Principles of treatment of bone fractures in the hospital.

Determination of dislocation. Classification of dislocations. Pathophysiological and pathomorphological aspects of dislocation. Clinical manifestations and diagnosis of dislocation. Elements of first aid for dislocation. General conditions for repositioning in dislocation and methods of repositioning depending on the location of the dislocation. Principles of treatment of dislocation.

15. Polytrauma. Multiple injuries, combined and combined injuries. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment.

Definition of polytrauma, classification. Modern methods of diagnosis and treatment in conditions of hostilities and natural disasters. Traumatic shock: pathogenesis, clinical manifestations, diagnosis, principles of prevention of development and treatment at the prehospital and hospital stages of care for the victim. Prolonged compression syndrome: definition,

pathophysiological and pathological aspects, clinical manifestations, classification, diagnosis. Algorithm of first aid for long compression syndrome. Principles of hospital treatment.

16. Wounds, definition, classification. Wound structure and course of the wound process. Features of modern gunshot wound and mine damage. Accidental contaminated wound: conditions for the development of the infectious process in the wound and their elimination (PHO). Clean postoperative wounds, features of treatment.

Wound determination, wound structure, wound classification, characteristics of different types of wounds. Pathophysiological and pathomorphological aspects of the wound. Elements of first aid for wounds. Conditions conducive to the development of the infectious process in a contaminated wound. Prevention of the development of the infectious process in an accidental contaminated wound (primary surgical treatment). Pure postoperative wound, its features. Healing of a pure wound by primary tension (stages of wound process at a pure wound). Primary surgical suture and its varieties. Treatment of a clean wound in the postoperative period. Pathomorphological features of a gunshot wound. Features of structural and functional changes of fabric from the type of weapon. Primary surgical treatment of gunshot wounds, its features.

17. Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound.

Identification of an infected wound. The course of the wound process in an infected wound, the characteristics of the different stages of the wound process in an infected wound. The principle of treatment of an infected wound depending on the stage of the wound process. Surgical treatment of a purulent wound: indications, contraindications, technique. Types of purulent wound drainage. Types of secondary surgical sutures, indications and contraindications for their use. Surgical operations that can be used in the stage of epithelialization and scarring. Clinical analysis of a patient with an infected wound.

18. Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures.

Definition of burns. Varieties of burns. Classification of burns by depth, area, severity. Clinical manifestations of thermal burns depending on the degree of damage. Algorithm for providing first aid for thermal burns. Symptoms of varying degrees of burns with chemical compounds, features of first aid for this type of lesion. Radiation burn: causes, clinical manifestations, first aid, prevention. Determining the depth and area of the lesion in burns, the value of these data in providing medical care to the victim. Features of damage by light radiation of a nuclear explosion, incendiary mixtures, first aid for these lesions.

19. Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.

Definition of burn disease. Periods of burn disease. Pathophysiological and pathomorphological aspects of periods of burn disease. Principles of local treatment of burns. Features of treatment of different periods of burn disease. Calculation of transfusion volume in the treatment of burn shock. Types of surgical operations in the treatment of burns.

20. Frostbite. Classification. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features.

Definition of frostbite. Factors contributing to the occurrence of cold injury. Periods of frostbite. Pathophysiological and pathomorphological aspects of the occurrence and course of frostbite lesions. Classification of frostbite: degrees of lesions and their clinical manifestations. Features of first aid to the victim with frostbite in the pre-reactive period. Principles of treatment of frostbite in the postoperative period. Surgical operations used in the treatment of frostbite.

Electrotrauma: pathomorphological and pathophysiological aspects; clinical manifestations, features of first aid.

BLOCK 2.
SURGICAL INFECTION. MORTIFICATION. FUNDAMENTALS OF TRANSPLANTOLOGY AND CLINICAL ONCOLOGY. METHODS OF EXAMINATION OF SURGICAL PATIENTS

Section 1. Surgical infection. Mortification.
Subject and

21. General issues of surgical infection: classification; pathogens of surgical infection; translocation. Pathogenesis of development of local and general reaction of an organism at a surgical infection. Principles of diagnosis and treatment. Abscess, phlegmon.

Determination of surgical infection. Classification of surgical infection. Pathogens of surgical infection and their characteristics. Determination of translocation and causes of its occurrence. Pathophysiological and pathomorphological aspects of the development of local and general reactions of the body in surgical infection. Stages of the pathological process in surgical infection. Diagnosis and differential diagnosis of the stages of the surgical infectious process. Principles of treatment of surgical infection. Abscess: definition, clinical manifestations, diagnosis, principle of treatment. Phlegmon: definition, features of a clinical course, diagnostics, the principle of treatment.

22. Acute purulent soft tissue diseases: boils, carbuncles, hydradenitis, mastitis, paraproctitis , erysipelas .

Determination of boils, carbuncles, hydradenitis, mastitis, paraproctitis, erysipelas. Features of a clinical picture at the specified surgical infectious processes depending on a development stage. Clinical classification of mastitis, paraproctitis. Clinical forms of erysipelas. Surgical tactics and complex treatment of these diseases depending on the clinical form and stage of development of the pathological process.

23. Panaritium. Phlegmons of the hand. Features of the anatomical structure of the hand. Etiology, pathogenesis, clinic, diagnosis, treatment. Lymphangitis, lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment.

Definition of panaritium, classification of panaritium. Determination of phlegmon of the hand and its classification. Features of the anatomical structure of the hand, influencing the clinic and the development of the infectious process. Clinic for various forms of panaritium, diagnosis, principles and features of treatment of various forms of panaritium. Clinical manifestations of phlegmon of the hand depending on the type and stage of development of the infectious process. Diagnosis, differential diagnosis of phlegmon of the hand, the principles of surgical treatment. Determination of lymphangitis, lymphadenitis. Etiological, pathophysiological and pathomorphological aspects of lymphangitis and lymphadenitis. Clinical forms of lymphangitis. Principles of surgical tactics and treatment for lymphangitis and lymphadenitis.

24. Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention.

Determination of putrefactive surgical infection. Characteristics of pathogens of putrefactive infection. Features of the clinical picture, diagnosis and course of putrefactive infection. Surgical tactics in the treatment of putrefactive surgical process, features of medical treatment. Determination of anaerobic clostridial infection, characteristics of its pathogens. Gas gangrene: etiology, pathogenesis, clinic, principles of surgical treatment, Means for specific prevention and treatment of gas gangrene, measures to ensure non-specific prevention of gas gangrene.

25. To spend. Anthrax. Wound diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations.

Tetanus: etiology, pathogenesis, classification, clinic, diagnosis, treatment, means of prevention, planned and emergency prevention. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations. Anthrax: etiology, pathogenesis, clinic, diagnosis, specific treatment, prevention. Wound diphtheria: etiology, pathogenesis, clinic, diagnosis, principles of treatment, prevention.

