**MINISTRY OF HEALTH OF UKRAINE**

**Kharkiv National Medical University**

**Department of Surgery №1**

**Department of Pediatric Surgery and Pediatric Anesthesiology**

**Department of Oncology**

**level of higher education training 22 "Health"**

**Specialty 222 "Medicine"**

**Specialization "Master of Medicine"**

**Educational-professional program Medicine of the second (master's) level of higher education**

**SYLLABUS OF THE COURSE**

**"SURGERY, INCLUDING CHILDREN'S SURGERY IN GENERAL PRACTICE"**

for 6th year students (Family Medicine profile)

|  |  |  |
| --- | --- | --- |
| The syllabus of the discipline was approved at the meeting  Department of Surgery №1  Protocol from  «28» August  2020\_  № \_1 \_  Head of department  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **prof. V.V.Boyko**  (signature) (surname and initials)  «\_28\_» \_\_August\_\_\_2020\_\_ |  | Approved by the methodical commission of KhNMU on problems of professional training  surgical profile  Protocol from  «28\_\_» \_August\_\_\_\_\_\_\_\_\_ 2020  № \_\_1\_\_  Head of methodical commission of KhNMU on problems of professional training  surgical profile  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**prof. V.O. Siplyvyi**  (signature) (surname and initials )  «\_28\_» \_\_\_\_August\_\_\_\_\_\_\_ 2020\_\_ |

The syllabus of the discipline

approved at the meeting of the department

pediatric surgery and pediatric anesthesiology

protocol from year №

Head departments, professor

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **V.B. Davidenko**

«\_\_\_» \_\_\_\_\_\_\_\_\_ 2020

The syllabus of the discipline is approved

at a meeting of the Department of Oncology

Protocol from

“” August 2020 № 1

Head of Department

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **prof. Starikov VI**

"" 2020

**EDUCATIONAL DISCIPLINE "SURGERY, INCLUDING PEDIATRIC SURGERY IN GENERAL PRACTICE".**

**Description of the discipline**

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Subject area, degree, education qualificational level** | **Study discipline characteristic** |
| **Full time study** |
| Credit amount – 9, include 1 credit of pediatric surgery, 1 credit of oncology | Educational program for training specialists of the second (master's)  level of higher education training 22 “Health care” | Standart |
| Total hours amount – 270, include 30 hours of pediatric surgery, 30 hours of oncology | Degree 222“Medicine” | **Year education:** |
| 6 |
| **Term** |
| 11-12 |
| **Lections** |
| Hours for full time study:  In class – 140 study hours of practic classes, include 10 hours of pediatric surgery, 10 hours of oncology  SIRS – 130, include 20 hours of pediatric surgery, 20 hours of oncology | Education qualificational level:  magister | 0 h. |
| **Practical classes** |
| 140 h. |
| **Laboratory** |
| 0 h. |
| **Individual work** |
| 130 h. |
| **Individual tasks:** |
| Type of control:  Differentiated credit |

**SECTION "URGENT CONDITIONS IN SURGERY"**

**Developers:** Boyko Valeriy Volodymyrovych, Makarov Vitaliy Volodymyrovych, Tarasenko Lyudmyla Hryhorivna, Tymchenko Mykhailo Yevhenovych.

**Teachers:**

**Teacher information:**

BOYKO VV - Corresponding Member of NAMSU, Doctor of Medical Sciences, Professor, Head of the Department of Surgery №1, specialization: surgery, vascular surgery, thoracic surgery, heart and main vessel surgery, oncosurgery

HRIGOROV Yu.B. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

TARABAN IA - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

ZAMYATIN PM - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

MAKAROV VV - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

KRASNOYARUZHSKIY АG - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

PRASOL VO- Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization in vascular surgery.

SAVVI S.O. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

GROMA VG - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery, endoscopy.

SUSHKOV SV - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

IVANOVA YU.V. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

KRYVOROTʹKO I.V. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

SMACHYLO R.M. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

YEVTUSHENKO D.O. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

HONCHARENKO L.Y. - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

SHCHERBAKOV V.I. - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

KUZNETSOV OV - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

IYEFIMOV DS - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

MINUKHIN DV - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

TYMCHENKO ME - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

LAZIRSKY VO - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

PISOTSKY OM - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery, cardiovascular surgery

BUCHNEVA OV - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

TARASENKO LG - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

HOLOBOROD`KO MM - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

DOTSENKO DG - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

SMOLYANYK KM - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

TOKAREV AV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

SHEVCHENKO OM - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

LELYTSA AV - Assistant of the Department of Surgery №1, specialization surgery.

LEBID PB - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

LYACH SI - Assistant of the Department of Surgery №1, specialization surgery.

KULIK IA - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

MYROSHNYCHENKO DO - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

CHERNYAYEV MS - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

KOROLEVSKA A.Yu. - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

TSODIKOV VV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

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LAVRINENKO AS - Assistant of the Department of Surgery №1, specialization surgery.

MYASOEDOV KV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

V’YUN S.V. - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

KIRIENKO DO - Assistant of the Department of Surgery №1, specialization surgery.

BITYAK S.Yu. - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

MUSHENKO EV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

SOCHNEVA AL - Assistant Professor of Surgery №1, specialization surgery.

RIGA AS - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

PONOMAROVA KV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

**Contact tel. and E-mail of department:**. tel. (057)349-41-51, khnmusurgery1@ukr.net

**Consultations:** time-table and place venue according to the schedule of the department.

**On-line Consultations:** schedule and venue by prior arrangement with the teacher.

Locations: classes are held in the conditions of the State Institution "VT Zaitsev Institute of General and Emergency Surgery of the National Academy of Medical Sciences of Ukraine"

Educational program of higher education of Ukraine, second (master's) level, educational qualification awarded - master's degree, field of knowledge - 22 Health care, specialty 222 "Medicine" is based on the Law of Ukraine "On Higher Education" and the resolution of the Cabinet of Ministers of Ukraine 01.02.2017 № 53 "On amendments to the resolution of the Cabinet of Ministers of Ukraine dated 29.04.2015 № 266", in accordance with the order of the Ministry of Education and Science of Ukraine dated 01.06.2016 № 600 "On approval and implementation of Methodological recommendations for the development standards of higher education ".

The course program determines the prerequisites for access to training, orientation and main focus of the program, the amount of ECTS credits required for a master's degree, a list of general and special (professional) competencies, normative and variable content of training, formulated in terms of learning outcomes and control requirements quality of higher education

The department accepts qualified students of any race, national or ethnic origin, sex, age, people with special needs, any religion, sexual orientation, gender, veteran status or marital status for all rights, privileges, programs and activities, provided to university students.

Reference to the video annotation of the discipline (if any), etc.: http://www.knmu.kharkov.ua/index.php?option=com\_content&view=article&id=95%3A-1&catid=7%3A2011-05-05-09-09-08&Itemid=27&lang=uk

Moodle discipline page (if available):

<http://31.128.79.157:8083/course/view.php?id=804>

<http://31.128.79.157:8083/course/view.php?id=803>

<http://31.128.79.157:8083/course/view.php?id=233>

**1. Description of the discipline (abstract).**

According to modern ideas, surgery studies diseases that are not amenable to therapeutic treatment, methods of disease diagnosis, tactics of treatment of patients and prevention. Surgery is closely related to the basic sciences such as anatomy, physiology, human histology, etc. Given all these basic sciences of medicine, the doctor is often on the verge of life and death of the patient.

It is important during the study to form academic training in basic and clinical biomedical sciences and prepare graduates for the professional activity of a doctor in office by acquiring general and special competencies, the scope of which is described by certain lists of syndromes and symptoms of diseases, emergencies, physiological conditions and diseases requiring special tactics of patient management; laboratory and. instrumental research, medical manipulations, surgical interventions, labor, forensic and military expertise.

This course focuses on solving the major problems of emergency surgery. The program covers topics related to the most common diseases of people in need of surgery. Clinical experience can be gained during the practical classes of the course in the leading institutions of the region according to the schedule of classes. During the course, students have the opportunity to participate in the curation and demonstration of patients with various pathologies, as well as the development of practical skills during classes in phantom classes of the National Academy of Sciences of KhNMU. That is, the course covers the main both practical and theoretical aspects of the future practitioner.

**1. Purpose**:: to expand and consolidate previously acquired theoretical knowledge and deepen practical skills in the complex and responsible component of surgery, emergency surgery.

**2. The main objectives** of the course are the acquisition by students of competencies in accordance with the general and professional competencies of the educational-professional program "Medicine" of the second level of higher education in 222 Medicine: ability to abstract thinking, analysis and synthesis, ability to learn and be modern; ability to apply knowledge in practical situations; knowledge and understanding of the subject area and understanding of professional activity; ability to adapt and act in a new situation; ability to make an informed decision; work in a team; interpersonal skills; ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language; skills of using information and communication technologies; determination and persistence in terms of tasks and responsibilities; ability to act socially responsibly and consciously. Survey skills; ability to determine the necessary list of laboratory and instrumental research methods and evaluate their results; ability to establish a preliminary and clinical diagnosis of the disease; ability to determine the principles and nature of treatment of diseases, the ability to determine the tactics of surgical intervention; the necessary mode of work and rest, the nature of nutrition in the treatment of diseases, the ability to diagnose emergencies; ability to determine tactics and skills of emergency medical care; skills of performing medical manipulations; ability to plan and conduct sanitary and hygienic, preventive and anti-epidemic measures, including infectious diseases; ability to determine the tactics of management of persons subject to dispensary supervision; ability to keep medical documentation.

**3. Discipline status: basic; format of the discipline is mixed** - a discipline is accompanied by the Moodle system, teaching the discipline, combines traditional forms of classroom learning with elements of distance learning, which uses available interactive information technology (ZOOM, Moodle), off-line and on-line counseling.

**4. Teaching methods.** Clinical (surgical supervision of patients), phantoms, electronic information (presentations, video materials, methodical recommendations, lectures), scientific (participation in scientific developments in the discipline), control (tests, situational tasks, assessment of practical skills, protection of a clinical case).

**Additional literature.**

В.В. Бойко, Р.М.Смачило, О.В.Малоштан, О.М.Тищенко. – Жовчні нориці (сучасна концепція лікування). – Харків: Промінь. 2017. – С.160

Секела М.В., Макаров В.В., Гетьманр В., Калабуха И.А., Жехонек А., / Невдкладні стани в торакальній хірургії: монографія 2 книга. [наук. ред проф. В.В.Бойко] - Львов: СПОЛОМ, 2017. – 240 с.

**6. Prerequisites, co-requisites, post-requisites.**

*Prerequisites.* The study of the discipline involves the prior mastering of disciplines in medical biology, normal and pathological anatomy, normal and pathological physiology, biochemistry, microbiology, medical genetics, pharmacology and medical formulations, epidemiology and principles of evidence-based medicine, military field surgery, emergency care, emergency as well as to have practical skills of care for patients of surgical profile and their management in outpatient and inpatient settings.

*Co-requisites.* The study of the discipline involves the joint acquisition of knowledge in the disciplines: emergency, traumatology, neurosurgery, ophthalmology, otolaryngology, oncology.

*Postrequisites*. The main provisions of the discipline should be applied in the study of related disciplines during 6 years of study, is the basis for preparation for the licensing exam EDKI, preparation for study in higher education institutions in the programs of the third educational and scientific level of higher education.

**7. Learning outcomes**, including practical skills (list of knowledge, skills and abilities acquired by the applicant in higher education in the process of its study).

This course focuses on the main problems of diagnosis, treatment of the adult population for urgent surgical pathology, its diagnosis, tactics of conservative and surgical treatment, the patient's stay in the postoperative period.Clinical experience can be gained during practical classes of the course in the leading institution of the region (in the departments of the State Institution " VT Zaitsev Institute of General and Urgent Surgery of NAMSU"), according to the schedule of classes. During the course, students have the opportunity to participate in the supervision and demonstration of patients, as well as visits to operating rooms. That is, the course covers the main both practical and theoretical aspects of the future family doctor. The course covers the main aspects of training future doctors in various specialties, including family doctor, surgeon and others.

**The structure of the discipline**

Table 2

Curriculum of the discipline

|  |  |  |  |
| --- | --- | --- | --- |
| № | Topics | Study form | |
|  |  | Full time or part time | SIV |
|  | **Section I. *Purulent surgical infection.*** | |  |
|  | Acute skin and soft tissue diseases |  |  |
|  | Systemic inflammatory response syndrome in surgical patients |  |
|  | **Section ІІ**. ***Acute* *pathology* *of* *gastrointestinal* *tract*** | |  |
|  | Acute appendicitis and its complications. Perforated ulcer of the stomach and duodenum |  |  |
|  | Acute cholecystitis and its complications. Acute pancreatitis and its complications. |  |
|  | Strangulated hernia. Acute intestinal obstruction. Acute disorders of the mesenteric circulation |  |
|  | Local and widespread purulent-inflammatory processes of the abdominal cavity, peritoneum and retroperitoneal space (infiltrates, abscesses, peritonitis) |  |
|  | **Section ІІI. *Acute surgical pathology of breathing system*** | |  |
|  | Emergency surgical pathology of breathing system: Acute surgical pathology of the lungs and pleura, Damage to the respiratory organs (lungs, pleura, bronchi, trachea, large blood vessels, large lymphatic duct). |  |  |
|  | **Section ІV. *Shock and polytrauma*** | |  |
|  | Shock and polytrauma in surgical patients. Traumas of abdomen. |  |  |
|  | Heamorragic syndrome in emergency surgry (GIT heamorragic syndrome, intraperitoneal and intrapleural heamorrages). Curration of patient/ |  |
|  | Final control of knowledge.Graded test |  |  |

**Curriculum of individual work of students**

Table 3

|  |  |  |
| --- | --- | --- |
| № | Topics | Hours |
| **1** | Differential diagnosis of septic conditions of various etiologies |  |
| **2** | Differentiated diagnosis of diseases of the upper abdomen |  |
| **3** | Differential diagnosis of "silent" abdomen syndrome |  |
| **4** | The latest methods of diagnosis and treatment in emergency surgery (ultrasound, CT, MRI, X-ray endovascular methods, punctures, drainage by ultrasound,) |  |
|  | |  |

**Topics of practical classes:**

**1. Acute skin and soft tissue diseases**.

General etiological and pathogenetic mechanisms of local purulent diseases. Local manifestations of purulent infection - abscess, phlegmon. Diseases: boils, carbuncles, lymphadenitis, lymphangitis, erysipelas (dermolymphangitis), panaritium, mastitis, osteomyelitis. General and local symptoms of local surgical infection. Basic principles of complex treatment of local infectious surgical diseases.

