MINISTRY OF HEALTH OF UKRAINE KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Surgery #1 Academic year 2021-2022

SYLLABUS OF THE ELECTIVE COURSE "TOPICAL ISSUES OF CARDIOSURGERY"

Form of education: <u>elective course</u>
Field of knowledge: 22 Health care

Specialty: 222 Medicine

Specialization (if available):

Educational and professional program of the second (masters) level of higher education

Course: 6

The syllabus of the discipline was approved at Approved by the methodical commission of the meeting Department of Surgery №1 KhNMU on problems of surgical profile Protocol from Protocol from 08 2021 No 1 August 30, 2021 № 1 Head of department Head prof. V.V. Boyko (surname and initials) (signature) Professor VO Syplyvy/ August August 30, 2021

SYLLABUS DEVELOPERS:

- 1. Boyko Valeriy Volodymyrovych Academician of the National Academy of Sciences of Ukraine, Doctor of Medical Sciences, Professor, Head of the Department of Surgery #1.
- 2. Buchneva Olga Volodymyrivna Doctor of Medical Sciences, Associate Professor of the Department of Surgery #1.

INFORMATION ABOUT TEACHERS TEACHING THE EDUCATIONAL COMPONENT

BUCHNEVA O.V. - Doctor of Medical Sciences, Associate Professor of the Department of Surgery #1. specialization surgery. https://knmu.edu.ua/departments/kafedra-hirurgiyi-1/,
Tel: 066-145-12-51, e-mail: ov.buchnieva@knmu.edu.ua

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

Off-line consultations: schedule and venue according to the schedule of the department.

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

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

INTRODUCTION

Educational program of higher education of Ukraine, second (master's) level, educational qualification awarded - master, 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 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.

Course description (abstract)

Heart defects are one of the main causes of death among patients of all ages due to the development of heart failure and other complications, despite significant progress in the timely diagnosis and treatment of this pathology.

Currently, there is a tendency to increase the incidence of congenital heart disease (CHD), especially in developed countries, which, according to most scientists, is associated with increased human exposure to adverse environmental factors (chemical, physical, biological teratogens), which, acting on the body of the fetus, cause the formation of malformations. The most vulnerable is the cardiovascular system of the fetus, which provides its hemodynamics from the early stages of development.

About 90% of Air Force occur due to the combined action of hereditary and environmental factors, chromosomal abnormalities are caused by about 8% of cases and about 2% are formed only due to environmental factors (physical, chemical, biological teratogens). The damaging factors of the environment that contribute to the formation of the BBC include the action of ionizing radiation, alcohol, some drugs (anticonvulsants, lithium salts, hormonal contraceptives, retinoic acid, drugs that affect the angiotensin system), household and professional during pregnancy rubella. Unfortunately, at the present stage we cannot prevent the effects of genetic factors on the fetus, but we can and must prevent teratogenic environmental influences.

Interdisciplinary links:

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, propaedeutics of pediatrics, medical genetics, pharmacology and medical formulations, epidemiology and principles of evidence-based medicine, emergency care, emergency also have practical skills in caring for pediatric 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 4 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.

Link to the discipline page in MOODLE

- 1. The purpose and objectives of the discipline.
- **1.1. The purpose of studying the discipline** to provide training for highly qualified specialists in medicine, namely in surgery, able to solve complex problems of diagnosis, treatment and prevention of congenital heart disease.

- **1.2. The main objectives of the discipline** 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 the specialty 222 Medicine (discipline "Surgery")
- **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 OPP and Standard).
- Integrated 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; determination and persistence in the tasks and responsibilities; ability to act socially responsibly and consciously.
- Professional competencies in the field of planned thoracic, cardiovascular and endocrine surgery. Survey skills; ability to determine the necessary list of laboratory and instrumental studies and evaluate their results; ability to establish a preliminary and clinical diagnosis of the disease; ability to determine the necessary tactics and methods of surgical operations in a modern format; maintenance of the postoperative period; rehabilitation regime, the nature of nutrition in these diseases; ability to diagnose emergencies; ability to determine tactics and skills of emergency medical care; skills of performing medical manipulations; ability to plan and carry out preventive measures, including for endocrine diseases; ability to determine the tactics of management of persons subject to dispensary supervision; ability to keep medical records.

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

- communicativeness (implemented through: the method of working in groups and brainstorming during the analysis of clinical cases, the method of presenting the results of independent work and their protection 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).
- **1.3.1.** The study of the discipline provides students with the acquisition of **competencies**:

Integral:

Ability to solve complex specialized problems and practical problems associated with injuries and diseases of the musculoskeletal system; integrate knowledge and solve complex issues, formulate judgments on insufficient or limited information; clearly and unambiguously communicate their conclusions and knowledge, reasonably substantiating them, to the professional audience.