26. Surgical sepsis (Sepsis-3): definition, etiology, classification, pathogenesis, clinical manifestations, diagnosis, principles of treatment. Septic shock. Multiple organ failure syndrome. Detoxification therapy and immunocorrection.

Determination of sepsis (sepsis-3). Historical aspects of the formation of the concept of sepsis. Etiology of sepsis, pathogenesis, classification, clinical manifestations. Algorithm and clinical criteria for the diagnosis of sepsis. Principles of complex treatment of surgical sepsis. Septic shock: criteria for diagnosis, principles of treatment. Multiple organ failure syndrome: the main indicators that determine the insufficiency of a system. The concept of detoxification, methods and indications for use. Immunotherapy, indications and principles.

27. Killing. Necrosis. Gangrene. Ulcers. Fistulas. Causes. Clinical manifestations, diagnosis, treatment.

Definition of death. Causes of necrosis, classification of necrosis, general principles of diagnosis and treatment. Definition of gangrene, pathogenesis, classification, diagnosis, principles of treatment. Stages of development of acute and chronic ischemia of the limb. Ulcers: definition, causes, pathogenesis, clinical manifestations, complications, principles of treatment. Fistulas: definition, causes of formation, pathogenesis, clinical manifestations, methods of diagnosis, principles of local treatment, surgical tactics.

Section 2. Fundamentals of transplantology and clinical oncology. Topics and :

28. Transplantology. Classification of grafts. Features of application of different types of grafts. Deontological aspects, legal bases of transplantation.

Definition of transplantology. Classification of grafts. Modern materials for the manufacture of artificial grafts. Features of application of different types of grafts. Principles of selection of donor organs for transplantation. Deontological aspects, legal bases of transplantology.

29. Tumors. Etiology, pathogenesis. Benign and malignant tumors. Histogenetic, morphological, clinical and international (TNM) classifications. Clinical groups of cancer patients. Clinical manifestations. Diagnostic methods. Principles of treatment.

Tumor detection. Modern views on the causes and development of tumors. Signs of benign and malignant tumors. Classification of tumors. Criteria for the formation of clinical groups of cancer patients. Clinical manifestations of benign and malignant tumors. Modern methods of instrumental diagnosis in the oncological process. Principles of treatment. Varieties of surgical operations for cancer (radical, palliative, symptomatic).

Section 3 . Methods of examination and supervision of a surgical patient.

30. Survey surgical - tion of the patient. Collection of complaints, Anam - imperfecta disease and life. Objective examination of the head, neck, chest. Abdomen, musculoskeletal system, blood vessels, lymph nodes.

31. Curation of a surgical patient (first lesson).

32. Curation of a surgical patient (second lesson).

The structure of the discipline

Name of content modules and topics	Number of hours					
	Full-time					
	In this	L.	P	Lab.	And the sun.	CPC
1	2	3	4	5	6	7
BLOCK 1. INTRODUCTION TO SURGERY. DESMURGY. FUNDAMENTALS OF SANITARY AND EPIDEMIC REGIME IN THE SURGICAL CLINIC. URGENT SURGICAL CONDITIONS. FUNDAMENTALS OF TRANSFUSIOLOGY, ANESTHESIOLOGY AND RESUSCITATION						
Section 1. Desmurgia. Antisepsis. Asepsis. Bleeding. Blood transfusion. Traumatic injuries.						
Topic 1. Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest.	1			-	-	1
Topic 2. Desmurgia. Bandages on the abdomen, perineum, lower extremity. Plaster technique.	1			-	-	1
Topic 3. Antiseptics. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.	2	0 , 5	1	-	-	1
Topic 4. Nosocomial infection. Sanitary epidemic - logical mode. Asepsis.	2.5	0 , 5	1	-	-	1
Topic 5. Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.	2.5	0, 5	1	-		1
Section 2. Bleeding, blood loss. Fundamentals of transfusiology						
Topic 6. Bleeding and blood loss. Methods of temporary and final cessation of bleeding.	2.5	0, 5	1	-	-	1
Topic 7. Blood transfusion. Determination of blood groups by ABO and Rh-factor systems. Samples for individual compatibility by ABO and Rh-factor systems, biological test.	2.5	0, 5	1	-	-	1
Theme 8. Operation hemotrans - fusion. Features of transfusion of various components of blood.	2.5	0, 5	1	-	-	1
Theme 9. Complications hemotran - sfuziyi and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application.	2.5	0, 5	1	-	-	1
Section 3 Fundamentals of anesthesiology and resuscitation						
Topic 10. Local znebolyuvan - tion. See. Indications, protypoka - Zanni, complications.	2.5	0.5	1	-	-	1
Topic 11. General znebolyuvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention.	2.5	0, 5	1	-		1
Topic 12. Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation.	2.5	0, 5	1	-	-	1
Section 4. Traumatic injuries.						
Topic 13. Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment.	3 , 5	0.5	1	-	-	2
Topic 14. Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of	3 , 5	0 , 5	1	-	-	2

treatment.						
Topic 15 . Polytrauma. Multiple injuries combined and combi - President dieter f injury. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment.	2	-		-	-	2
Topic 16. Wounds, definition, classification. Wound structure and course of the wound process. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially treatment.	3.5	0, 5	1	-	-	2
Topic 17. Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound.	3.5	0, 5	1	-	-	2
Topic 18. Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures.	2.5	0, 5	1	-	-	1
Topic 19. Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.	1			-	-	1
Topic 20. Frostbite. Classes - fikatsiya. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features.	2			-	-	2
Together for block 1	**48.5**	**7.5**	**15**	**-**	**-**	**2 6**
Block 2. SURGICAL INFECTION. MORTIFICATION. FUNDAMENTALS OF TRANSPLANTOLOGY AND CLINICAL ONCOLOGY. METHODS OF EXAMINATION OF SURGICAL PATIENTS						
Section 1. Surgical infection. Mortification.						
Theme 21. General questions of surgical infection, classi - tion; surgical infectious pathogens - tion; translocation. Pathogenesis of local and general reactions of the organism during surgical - It infection. Principles diag - tics and treatment. Abscess, Flag - Mona.	9	1	4	-	-	4
Topic 22. Acute purulent incidence - ing soft tissues boil, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas,	9	1	4	-	-	4
Topic 23. Panaritium. Phlegmons of the hand. Features of the anatomical structure of the hand. Etiology, patohe - Nez, clinical diagnostics, medi - ting. Lymphangitis, lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment.	9	1	4	-	-	4
Topic 24. Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention.	9	1	4	-	-	4
Topic 25. Tetanus. Anthrax. Wound diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations.	9	1	4		-	4
Topic 26. Surgical sepsis (Sepsis-3): definition, etiolo - Gia, classification, pathogenesis, clinical	9	1	4	-	-	4

manifestations, diagnosis, treatment. Septic shock. Multiple organ failure syndrome. Dezintoksyka - tional therapy and immunotherapy.						
Topic 27. Death. Necrosis. Gangrene. Ulcers. Fistulas. Causes. Clinical manifestations, diagnosis, treatment.	9	1	4	-	-	4
Section 2. Fundamentals of transplantology and clinical oncology.						
Topic 28. Transplantology. Classification of grafts. Features of application of different types of grafts. Deontological aspects, legal bases of transplantation.	9	1	4	-	-	4
Topic 29. Tumors. Etiology, pathogenesis. Benign and malignant tumors. Histohene - cal, morphological, clinical and International (TNM) classification. Clinical groups of cancer patients. Clinical manifestations. Diagnostic methods. Principles of treatment.	11	2	4	-	-	5
Together for block 2	**87**	**1 0**	**40**			**3 7**
Total discipline	**135**	**17.5**	**55**			**63**