**2. Syndrome of systemic inflammatory response. Generalized purulent surgical infection (sepsis, septic shock)**

Systemic inflammatory response syndrome (CVD). Infection. Bacteremia Definition (definition) of sepsis and related conditions (SEPSIS-1, SEPSIS-2, SEPSIS-3). Septic shock. Multiple organ failure syndrome (MRI). Pathogenesis of sepsis. Principles of treatment of septic patients: Standard therapy - Antibacterial therapy, Invasive surgical or radiological procedures, Treatment of shock and organ failure; New therapeutic possibilities Specific to pathogens (antiendotoxin, polyclonal antiendotoxin serum, antigropositive cell wall substance, antifungal cell wall substance), Specific to mediators (anti-TNF, anti-IL-1, anti-PAF, anti-PAF) TNF, anti-IL-1, anti-PAF), receptor antagonists (anti-TNF, anti-IL-1, anti-PAF)), polyvalent antiseptic action (ibuprofen, pentoxifylline, acetylcysteine, lactoferrin, polymyxin B).

**3. Acute appendicitis and its complications, perforated ulcer of the stomach and duodenum.**

Etylology and pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis Prevention and rehabilitation

**4. Acute cholecystitis and its complications, acute pancreatitis and its complications**

Etylology and pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis. Prevention and rehabilitation.

**5. Strangulated hernia. Acute intestinal obstruction. Acute disorders of mesenteric circulation**

Strangulated hernia - ethylology and pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis. Prevention and rehabilitation.

Acute intestinal obstruction - etiology and pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis. Prevention and rehabilitation.

Acute mesenteric circulatory disorders - etiology and pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis. Prevention and rehabilitation.

**6. Local and widespread purulent-inflammatory processes of the abdominal cavity, peritoneum and retroperitoneal space (infiltrates, abscesses, peritonitis)**

Classification of peritonitis. Pathogenesis. Clinic. Predicting the severity of peritonitis: prognostic scales in surgery (APACHE II, SOFA, MODS, Mannheim Peritonitis Index). Basic principles of surgical treatment of peritonitis. Complications. Treatment in the postoperative period.

**7. Urgent surgical pathology of the respiratory organs: acute surgical pathology of the lungs and pleura, damage to the respiratory organs (lungs, pleura, bronchi, trachea, large blood vessels, large lymphatic duct).**

Clinical anatomy and physiology. Acute purulent-destructive lung diseases. Abscessive pneumonia, lung abscess, gangrenous abscess, purulent abscess, lung gangrene. Etylology and pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis. Prevention and rehabilitation. Damage to the respiratory organs (lungs, pleura, bronchi, trachea, large blood vessels, large lymphatic duct). The side of the body of the respiratory tract. Traumatic chest injuries. Pathogenesis. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis. Prevention and rehabilitation.

**8. Shock and polytrauma in surgical patients. Life injuries**

Classification of injury. Traumatic illness. Determination of polytrauma. Periods of traumatic illness. Multiple organ failure in traumatic illness. Basic concepts in the treatment of polytrauma. Determination of shock. Classification. Differential diagnosis. Principles of treatment. Forecast. Prevention and rehabilitation. Abdominal injury - Clinical anatomy and physiology. Traumatic abdominal injuries. Pathogenesis. Clinic. Diagnosis. Differential diagnosis. Methods of surgical treatment. Management of the perioperative period. Prognosis. Prevention and rehabilitation

**9. Hemorrhagic syndrome in emergency surgery (gastrointestinal bleeding syndrome, intra-abdominal, intrapleural bleeding)**

Classification. The latest diagnostic methods. Physiology of the blood coagulation system. Evaluation of the coagulogram. Differential diagnosis. Tactics of surgical treatment. Management of the perioperative period. Prognosis.

**Discipline policy and values.**

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and get it when you need it.

Students can discuss different tasks, but their performance is strictly individual. You are not allowed to write off, use any software, tips, use a cell phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to attend practical classes.

Visiting patients during hospital treatment is possible provided that students have the appropriate form of clothing, a health book with a note about vaccinations, the results of the examination for the stress of immunity to infectious diseases according to the current epidemic situation.

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions use contact with the teacher.

Students are encouraged to participate in research and participate in conferences on this topic.

All students of KhNMU are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to determine an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Preventing and Combating Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men";

Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation № 25 to paragraph 1 of Article 4 of the Convention on the Elimination of All Forms of Discrimination against Women, General Comment № 16 (2005) "Equal rights for men and women to enjoy economic, social and cultural rights" (Article 3 of the International Covenant on Economic, Social and Cultural Rights) Cultural Rights; UN Committee on Economic, Social and Cultural Rights); Recommendations on education in the spirit of international mutual understanding, cooperation and peace and education in the spirit of respect for human rights and fundamental freedoms (UNESCO), the Concept of the State Social Program for Equal Rights and Opportunities for Women and Men until 2021. Kharkiv National Medical University provides education and work that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans' offices, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential regarding those who report or accuse of discrimination. or sexual harassment (except where the law requires disclosure and / or when disclosure by the University is necessary to protect the safety of others). KhNMU creates a space of equal opportunities free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

Behavior in the audience

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

* leave the audience for a short time if necessary and with the permission of the teacher;
* drink soft drinks;
* take photos of presentation slides;
* take an active part in the class

Forbidden:

* eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;

- use obscene language or use words that offend the honor and dignity of colleagues and faculty;

- gambling;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

Plagiarism and academic integrity

The Department of Surgery №1 maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

Occupational Health

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is, where the fire extinguisher is, how to use it, and so on.

**The procedure for informing about changes in the syllabus**: the necessary changes in the syllabus are approved by the methodical commission of KhNMU on the problems of professional training of surgical profile and published on the site of KhNMU, the site of the Department of Surgery №1 KhNMU.

**Evaluation policy**

To receive credit for the course "Emergencies in Surgery" it is necessary to attend all practical classes, have the necessary level of knowledge on the topics of classes, the ability to solve questions from the licensing exam KROK - 2 from the course Surgery. The number of points received by a student per course depends on the level of knowledge, the degree of mastery of practical skills.

- Current - current educational activities.

- Final - differential test.

**Assessment of individual student tasks is carried out by performing the tasks of the teacher:**

**•** report of the abstract on a practical lesson 0 - 2 points;

• report with a presentation in a practical lesson 0 - 3 points,

• report at scientific and practical conferences of the department, university, writing abstracts, articles 0 - 5 points;

• participation in the All-Ukrainian Olympiad - 5 - 10 points

**Differential credit** - is conducted by the teacher of the academic group at the last lesson of the discipline. Admission to the test is determined in the points of the current educational activity, namely: minimum 70 points, maximum - 120 points.

Table 4

**Recalculation of the average score for current activities in a multi-point scale**

**(for disciplines that end with a d / z or an exam)**

| 4-poins scale | 200-points scale |  | 4-points scale | 200-points scale |
| --- | --- | --- | --- | --- |
| 5,00 | **120** | 3.91-3,94 | 94 |
| 4.95-4,99 | 119 | 3.87-3,9 | 93 |
| 4.91-4,94 | 118 | 3.83- 3,86 | 92 |
| 4.87-4,9 | 117 | 3.79- 3,82 | 91 |
| 4.83-4,86 | 116 | 3.74-3,78 | 90 |
| 4.79-4,82 | 115 | 3.7- 3,73 | 89 |
| 4.75-4,78 | 114 | 3.66- 3,69 | 88 |
| 4.7-4,74 | 113 | 3.62- 3,65 | 87 |
| 4.66-4,69 | 112 | 3.58-3,61 | 86 |
| 4.62-4,65 | 111 | 3.54- 3,57 | 85 |
| 4.58-4,61 | 110 | 3.49- 3,53 | 84 |
| 4.54-4,57 | 109 | 3.45-3,48 | 83 |
| 4.5-4,53 | 108 | 3.41-3,44 | 82 |
| 4.45-4,49 | 107 | 3.37-3,4 | 81 |
| 4.41-4,44 | 106 | 3.33- 3,36 | 80 |
| 4.37-4,4 | 105 | 3.29-3,32 | 79 |
| 4.33-4,36 | 104 | 3.25-3,28 | 78 |
| 4.29-4,32 | 103 | 3.21-3,24 | 77 |
| 4.25- 4,28 | 102 | 3.18-3,2 | 76 |
| 4.2- 4,24 | 101 | 3.15- 3,17 | 75 |
| 4.16- 4,19 | 100 | 3.13- 3,14 | 74 |
| 4.12- 4,15 | 99 | 3.1- 3,12 | 73 |
| 4.08- 4,11 | 98 | 3.07- 3,09 | 72 |
| 4.04- 4,07 | 97 | 3.04-3,06 | 71 |
| 3.99-4,03 | 96 | 3.00-3,03 | **70** |
| 3.95- 3,98 | 95 | **Less than 3,00** | **Not enough** |

Final attestation - differentiated test (GT) on the subject of "Emergency Surgery" is conducted by the teacher of the group.

Students who have scored at least the minimum number of final points for IPA - 70 points are allowed to compile the DZ.

The form of conducting DZ is standardized and according to the methodology approved by the department is carried out in two stages.

I stage - the initial level of evaluation of GTconsists of 2 parts:

1. Practical-oriented part, which involves the implementation of tasks set by the EQCH at the level of basic requirements for knowledge, skills and abilities in the surgical field, and includes:

1) tasks for professional training in working with surgical patients;

2) tasks for evaluating the results of laboratory and instrumental research methods in surgical patients;

3) tasks for the diagnosis and provision of emergency medical care for emergencies in surgery.

Practically-oriented part of the GT is carried out in the form of curation by each student of a patient with urgent surgical pathology on the subject of the discipline "Urgent surgery" with the completion of the "Protocol of curation"

Direct differential test is evaluated: minimum - 50 points, maximum - 80 points. The grade in the discipline is the sum of points for the current educational activity and differentiated credit in points: minimum - 120 points, maximum - 200 points and corresponds to the national scale and the ECTS scale.

During the assessment of mastering each subject of the discipline (CEA) and the final class (FC) the student is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory".

The final score for current educational activities (CEA) and practical classes (PC) is defined as the arithmetic mean of traditional grades for each class and PC, rounded to 2 decimal places and listed in a multi-point scale according to tables 4.

The recalculation of the average score for CEA and PC software for disciplines that end with a differentiated credit is made in accordance with Table 1. The minimum number of points that a student must score for admission to a differentiated credit - 70 points, the minimum positive score on a differentiated credit, respectively 50 points, maximum - 80 points. The maximum score for differentiated credit is 200 points, the minimum is 120 points.

Students who have completed all types of work provided for in the curriculum and scored at least the minimum number of points in the study of sections are admitted to the differentiated test.

The form of differentiated credit is standardized and includes control of theoretical (test control) and practical training (demonstration of student skills at the bedside of a sick child, solving structured situational problems, performing manipulations).

Test control includes 50 test tasks.

Students perform practical skills at the patient's bedside (assessment of the general condition of the sick child, analysis of anamnesis data, objective examination and determination of clinical changes in organs and systems, justification of previous diagnosis, treatment, emergency measures, etc.).

Solving a complex structured situational problem, which includes the interpretation of laboratory and instrumental research data, substantiation of clinical diagnosis, determination of therapeutic tactics, appointment of treatment or emergency care.

Exam or differentiated test in a discipline or its part is a process during which the received for a course (semester) are checked:

- level of theoretical knowledge;

- development of creative thinking;

- skills of independent work;

- competencies - the ability to synthesize the acquired knowledge and apply them in solving practical problems.

Differentiated credit is conducted by the teacher of the group at the last practical lesson, and for the session a schedule is set, approved by the rector of KhNMU, indicating the specific dates of the exams.

If the exam is not passed, the dates of rescheduling during the holidays are set, until the beginning of the next semester.

Assessment in the discipline is the current educational activity (consists of the total number of points during the academic semester, which can be assessed from 70 to 120 points) + differentiated test (consists of assessment of practical skills, laboratory and instrumental research methods and problem solving) = 120 points + 80 points = 200 points.

Table 5

**Conversion of discipline assessment points into ECTS and traditional estimates**

|  |  |  |
| --- | --- | --- |
| **Score on a 200-point scale** | **Score on a point**  **scale ESTS** | **Score on a 4-point traditional scale** |
| 200 – 180 | A | Excellent |
| 179 - 160 | B | Well |
| 159 - 150 | C | Well |
| 149 - 130 | D | Satisfactorily |
| 129 – 120 | E | Satisfactorily |
| less120 | F, Fx | Unsatisfactorily |

**The maximum number** of points that a student can score for studying the discipline - 200 points, including the maximum number of points for current educational activities - 120 points, as well as the maximum number of points according to the results of differentiated credit - 80 points. The minimum number of points is 120 points, including the minimum current educational activity - 70 and according to the results of DC - 50 points.

**EDUCATIONAL DISCIPLINE "SURGERY, INCLUDING PEDIATRIC SURGERY IN GENERAL PRACTICE". SECTION "PLANNED SURGICAL PATHOLOGY, INCLUDING PEDIATRIC SURGERY"**

**Developers:** Boyko Valeriy Volodymyrovych, Makarov Vitaliy Volodymyrovych, Tarasenko Lyudmyla Hryhorivna, Tymchenko Mykhailo Yevhenovych

**Teachers:**

**Teacher information:**

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**Consultations:** time-table and place venue according to the schedule of the department.

**On-line Consultations:** schedule and venue by prior arrangement with the teacher.

Locations: classes are held in the conditions of the State Institution "VT Zaitsev Institute of General and Emergency Surgery of the National Academy of Medical Sciences of Ukraine"

**Locations:** classes are held in the conditions of the State Institution "VT Zaitsev Institute of General and Emergency Surgery of the National Academy of Medical Sciences of Ukraine"

**1. Description of the discipline (abstract).**

According to modern ideas, surgery studies diseases that are not amenable to therapeutic treatment, methods of disease diagnosis, tactics of treatment of patients and prevention. Surgery is closely related to the basic sciences such as anatomy, physiology, human histology, etc. Given all these basic sciences of medicine, the doctor is often on the verge of life and death of the patient.

It is important during the study to form academic training in basic and clinical biomedical sciences and prepare graduates for the professional activity of a doctor in office by acquiring general and special competencies, the scope of which is described by certain lists of syndromes and symptoms of diseases, emergencies, physiological conditions and diseases requiring special tactics of patient management; laboratory and. instrumental research, medical manipulations, surgical interventions, labor, forensic and military expertise.