General:

Ability to abstract thinking, analysis and synthesis, the 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.

Special professional:

Survey skills; ability to determine the necessary list of laboratory and instrumental studies and evaluate their results; ability to establish a preliminary and clinical diagnosis of the disease; ability to determine the necessary tactics and methods of surgical operations in a modern format; maintenance of the postoperative period; rehabilitation regime; ability to diagnose emergencies; ability to determine tactics and skills of emergency medical care; skills of performing medical manipulations; ability to plan and carry out preventive measures, including for diseases of the musculoskeletal system; ability to keep medical records.

1.3.2. The study of the discipline provides students with the acquisition of the following **program** learning outcomes:

- acquisition by a person of general and special fundamental and professionally-oriented knowledge, skills, abilities, competencies necessary for the performance of typical professional tasks related to his / her activity in the medical field in the relevant position
- the ability to apply the acquired knowledge, skills and understanding to solve typical problems of the doctor, the scope of which is provided by lists of syndromes and symptoms, diseases, emergencies, laboratory and instrumental research, medical manipulations
- collection of patient information
- evaluation of survey results, physical examination, laboratory and instrumental research data
- establishing a preliminary clinical diagnosis of the disease
- determining the nature, principles of treatment of diseases
- diagnosing emergencies, determining the tactics of emergency medical care
- performance of medical manipulations
- maintenance of medical documentation, processing of state, social and medical information
- the ability to apply the acquired knowledge about the existing health care system to optimize their own professional activities and participate in solving practical problems of the industry
- the formation of a specialist with appropriate personal qualities, who adheres to the code of ethics of the doctor

1.3.3. The study of the discipline provides students with the following social skills (Soft skills):

- communicativeness (implemented through: the method of group work and brainstorming during the analysis of clinical cases, the method of presenting the results of independent work and their protection 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).

2. INFORMATION SCOPE OF THE COURSE

Specific semester/academic year	
Scope of discipline: ECTS credits – 40. Total hor	111

Scope of discipline: ECTS credits -40, Total hours amount 120, of which lectures -0 hours, practical training -20 hours, ISW -100 hours.

Type of control – differentiated credit.

Course 6

The status of the discipline - elective, discipline format – mixed (combination of traditional forms of classroom training with e-learning elements on Moodle, ZOOM,, Google Meet platforms).

The methods of the training. Types of educational activities of students according to the curriculum are: a) lectures, b) practical training, c) independent work of students (ISW).

Thematic plans of lectures, practical classes and ISW ensure the implementation in the educational process of all topics that are part of the discipline. The topics of the lecture course reveal the problematic issues of the relevant sections of medicine.)

The method of organizing clinical practical classes in internal medicine implies the need to:

- to make a student a participant in the process of providing medical care to patients from the moment of their hospitalization, examination, diagnosis, treatment to discharge from the hospital;
- to master professional practical skills;
- to form the responsibility of the student as a future specialist for the level of their training, its improvement during training and professional activity. To implement the above at the first class, each student is provided with a detailed plan of his work in the clinic and the organization of its implementation is ensured.

This plan includes:

- metodic studies that a student should learn (or get acquainted with);
- algorithms (protocols) of examinations, diagnosis, treatment, prevention in accordance with the standards of evidence-based medicine;
- the number of patients for curation, which should be carried out by the student during the cycle;
- reports on the patient's medical history in the training group, at clinical bypasses, practical conferences. Patient curation involves:
- 1) clarification of the patient's complaints, history of the disease and life, conducting a survey on organs and systems;
- 2) physical examination of the patient and determination of the main symptoms of the disease;
- 3) analysis of laboratory and instrumental examination of the patient;
- 4) formulation of the diagnosis of the patient;
- 5) treatment appointment;
- 6) determination of primary and secondary prevention measures;
- 7) report of the results of the examination of the patient by the team of students in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the volume of the assigned examination, therapeutic tactics, assessment of prognosis and performance;

ISW and individual student work:

- preparation for practical classes on planned topics;
- work of students in the departments of clinical base of the department,

including in laboratories and offices of functional diagnostics; interpretation of data of laboratory and instrumental research methods in internal pathology;

- learning practical skills with the help of phantoms and working with patients (according to the list)
- individual ISW (speech at the scientific and practical conference of the clinic, writing articles, abstract report on practical classes, etc.);
- work in the phantom class "Universitet".