4. The content of the discipline

4.1. Lecture plan

№ s / n	**TOPIC**	**hours**
	Block 1	
1	Antisepsis. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application. Nosocomial infection. Sanitary epidemic - logical mode. Asepsis. 1. Antisepsis. Types of antiseptics. 2. Characteristics of the main groups of antiseptics and the main methods of their application 3. Nosocomial infection. 4. Asepsis Bleeding and blood loss. Methods of temporary and final cessation of bleeding. 1. Bleeding and blood loss 2. Classification of blood loss 3. Methods of temporary and final cessation of bleeding 4. Pre-medical care for bleeding	2
2	Blood transfusion. Determination of blood groups by ABO and Rh-factor systems. Samples for individual compatibility by ABO and Rh-factor systems, biological test. Operation hemotrans - fusion. Features of transfusion of various components of blood. 1. Blood transfusion. Determination of blood groups by ABO and Rh-factor systems 2. Samples for individual compatibility by ABO and Rh-factor systems 3. Operation hemotrans - fusion. Features of transfusion of various components of blood. Complications hemotran - sfuziyi and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of	2

	application. 1. Complications hemotran - sfuziyi and their prevention 2. Prevention of transmission of infectious diseases during transfusion of blood components. 3. Blood substitutes: classification, mechanism of action, indications and methods of application.	
3	Surgery. Local znebolyuvan - tion. See. Indications, protypoka - Zanni, complications. General znebolyuvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention. Closed soft tissue injuries . 1. Surgery. 2. Local znebolyuvan - tion. See. Indications, protypoka - Zanni, complications. 3. General znebolyuvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention 4. Closed soft tissue injuries . Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation. 1. Resuscitation as a science. 2. Resuscitation: terminal conditions; clinical death 3. B Azov cardiopulmonary resuscitation.	2
4	Closed soft tissue injuries: bruising, concussion, rupture. Freezing. Classes - fikatsiya. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features. 1. Closed soft tissue injuries 2. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features. Wounds, definition, classification. Wound structure and course of the wound process. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially . Burns: classification, clinic. First aid for various types of burns. Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns. 1. Wounds, definition, classification. Wound structure and course of the wound process. 2. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially . 3. Burns: classification, clinic. First aid for various types of burns. Burn disease. 4. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.	1.5
	Together for block 1	**7.5**
	Block 2. SURGICAL INFECTION. MORTIFICATION. FUNDAMENTALS OF TRANSPLANTOLOGY AND CLINICAL ONCOLOGY. METHODS OF EXAMINATION OF SURGICAL PATIENTS	
5	General questions of surgical infection, classi - tion; surgical infectious pathogens - tion; translocation. Pathogenesis of local and general reactions of the	2

	organism during surgical - It infection. Principles diag - tics and treatment. Abscess, Flag - Mona. 1. General questions of surgical infection, classi - tion; surgical infectious pathogens - tion; trans location 2. Pathogenesis of local and general reactions of the organism during surgical - It infection. 3. Principles diag - tics and treatment . 4. Abscess, Flag - Mona.	
6	Acute suppurative incidence - ing soft tissues boil, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas . Felon. Phlegmons of the hand. Features of the anatomical structure of the hand. Etiology, patohe - Nez, clinical diagnostics, medi - ting. Lymphangitis, lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment. 1. Acute suppurative incidence - tion of soft tissues 2. Boil, carbuncle, hydradenitis , mastitis, paraproctitis, erysipelas 3. Phlegmons of the hand. Features of the anatomical structure of the hand. 4. Etiology, patohe - Nez, clinical diagnostics, medi - ting Lymphangitis, lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment.	2
7	Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention. To spend. Anthrax. Wound diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations. 1. Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment 2. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention. 3. To spend. Anthrax. Wound diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention 4. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations	2
8	Surgical sepsis (Sepsis-3): definition, etiolo - Gia, classification, pathogenesis, clinical manifestations, diagnosis, treatment. Septic shock. Multiple organ failure syndrome. Dezintoksyka - tional therapy and immunotherapy. 1. Surgical sepsis (Sepsis-3): definition, etiolo - Gia, classification, pathogenesis, clinical manifestations, diagnosis, treatment. 2. Septic shock. Multiple organ failure syndrome. 3. Dezintoksyka - tional therapy and immunotherapy.	2
9	Transplantology. Classification of grafts. Features of application of different types of grafts. Deontological aspects, legal bases of transplantation. Tumors. Etiology, pathogenesis. Benign and malignant tumors. Histohene - cal, morphological, clinical and International (TNM) classification. Clinical groups of cancer patients. Clinical manifestations. Diagnostic methods. Principles of treatment 1. Transplantology. Classification of grafts. 2. Features of application of different types of grafts. Deontological aspects, legal bases of transplantation. 3. Tumors. Etiology, pathogenesis. Benign and malignant tumors 4. Histohene - cal, morphological, clinical and International (TNM) classification. Clinical groups of cancer patients. Clinical manifestations. 5. Diagnostic methods. Principles of treatment	2
	Together for block 2	**10**
	Total discipline	**17.5**

4.2. Plan of practical classes

№ s / n	Name topics	hours
	BLOCK 1	
1	Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest.	2
2	Desmurgia. Bandages on the abdomen, perineum, lower extremity. Plaster technique.	2
3	Antisepsis. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.	2
4	Nosocomial infection. Sanitary epidemic - logical mode. Asepsis.	2
5	Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.	2
6	Bleeding and blood loss. Methods of temporary and final cessation of bleeding.	2
7	Blood transfusion. Determination of blood group ABO system and Rh-factor. Tests on individual compatibility of ABO and Rh-factor, a biological sample.	2
8	Operation hemotrans - fusion. Features of transfusion of various components of blood.	1.5
	Together for block 1	**15**
	BLOCK 2	
9	Complications hemotran - sfuziyi and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application.	2
1 0	Local znebolyuvan - tion. See. Indications, protypoka - Zanni, complications.	2
1 1	General znebolyuvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention.	2
12	Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation.	2
13	Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment.	2
14	Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of treatment	2
15	Polytrauma. Multiple injuries combined and combi - President dieter f injury. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment.	2
16	Wounds, definition, classification. Wound structure and course of the wound process. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially treatment.	2
17	Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound.	2
18	Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures.	2
19	Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.	2
20	Freezing. Classes - fikatsiya. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features.	2
21	General issues of surgical infection. Pathogens of nonspecific surgical infection and mechanisms of their aggression. Translocation of microflora.	2