This course focuses on solving the major problems of emergency surgery. The program covers topics related to the most common diseases of people in need of surgery. Clinical experience can be gained during the practical classes of the course in the leading institutions of the region according to the schedule of classes. During the course, students have the opportunity to participate in the curation and demonstration of patients with various pathologies, as well as the development of practical skills during classes in phantom classes of the National Academy of Sciences of KhNMU. That is, the course covers the main both practical and theoretical aspects of the future practitioner.

Educational program of higher education of Ukraine, second (master's) level, educational qualification awarded - master's degree, field of knowledge - 22 Health care, specialty 222 "Medicine" is based on the Law of Ukraine "On Higher Education" and the resolution of the Cabinet of Ministers of Ukraine 01.02.2017 № 53 "On amendments to the resolution of the Cabinet of Ministers of Ukraine dated 29.04.2015 № 266", in accordance with the order of the Ministry of Education and Science of Ukraine dated 01.06.2016 № 600 "On approval and implementation of Methodological recommendations for the development standards of higher education ".

The course program determines the prerequisites for access to training, orientation and main focus of the program, the amount of ECTS credits required for a master's degree, a list of general and special (professional) competencies, normative and variable content of training, formulated in terms of learning outcomes and control requirements quality of higher education

The department accepts qualified students of any race, national or ethnic origin, sex, age, people with special needs, any religion, sexual orientation, gender, veteran status or marital status for all rights, privileges, programs and activities, provided to university students.

Reference to the video annotation of the discipline (if any), etc.: http://www.knmu.kharkov.ua/index.php?option=com\_content&view=article&id=95%3A-1&catid=7%3A2011-05-05-09-09-08&Itemid=27&lang=uk

Moodle discipline page (if available):

<http://31.128.79.157:8083/course/view.php?id=804>

<http://31.128.79.157:8083/course/view.php?id=803>

<http://31.128.79.157:8083/course/view.php?id=233>

**1. Purpose**:: to expand and consolidate previously acquired theoretical knowledge and deepen practical skills in the complex and responsible component of surgery, emergency surgery.

**2. The main objectives** of the course are the acquisition by students of competencies in accordance with the general and professional competencies of the educational-professional program "Medicine" of the second level of higher education in 222 Medicine: ability to abstract thinking, analysis and synthesis, ability to learn and be modern; ability to apply knowledge in practical situations; knowledge and understanding of the subject area and understanding of professional activity; ability to adapt and act in a new situation; ability to make an informed decision; work in a team; interpersonal skills; ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language; skills of using information and communication technologies; determination and persistence in terms of tasks and responsibilities; ability to act socially responsibly and consciously. Survey skills; ability to determine the necessary list of laboratory and instrumental research methods and evaluate their results; ability to establish a preliminary and clinical diagnosis of the disease; ability to determine the principles and nature of treatment of diseases, the ability to determine the tactics of surgical intervention; the necessary mode of work and rest, the nature of nutrition in the treatment of diseases, the ability to diagnose emergencies; ability to determine tactics and skills of emergency medical care; skills of performing medical manipulations; ability to plan and conduct sanitary and hygienic, preventive and anti-epidemic measures, including infectious diseases; ability to determine the tactics of management of persons subject to dispensary supervision; ability to keep medical documentation.

**3. Discipline status: basic; format of the discipline is mixed** - a discipline is accompanied by the Moodle system, teaching the discipline, combines traditional forms of classroom learning with elements of distance learning, which uses available interactive information technology (ZOOM, Moodle), off-line and on-line counseling.

**4. Teaching methods.** Clinical (surgical supervision of patients), phantoms, electronic information (presentations, video materials, methodical recommendations, lectures), scientific (participation in scientific developments in the discipline), control (tests, situational tasks, assessment of practical skills, protection of a clinical case).

**6. Prerequisites, co-requisites, post-requisites.**

*Prerequisites.* The study of the discipline involves the prior mastering of disciplines in medical biology, normal and pathological anatomy, normal and pathological physiology, biochemistry, microbiology, medical genetics, pharmacology and medical formulations, epidemiology and principles of evidence-based medicine, military field surgery, emergency care, emergency as well as to have practical skills of care for patients of surgical profile and their management in outpatient and inpatient settings.

*Co-requisites.* The study of the discipline involves the joint acquisition of knowledge in the disciplines: emergency, traumatology, neurosurgery, ophthalmology, otolaryngology, oncology.

*Postrequisites*. The main provisions of the discipline should be applied in the study of related disciplines during 6 years of study, is the basis for preparation for the licensing exam EDKI, preparation for study in higher education institutions in the programs of the third educational and scientific level of higher education.

**7. Learning outcomes**, including practical skills (list of knowledge, skills and abilities acquired by the applicant in higher education in the process of its study).

This course focuses on the main problems of diagnosis, treatment of the adult population for urgent surgical pathology, its diagnosis, tactics of conservative and surgical treatment, the patient's stay in the postoperative period.Clinical experience can be gained during practical classes of the course in the leading institution of the region (in the departments of the State Institution " VT Zaitsev Institute of General and Urgent Surgery of NAMSU"), according to the schedule of classes. During the course, students have the opportunity to participate in the supervision and demonstration of patients, as well as visits to operating rooms. That is, the course covers the main both practical and theoretical aspects of the future family doctor. The course covers the main aspects of training future doctors in various specialties, including family doctor, surgeon and others.

**The structure of the discipline**

Table 2

Curriculum of the discipline

|  |  |  |  |
| --- | --- | --- | --- |
| № | Topics | Study form | |
| Full time or part time | SIV |
| 1. | History of surgery in Ukraine. Organization of surgical care in Ukraine. Ethics and deontology in surgery. |  |  |
| 2. | Diagnostic methods in surgery. |  |  |
| 3. | Rules of antibiotic therapy in the prevention and treatment of surgical infection. |  |  |
| 4. | Acute skin and soft tissue diseases. Principles of diagnosis and indications for surgical treatment. |  |  |
| 5. | Gastric or peptic ulcer: Benign neoplasms of the gastrointestinal tract. |  |  |
| 6. | Diseases of the hepatopancreatobiliary zone (chronic cholecystitis, chronic pancreatitis, non-blastomatous formations of the liver and biliary tract). |  |  |
| 7. | Portal hypertension syndrome in surgery. |  |  |
| 8. | Features of the search for surgical diseases in pregnant women and the elderly. |  |  |
| 9. | Surgical diseases of the neck and mediastinal organs. Principles of diagnosis and choice of treatment tactics. |  |  |
| 10. | Surgical treatment of non-blastomatous neoplasms of the retroperitoneal space. Curation of the patient. |  |  |
| 11. | Developmental defects in children, diagnosis, treatment tactics and emergency medical care. Emergency care for cardiovascular insufficiency. |  |  |
| 12. | Congenital lung cysts. Pulmonary hypoplasia. |  |  |
| 13. | Gastroesophageal reflux. Achalasia. Congenital pylorostenosis. |  |  |
| 14. | Esophageal atresia. |  |  |
| 15. | Diaphragmatic hernias. Biliary atresia. Choledochal cyst. Emergency care for liver failure. |  |  |
| 16. | Developmental defects accompanied by intestinal obstruction. Malformations of the colon (anorectal defects, Hirschsprung's disease). |  |  |
| 17. | Malformations of the anterior abdominal wall (embryonic hernias of the umbilical cord, gastroschisis, umbilical and inguinal hernias). Cryptorchidism. |  |  |
| 18. | Malformations of the urinary and genital systems (hydronephrosis, vesicoureteral reflux, malformations of the urethra and bladder). Emergency care for renal failure. |  |  |
| 19. | Musculoskeletal disorders (congenital hip dislocation, congenital clubfoot, congenital muscular crooked neck). |  |  |
| 20. | Prenatal diagnosis of malformations. The solution to this problem. Optimal terms of treatment of congenital malformations in children. |  |  |
| 21. | Minimally invasive surgery. |  |  |
| 22. | Neonatal urology. |  |  |
| 23. | Final control of knowledge. Differential credit |  |  |

**Curriculum of individual work of students**

Table 3

|  |  |  |
| --- | --- | --- |
| № | Topics | Hours |
| 1. | Nonspecific ulcerative colitis, Crohn's disease. |  |
| 2. | Differential diagnosis of diseases of the rectum and pararectal space. |  |
| 3. | Jaundice syndrome in surgery. |  |
| 4. | Bronchiectasis. |  |
| 5. | Hernia of liquid localization |  |
| 6. | Intrauterine and endoscopic methods of operations in pediatric surgery. |  |
| 7. | Parenteral and enteral feeding of children. |  |
| 8. | Differential diagnosis of hydronephrosis. |  |
|  | |  |

**Topics of practical classes**

**1. History of surgery in Ukraine. Organization of surgical care in Ukraine. Ethics and deontology in surgery.**

Studying the history of surgical science The composition and structure of the surgical department in the clinic, which depends on the number of people served by the clinic. Indications for hospitalization of patients: urgent and planned. Urgent hospitalization for injuries in which emergency care in a polyclinic is not possible in full; acute surgical infection that requires major surgery or constant monitoring of the patient; acute diseases of the thoracic and abdominal cavities; acute vascular diseases (acute thrombosis, embolism); diagnostic hospitalization (conditions of supervision of the patient in the clinic do not exclude acute disease), etc. Indications for planned hospitalization are: diseases that require major surgery; chronic diseases, the treatment of which in the clinic were ineffective; diagnostic hospitalization, which requires the use of special equipment or special research conditions; minor surgery in persons with severe comorbidities, etc. Dispanserisation is a method of active dynamic monitoring of the state of health of groups of the population in order to identify, register and treat the earliest forms of chronic surgical diseases.

**2. Diagnostic methods in surgery.**

The development of technology, its widespread merging with medical science has a great influence on the improvement of methods of diagnosis and treatment in practical medicine and surgery in particular. These methods allow to reduce the time of the examination, to accurately diagnose, to conduct highly effective treatment with minimal invasion and often without a large "incision". Minimally invasive interventions have found their application in almost all areas of surgery. This led to the maximum economic effect, reducing the patient's stay in the hospital, reducing the pre- and post-operative period. Among the new diagnostic and therapeutic technologies in surgery, video endoscopic, X-ray endovascular, ultrasound and computed tomography methods are currently most widely used.

**3. Principles of rational antibiotic therapy in surgery.**

Classification of antibacterial drugs. Antibiotics in the prevention of surgical infection. Antibacterial therapy of surgical infections. Ways of administration of antibiotics. Deescalation therapy. Step antibiotic therapy in surgery.

**4. Surgical diseases of the skin and subcutaneous tissue. Principles of diagnosis and indications for surgical treatment.**

Surgical diseases of the skin and subcutaneous tissue. Atheroma, lipoma and other non-blastomatous diseases of the skin, its derivatives and subcutaneous tissue. Principles of diagnosis and indications for surgical treatment.

**5. Gastric or peptic ulcer. Benign neoplasms of the gastrointestinal tract.**

Gastric or peptic ulcer: Principles of diagnosis, indications for surgical treatment. Modern principles of prevention of complications. Modern methods of surgical treatment. Benign neoplasms of the gastrointestinal tract.

**6. Diseases of the hepatopancreatobiliary zone (chronic cholecystitis, chronic pancreatitis, non-blastomatous formations of the liver and biliary tract).**

Diseases of the hepatopancreatobiliary zone (chronic cholecystitis, chronic pancreatitis, non-blastomatous liver formations). Differential diagnosis of benign and blastomatous processes. Modern surgical approaches to surgical treatment. Step-by-step approaches to surgical treatment.

**7. Syndrome of portal hypertension in surgery.**

Portal hypertension syndrome in surgery. The main principles of differential diagnosis. Modern methods of surgical treatment (endoscopic, endovascular surgery). Step by step approaches to surgical treatment.

**8. Features of the search for surgical diseases in pregnant women and the elderly.**

Features of the search for surgical diseases in pregnant women and the elderly. Anatomical and physiological features of pregnant women. Features of diagnostic approaches in pregnant women. Anatomical and physiological features of the elderly. Features of diagnosis and surgical approaches to surgical diseases of the elderly and senile.

**9. Surgical diseases of the neck and mediastinal organs. Principles of diagnosis and choice of treatment tactics.**

Surgical diseases of the neck and mediastinal organs. Principles of differential diagnosis of blastomatous and non-blastomatous processes. Indications and contraindications to surgical treatment of tumors of the neck and mediastinum. Modern methods of surgical treatment.

**10. Surgical treatment of non-blastomatous neoplasms of the retroperitoneal space. Curation of the patient.**

Surgical treatment of non-blastomatous neoplasms of the retroperitoneal space. Multidisciplinary approach to the treatment of adrenal tumors. Indications and contraindications to surgical dichotomy Minimally invasive methods of treatment of retroperitoneal space. Curation of the patient with filling in the medical history.

**11. Final lesson. Differential credit.**

**Discipline policy and values.**

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and get it when you need it.

Students can discuss different tasks, but their performance is strictly individual. You are not allowed to write off, use any software, tips, use a cell phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to attend practical classes.

Visiting patients during hospital treatment is possible provided that students have the appropriate form of clothing, a health book with a note about vaccinations, the results of the examination for the stress of immunity to infectious diseases according to the current epidemic situation.

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions use contact with the teacher.

Students are encouraged to participate in research and participate in conferences on this topic.

All students of KhNMU are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to determine an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Preventing and Combating Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men";

Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation № 25 to paragraph 1 of Article 4 of the Convention on the Elimination of All Forms of Discrimination against Women, General Comment № 16 (2005) "Equal rights for men and women to enjoy economic, social and cultural rights" (Article 3 of the International Covenant on Economic, Social and Cultural Rights) Cultural Rights; UN Committee on Economic, Social and Cultural Rights); Recommendations on education in the spirit of international mutual understanding, cooperation and peace and education in the spirit of respect for human rights and fundamental freedoms (UNESCO), the Concept of the State Social Program for Equal Rights and Opportunities for Women and Men until 2021. Kharkiv National Medical University provides education and work that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans' offices, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential regarding those who report or accuse of discrimination. or sexual harassment (except where the law requires disclosure and / or when disclosure by the University is necessary to protect the safety of others). KhNMU creates a space of equal opportunities free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

Behavior in the audience

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

* leave the audience for a short time if necessary and with the permission of the teacher;
* drink soft drinks;
* take photos of presentation slides;
* take an active part in the class

Forbidden:

* eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;

- use obscene language or use words that offend the honor and dignity of colleagues and faculty;

- gambling;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

Plagiarism and academic integrity

The Department of Surgery №1 maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

Occupational Health

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is, where the fire extinguisher is, how to use it, and so on.

**The procedure for informing about changes in the syllabus**: the necessary changes in the syllabus are approved by the methodical commission of KhNMU on the problems of professional training of surgical profile and published on the site of KhNMU, the site of the Department of Surgery №1 KhNMU.

**Evaluation policy**

To receive credit for the course "Emergencies in Surgery" it is necessary to attend all practical classes, have the necessary level of knowledge on the topics of classes, the ability to solve questions from the licensing exam KROK - 2 from the course Surgery. The number of points received by a student per course depends on the level of knowledge, the degree of mastery of practical skills.

- Current - current educational activities.

- Final - differential test.

**Assessment of individual student tasks is carried out by performing the tasks of the teacher:**

**•** report of the abstract on a practical lesson 0 - 2 points;

• report with a presentation in a practical lesson 0 - 3 points,

• report at scientific and practical conferences of the department, university, writing abstracts, articles 0 - 5 points;

• participation in the All-Ukrainian Olympiad - 5 - 10 points

**Differential credit** - is conducted by the teacher of the academic group at the last lesson of the discipline. Admission to the test is determined in the points of the current educational activity, namely: minimum 70 points, maximum - 120 points.

Table 4

**Recalculation of the average score for current activities in a multi-point scale**

**(for disciplines that end with a d / z or an exam)**

| 4-poins scale | 200-points scale |  | 4-points scale | 200-points scale |
| --- | --- | --- | --- | --- |
| 5,00 | **120** | 3.91-3,94 | 94 |
| 4.95-4,99 | 119 | 3.87-3,9 | 93 |
| 4.91-4,94 | 118 | 3.83- 3,86 | 92 |
| 4.87-4,9 | 117 | 3.79- 3,82 | 91 |
| 4.83-4,86 | 116 | 3.74-3,78 | 90 |
| 4.79-4,82 | 115 | 3.7- 3,73 | 89 |
| 4.75-4,78 | 114 | 3.66- 3,69 | 88 |
| 4.7-4,74 | 113 | 3.62- 3,65 | 87 |
| 4.66-4,69 | 112 | 3.58-3,61 | 86 |
| 4.62-4,65 | 111 | 3.54- 3,57 | 85 |
| 4.58-4,61 | 110 | 3.49- 3,53 | 84 |
| 4.54-4,57 | 109 | 3.45-3,48 | 83 |
| 4.5-4,53 | 108 | 3.41-3,44 | 82 |
| 4.45-4,49 | 107 | 3.37-3,4 | 81 |
| 4.41-4,44 | 106 | 3.33- 3,36 | 80 |
| 4.37-4,4 | 105 | 3.29-3,32 | 79 |
| 4.33-4,36 | 104 | 3.25-3,28 | 78 |
| 4.29-4,32 | 103 | 3.21-3,24 | 77 |
| 4.25- 4,28 | 102 | 3.18-3,2 | 76 |
| 4.2- 4,24 | 101 | 3.15- 3,17 | 75 |
| 4.16- 4,19 | 100 | 3.13- 3,14 | 74 |
| 4.12- 4,15 | 99 | 3.1- 3,12 | 73 |
| 4.08- 4,11 | 98 | 3.07- 3,09 | 72 |
| 4.04- 4,07 | 97 | 3.04-3,06 | 71 |
| 3.99-4,03 | 96 | 3.00-3,03 | **70** |
| 3.95- 3,98 | 95 | **Less than 3,00** | **Not enough** |

Final attestation - differentiated test (GT) on the subject of "Emergency Surgery" is conducted by the teacher of the group.

Students who have scored at least the minimum number of final points for IPA - 70 points are allowed to compile the DZ.

The form of conducting DZ is standardized and according to the methodology approved by the department is carried out in two stages.

I stage - the initial level of evaluation of GTconsists of 2 parts:

1. Practical-oriented part, which involves the implementation of tasks set by the EQCH at the level of basic requirements for knowledge, skills and abilities in the surgical field, and includes:

1) tasks for professional training in working with surgical patients;

2) tasks for evaluating the results of laboratory and instrumental research methods in surgical patients;

3) tasks for the diagnosis and provision of emergency medical care for emergencies in surgery.

Practically-oriented part of the GT is carried out in the form of curation by each student of a patient with urgent surgical pathology on the subject of the discipline "Urgent surgery" with the completion of the "Protocol of curation"

Direct differential test is evaluated: minimum - 50 points, maximum - 80 points. The grade in the discipline is the sum of points for the current educational activity and differentiated credit in points: minimum - 120 points, maximum - 200 points and corresponds to the national scale and the ECTS scale.

During the assessment of mastering each subject of the discipline (CEA) and the final class (FC) the student is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory".

The final score for current educational activities (CEA) and practical classes (PC) is defined as the arithmetic mean of traditional grades for each class and PC, rounded to 2 decimal places and listed in a multi-point scale according to tables 4.

The recalculation of the average score for CEA and PC software for disciplines that end with a differentiated credit is made in accordance with Table 1. The minimum number of points that a student must score for admission to a differentiated credit - 70 points, the minimum positive score on a differentiated credit, respectively 50 points, maximum - 80 points. The maximum score for differentiated credit is 200 points, the minimum is 120 points.

Students who have completed all types of work provided for in the curriculum and scored at least the minimum number of points in the study of sections are admitted to the differentiated test.

The form of differentiated credit is standardized and includes control of theoretical (test control) and practical training (demonstration of student skills at the bedside of a sick child, solving structured situational problems, performing manipulations).

Test control includes 50 test tasks.

Students perform practical skills at the patient's bedside (assessment of the general condition of the sick child, analysis of anamnesis data, objective examination and determination of clinical changes in organs and systems, justification of previous diagnosis, treatment, emergency measures, etc.).

Solving a complex structured situational problem, which includes the interpretation of laboratory and instrumental research data, substantiation of clinical diagnosis, determination of therapeutic tactics, appointment of treatment or emergency care.

Exam or differentiated test in a discipline or its part is a process during which the received for a course (semester) are checked:

- level of theoretical knowledge;

- development of creative thinking;

- skills of independent work;

- competencies - the ability to synthesize the acquired knowledge and apply them in solving practical problems.

Differentiated credit is conducted by the teacher of the group at the last practical lesson, and for the session a schedule is set, approved by the rector of KhNMU, indicating the specific dates of the exams.

If the exam is not passed, the dates of rescheduling during the holidays are set, until the beginning of the next semester.

Assessment in the discipline is the current educational activity (consists of the total number of points during the academic semester, which can be assessed from 70 to 120 points) + differentiated test (consists of assessment of practical skills, laboratory and instrumental research methods and problem solving) = 120 points + 80 points = 200 points.

Table 5

**Conversion of discipline assessment points into ECTS and traditional estimates**

|  |  |  |
| --- | --- | --- |
| **Score on a 200-point scale** | **Score on a point**  **scale ESTS** | **Score on a 4-point traditional scale** |
| 200 – 180 | A | Excellent |
| 179 - 160 | B | Well |
| 159 - 150 | C | Well |
| 149 - 130 | D | Satisfactorily |
| 129 – 120 | E | Satisfactorily |
| less120 | F, Fx | Unsatisfactorily |

**The maximum number** of points that a student can score for studying the discipline - 200 points, including the maximum number of points for current educational activities - 120 points, as well as the maximum number of points according to the results of differentiated credit - 80 points. The minimum number of points is 120 points, including the minimum current educational activity - 70 and according to the results of DC - 50 points.

**EDUCATIONAL DISCIPLINE "SURGERY, INCLUDING PEDIATRIC SURGERY IN GENERAL PRACTICE". SECTION "CARDIOVASCULAR SURGERY"**

**Developers:** Boyko Valeriy Volodymyrovych, Makarov Vitaliy Volodymyrovych, Tarasenko Lyudmyla Hryhorivna, Tymchenko Mykhailo Yevhenovych.

**Teachers:**

**Teacher information:**

BOYKO VV - Corresponding Member of NAMSU, Doctor of Medical Sciences, Professor, Head of the Department of Surgery №1, specialization: surgery, vascular surgery, thoracic surgery, heart and main vessel surgery, oncosurgery

HRIGOROV Yu.B. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

TARABAN IA - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

ZAMYATIN PM - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

MAKAROV VV - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

KRASNOYARUZHSKIY АG - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

PRASOL VO- Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization in vascular surgery.

SAVVI S.O. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

GROMA VG - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery, endoscopy.

SUSHKOV SV - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

IVANOVA YU.V. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

KRYVOROTʹKO I.V. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

SMACHYLO R.M. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

YEVTUSHENKO D.O. - Doctor of Medical Sciences, Professor of the Department of Surgery №1, specialization surgery.

HONCHARENKO L.Y. - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

SHCHERBAKOV V.I. - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

KUZNETSOV OV - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

IYEFIMOV DS - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

MINUKHIN DV - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

TYMCHENKO ME - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

LAZIRSKY VO - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

PISOTSKY OM - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery, cardiovascular surgery

BUCHNEVA OV - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

TARASENKO LG - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

HOLOBOROD`KO MM - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

DOTSENKO DG - Candidate of Medical Sciences, Associate Professor of Surgery №1, specialization surgery.

SMOLYANYK KM - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

TOKAREV AV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

SHEVCHENKO OM - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

LELYTSA AV - Assistant of the Department of Surgery №1, specialization surgery.

LEBID PB - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

LYACH SI - Assistant of the Department of Surgery №1, specialization surgery.

KULIK IA - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

MYROSHNYCHENKO DO - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

CHERNYAYEV MS - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

KOROLEVSKA A.Yu. - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

TSODIKOV VV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

ZAMYATIN DP - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

LAVRINENKO AS - Assistant of the Department of Surgery №1, specialization surgery.

MYASOEDOV KV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

V’YUN S.V. - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

KIRIENKO DO - Assistant of the Department of Surgery №1, specialization surgery.

BITYAK S.Yu. - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

MUSHENKO EV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

SOCHNEVA AL - Assistant Professor of Surgery №1, specialization surgery.

RIGA AS - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

PONOMAROVA KV - Candidate of Medical Sciences, Assistant of the Department of Surgery №1, specialization surgery.

**Contact tel. and E-mail of department:**. tel. (057)349-41-51, khnmusurgery1@ukr.net

**Consultations:** time-table and place venue according to the schedule of the department.

**On-line Consultations:** schedule and venue by prior arrangement with the teacher.

Locations: classes are held in the conditions of the State Institution "VT Zaitsev Institute of General and Emergency Surgery of the National Academy of Medical Sciences of Ukraine"

**1. Description of the discipline (abstract).**

According to modern ideas, surgery studies diseases that are not amenable to therapeutic treatment, methods of disease diagnosis, tactics of treatment of patients and prevention. Surgery is closely related to the basic sciences such as anatomy, physiology, human histology, etc. Given all these basic sciences of medicine, the doctor is often on the verge of life and death of the patient.

It is important during the study to form academic training in basic and clinical biomedical sciences and prepare graduates for the professional activity of a doctor in office by acquiring general and special competencies, the scope of which is described by certain lists of syndromes and symptoms of diseases, emergencies, physiological conditions and diseases requiring special tactics of patient management; laboratory and. instrumental research, medical manipulations, surgical interventions, labor, forensic and military expertise.

This course focuses on solving the major problems of emergency surgery. The program covers topics related to the most common diseases of people in need of surgery. Clinical experience can be gained during the practical classes of the course in the leading institutions of the region according to the schedule of classes. During the course, students have the opportunity to participate in the curation and demonstration of patients with various pathologies, as well as the development of practical skills during classes in phantom classes of the National Academy of Sciences of KhNMU. That is, the course covers the main both practical and theoretical aspects of the future practitioner.

Educational program of higher education of Ukraine, second (master's) level, educational qualification awarded - master's degree, field of knowledge - 22 Health care, specialty 222 "Medicine" is based on the Law of Ukraine "On Higher Education" and the resolution of the Cabinet of Ministers of Ukraine 01.02.2017 № 53 "On amendments to the resolution of the Cabinet of Ministers of Ukraine dated 29.04.2015 № 266", in accordance with the order of the Ministry of Education and Science of Ukraine dated 01.06.2016 № 600 "On approval and implementation of Methodological recommendations for the development standards of higher education ".

The course program determines the prerequisites for access to training, orientation and main focus of the program, the amount of ECTS credits required for a master's degree, a list of general and special (professional) competencies, normative and variable content of training, formulated in terms of learning outcomes and control requirements quality of higher education

The department accepts qualified students of any race, national or ethnic origin, sex, age, people with special needs, any religion, sexual orientation, gender, veteran status or marital status for all rights, privileges, programs and activities, provided to university students.

Reference to the video annotation of the discipline (if any), etc.: http://www.knmu.kharkov.ua/index.php?option=com\_content&view=article&id=95%3A-1&catid=7%3A2011-05-05-09-09-08&Itemid=27&lang=uk

Moodle discipline page (if available):

<http://31.128.79.157:8083/course/view.php?id=804>

<http://31.128.79.157:8083/course/view.php?id=803>

<http://31.128.79.157:8083/course/view.php?id=233>

**1. Purpose**:: to expand and consolidate previously acquired theoretical knowledge and deepen practical skills in the complex and responsible component of surgery, emergency surgery.

**2. The main objectives** of the course are the acquisition by students of competencies in accordance with the general and professional competencies of the educational-professional program "Medicine" of the second level of higher education in 222 Medicine: ability to abstract thinking, analysis and synthesis, ability to learn and be modern; ability to apply knowledge in practical situations; knowledge and understanding of the subject area and understanding of professional activity; ability to adapt and act in a new situation; ability to make an informed decision; work in a team; interpersonal skills; ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language; skills of using information and communication technologies; determination and persistence in terms of tasks and responsibilities; ability to act socially responsibly and consciously. Survey skills; ability to determine the necessary list of laboratory and instrumental research methods and evaluate their results; ability to establish a preliminary and clinical diagnosis of the disease; ability to determine the principles and nature of treatment of diseases, the ability to determine the tactics of surgical intervention; the necessary mode of work and rest, the nature of nutrition in the treatment of diseases, the ability to diagnose emergencies; ability to determine tactics and skills of emergency medical care; skills of performing medical manipulations; ability to plan and conduct sanitary and hygienic, preventive and anti-epidemic measures, including infectious diseases; ability to determine the tactics of management of persons subject to dispensary supervision; ability to keep medical documentation.