	Local and general reaction of the organism. Diagnostic methods and general principles of treatment. HIV infection in surgery.	
2 2	Acute suppurative incidence - ing soft tissues boil, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas,	2
2 3	Felon. Phlegmons of the hand. Features of the anatomical structure of the hand. Etiology, patohe - Nez, clinical diagnostics, medi - ting. Lymphangitis, lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment.	2
2 4	Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention.	2
2 5	To spend. Anthrax. Wound diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations.	2
2 6	Surgical sepsis (Sepsis-3): definition, etiolo - Gia, classification, pathogenesis, clinical manifestations, diagnosis, treatment. Septic shock. Multiple organ failure syndrome. Dezintoksyka - tional therapy and immunotherapy.	2
27	Mortification. Necrosis. Gangrene. Ulcers. Fistulas. Causes. Clinical manifestations, diagnosis, treatment Transplantology. Classification of grafts. Features of application of different types of grafts. Deontological aspects, legal bases of transplantation.	2
2 8	Tumors. Etiology, pathogenesis. Benign and malignant tumors. Histohene - cal, morphological, clinical and International (TNM) classification. Clinical groups of cancer patients. Clinical manifestations. Diagnostic methods. Principles of treatment Survey surgical - tion of the patient. Collection of complaints, Anam - imperfecta disease and life. Objective examination of the head, neck, chest. Abdomen, musculoskeletal system, blood vessels, lymph nodes.	2
	Together for block 2	**4 0**
Together in discipline		**55**

4.3. S setting for amostiyn first robot and

№ s / n	**Name topics**	**hours**
1	Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest.	
2	Desmurgia. Bandages on the abdomen, perineum, lower extremity. Plaster technique.	
3	Antisepsis. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.	
4	Nosocomial infection. Sanitary and epidemiological regime. Asepsis.	
5	Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.	2
6	Bleeding and blood loss. Methods of temporary and final cessation of bleeding.	1
7	Blood transfusion. Determination of blood group ABO system and Rh-factor.	1

	Tests on individual compatibility of ABO and Rh-factor, a biological sample.	
8	Blood transfusion operation. Features of transfusion of various components of blood.	2
9	Complications of blood transfusion and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application.	2
10	Local anesthesia. See. Indications, contraindications, complications.	2
11	General anesthesia. Inhalation and non-inhalation anesthesia. Indications and contraindications. Complications and their prevention.	2
12	Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation.	1
13	Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment.	2
14	Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of treatment.	2
15	Polytrauma. Multiple injuries, combined and combined injuries. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment.	2
16	Wounds, definition, classification. Wound structure and course of the wound process. Features of modern gunshot wound and mine damage. Accidental contaminated wound: conditions for the development of the infectious process in the wound and their elimination (PHO). Clean postoperative wounds, features of treatment.	2
17	Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound.	2
18	Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures.	2
19	Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.	2
20	Freezing. Classification. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features.	2
	Final control	
	Together for block 1	**37**
21	General issues of surgical infection: classification; pathogens of surgical infection; translocation. Pathogenesis of development of local and general reaction of an organism at a surgical infection. Principles diag - tics and treatment. Abscess, phlegmon.	2
22	Acute purulent soft tissue diseases: boils, carbuncles, hydradenitis, mastitis, paraproctitis, erysipelas,	2
23	Felon. Phlegmons of the hand. Features of the anatomical structure of the hand. Etiology, patohe - Nez, clinic, diagnostics, treatment. Lymphangitis, lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment.	2
24	Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention.	2
25	To spend. Anthrax. Wound diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention. Diagnosis, prevention and principles of treatment of	2

	tetanus in hostilities and extreme situations.	
26	Surgical sepsis (Sepsis-3): definition, etiology, classification, pathogenesis, clinical manifestations, diagnosis, principles of treatment. Septic shock. Multiple organ failure syndrome. Detoxification therapy and immunocorrection.	2
27	Mortification. Necrosis. Gangrene. Ulcers. Fistulas. Causes. Clinical manifestations, diagnosis, treatment.	2
28	Transplantology. Classification of grafts. Features of application of different types of grafts. Deontological aspects, legal bases of transplantation.	2
29	Tumors. Etiology, pathogenesis. Benign and malignant tumors. Histogenetic, morphological, clinical and international (TNM) classifications. Clinical groups of cancer patients. Clinical manifestations. Diagnostic methods. Principles of treatment.	2
30	Examination of a surgical patient. Collection of complaints, medical history and life. Objective examination of the head, neck, chest. Abdomen, musculoskeletal system, blood vessels, lymph nodes.	2
31	Curation of a surgical patient (first lesson).	2
32	Curation of a surgical patient (second lesson).	2
33	Protection of medical history.	2
34	***Final control***	
	Together for block 2	**26**
Together in discipline		**80**

Note: all topics included in the curriculum BC and vchalnoho plan classes. Independent elaboration of these topics is not made separately.

An individual task was not envisaged.

Typical test problems to be solved in practical classes

Subject : General questions of surgical infection, classi - tion; surgical infectious pathogens - tion; translocation. Pathogenesis of local and general reactions of the organism during surgical - It infection. Principles diag - tics and treatment. Abscess, Flag - Mona .

Tests on " Gn and ino-septic surgery (wounds) " .
I. Class and fikatsiya wounds.

1. In relation to body cavities wounds are divided into:
A) chipped, cut, fire
B) through, tangential, blind
C) penetrating, impenetrable
D) p crushed , firearms
E) surgical, combat, accidental

2. In the classification by anatomical th localization yeyu not emit injury:
A) main blood vessels
B) heads
C) the neck
D) chest
E) life

3. pervogo Inna phase wounds at Volyn NGO process for Kuzin im called:
A) the phase of vascular reactions
B) the phase of cellular reactions
C) the regeneration phase
D) phase of scar reorganization and epithelialization
E) the phase of inflammation

4. Primary th sore called a wound formed:
A) after opening the purulent focus
B) due to suppuration of the surgical wound
C) due to suppuration of the traumatic wound
D) due to severe immunodeficiency
E) after removal of a foreign body

5. In the phase of inflammation in a purulent wound occurs:
A) enhanced growth of granulations
B) proliferation of fibroblasts
C) accumulation of underoxidized metabolic products
D) start of capillaries
E) the development of fibrous tissue

6. The third phase wounds at Volyn NGO process for Kuzin im called:
A) the regeneration phase
B) the phase of the cellular reaction
C) phase of scar reorganization and epithelialization
D) phase u s udynnoyi reaction
E) the phase of inflammation

7. However, power and of reliable methods of monitoring the progress of wound healing phase of inflammation are:
A) microbial count per gram of wound tissue
B) measuring the area of the wound
C) wound contractometry
D) and the monogram
E) study of the content of eosinophils in peripheral blood

8.Vtor Inna destruction of tissue healing in the first phase of Volyn NGO due process:
A) the size of the wound
B) the age of the patient
C) the virulence of the microflora
D) immunodeficiency
E) excessive edema

9. An accidental wound is infected due to:
A) 2 years
B) 4 years
C) 5 hours
D) 8 hours
E) 12 hours

10. Kp ytychnyy level of bacterial contamination of wounds is:
A) 1010 - 1011
B) 1012 - 1013
C) 102 - 103
D) 107 - 108
E) 105 - 106 per 1 cm $^{2\,of}$the wound surface

11.Fibroblast ychna reaction phase of regeneration of wounds at Volyn NGO process provides:
A) necrolysis

B) bacteriolysis, proteolysis
C) immunological reactions
D) collagenesis
E) production of histamine

12. The transition of the wound from the state of primary bacterial contamination to the state of infection contributes to:
A) the use of plaster casts
B) the use of an occlusive dressing
C) the method of transporting the patient to the hospital
D) ambient temperature
D) immunodeficiency of the patient

13. Deut ynnoyu purulent th sore called a wound formed:
A) after necrotomy
B) due to beriberi
C) after opening the purulent focus
D) due to suppuration of a traumatic wound
E) after necrectomy

14. How important is the occurrence of secondary wound infection:
A) shortens the period before the onset of purulent complications
B) ahravu is t b be the severity of infectious complications
C) prolongs the phase of scar reorganization and epithelialization
D) the probability of purulent complication of the wound process increases sharply
E) prolongs the regeneration phase

15. pervogo ynne bacterial contamination - is:
A) penetration of microbes into the wound after injury
B) the entry of microbes into the wound at the time of injury
C) the entry of microbes into the wound at the time of dressing
D) the entry of microbes into the wound during PHO
E) all of the above is true

16. For the healing of the wound by primary intention helps:
A) activation of fibrinolysis
B) the presence of drainage in the wound
C) adaptation of the wound edges
D) the formation of s t roma
E) hematoma formation

17. Secondary purulent wound is a wound formed:
A) after necrectomy
B) due to suppuration of a clean surgical wound
C) after removal of a foreign body
D) due to immunodeficiency
E) after opening the purulent focus

18. Morfolohich tion basis wounds phase inflammation are:
A) fibroblasts
B) fat and cells
C) profibroblasts
D) neutrophils, lymphocytes, macrophages
E) platelets

19. For wound healing by secondary tension - is healing:
A) by granulation
B) without tension
C) with a vascular reaction
D) by epithelialization
E) after surgery

20. Through wound with a small inlet and a large outlet is observed when injured:
A) the Finn
B) a bayonet
C) a fragment
D) a bullet at close range
E) a sword

4 . 4. Ensuring the educational process

1. Multimedia projectors, computers, screens for multimedia presentations, lecture presentations.
2. Demonstration screens, laptops, files in Power Point and Word with tasks "Step-1" for practical and final classes.
3. Examination tickets.
4. Tests .

5. Final control

List of final control (exam) questions

1. M. .I. Pirogov, his role in the development of domestic surgery.
2. Boils, boils. Etiology, pathogenesis, clinic, treatment.
3. Rules of treatment (dressing) of a purulent wound
5. Rules of bandaging.
6. Boil, carbuncle of the face, features, clinic, treatment
7. Rules of treatment (bandaging) of a "clean" wound
8. Rules for applying hardening bandages
9. Carbuncle, etiology, pathogenesis, diagnosis, treatment
10. Nosocomial infection, causes and prevention
11. The main types of bandages.
12. Abscess. Etiology, clinic, treatment
13. Wounds, classification
14. Antiseptics. The essence of the method, the main types
15. Phlegmon, clinic, diagnosis, treatment
16. Primary surgical treatment of the wound
17. Antibiotics. Ways of application, complications and their prevention
18. Phlegmons of the hand. Clinic, diagnosis, treatment
19. Rules of treatment of a purulent wound
20. The main groups of chemical antiseptic substances
21. Hydradenitis, clinic, treatment
22. Medical sorting. Purpose, task.
23. Methods of sterilization control
24. Lymphangitis, lymphadenitis. Causes, clinic, diagnosis
25. Hemostatic tourniquet. Types, rules of overlay
26. Surgery. Classification depending on the term and scope of execution
27. Purulent lactational mastitis. Causes, clinic, diagnosis, treatment, prevention
28. Nosocomial infection. Causes, measures to prevent the spread of infection

29. Methods of preparing the surgeon's hands for surgery

30. Beshiha. Etiology, pathogenesis, clinic, treatment.

31. Occupational hazards in the work of a doctor - surgeon

32. Panaritium. Etiology, pathogenesis, clinic, diagnosis, treatment.

33. Principles of operation of the autoclave, methods of sterilization of dressings and surgical linen.

34. Primary surgical treatment of the wound

35. Basic principles of resuscitation.

36. Classification of wounds, clinical signs.

37. The structure of the operating unit, the requirements for its device, sterility zones, types of cleaning, mode of operation.

38. The main stages of development of anesthesiology.

Local anesthesia. Indications, contraindications.

Compatibility tests for blood transfusions. Technique and methods of blood transfusion.

41. Anaerobic infection, gas gangrene, gas phlegmon. Etiology, pathogenesis, clinic, treatment.

42. Infiltration anesthesia by A.V. Vyshnevsky.

43. Drugs and blood components. Blood substitutes. Principles of their application.

44. Paraproctitis. Clinic, diagnosis, treatment.

45. Methods of local anesthesia, novocaine blockade.

46. The value of rhesus factor in the transfusion of blood components. Complications associated with transfusion of meringue-incompatible blood and their prevention.