**3. Discipline status: basic; format of the discipline is mixed** - a discipline is accompanied by the Moodle system, teaching the discipline, combines traditional forms of classroom learning with elements of distance learning, which uses available interactive information technology (ZOOM, Moodle), off-line and on-line counseling.

**4. Teaching methods.** Clinical (surgical supervision of patients), phantoms, electronic information (presentations, video materials, methodical recommendations, lectures), scientific (participation in scientific developments in the discipline), control (tests, situational tasks, assessment of practical skills, protection of a clinical case).

**6. Prerequisites, co-requisites, post-requisites.**

*Prerequisites.* The study of the discipline involves the prior mastering of disciplines in medical biology, normal and pathological anatomy, normal and pathological physiology, biochemistry, microbiology, medical genetics, pharmacology and medical formulations, epidemiology and principles of evidence-based medicine, military field surgery, emergency care, emergency as well as to have practical skills of care for patients of surgical profile and their management in outpatient and inpatient settings.

*Co-requisites.* The study of the discipline involves the joint acquisition of knowledge in the disciplines: emergency, traumatology, neurosurgery, ophthalmology, otolaryngology, oncology.

*Postrequisites*. The main provisions of the discipline should be applied in the study of related disciplines during 6 years of study, is the basis for preparation for the licensing exam EDKI, preparation for study in higher education institutions in the programs of the third educational and scientific level of higher education.

**7. Learning outcomes**, including practical skills (list of knowledge, skills and abilities acquired by the applicant in higher education in the process of its study).

This course focuses on the main problems of diagnosis, treatment of the adult population for urgent surgical pathology, its diagnosis, tactics of conservative and surgical treatment, the patient's stay in the postoperative period.Clinical experience can be gained during practical classes of the course in the leading institution of the region (in the departments of the State Institution " VT Zaitsev Institute of General and Urgent Surgery of NAMSU"), according to the schedule of classes. During the course, students have the opportunity to participate in the supervision and demonstration of patients, as well as visits to operating rooms. That is, the course covers the main both practical and theoretical aspects of the future family doctor. The course covers the main aspects of training future doctors in various specialties, including family doctor, surgeon and others.

**Curriculum of the discipline**

**The content of the discipline**

**Table 2**

|  |  |
| --- | --- |
| № | **Topics** |
|
| 1. | Arterial embolism and acute arterial thrombosis of the extremities (syndrome acute ischemia of the extremities) |
| 2. | Acute thrombose of the magistral veins of the extremities. Pulmonare embolism. |
| 3. | Varicose veins disease. Endovenoustreatment. Chronic venous insufficiency. |
| 4. | Ischemic heart disease and its complications.Acute coronary syndrome. Modern treatment. Heart injuries. |
| 5. | Chronic criticial ischemia extremities, ethiology, classification, kinds of the conservative and surgical treatment. |
| 6. | Final class. Training at Differentiated credit. Patient supervision. |
| 7. | Differentiated credit |
|  | |

**Education Thematic Plan CVS**

**Table 3**

|  |  |  |
| --- | --- | --- |
| № | Topics | Hours |
| 1 | 1 Thrombophilia - etiology, pathogenesis, clinical manifestations, principles of diagnosis and treatment. |  |
| 2 | 2 Anticoagulant and thrombolytic therapy in acute thrombosis. Prophylactic anticoagulant therapy |  |
| 3 | 3 Modern angiographic studies and X-ray endovascular interventions |  |
| 4 | 4 Surgical treatment of heart valve disease. |  |
|  | |  |

**Topics of practical classes**

**1.** **Arterial emboli and acute arterial thrombosis of the extremities (syndrome of acute ischemia of the extremities).**

Diagnostic criteria for arterial emboli and acute arterial thrombosis of the extremities. Methods of examination of patients with arterial emboli and acute arterial thrombosis of the extremities. Classification of arterial emboli and acute arterial thrombosis of the extremities. Tactics of management of patients with arterial embolism and acute arterial thrombosis of the extremities. Differential diagnosis with other vascular and general pathology. Indications for surgery. Indications for emergency surgery. Types of surgical interventions and tactics of postoperative period management. Complications of arterial emboli and acute arterial thrombosis of the extremities .. Complications in the postoperative period.

**2. Acute thrombosis of the main veins of the extremities. Pulmonary artery thromboembolism (PE).**

Leading clinical symptoms of acute thrombosis of the main veins of the extremities. Etiology of the disease. Examination protocol. Procedure for appointment and selection of anticoagulants. Dosage regimen and timing of anticoagulants. Bleeding risk scale. Compression treatment. Prevention of this pathology. PE - clinical manifestations. Classification. Differential diagnosis .. Examination methods. Providing emergency care to patients with pulmonary embolism. Tactics of patient management. Indications and contraindications to surgical treatment.

**3. Varicose veins of the extremities, endovenous treatment. Chronic venous insufficiency.**

Prevalence among the population, pathogenesis of CVI, classification, symptoms, modern diagnosis, surgical and endovenous treatment of CVI and varicose veins depending on the stage.

**4. Ischemic heart disease, acute coronary syndrome. Modern treatment. Heart damage.**

Risk factors and etiological factors of coronary heart disease, clinical manifestations of acute coronary syndrome, modern diagnosis, thrombolytic therapy, coronary angiography, percutaneous coronary interventions, coronary artery bypass grafting, postoperative treatment of patients with coronary heart disease. Clinical symptoms of heart damage. Features of instrumental and laboratory diagnostics. Indications for conservative and surgical treatment of patients. Types of surgical interventions. Types of endovascular interventions. Features of conservative treatment in the postoperative period.

**5. Chronic critical ischemia of the lower extremities, etiology, classification, differential diagnosis, types of surgical and conservative treatment.**

Etiology, modern classification, clinical manifestations, differential diagnosis. Endovascular treatment, modern possibilities of cellular therapy in inoperable conditions critical ischemia of the lower extremities.

**6. Final lesson. Preparation for differential test.**

Curation of the patient with filling in the "Curation Protocol".

**7. Differential credit.**

**Discipline policy and values.**

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and get it when you need it.

Students can discuss different tasks, but their performance is strictly individual. You are not allowed to write off, use any software, tips, use a cell phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to attend practical classes.

Visiting patients during hospital treatment is possible provided that students have the appropriate form of clothing, a health book with a note about vaccinations, the results of the examination for the stress of immunity to infectious diseases according to the current epidemic situation.

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions use contact with the teacher.

Students are encouraged to participate in research and participate in conferences on this topic.

All students of KhNMU are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to determine an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Preventing and Combating Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men";

Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation № 25 to paragraph 1 of Article 4 of the Convention on the Elimination of All Forms of Discrimination against Women, General Comment № 16 (2005) "Equal rights for men and women to enjoy economic, social and cultural rights" (Article 3 of the International Covenant on Economic, Social and Cultural Rights) Cultural Rights; UN Committee on Economic, Social and Cultural Rights); Recommendations on education in the spirit of international mutual understanding, cooperation and peace and education in the spirit of respect for human rights and fundamental freedoms (UNESCO), the Concept of the State Social Program for Equal Rights and Opportunities for Women and Men until 2021. Kharkiv National Medical University provides education and work that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans' offices, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential regarding those who report or accuse of discrimination. or sexual harassment (except where the law requires disclosure and / or when disclosure by the University is necessary to protect the safety of others). KhNMU creates a space of equal opportunities free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

Behavior in the audience

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

* leave the audience for a short time if necessary and with the permission of the teacher;
* drink soft drinks;
* take photos of presentation slides;
* take an active part in the class

Forbidden:

* eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;

- use obscene language or use words that offend the honor and dignity of colleagues and faculty;

- gambling;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

Plagiarism and academic integrity

The Department of Surgery №1 maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

Occupational Health

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is, where the fire extinguisher is, how to use it, and so on.

**The procedure for informing about changes in the syllabus**: the necessary changes in the syllabus are approved by the methodical commission of KhNMU on the problems of professional training of surgical profile and published on the site of KhNMU, the site of the Department of Surgery №1 KhNMU.

**Evaluation policy**

To receive credit for the course "Emergencies in Surgery" it is necessary to attend all practical classes, have the necessary level of knowledge on the topics of classes, the ability to solve questions from the licensing exam KROK - 2 from the course Surgery. The number of points received by a student per course depends on the level of knowledge, the degree of mastery of practical skills.

- Current - current educational activities.

- Final - differential test.

**Assessment of individual student tasks is carried out by performing the tasks of the teacher:**

**•** report of the abstract on a practical lesson 0 - 2 points;

• report with a presentation in a practical lesson 0 - 3 points,

• report at scientific and practical conferences of the department, university, writing abstracts, articles 0 - 5 points;

• participation in the All-Ukrainian Olympiad - 5 - 10 points

**Differential credit** - is conducted by the teacher of the academic group at the last lesson of the discipline. Admission to the test is determined in the points of the current educational activity, namely: minimum 70 points, maximum - 120 points.

Table 4

**Recalculation of the average score for current activities in a multi-point scale**

**(for disciplines that end with a d / z or an exam)**

| 4-poins scale | 200-points scale |  | 4-points scale | 200-points scale |
| --- | --- | --- | --- | --- |
| 5,00 | **120** | 3.91-3,94 | 94 |
| 4.95-4,99 | 119 | 3.87-3,9 | 93 |
| 4.91-4,94 | 118 | 3.83- 3,86 | 92 |
| 4.87-4,9 | 117 | 3.79- 3,82 | 91 |
| 4.83-4,86 | 116 | 3.74-3,78 | 90 |
| 4.79-4,82 | 115 | 3.7- 3,73 | 89 |
| 4.75-4,78 | 114 | 3.66- 3,69 | 88 |
| 4.7-4,74 | 113 | 3.62- 3,65 | 87 |
| 4.66-4,69 | 112 | 3.58-3,61 | 86 |
| 4.62-4,65 | 111 | 3.54- 3,57 | 85 |
| 4.58-4,61 | 110 | 3.49- 3,53 | 84 |
| 4.54-4,57 | 109 | 3.45-3,48 | 83 |
| 4.5-4,53 | 108 | 3.41-3,44 | 82 |
| 4.45-4,49 | 107 | 3.37-3,4 | 81 |
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| 3.99-4,03 | 96 | 3.00-3,03 | **70** |
| 3.95- 3,98 | 95 | **Less than 3,00** | **Not enough** |

Final attestation - differentiated test (GT) on the subject of "Emergency Surgery" is conducted by the teacher of the group.

Students who have scored at least the minimum number of final points for IPA - 70 points are allowed to compile the DZ.

The form of conducting DZ is standardized and according to the methodology approved by the department is carried out in two stages.

I stage - the initial level of evaluation of GTconsists of 2 parts:

1. Practical-oriented part, which involves the implementation of tasks set by the EQCH at the level of basic requirements for knowledge, skills and abilities in the surgical field, and includes:

1) tasks for professional training in working with surgical patients;

2) tasks for evaluating the results of laboratory and instrumental research methods in surgical patients;

3) tasks for the diagnosis and provision of emergency medical care for emergencies in surgery.

Practically-oriented part of the GT is carried out in the form of curation by each student of a patient with urgent surgical pathology on the subject of the discipline "Urgent surgery" with the completion of the "Protocol of curation"

Direct differential test is evaluated: minimum - 50 points, maximum - 80 points. The grade in the discipline is the sum of points for the current educational activity and differentiated credit in points: minimum - 120 points, maximum - 200 points and corresponds to the national scale and the ECTS scale.

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The final score for current educational activities (CEA) and practical classes (PC) is defined as the arithmetic mean of traditional grades for each class and PC, rounded to 2 decimal places and listed in a multi-point scale according to tables 4.

The recalculation of the average score for CEA and PC software for disciplines that end with a differentiated credit is made in accordance with Table 1. The minimum number of points that a student must score for admission to a differentiated credit - 70 points, the minimum positive score on a differentiated credit, respectively 50 points, maximum - 80 points. The maximum score for differentiated credit is 200 points, the minimum is 120 points.

Students who have completed all types of work provided for in the curriculum and scored at least the minimum number of points in the study of sections are admitted to the differentiated test.

The form of differentiated credit is standardized and includes control of theoretical (test control) and practical training (demonstration of student skills at the bedside of a sick child, solving structured situational problems, performing manipulations).

Test control includes 50 test tasks.

Students perform practical skills at the patient's bedside (assessment of the general condition of the sick child, analysis of anamnesis data, objective examination and determination of clinical changes in organs and systems, justification of previous diagnosis, treatment, emergency measures, etc.).

Solving a complex structured situational problem, which includes the interpretation of laboratory and instrumental research data, substantiation of clinical diagnosis, determination of therapeutic tactics, appointment of treatment or emergency care.

Exam or differentiated test in a discipline or its part is a process during which the received for a course (semester) are checked:

- level of theoretical knowledge;

- development of creative thinking;

- skills of independent work;

- competencies - the ability to synthesize the acquired knowledge and apply them in solving practical problems.

Differentiated credit is conducted by the teacher of the group at the last practical lesson, and for the session a schedule is set, approved by the rector of KhNMU, indicating the specific dates of the exams.

If the exam is not passed, the dates of rescheduling during the holidays are set, until the beginning of the next semester.

Assessment in the discipline is the current educational activity (consists of the total number of points during the academic semester, which can be assessed from 70 to 120 points) + differentiated test (consists of assessment of practical skills, laboratory and instrumental research methods and problem solving) = 120 points + 80 points = 200 points.

Table 5

**Conversion of discipline assessment points into ECTS and traditional estimates**

|  |  |  |
| --- | --- | --- |
| **Score on a 200-point scale** | **Score on a point**  **scale ESTS** | **Score on a 4-point traditional scale** |
| 200 – 180 | A | Excellent |
| 179 - 160 | B | Well |
| 159 - 150 | C | Well |
| 149 - 130 | D | Satisfactorily |
| 129 – 120 | E | Satisfactorily |
| less120 | F, Fx | Unsatisfactorily |

**The maximum number** of points that a student can score for studying the discipline - 200 points, including the maximum number of points for current educational activities - 120 points, as well as the maximum number of points according to the results of differentiated credit - 80 points. The minimum number of points is 120 points, including the minimum current educational activity - 70 and according to the results of DC - 50 points.

Head of Deprtment Surgey № 1

professor. Boyko V.V.