47. Temporary and final methods of stopping bleeding.

48. Electrotrauma, features of influence on a human body. First aid under the influence of electric current.

49. Clinic of acute bleeding and blood loss. Ways to combat acute blood loss.

50. Pre-sterilization preparation and methods of sterilization of instruments.

51. Burns, classification depending on the degree of damage.

52. Ways to temporarily stop bleeding. Rules for applying the tourniquet.

53. Complications in the postoperative period, treatment of complications, their prevention

54. Differential diagnosis of benign and malignant tumors.

55. Methods of final cessation of bleeding: mechanical, physical, chemical and biological.

56. The main stages of surgery.

57. Terminal states.

58. The concept of injury. Types of injuries. Injury prevention. Organization of first aid for injuries.

59. Features of sterilization of instruments with an optical system.

60. Stages of anesthesia.

61. Chest injury. Diagnosis of pneumothorax and hemothorax.

62. Blood loss, classification by severity, principles of treatment.

63. General principles of treatment of tumors.

64. Occupational hazards in the work of a doctor - surgeon

65. Infectious complications of the wound.

66. Acute hematogenous osteomyelitis. Etiology, pathogenesis, clinic, diagnosis, treatment

67. Classification of bone fractures, principles of diagnosis and treatment.

68. Primary surgical treatment of the wound.

69. Basic rules of surgical deontology.

70. Organization of care for trauma patients. Injuries, definition, classification.

71. Antibiotics. Ways of application, complications.

72. First aid for an existing wound.

73. Burns. Characteristics by degrees. Features burn shock.

74. Determination of blood group and Rh factor.

75. Trophic ulcer. Causes, features of the clinical course. Clinic, diagnosis, treatment.

76. Primary surgical treatment of wounds. Indications and contraindications.

77. Physical, mechanical, chemical, biological antiseptics.

78. Bleeding, causes, types, diagnosis.

79. Local anesthesia. Its types, advantages and disadvantages. AV Vishnevsky role in the development of the method.

80. Nosocomial infection, ways of spread and its prevention.

81. Obliterating endarteritis and obliterating atherosclerosis. Clinic, diagnosis, treatment

82. Ethics and deontology in a surgical hospital. Psychological preparation of the patient for surgery. Execution of the patient's consent for surgical treatment or refusal of it.

83. Dislocations. Mechanism of. Methods of treatment.

84. Bedsores. The mechanism of occurrence. Treatment, prevention.

85. Operation, definition, classification of operations, stages of operation.

86 . Basic principles of work organization in the operating room and dressing room.

87. First aid for fractures. Immobilization and transportation. Basic principles of fracture treatment.

88. General principles of treatment of patients with purulent surgical infection.

89. Transplantology. Classification of grafts.

90. Features of different types of grafts.

91. Deontological aspects, legal and legal basis for transplantation.

92 . Tumors. Etiology, pathogenesis.

93. Benign and malignant tumors

94. Histohene - cal, morphological, clinical and International (TNM) classification.

95. Clinical groups of cancer patients. Clinical manifestations.

96. Methods of diagnosis. Principles of treatment of cancer patients

97. Surgical sepsis (Sepsis-3): definition, etiolo - Gia, classification, pathogenesis, clinical manifestations, diagnosis, treatment.

98. Septic shock. Multiple organ failure syndrome.

99. Dezintoksyka - tional therapy and immunotherapy.

100. Septic surgical infection: pathogens, features of clinical symptoms and course, principles of treatment

101. Anaerobic gas gangrene: etiology, pathogenesis, clinic, treatment, specific and nonspecific prevention.

102. To spend. Anthrax. Wound diphtheria.

103. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention of rabies, anthrax, diphtheria wounds

104. Diagnosis, prevention and principles of treatment of tetanus in hostilities and extreme situations

105. Mortification. Necrosis. Gangrene

106. Ulcers. Noritz . and Causes. Clinical manifestations, diagnosis, treatment.

107. Acute suppurative incidence - tion of soft tissues

108. Boil, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas

109. Phlegmons of the hand. Features of the anatomical structure of the hand.

110. Etiology, patohe - Nez, clinical diagnostics, medi - ting

111. Lymphangitis : etiology, pathogenesis, clinic, diagnosis, principles of treatment.

112. Lymphadenitis: etiology, pathogenesis, clinic, diagnosis, principles of treatment.

113. Asepsis. Definition. Prevention of airborne infection.

114. Principles of autoclave operation, methods of sterilization of dressings and surgical linen.

115. Methods of sterility control.

116. Pre-sterilization preparation of instruments and methods of their sterilization. Methods of control of pre-sterilization processing of instruments.

117. Chemical methods of sterilization. Features of sterilization of instruments with optical system.

118. Classification and requirements suture material. Methods of sterilization of suture material.

119. Implantation infection. Sources. Features of prevention.
120. Methods of preparing the surgeon's hands for surgery.
121. Methods for preparing and processing the surgical field.
122. Basic principles of work organization in the operating room and dressing room.
123. Surgery. Classification depending on the term and scope of execution.
124. Classification of surgical operations depending on the purpose. Simultaneous and combined operations.

125. One-moment, multi-moment, repeated operations
126. Typical, atypical, special surgical operations. Classification of operations by degree of infection
127. The main stages of surgery.
128. The main intraoperative complications. Intraoperative prevention of infectious complications.
129. Features of preparation of patients for planned and urgent operations.
130. Preoperative period. Determining basic tasks diagnostic phase
131. Preoperatively. Immediate preparation of the patient for surgery
132. Degrees of risk of operation.
133. The postoperative period. Definitions, tasks.
134. Physiological phases of the postoperative period and clinical stages.
135. Uncomplicated postoperative period. Basic principles of postoperative period management.
136. Complications in the postoperative period from the wound, treatment of these complications, their prevention.
137. Complications in the postoperative period from the cardiovascular system and respiratory
system, treatment of these complications, their prevention.
138. Complications in the postoperative period from the gastrointestinal tract and urinary system, treatment of these complications, their prevention
139. Prevention and treatment of bedsores.
140. Bleeding. Definition. Classification.
141. Classification of bleeding depending on the severity.
142. Changes in the body in acute blood loss. Compensatory-adaptive mechanisms.
143. Abdominal bleeding, clinic, diagnosis. Treatment
144. Massive blood transfusion syndrome. Clinic, diagnosis, treatment and prevention
145. Citrated and potassium intoxication. Clinic, diagnosis, treatment and prevention.
146. Complications of infectious nature. Clinic, diagnosis, treatment and prevention
147. Indications and contraindications to donation.
148. Donor examination. Methods of preserving blood and its preparations.
149. Characteristics of basic anesthetics for local anesthesia.
150. Infiltration anesthesia according to AV Vishnevsky. Possible complications.

"0" version of the exam ticket

Petro Mohyla Black Sea National University
P Evan higher education - MA
Field of knowledge: 22 Health care
C specialty 222 Medicine
Course - **General Surgery**

Option № 0

1.1. E. Pirogov, his role in the development of domestic surgery.

1.2 . Complications during transfusion of blood components, their classification, pathogenesis, clinic, differential diagnosis.

1. 3. Varieties of local anesthesia (superficial, layered infiltrative, regional, subarachnoid, epidural, intraosseous).

1. 4. Means of transport immobilization and features of their use in bone fractures. Principles of treatment of bone fractures in the hospital

1.5. Inject intravenously. Explain your actions.

1.6. Task.

To the hospital and asked the patient complained of pain in the perineum and waste canal fever. The pain is exacerbated by movement and defecation. Objectively: when examining the perineum to the right of 3 cm from the anus oval red protrusion, sharply painful, with softening in the center. Which of the treatments is most effective in this case?

1. Dissection and drainage of pus

2. Massive antibacterial therapy

3. Detoxification therapy

4. UHF

5. Compresses with a solution of demixide and other honey. drugs

Note: the maximum score for the answer to the question - 12 points ,
Est maximum for a response to the task - 20 points , with 80 points.

Minutes of the meeting of the Department of Therapeutic and Surgical Disciplines № __ from "__" _____ 20 21

And so 30 variants of tickets and 30 variants of tests .

An example of the final control work on block 1

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
BLACK SEA NATIONAL UNIVERSITY NAMED AFTER Mr. graves
Department of Therapeutic and Surgical Disciplines
COMPLEX CONTROL WORK
in the discipline "General Surgery"

Option 1

Topic 1. "Introduction to surgery. Hygiene in the surgical hospital. The work of paramedics in the surgical department "

I. Solve test tasks:

1. How often should be wet cleaning chambers?
A. As needed.
B. As needed, but at least twice a day.
B. Every day.
G. 3 times a day.
D. As needed, but at least 3 times a week.

2. In which ward should a patient with an infiltrate, signs of fluctuation be hospitalized?
A. In the intensive care unit.
B. Insulator.
B. The General Chamber.
G. Chamber of purulent department.
D. A separate chamber.

3. How often should I change my underwear and bedding?
A. 1 time in 10 days.
B. Weekly, after taking a shower or bath.
B. As it is contaminated, but at least once every 10 days.
D. As the discomfort increases.
D. 1 time in 3 days.

4. What complications are associated with violations of the rules of asepsis and antiseptics during injections?
A. Air and fat embolism.
B. Allergic reactions.
B. Development of postinjection infiltrates and abscesses.
D. Diseases of serum hepatitis B, C.
D. Skin dermatitis.

5. What does medical deontology study?
A. Clinical manifestations of various diseases.
B. The relationship between personal workers and the patient.
B. The range of issues of duty, morality and professional ethics of health workers.
G. Assessment of professionalism of health workers.
D. Iatrogenic diseases.

6. Who takes care of the patient?
A. The doctor.
B. Relatives of the patient.
B. Junior and midwifery staff, relatives of the patient, each has its own functions.
G. Junior medical staff

7. What does the term "special" care mean?
A. Care, carried out especially carefully.
B. Care carried out in special conditions.
B. Care that requires the presence of certain specialists.
D. Care that provides additional measures in connection with the specifics of the disease.
D. Care due to the social status of the patient.

8. Dressing lice were found in a patient sent to the hospital. Your actions:
A. Refuse the patient to be hospitalized.
B. Re-wash with soap in the bath , send the patient's clothes and linen to the disinfection chamber
B. Carry out sanitary treatment, including cutting the hair of the head, lubricating the hair with a mixture of kerosene and sunflower oil, followed by washing the head with a hot 10% solution of table vinegar
G. P ereodyahnen tion in a hospital gown.
D. Call a disinfection service.

9. A patient with complaints of abdominal pain was admitted to the admission department. The patient's condition is satisfactory. Can he take a hygienic bath?
And you can.
B. It is impossible.
B. It is possible after the exclusion of acute surgical disease.
D. It is possible, but the water temperature should not exceed 38 ° C.
D. It is possible if the patient cannot stand.

10. A patient with suspected gastrointestinal bleeding was taken to the admission department (3 hours ago there was vomiting with the content of "coffee grounds" type). Feels subjectively satisfactory, can move independently. How to transport the patient to the department?

A. On foot accompanied by a nurse.

B. In a chair - a wheelchair.

B. Only on a wheelchair.

G. Only on a wheelchair accompanied by a nurse.

D. Only in a chair - a wheelchair accompanied by a junior nurse.

11. For what purpose are patients with diseases of the cardiovascular system suffering from severe shortness of breath recommended to take a semi-sitting position in bed?

A. In this position it is more convenient to feed.

B. Reduces blood stasis in the small circle of blood circulation.

B. Reduces the risk of bedsores.

G. P prevents the sinking of the tongue.

D. Prevention of pulmonary edema

12. What is the main purpose of a functional bed?

A. Allows to give the patient the most favorable and convenient position for him.

B. It can be moved easily and quickly.

B. Facilitates medical staff to perform their treatment and care functions.

D. Prevention of bedsores.

D. Prevention of thrombosis in peripheral vessels

13. Can bedsores occur when patients are forced to sit?

A. They can not, because bedsores are formed only when the patient is on his back, abdomen or side.

B. Can in the buttocks.

B. Can not, because when sitting between the bony protrusions and the mattress is a large layer of subcutaneous fat and muscle tissue.

G. Can, in any position of the patient.

D. Can, in the area of the heel bones.

14. Why can't the liner circle be inflated too much?

A. It will fail quickly.

B. It will be difficult to give him a stable position in bed.

B. It must change its shape during the movements of the patient.

G. Causes bedsores.

D. Contributes to the formation of bumps.

15. What should be done in the initial stage of bedsore formation?

A. Strengthen all preventive measures (keeping the bed, changing the position of the patient, careful skin toilet).

B. Use various biologically active ointments.

B. Carry out surgical treatment.

D. Assign physiotherapy to the affected area (UHF, UFO), treat the affected areas with 1% solution of diamond green, a strong solution of potassium permanganate, 5-10% solution of iodine.

D. Apply a band-aid.

6. Evaluation criteria and tools for diagnosing learning outcomes

Control methods

- **Survey (testing of theoretical knowledge and practical skills).**
- **Test control.**
- **Writing a review of scientific literature (abstracts), performing individual tasks, their defense.**

Current control. Testing in practical classes of theoretical knowledge and the acquisition of practical skills, as well as the results of independent work of students. Supervised by teachers according to the specific purpose of the curriculum. Evaluation of training students through: Student Survey, and analysis solution for situational cottages and tests, interpreting the results of clinical and instrumental and clinical and laboratory research, control of practical skills.

Intermediate control. Checking the possibility of students using for clinical and diagnostic analysis of theoretical knowledge and practical skills on all topics studied, as well as the results of independent work of students. Carried out in the last lesson by section by passing practical skills, solving situational problems and testing.

The final test (RCC) is carried out upon completion of the study of all topics of the block at the last test session of the semester.

In order to assess the learning outcomes of the entire discipline , the final control is conducted in the form of an **exam,** which is recommended for academic disciplines, which is part of the integrated test exams EDKI and "Step-2".

Intermediate final control (certification) and final control (exam) are allowed to students who have attended all the lectures, classroom classes, performed full independent work and in the learning process scored the number of points, not less than the minimum - **70 points in the fall semester and 40 points in the spring semester.**

Only students who have passed both final tests (according to blocks 1 and 2) in the discipline are admitted to the exam .

Distribution of points received by students

In the autumn semester, a positive assessment in each practical session can be from 3.5 points (70 points: 20 practical classes) to 6 points (120: 20) . A score below 4 points means "unsatisfactory", the lesson is not credited and is subject to practice in the prescribed manner.

At the RCC in block 1, a student can get a maximum of 80 points. PKR is considered credited if the student scored at least 50 points.

In the spring semester, a positive assessment in a practical lesson can be from 3.6 points (40 points: 11 topics of practical classes) to 7 , 3 points (80: 11) . Evaluation below 3.6 point s means "poor" classes are not counted and be working out in due course.

At the RCC in block 2, a student can get a maximum of 40 points. PKR is considered credited if the student scored at least 30 points.