**SECTION "ONCOLOGY"**

**Developers:** Starikov Vladimir Ivanovich, Muzhichuk Alexey Vladimirovich, Mikhanovsky Alexander Albertovich, Sennikov Igor Anatolyevich, Khodak Andrey Sergeevich, Kotenko Alexander Evstahiyovych, Yevtushenko Dmitry Vasilyevich, Gavrilov Andrey Yuriyovych.

**Teachers:**Starikov Vladimir Ivanovich, Muzhichuk Alexey Vladimirovich, Mikhanovsky Alexander Albertovich, Sennikov Igor Anatolyevich, Khodak Andrey Sergeevich, Kotenko Alexander Evstahiyovych, Yevtushenko Dmitry Vasilyevich, Gavrilov Andrey Yuriyovych.

**Teacher information:**

Starikov Volodymyr Ivanovych - Professor, Doctor of Medical Sciences, Head of the Department of Oncology, specialization Oncology, Oncosurgery.

Muzhychuk Oleksiy Volodymyrovych - Doctor of Medical Sciences, Professor of the Department of Oncology, specialization Oncology, Oncosurgery.

Mikhanovsky Alexander Albertovich - Doctor of Medical Sciences, Professor of Oncology, specialization in oncology, oncogynecology.

Sennikov Igor Anatoliyovych - Candidate of Medical Sciences, Associate Professor of Oncology, specialization in oncosurgery.

Kotenko Oleksandr Yevstahiyovych - Candidate of Medical Sciences, Associate Professor of the Department of Oncology, specialization Oncology, Oncosurgery.

Khodak Andriy Serhiyovych - Candidate of Medical Sciences, Associate Professor of Oncology, specialization Oncology, Oncosurgery.

Ievtushenko Dmytro Vasyliovych - Candidate of Medical Sciences, Associate Professor of the Department of Oncology, specialization in Oncosurgery.

Gavrilov Andrey Yurievich assistant of the department of oncology, specialization oncosurgery.

**Contact phone and E-mail of the department:**. tel. +38 (057) 704-10-69, dep.oncology@i.ua

**Eye consultations:**schedule and venue according to the schedule of the department.

**Online consultations**: schedule and venue by prior arrangement with the teacher.

**Location:** classes are held in the conditions of IMR, OCO and university clinic.

**Discipline information**

|  |  |  |
| --- | --- | --- |
| Name of indicators | Field of knowledge, direction of training, educational and qualification level | Characteristics of the discipline |
| full-time education |
| Number of credits - 1 | educational program for training specialists of the second (master's)  level of higher education training 22 "Health" | Normative |
| Total number of hours 30 | Specialty:  222 "Medicine" | **Year of preparation:** |
| 6th |
| **Semester** |
| 11-12 |
| **Lectures** |
| Hours for day (or evening) form of study:  classrooms - 10  independent work of the student -20 | Education level:  master | 6 years |
| **Practical, seminar** |
| 10 hours |
| **Laboratory** |
| 0 years |
| **Individual work** |
| 20 hours |
| **Individual tasks:** |
| Type of control:  Differentiated credit |

Educational program of higher education of Ukraine, second (master's) level, educational qualification assigned - master's degree, field of knowledge - 22 Healthcare, specialty 221 "Dentistry" is based on the Law of Ukraine "On Higher Education" and the resolution of the Cabinet of Ministers of Ukraine 01.02.2017 № 53 "On amendments to the resolution of the Cabinet of Ministers of Ukraine dated 29.04.2015 № 266", in accordance with the order of the Ministry of Education and Science of Ukraine dated 01.06.2016 № 600 "On approval and implementation of Methodological recommendations for the development standards of higher education ".

The course program determines the prerequisites for access to education, orientation and main focus of the program, the amount of ECTS credits required for a master's degree, a list of general and special (professional) competencies, normative and variable content of training, formulated in terms of learning outcomes and control requirements quality of higher education.

The department accepts qualified students of any race, national or ethnic origin, sex, age, people with special needs, any religion, sexual orientation, gender, veteran status or marital status for all rights, privileges, programs and activities, provided to university students.

Link to the video annotation of the discipline (if available), etc.

Moodle discipline page (if available)

**Description of the discipline (abstract).**

**Part of the subject** study of the discipline of Surgery, including Oncology and neurosurgery is oncology - a science that studies the causes, development of tumors, their clinical manifestations, diagnosis, treatment and prevention.

Knowledge of the basics of oncology is extremely important for the training of physicians of all specialties.

During the study it is important to form academic training in basic and clinical biomedical sciences and preparation of graduates for the professional activity of a pediatrician in the relevant primary position by acquisition of general and special competencies, the scope of which is described by certain lists of syndromes and symptoms of cancer, emergencies, physiological conditions and comorbidities that require special tactics of patient management; laboratory and instrumental research, medical manipulations, labor, forensic and military expertise.

This course focuses on solving the major problems of oncology. The program covers topics related to the most common localizations of malignant tumors. Clinical experience can be gained during practical classes of the course in the leading institutions of the region according to the schedule of classes. During the course, students have the opportunity to participate in the curation and demonstration of patients with various oncopathologies, as well as the development of practical skills during classes in phantom classes of NNTSYAO KhNMU. That is, the course covers the main both practical and theoretical aspects of the future dentist

*Prerequisites.*The study of the discipline involves prior mastering of disciplines in medical biology, normal and pathological anatomy, normal and pathological physiology, biochemistry, microbiology, propaedeutics of internal and pediatric diseases, medical genetics, pharmacology and medicine, oncoepidemiology and evidence-based medicine , as well as to have practical skills in caring for cancer patients and their management in outpatient and inpatient settings.

*Postrequisites*. The main provisions of the discipline should be applied in the study of related disciplines during 3 years of study, is the basis for preparation for the license exam EDKI, preparation for study in higher education institutions in the programs of the third educational and scientific level of higher education.

**Goal:** to provide training of highly qualified specialists in the field of medicine, namely, in dentistry, able to solve complex problems of diagnosis, treatment and prevention of oncological diseases.

**The main objectives of the course** is the acquisition by students of competencies in accordance with the general and professional competencies of the educational-professional program "Medicine" of the second level of higher education in the specialty 221 Dentistry

* Integral competencies:

ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.

* General competencies:

ability to abstract thinking, analysis and synthesis, ability to learn and be modernly trained; ability to apply knowledge in practical situations; knowledge and understanding of the subject area and understanding of professional activity; ability to adapt and act in a new situation; ability to make an informed decision; work in a team; interpersonal skills; ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language; skills of using information and communication technologies; certainty and persistence in terms of tasks and responsibilities; ability to act socially responsibly and consciously.

Professional competencies in the field of oncology:

* Identify and identify the leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge about the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of a dental disease (according to list 2).
* Collect information about the general condition of the patient, assess the psychomotor and physical development of the patient, the condition of the organs of the maxillofacial area, based on the results of laboratory and instrumental studies to assess information about the diagnosis (list 5).
* Assign and analyze additional (mandatory and optional) examination methods (laboratory, radiological, functional and / or instrumental) according to list 5, patients with diseases of organs and tissues of the oral cavity and maxillofacial region for differential diagnosis of diseases (according to the list) 2).

The study of this discipline forms in students of social skills:

* communicativeness (implemented through: group work method and brainstorming during the analysis of clinical cases, the method of presenting the results of independent work and their defense in the group),
* teamwork (implemented through: group work method and brainstorming during the analysis of clinical cases),
* conflict management (implemented through: business games),
* time management (implemented through: the method of self-organization during classroom work in groups and independent work),
* leadership skills (implemented through: the method of presenting the results of independent work and their defense in the group).

**Discipline status: basic** The format of the discipline is mixed - the discipline, which is accompanied by Moodle, teaching the discipline, combines traditional forms of classroom learning with elements of distance learning, which uses available interactive information technology (ZOOM, Moodle), face-to-face and distance counseling.

**Teaching methods**. Clinical (curation of patients with oncological diseases and suspicion of them), phantom, electronic information (presentations, video materials, methodical recommendations, lectures), scientific (participation in scientific developments on discipline), control (tests, situational tasks) are used for carrying out of employment. , assessment of practical skills, defense of a clinical case)

**Learning outcomes**.

The course covers the main aspects of training a future dentist.

According to the training program in the discipline "Surgery, including oncology and neurosurgery "higher education seeker will acquire theoretical knowledge, methodological training, practical skills and abilities in the following areas:

* + to acquaint students with the basic provisions of theoretical oncology;
  + to teach a general practitioner the tactics of examination of patients in case of suspicion of a malignant tumor;
  + to study the main pathological forms of malignant tumors;
  + to study the basic principles of treatment of tumor diseases;
  + to acquaint with the organization of oncological help to the population and principles of oncological deontology;
  + to provide mastering of practical skills in the organization of oncological care, prevention, diagnosis and treatment of malignant neoplasms.

**1. The content of the discipline**

**Discipline section 1.**

Topic 1. Treatment of complicated forms of cancer. Emergency therapy for complications of chemotherapy and radiation therapy

Topic 2. Palliative and symptomatic treatment of cancer patients. Palliative surgical manipulations

Topic 3 Deontology in oncology. Treatment of chronic pain

Topic 4 Treatment of complicated forms of cancer. Urgent surgical operations: Gastrostomy, tracheotomy, colostomy, cystostomy, bypass anastomoses. Intensive care for tumors of the gastrointestinal, pulmonary, urinary, external bleeding, anemia, complications of chemotherapy and radiation therapy.

Topic 5 Palliative surgery. Pleural puncture, laparocentesis, bladder puncture. Care for stoma, fistula, prevention and treatment of bedsores, lymphostasis. Treatment of patients with nausea, vomiting, constipation, diarrhea, disorders of the urinary system; with external and internal fistulas; with shortness of breath, stridor, atelectasis of the lungs, cough).

Topic 6 Treatment of chronic pain, deontology in oncology. Maintaining medical records. Principles of oncological deontology, ethical issues of terminal conditions, relationships with the patient and his relatives.

**2. The structure of the discipline**

|  |  |
| --- | --- |
| Names of sections of the discipline and topics | |
| Topic 1. | Treatment of complicated forms of cancer. Emergency therapy for complications of chemotherapy and radiation therapy |
| Topic 2. | Palliative and symptomatic treatment of cancer patients. Palliative surgical manipulations |
| Topic 3. | Deontology in oncology. Treatment of chronic pain |
| Topic 4. | Treatment of complicated forms of cancer. Urgent surgical operations: Gastrostomy, tracheotomy, colostomy, cystostomy, bypass anastomoses. Intensive care for tumors of the gastrointestinal, pulmonary, urinary, external bleeding, anemia, complications of chemotherapy and radiation therapy. |
| Topic 5. | Palliative surgery. Pleural puncture, laparocentesis, bladder puncture. Care for stoma, fistula, prevention and treatment of bedsores, lymphostasis. Treatment of patients with nausea, vomiting, constipation, diarrhea, disorders of the urinary system; with external and internal fistulas; with shortness of breath, stridor, atelectasis of the lungs, cough). |
| Topic 6. | Treatment of chronic pain, deontology in oncology. Maintaining medical records. Principles of oncological deontology, ethical issues of terminal conditions, relationships with the patient and his relatives. |
| Total by section 1 | |
| Total hours in the discipline 30 hours | |

**3. Topics of practical classes**

|  |  |  |
| --- | --- | --- |
| **№** | **Topics** | **Hours** |
|  | Treatment of complicated forms of cancer. Emergency therapy for complications of chemotherapy and radiation therapy |  |
|  | Palliative and symptomatic treatment of cancer patients. Palliative surgical manipulations |  |
|  | Deontology in oncology. Treatment of chronic pain |  |
| **Total** | | 10 |

**4. Independent work**

|  |  |  |
| --- | --- | --- |
| **№** | **Topics** | **Hours** |
|  | Treatment of complicated forms of cancer. Urgent surgical operations: Gastrostomy, tracheotomy, colostomy, cystostomy, bypass anastomoses. Intensive care for tumors of the gastrointestinal, pulmonary, urinary, external bleeding, anemia, complications of chemotherapy and radiation therapy. |  |
|  | Palliative surgical manipulations. Pleural puncture, laparocentesis, bladder puncture. Care for stoma, fistula, prevention and treatment of bedsores, lymphostasis. Treatment of patients with nausea, vomiting, constipation, diarrhea, disorders of the urinary system; with external and internal fistulas; with shortness of breath, stridor, atelectasis of the lungs, cough). |  |
|  | Treatment of chronic pain, deontology in oncology. Maintaining medical records. Principles of oncological deontology, ethical issues of terminal conditions, relationships with the patient and his relatives. |  |
| **Total** | | 20 |

**Recommended Books**

**Basic**

1. Algorithms of modern oncology. / Edited by Shchepotin IB, Bondarya GV, Ganula VL - К .: Книга плюс- 2006.
2. Bondar GV, Antipova SV Selected lectures on clinical oncology. - OJSC, Luhansk, 2009-7.-510 p.
3. Bondar GV, Vitenko IS, Popovich O.Yu. Palliative care. Donetsk, Donetsk region. - 2004. -150p.
4. Ganul.VL, Kirkilevsky SI. Esophageal cancer: a guide for oncologists and surgeons. K .: Book plus. - 2003. - 200p.
5. Efetov VM Selected lectures on clinical oncology. 1997. -260p.
6. Oncology. / Ed. VP Bashtan, AL Odabashyan, PV Sheleshko - Ternopil; Ukrmedkniga, 2003.-316p.
7. Oncology: Textbook - 3rd edition, revised. and add. / BT Bilinsky, NA Volodko, AI Hnatyshak, OO Galay, etc .; For order. BT Bilynsky - K. Health, 2004. - 528p.
8. Starikov VI General oncology: Textbook.- Kharkov: KhSMU, 2001.- 72p.
9. Starikov VI, Trunov GV Lung cancer.- Kharkiv, "Katran KPK LLC", - 2002.-212p.
10. Yu.Shevchenko AI Oncology. Electr. textbook for students of higher medical institutions., Zaporozhye.-2006.
11. Shchepotin IB, Ganul VL, Klimenko IO etc. Oncology.- K .: Book plus. -2006. - 496с.
12. Encyclopedia of Clinical Oncology. Guide for practicing physicians / MI Davydov, GL Vyshkovsky and others - M .: Radar - 2005,2004.-1536 p.
13. Oxford Textbook of Oncology David J. Kerr, Daniel G. Haller, Cornelis J. H. van de Velde, Michael Baumann, Oxford University Press, 28 янв. 2016 г. -: 832

**Auxiliary**

1. Atlas of oncological operations / Ed. B.E. Peterson, VI Chissov, AI Pachesa - M .: Medicine, 1987. -534p.
2. Lupaltsov VI, Tsyganenko AY, Sennikov IA Elements of general care for patients in a surgical hospital. - Kharkiv, 1999. - 232 p.
3. Переводчикова Н.И. Guide to chemotherapy of tumors / Ed. N.I. Translator. - 2nd ed., Add.- M .: Practical Medicine, 2005.-S. 195- 209.
4. Chernousov AF, Polikarpov SA, Chernousov FA Gastric cancer surgery. - Moscow, - 2004, 560 p.