At the exam the student can get from 50 to 80 points ; distribution of points on the exam, see above in the example of the exam ticket.

Assessment of student performance

Type of activity (task)	Maximum number of points
Block 1	
Topic 1	6
Topic 2	6
Topic 3	6
Topic 4	6
Topic 5	6
Topic 6	6
Topic 7	6

Topic 8	6
Topic 9	6
Topic 10	6
Topic 11	6
Topic 12	6
Topic 13	6
Topic 14	6
Topic 15	6
Topic 16	6
Topic 17	6
Topic 1 8	6
Topic 1 9	6
Topic 20	6
Together	**120**
Final control work on block 1	**80**
Together for block 1	**200**
Block 2	
Topic 1	7 , 3
Topic 2	7.3
Topic 3	7.3
Topic 4	7.3
Topic 5	7.3
Topic 6	7.3
Topic 7	7.3
Topic 8	7.3
Topic 9	7.3
Topic 10	7.3
Topic 11	7.3
Together	**80**
Final control work on block 2	**40**
Together for block 2	**120**
Examination	**80**
Together for block 2 and the exam	**200**

Criteria for assessing knowledge

Evaluation 6 points in the fall semester (7- 7 , 3 score and in the spring semester), 71-80 points on PKR in the fall semester (38-40 points in the spring semester) and 71-80 points on the exam (and the scale ECTS , t and 5 national scale) a student is assessed if it demonstrates a deep knowledge of theoretical concepts and the ability to apply theoretical material for practical analysis and has no inaccuracies.

Evaluation 5 points in the fall semester (5- 6 points in the spring semester), 61-70 points on PKR in the fall semester (35-37 points on PKR in the spring semester) and 61-70 points on the exam (B and C scale ECTS and 4 on a national scale) the answer is evaluated if it shows knowledge of all theoretical provisions, the ability to apply them in practice, but some fundamental inaccuracies are allowed.

Assessment 3 , 5-4 points in the fall semester (3,6-4 point and in the spring semester), 50-60 points on PKR in the fall semester (30-34 points on PKR in the spring semester) and 50-60 points on the exam (D and E on the ECTS scale and 3 on the national scale) the student's answer is evaluated provided that he knows the main theoretical provisions and can use them in practice.

7. Recommended sources of information

Basic and (basic and)

1. General surgery: a textbook / SD Khimich, MD Zheliba,, IG Gerich, etc .: ed. professors SD Khimich, MD Zheliba ,. - K .: BCB «Медицина», 2018. - 608 c.
2. General surgery: a textbook / MD Zheliba, SD Khimich, IG Gerich, etc .: ed. professors MD Zheliby, SD Khimich. - K .: BCB «Медицина», 2010, 2016. - 448 c.
3. General surgery: a textbook / ND Zheliba, SD Khimich, IG Gerich, etc .: ed. professors ND Zheliba, SD Khimich. - K .: ВСИ «Медицина», 2011, 2016. - 488 c.
4. Desmurgia . Textbook / OO Vinogradov, MO Ropaeva, OI Guzhva, AV Radchenko . - Starobilsk : Taras Shevchenko Lviv National University , 2015 .

To the additional :

1. Outpatient surgical manipulations / ed. n rof. Field VP, Shkvarovsky IV, Zheliby MD - Chernivtsi: Medical University, 2013. - 252 p.
2. Care of patients of surgical profile / VP Polevoy, OY Khomko, SP Poleva, AS Palyanytsya, IO Vyshnevsky. - Chernivtsi: Medical University - 2012. - 380 p.
3. Kazitsky VM Desmurgia / VM Kazitsky, NA Korzh. - Kyiv, 1999.
4. Clinical Oncology: Handbook for students of higher medical educational institutions of the IV level of accreditation and interns / BA Bolyukh, VV Petrushenko, AA Tkach, etc .; for order. MD, prof. B. A. Bolyukha. - Vinnytsia: SE "DKF", 2012. - 704 p.
5. Disaster medicine (basics of providing medical care to victims at the prehospital stage) / Ed. H. A. Musalatova. - M., 2002. - 440 p.
6. First aid / Andryushchenko VP, Kushta YF, Andryushchenko DV - Lviv, Lviv National Medical University, 2011. - 351 p.
7. Petrichenko TV First aid. - 2007 - 248 p.
8. Polevoy VP Care for patients of surgical profile / VP Polevoy, OY Khomko, SP Poleva, AS Palyanytsya. - Chernivtsi: Medical University, 2012. - 380 p.
9. Field VP Ambulatory surgical manipulations / VP Field, IV Shkvarkovsky, MD Zheliba. - Chernivtsi: Medical University, 2013. - 252 p.
10. Fistal EY, Kozynets GP, Samoilenko GE etc. Combustiology. - K., 2004. - 184 p.
11. Khimich SD Handbook of surgeon / SD Khimich. - Kyiv: Health, 2011. - 240 p.
12. Chen G. Guide to the technique of medical manipulation (2nd edition) / G. Chen, K. J. Sonnendai, K. D. Lilremo. - Москва: Медицинская литература, 2002. - 384 c.
13. Surgery. Vol.1: Textbook of general surgery / edited by Ya. S. Bereznytsky, MP Zakharash, VG Mishalov, VO Shidlovsky. - Dnipropetrovsk .: RVA "Dnipro VAL", 2006. - 443 p.
14. Pantio VI General surgery: textbook / VI Pantio, VM Shimon, OO Boldizhar - Uzhhorod: IVA, 2010. - 464 p.
15. Lyapis MO Methods of examination of a surgical patient / MO Lyapis - Ternopil, 2000.
16. Zhuchenko SP General surgery / SP Zhuchenko, MD Zheliba, SD Khimich. - Kyiv: Health, 1999. - 368 p.
17. Cherenko MP General surgery / MP Cherenko, Zh. M. Vavryk. - Kyiv: Health, 1999.
18. Kushnir R. Ya. General surgery / R. Ya. Kushnir. - Ternopil: Ukrmedknyha, 2005. - 308 p.
19. Lyapis MA Methods of examination of a surgical patient / MA Lyapis. - Ternopil: Ukrmedbook, 2004. - 156 p.
20. Schevchenko SI Surgery / SI Schevchenko and others. - Kharcov, 2004.
21. General surgery: A textbook for medical universities / Ed. PN Zubareva, MI Lytkina, MV Epifanova. - 2nd ed., Additional and reworked.-SPb: SpetsLit., 2004.-491 p.
22. Butyrsky A. General surgery. - Simferopol . 2004.
23. Schevchenko S .I. and others. Surgery. - Kharcov. 2004

24. Clinical wound management / Prem P. Gogia. - SLACK Incorporated, 1995.
25. Kushnir R. Lectures of General surgery. - 2005.
26. Lyapis MA Methods of examination of a surgical patients. - 2004.
27. Methodological recommendations on surgical patients care. - Vinnitsa medical national university, 2006.