**16. Information resources**

1. rosoncoweb.ru
2. oncology-knmu.com.ua
3. knmu.kharkov.ua
4. [moz.gov.ua](http://www.moz.gov.ua)
5. unci.org.ua
6. mozdocs.kiev.ua
7. ncru.inf.ua
8. oncology.kiev
9. websurg
10. medscape

**Policy and values of discipline.**

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and receive it when you need it.

Students can discuss different tasks, but their performance is strictly individual. It is not allowed to write off, use various software, tips, use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the learning process. Students are not allowed to be late for practical classes.

Visiting patients during hospitalization is possible provided that students have appropriate clothing, a health book with a diphtheria vaccination note, the results of a measles immunity test (or a vaccination mark), or other infectious diseases according to the current epidemic situation.

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions, please contact the teacher.

Students' participation in research and conferences on this topic is encouraged.

All students of KhNMU are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to determine an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Preventing and Combating Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men"; Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation № 25 to paragraph 1 of Article 4 of the Convention on the Elimination of All Forms of Discrimination against Women; Cultural Rights; UN Committee on Economic, Social and Cultural Rights); Recommendations on Education in the Spirit of International Understanding, Cooperation and Peace and Education in the Spirit of Respect for Human Rights and Fundamental Freedoms (UNESCO); Concept of the State Social Program for Equal Rights and Opportunities for Women and men for the period up to 2021. Kharkiv National Medical University provides education and work that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential about those who report or accuse of discrimination. or sexual harassment (except where the law requires disclosure and / or when disclosure by the University is necessary to protect the safety of others).

KhNMU creates a space of equal opportunities free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

**Behavior in the audience**

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

* leave the audience for a short time if necessary and with the permission of the teacher;
* drink soft drinks;
* take photos of presentation slides;
* take an active part in the class

Forbidden:

* eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);
* smoking, drinking alcohol and even low-alcohol beverages or drugs;
* to use obscene language or use words that offend the honor and dignity of colleagues and faculty;
* gaff;
* to damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);
* shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

**Plagiarism and academic integrity**

The Department of Oncology maintains zero tolerance for plagiarism. Male and female students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

**Occupational Health**

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is to the audience, where the fire extinguisher is, how to use it, and so on.

Procedure for informing about changes in the syllabus: the necessary changes in the syllabus are approved by the methodical commission of KhNMU on the problems of professional training of pediatric profile and are published on the site of KhNMU, the site of the Department of Oncology of KhNMU.

**Evaluation policy**

To get credit for the course Surgery, including oncology and neurosurgery it is necessary to attend all practical classes, to have the necessary level of knowledge on the topics of classes, the ability to solve questions from the licensing exam STEP - 2 from the course Oncology. The number of points received by a student per course depends on the level of knowledge, the degree of mastery of practical skills.

- Current - current educational activities.

- Final - differentiated test.

**Assessment of individual student tasks** carried out by performing the tasks of the teacher:

* report of the abstract on practical lesson 0 - 2 points;
* report with a presentation in a practical lesson 0 - 3 points,
* report at scientific and practical conferences of the department, university, writing abstracts, articles 0 - 5 points;
* participation in the All-Ukrainian Olympiad -5 - 10 points

**Differentiated credit -**conducted by a teacher of the academic group in the last lesson of the discipline. Admission to the test is determined in the points of current educational activity, namely: minimum 70 points, maximum - 120 points. Directly differentiated is valued: minimum - 50 points, maximum - 80 points. Assessment in the discipline is the sum of points for the current educational activity and differentiated credit in points: minimum - 120 points, maximum - 200 points corresponds to the national scale and ECTS scale.

During the assessment of mastering each subject of the discipline (PND) and the final lesson (PZ) the student is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory".

Final score for current educational activities(IPA) and final classes (SO) is defined as the arithmetic mean of traditional grades for each lesson and software, rounded to 2 decimal places and listed in a multi-point scale according to Tables 1.

Recalculation of the average grade for IPA and software for disciplines that end diff. credit, is carried out in accordance with table 1. The minimum number of points that a student must score for admission to the diff. test or exam - 70 points, the minimum positive grade on the diff. credit, respectively, 50 points, maximum - 80 points. The maximum score for differentiated credit is 200 points, the minimum is 120 points.

Table 1

**Recalculation of the average score for current activities in a multi-point scale**

**(for disciplines that end with a d / z or exam)**

| 4-point scale | 200-point scale |  | 4-point scale | 200-point scale |
| --- | --- | --- | --- | --- |
| 5 | 120 | 3.91-3.94 | 94 |
| 4.95-4.99 | 119 | 3.87-3.9 | 93 |
| 4.91-4.94 | 118 | 3.83- 3.86 | 92 |
| 4.87-4.9 | 117 | 3.79- 3.82 | 91 |
| 4.83-4.86 | 116 | 3.74-3.78 | 90 |
| 4.79-4.82 | 115 | 3.7- 3.73 | 89 |
| 4.75-4.78 | 114 | 3.66- 3.69 | 88 |
| 4.7-4.74 | 113 | 3.62- 3.65 | 87 |
| 4.66-4.69 | 112 | 3.58-3.61 | 86 |
| 4.62-4.65 | 111 | 3.54- 3.57 | 85 |
| 4.58-4.61 | 110 | 3.49- 3.53 | 84 |
| 4.54-4.57 | 109 | 3.45-3.48 | 83 |
| 4.5-4.53 | 108 | 3.41-3.44 | 82 |
| 4.45-4.49 | 107 | 3.37-3.4 | 81 |
| 4.41-4.44 | 106 | 3.33- 3.36 | 80 |
| 4.37-4.4 | 105 | 3.29-3.32 | 79 |
| 4.33-4.36 | 104 | 3.25-3.28 | 78 |
| 4.29-4.32 | 103 | 3.21-3.24 | 77 |
| 4.25- 4.28 | 102 | 3.18-3.2 | 76 |
| 4.2- 4.24 | 101 | 3.15- 3.17 | 75 |
| 4.16- 4.19 | 100 | 3.13- 3.14 | 74 |
| 4.12- 4.15 | 99 | 3.1- 3.12 | 73 |
| 4.08- 4.11 | 98 | 3.07- 3.09 | 72 |
| 4.04- 4.07 | 97 | 3.04-3.06 | 71 |
| 3.99-4.03 | 96 | 3.0-3.03 | 70 |
| 3.95- 3.98 | 95 | Less 3 | Not enough |

Students who have completed all types of work provided for in the curriculum and have scored at least the minimum number of points in the study of sections are admitted to the differentiated test.

The form of differentiated credit is standardized and includes control of theoretical (test control) and practical training (demonstration of student skills at the bedside of a sick child, solving structured situational problems, performing manipulations).

Test control includes 85 test tasks.

Students perform practical skills at the patient's bedside (assessment of the general condition of the sick child, analysis of anamnesis data, objective examination and determination of clinical changes in organs and systems, justification of previous diagnosis, treatment, emergency measures, etc.).

Solving a complex structured situational problem, which includes the interpretation of laboratory and instrumental research data, substantiation of clinical diagnosis, determination of therapeutic tactics, appointment of treatment or emergency care.

An exam or a differentiated test in a discipline or its part is a process during which the results of the course (semester) are checked:

- level of theoretical knowledge;

- development of creative thinking;

- skills of independent work;

- competencies - the ability to synthesize the acquired knowledge and apply them in solving practical problems.

Differentiated credit is conducted by the teacher of the group at the last practical lesson, and for the session a schedule is set, approved by the rector of KhNMU, indicating the specific dates of the exams.

If the differentiated test is not passed, the dates of re-setting during the holidays are set, before the beginning of the next semester.

Assessment in the discipline is the current educational activity (consists of the total number of points during the academic semester, which can be assessed from 70 to 120 points) + differentiated test (consists of assessment of practical skills, laboratory and instrumental research methods and situational problems) = 120 points + 80 points = 200 points.

Table 2

**Correspondence of grades on a 200-point scale, four-point "national" and ECTS scale**

|  |  |  |
| --- | --- | --- |
| Score on a multi-point (200) scale | Assessment on the ECTS scale | Score for  four-point "national" scale |
| **From 180 to 200 points** | **A** | **perfectly** |
| **From 160 to 179 points** | **B** | **fine** |
| **From 150 to 159 points** | **C** | **fine** |
| **From 130 to 149 points** | **D** | **satisfactorily** |
| **From 120 to 129 points** | **E** | **satisfactorily** |
| **Below 120 points** | **F, Fx** | **unsatisfactorily** |

The issue of test tasks is considered at the meetings of the department and the methodical commission on surgery and the methodical commission on "Step-2" at KhNMU. Test tasks are compiled annually by the staff of the department, the national bank of licensing tasks is distributed.

Availability of an individual rating of the graduate's educational activity.

Each student has an individual rating of educational activities, which is entered in the certification letters, separate for each group. Certification letters are used during the diffusion to analyze the current performance of each student during the year.

Head of the Department of Oncology,

Professor Starikov VI.

**Section "Pediatric Surgery"**

**Data on the teacher who teaches the discipline**

|  |  |
| --- | --- |
| Compiler / developer of the syllabus | Davydenko Vyacheslav Borisovich  Danilova Victoria Vasilevna |
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| Timetable | According to the schedule of the educational department |
| Consultations | (Online consultations: 3 17:00 to 19:00, link to phones) |

**INTRODUCTION**

**The syllabus of the section "Pediatric Surgery" is compiled for OP Medicine of the second (master's) level, field of knowledge 22 - "Health", specialty - 222 "Medicine".**

**Description of the discipline (abstract).**

**Link to the video annotation of the discipline.**

**Discipline page in the Moodle system (if available)** [**http://31.128.79.157:8083/course/index.php?categoryid=60**](http://31.128.79.157:8083/course/index.php?categoryid=60)

Pediatric surgery is based on students' integration of pediatric diseases with child care, faculty pediatrics and surgery, pediatrics and pediatric infectious diseases, and integrates with these disciplines.

Students study pediatrics and faculty surgery, which involves the integration of teaching with these disciplines and the formation of skills to apply the knowledge of pediatric surgery in the process of further study and in professional activities;

Lays the foundations of a healthy childhood and prevention of dysfunction in the process

vital functions of a growing organism.

Prerequisites. The study of the discipline involves the prior mastering of disciplines in propaedeutics of children's diseases with child care, faculty pediatrics and surgery, children's diseases and children's infectious diseases, and integrates with these disciplines.

*Postrequisites.* The main provisions of the discipline should be applied in the process of further study and in professional activities; for laying the foundations of a healthy childhood and prevention of dysfunction in the life of a growing organism in the study of professional disciplines

1. The purpose and objectives of the section "Pediatric Surgery"

1.1 The purpose of the section "Pediatric Surgery" for students is the consistent formation of the personality of a specialist of the appropriate level of education (master's degree) in higher medical institutions. .

The ultimate goal of the discipline "Pediatric Surgery" of higher medical educational institutions follows from the purpose of educational and professional training of graduates of higher medical educational institutions and is determined by the content of theoretical knowledge, methodological training, practical skills to be mastered by a specialist.

1.2 The main tasks of studying the section "Pediatric Surgery" are:

• Study by students of various clinical manifestations of malformations, surgical diseases, injuries and their complications in children.

• Determination of etiological and pathogenetic factors of the most common surgical diseases in children.

• Planning the examination of the patient, interpreting the results of laboratory and instrumental studies in the typical and atypical course of surgical diseases in children and their complications.

• Conducting differential diagnosis, substantiation and formulation of preliminary clinical diagnosis of malformations and surgical diseases in children.

• Determining the treatment tactics of a child with developmental disabilities and a patient with major surgical diseases and injuries.

• Interpretation of general principles of treatment, rehabilitation, prevention of malformations, surgical diseases in children.

• Diagnosing emergencies in the pediatric surgery clinic and determining the tactics of providing emergency medical care to children with surgical malformations, diseases, injuries and complications.

1.3 Competences and learning outcomes, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the Standard).

According to the requirements of the standard, the discipline provides students with the acquisition of competencies:

* integral;
* general;
* special (professional, subject).

Also, the study of this discipline forms in students of social skills (soft skills): communication (implemented through: the method of working in pairs and groups, brainstorming, self-presentation method), teamwork (implemented through: the project method, openwork saw), conflict- management (implemented through: dramatization method, game methods), time management (implemented through: project method, group work, training), leadership skills (implemented through: group work, project method, self-presentation method).

As a result of mastering the discipline, the applicant must demonstrate the following learning outcomes:

1. - to interpret the results of general and special research methods, to make generalizations and practical conclusions on the basis of these data;

2. - issues of asepsis and antiseptics in surgery; main documents regulating measures to maintain the sanitary-epidemiological regime of surgical departments;

3. - basics of pharmacotherapy (including antibiotic and hormone therapy), basics of immunology, antibiotic prophylaxis in surgery;

4. - clinical symptoms of major surgical diseases, features of their course in children, differential diagnosis of surgical diseases with related (urological, gynecological, pediatric) pathology;

5. - to conduct a purposeful clinical examination of the patient;

6. determine the required amount of laboratory, radiological and other special studies, organize their timely implementation, comment on their results;

7.- clearly determine the severity of the patient's condition and the amount of resuscitation;

8. - provide emergency care to patients in terminal situations (heart massage and other measures to restore its work, artificial respiration, methods to stop external bleeding, prevention and treatment of shock, gastric lavage in case of poisoning and other manipulations);- визначити покази для госпіталізації за профілем та організувати її;

9. - to conduct demonstrations for hospitalization by profile and organize it;

10. - to carry out differential diagnosis of the disease in children, if necessary, to organize a consultation with specialized specialists.

# **2. The program of the discipline**

# Description of the discipline

|  |  |  |  |
| --- | --- | --- | --- |
| Name of indicators | Field of knowledge, direction of training, educational and qualification level | Characteristics of the discipline | |
| **Full-time education** |  |
| Number of credits - 1.0 | Training direction:  1201 “Medicine” | Normative | |
| The total number of hours is 30 | Specialty:  7.120 10001 "Medical case"  7.120 10003 "Medical and preventive business" | **Year of preparation:** | |
| 6th - |  |
| **Semester** | |
| 11th, 12th - |  |
| Hours for full-time study:  classroom - 10 | Education level:  "specialist" | **Practical, seminar** | |
| 10 hours - |  |
| **Individual work** | |
| 20 hours - |  |
| **Type of control: credit** | |

**3. The structure of the discipline "Pediatric Surgery"**

|  |
| --- |
| Names of sections and topics |
|
|
|
| 1 |
| Developmental defects accompanied by respiratory failure (congenital lung cysts, pulmonary hypoplasia, congenital partial emphysema). |
| Esophageal atresia. Diaphragmatic hernia. |
| Developmental defects that are accompanied by intestinal obstruction (congenital pylorostenosis, congenital intestinal obstruction). Malformations of the colon (anorectal defects, Hirschsprung's disease). |
| ISW 20 |
| Total hours 30 |

**4. Topics of lectures**

Lectures are not provided by the program.

**5. Topics of seminars**

The program does not provide for seminars.

|  |  |
| --- | --- |
| № | Name topics |
| **1** | Developmental defects accompanied by respiratory failure (congenital lung cysts, pulmonary hypoplasia, congenital partial emphysema). |
| **2** | Esophageal atresia. Diaphragmatic hernia. |
| **3** | Developmental defects that are accompanied by intestinal obstruction (congenital pylorostenosis, congenital intestinal obstruction). Malformations of the colon (anorectal defects, Hirschsprung's disease).  Malformations of the anterior abdominal wall (umbilical cord hernia, gastroschisis, umbilical and inguinal hernia). Cryptorchidism. |
|  | Total 10 hours |

**7. Topics of laboratory classes**

Laboratory classes are not provided by the program.

**8. Independent work**

|  |  |
| --- | --- |
| № | Name topics |
|  | Preparation for practical classes - theoretical training and development of practical skills. |
| 2. | Independent elaboration of topics that are not included in the lesson plan: |
| 2.1 | Emergency care for respiratory failure. |
| 2.2 | Emergency care for cardiovascular insufficiency. |
| 2.3 | Emergency care for renal failure. |
| 2.4 | Individual independent work of students on one of the topics of choice. Review of the scientific literature of your choice. |
|  | **Total hours: 20** |

**9. Tasks for independent work**

- preparation for classroom (practical);

- performance of practical tasks during the semester;

- independent study of certain topics of the discipline;

- preparation and implementation of tasks provided by the program of practical training;

- preparation for all types of control (differential test).

**10. Policy of the teacher of the Department of Pediatric Surgery and Pediatric Anesthesiology**

Academic expectations from students / -ok

Course requirements

It is expected that students will attend all lectures and practical classes. If they missed classes, it is necessary to work it out (according to the schedule on the information stand of the department)

Written and homework must be completed completely and on time, if students have questions, you can contact the teacher in person or by e-mail, which the teacher will provide in the first practical lesson.

During the practical lesson, students are recommended to keep a synopsis of the lesson and keep a sufficient level of silence. Asking questions to the teacher is perfectly normal.

Practical training. Active participation during the discussion in the audience, students should be ready to understand the material in detail, ask questions, express their point of view, discuss.

During the discussion it is important:

- respect for colleagues,

- tolerance for others and their experience,

- receptivity and impartiality,

- the ability to disagree with the opinion, but to respect the identity of the opponent (s),

- careful argumentation of his opinion and the courage to change his position under the influence of evidence,

- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,

- Mandatory acquaintance with primary sources.

A creative approach in its various manifestations is welcome. Students are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject profile.

Occupational Health

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is, where the fire extinguisher is, how to use it, and so on.

Behavior in the audience

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

* leave the audience for a short time if necessary and with the permission of the teacher;
* drink soft drinks;
* take photos of presentation slides;
* take an active part in the class

Forbidden:

* eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;

- use obscene language or use words that offend the honor and dignity of colleagues and faculty;

- gambling;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

Plagiarism and academic integrity

The Department of Pediatric Surgery and Pediatric Anesthesiology maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

**The status of the discipline is normative.**

**The format of the discipline is mixed** - a discipline that has support in the Moodle system, teaching the discipline involves a combination of traditional forms of classroom learning with elements of e-learning, which uses special information, interactive technologies, online counseling, etc.

**11. Teaching methods**

1. Independent work of students:

- preparation for classroom classes (lectures);

- performance of practical tasks during the semester;

- independent study of certain topics of the discipline;

- preparation and implementation of tasks provided by the program of practical training;

- preparation for all types of control (credit).

2. Verbal methods: lecture, discussion, conversation.

3. Visual methods: presentations, videos, guidelines, slide shows, movies. with reference to the repositions of KhNMU, Moodle system.Teaching the discipline "Pediatric Surgery" is based on the introduction of modern teaching methods: problem, multimedia, binary lecture, lecture-conversation; discussion, "round table", didactic games, case method, modeling of professional, problem situations.

**12. Methods of control**

When studying the discipline, current and final control is used. There is also a mandatory control of the assimilation of educational material of the discipline, assigned to independent work.**Current control (assimilation of certain topics)** is carried out in the form of oral interviews, testing, conversations of students on predetermined issues, in the form of speeches of higher education students with reports when discussing educational issues in practical classes.

In order to assess the independent work of students, an alternative option is offered *(optional)*: traditional types of tasks: writing an abstract or creative types: preparation of a multimedia presentation, elaboration of educational literature (annotation, review, citation, abstracts, lectures).

**The final semester control in the discipline** is a mandatory form of control of academic achievements of higher education students. It is performed orally. The terms of the final semester control are set by the schedule of the educational process, and the amount of educational material, which is submitted for the final semester control, is determined by the work program of the discipline.

The final semester control is carried out after the completion of the discipline in the form of a test.

The following methods are used to determine the level of preparation of students:

1. Answers to control questions.

2. Computer tests.

3. Solving clinical situational problems.

4. Evaluation and interpretation of clinical-laboratory and instrumental examinations.

5. Control of mastering practical skills.

Final control is carried out at the final control classes. Assessment of student performance in the discipline is a rating and is set on a multi-point scale.

For those students who want to improve their grades in the discipline, the curriculum provides a deadline for re-completion.

**13. Evaluation of the success of students in the ECTS organization of the educational process**

**13.1 Evaluation of current learning activities (PND)**

Recalculation of the average grade for current activities in a multi-point scale is carried out in accordance with the "Instructions for the evaluation of educational activities in the European credit transfer system for the organization of the educational process"

During the assessment of mastering each subject of the discipline (PND) and the final lesson (PZ) the student is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory".The final score for current learning activities (PND) and final classes (PZ) is defined as the arithmetic mean of traditional grades for each class and PZ, rounded to 2 decimal places and listed in a multi-point scale according to tables 1 - 3.

Recalculation of the average grade for PND and PZ for the discipline that ends with a differentiated test, which must be scored by the student for admission to the differentiated test - 70 points, the minimum positive grade on the differentiated credit.

**Recalculation of the average score for current activities in a multi-point scale**

**(for disciplines that end with a d / z or an exam)**

| 4-poins scale | 200-points scale |  | 4-points scale | 200-points scale |
| --- | --- | --- | --- | --- |
| 5,00 | **120** | 3.91-3,94 | 94 |
| 4.95-4,99 | 119 | 3.87-3,9 | 93 |
| 4.91-4,94 | 118 | 3.83- 3,86 | 92 |
| 4.87-4,9 | 117 | 3.79- 3,82 | 91 |
| 4.83-4,86 | 116 | 3.74-3,78 | 90 |
| 4.79-4,82 | 115 | 3.7- 3,73 | 89 |
| 4.75-4,78 | 114 | 3.66- 3,69 | 88 |
| 4.7-4,74 | 113 | 3.62- 3,65 | 87 |
| 4.66-4,69 | 112 | 3.58-3,61 | 86 |
| 4.62-4,65 | 111 | 3.54- 3,57 | 85 |
| 4.58-4,61 | 110 | 3.49- 3,53 | 84 |
| 4.54-4,57 | 109 | 3.45-3,48 | 83 |
| 4.5-4,53 | 108 | 3.41-3,44 | 82 |
| 4.45-4,49 | 107 | 3.37-3,4 | 81 |
| 4.41-4,44 | 106 | 3.33- 3,36 | 80 |
| 4.37-4,4 | 105 | 3.29-3,32 | 79 |
| 4.33-4,36 | 104 | 3.25-3,28 | 78 |
| 4.29-4,32 | 103 | 3.21-3,24 | 77 |
| 4.25- 4,28 | 102 | 3.18-3,2 | 76 |
| 4.2- 4,24 | 101 | 3.15- 3,17 | 75 |
| 4.16- 4,19 | 100 | 3.13- 3,14 | 74 |
| 4.12- 4,15 | 99 | 3.1- 3,12 | 73 |
| 4.08- 4,11 | 98 | 3.07- 3,09 | 72 |
| 4.04- 4,07 | 97 | 3.04-3,06 | 71 |
| 3.99-4,03 | 96 | 3.00-3,03 | **70** |
| 3.95- 3,98 | 95 | **Less than 3,00** | **Not enough** |

**Assessment of theoretical knowledge, if practical skills are assessed by the criteria of "performed", "failed"**

Table 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of questions | «5» | «4» | «3» | Oral answer for tickets, which include the theoretical part of the discipline | For each answer the student receives from 10 to 16 points, which corresponds to:  "5" - 16 points;  "4" - 13 points;  "3" - 10 points. |
| 1 | 16 | 13 | 10 |
| 2 | 16 | 13 | 10 |
| 3 | 16 | 13 | 10 |
| 4 | 16 | 13 | 10 |
| 5 | 16 | 13 | 10 |
|  | 80 | 65 | 50 |

**13.2 Assessment in the discipline**

Differentiated credit is conducted by the teacher of the group at the last practical lesson, and for the session a schedule is set, approved by the rector of KhNMU, indicating the specific dates of the exams.

If the exam is not passed, the dates of rescheduling during the holidays are set, until the beginning of the next semester.

Assessment in the discipline is the current educational activity (consists of the total number of points during the academic semester, which can be assessed from 70 to 120 points) + differentiated test (consists of assessment of practical skills, laboratory and instrumental research methods and problem solving) = 120 points + 80 points = 200 points.

Table 3

**Conversion of discipline assessment points into ECTS and traditional estimates**

|  |  |  |
| --- | --- | --- |
| **Score on a 200-point scale** | **Score on a point**  **scale ESTS** | **Score on a 4-point traditional scale** |
| 200 – 180 | A | Excellent |
| 179 - 160 | B | Well |
| 159 - 150 | C | Well |
| 149 - 130 | D | Satisfactorily |
| 129 – 120 | E | Satisfactorily |
| less120 | F, Fx | Unsatisfactorily |

**14. Methodical support**

• Syllabus of academic discipline;

• Plans for practical classes and independent work of students;

• Methodical developments for the teacher;

• Methodical instructions for practical classes for students;

• Methodical materials that provide independent work of students;

• Test and control tasks for practical classes;

• Questions and tasks to control the assimilation of the section;

• List of questions to the differential test, tasks to test practical skills during the differential. offset.

**15. Literature**

1. Puri P. Pediatric surgery: Diagnosis and Management / P. Puri, M. Höllwarth / Springer-Verlag Berlin Heidelberg, 2009. – 998 p.
2. Congenital anomaly band, a rare cause of intestinal obstruction in children. Case report / A. Galván-Montaño, M. Trejo-Ávila, S. García-Moreno, A. Pérez González // Cir. Cir. – 2016. − PII: S0009-7411(15)00261-3. − DOI: 10.1016/j.circir.2015.10.011. Pediatric inguinal hernia repair with a single-incision approach using an Endo Close™ suturing device / R. Ordorica-Flores, R. Figueroa-Portillo, F. Pérez-Escamirosa [et al.] // Surg. Endosc. – 2016. – Vol. 30, N 11. – P. 5134−5135. − DOI: [10.1007/s00464-016-4806-0](https://dx.doi.org/10.1007/s00464-016-4806-0).
3. Thoracoscopic repair of esophageal atresia with tracheoesophageal fistula: basics of technique and its nuances / R. P. Kanojia, N. Bhardwaj, D. Dwivedi [et al.] // J. Indian. Assoc. Pediatr. Surg. – 2016. – Vol. 21, N 3. – P. 120−124. − DOI: 10.4103/0971-9261.182585.

**16. Information resources**

Website of the Department of Pediatric Surgery and Pediatric Anesthesiology - kharpedsurg@yahoo.com

Discipline page in the Moodle system Discipline page in the Moodle system (if available) <http://31.128.79.157:8083/course/index.php?categoryid=60>

List of questions for differentiated credit

1. Embryogenesis of congenital lung cysts.

2. Clinical course of congenital lung cysts.

3. Clinical manifestations of cystic lung diseases.

4. Treatment of congenital lung cysts.

5. Etiology of congenital pulmonary emphysema.

6. Clinical manifestations and forms of congenital emphysema.

7. Treatment of congenital pulmonary emphysema.

8. Esophageal atresia and "Vacterl-association".

9. Forms of esophageal atresia and clinical manifestations.

10. Diagnosis of esophageal atresia.

11. Treatment of esophageal atresia.

12. Classification of diaphragmatic hernias.

13. Clinical manifestations of diaphragmatic hernias. "Asphyxiation".

14. Diagnosis and differential diagnosis of diaphragmatic hernias.

15. Surgical treatment of diaphragmatic hernias.

16. Congenital pylorostenosis. Clinic. Diagnosis. Treatment.

17. Classification of congenital intestinal obstruction.

18. Clinic of high and small intestinal obstruction.

19. Clinic of low intestinal obstruction.

20. Diagnosis of congenital intestinal obstruction.

21. The amount of surgery for congenital intestinal obstruction.

22. Hernia of the umbilical cord. Classification. Clinic. Treatment.

23. Gastroschisis. Clinic. Differential diagnosis. Treatment.

24 Umbilical care. Clinic. Treatment.

25.Hydronephrosis. Reasons. Clinic. Diagnosis. Treatment.

26. Bladder-ureteral reflux. Classification. Clinic. Diagnosis. Treatment.

27. Malformations of the urethra. Methods of diagnosis, complications. Treatment.

Head of the Department, Professor Davydenko VB