Teachers, employees of the clinic and auxiliary staff of the department provide the opportunity to carry out ISW, during practical classes they monitor and evaluate its implementation.

The organization of the educational process ensures the participation of students in the conduct of at least 2/3 of inpatient patients. If it is not possible to provide curation of patients with diagnoses on the topic of the lesson, students fill out a study history of the disease with diseases of the relevant topic. The need to write such a story

is determined by the teacher of the group on the basis of viewing data on the presence of appropriate patients in the departments.

Daily patient review protocols by students are provided to the teacher for monitoring. Teachers ensure that each student receives the necessary competence in the following areas: patient questioning, physical examination, oral report, making diagnostic decisions and determining therapeutic tactics (critical thinking), filling in documentation.

Name of indicators	Field of knowledge, specialty, educational degree, OPP	Characteristics of the discipline full-time education	
Number of credits – 4,0	Branch of knowledge 22 Health care	Normative	
	Specialty:	Year of preparation:	
The total number of hours –	222 Medicine	6	
	<u>=== 1,100,01110</u>	Semester	
120	Specialization:		
		Lectures	
	Educational degree: second (master's) - "master of medicine" OPP	0 h	
Hours for full time study		Practical	
Hours for full-time study: classroom - 20		20 h	
independent work of the		Individual work	
student - 100		100 h	
	"Medicine"		
		Type of control: Differentiated credit	

2.1 Description of the discipline

2.2.1 Lectures - no

2.2.2 Seminars - no 2.2.3 Practical classes

No	Name topics	Number	Methods	Forms
s/		hours	teaching	control
n				
1.1. 1.2. 1.3	Introduction: acquaintance with the topic, program. Artificial blood circulation. Curation of patients	1 2 2	Story- explanation, conversation, illustration, demonstration, presentation, discussion, round table, modeling of processes and situations, debate, method "Brainstorming", sparring partnership (learning in pairs)	Oral interview (individual and frontal); written survey; test control; creative tasks; individual tasks; abstracts; mutual control; self-control; report; declamation.
2.1. 2.2. 2.3.	Congenital heart disease. Cyanotic defects and defects without cyanosis. Methods of diagnosis and surgical treatment	2		

2.4.	of congenital heart defects. Curation of patients. Work in the angiograph.	1		
3.1. 3.2. 3.3. 3.4.	Cardiac arrhythmias. Heart block. Methods of diagnosis and surgical treatment of cardiac arrhythmias. Curation of patients. Work in the angiograph.	1 2 1 1	Story- explanation, conversation, illustration, demonstration, presentation, discussion, round table, modeling of processes and situations, debate, method "Brainstorming", sparring partnership (learning in pairs)	Oral interview (individual and frontal); written survey; test control; creative tasks; individual tasks; abstracts; mutual control; self-control; report; declamation.
4.1.	Work in the operating room. Credit	3 2	Story- explanation, conversation, illustration, demonstration, presentation, discussion, round table, modeling of processes and situations, debate, method "Brainstorming", sparring partnership (learning in pairs)	Oral interview (individual and frontal); written survey; test control; creative tasks; individual tasks; abstracts; mutual control; self-control; report; declamation.
	Total, hours	20		

2.2.4. Laboratory classes - no 2.2.5. Individual work

No	Name topics	Number	Methods	Forms
S		hours	teaching	control
/				
n				
1	Electrocardiography in the diagnosis of heart	10	Self-education	Self-control
	block.			

2	Special research methods in the diagnosis of heart block.	10	Self-education	Self-control
3	Pulmonary hypertension - causes, stages, treatment	10	Self-education	Self-control
4	Conservative therapy of heart block.	5	Self-education	Self-control
5	Treatment of heart failure	10	Self-education	Self-control
6	Complications of surgical treatment of heart disease	5	Self-education	Self-control
7	Artificial blood circulation.	10	Self-education	Self-control
8	Congenital heart disease. Cyanotic defects and defects without cyanosis. Methods of diagnosis and surgical treatment of congenital heart defects.	20	Self-education	Self-control
9	Cardiac arrhythmias. Heart block. Methods of diagnosis and surgical treatment of cardiac arrhythmias.	10	Self-education	Self-control
10	Work in the operating room.	10		
	Total hours of independent student work	100		

3. EVALUATION CRITERIA

3.1. Evaluation of the success of education of students is carried out on the basis of the current «Instructions for evaluating the educational activities of students of KhNMU».

Current educational activities are carried out and controlled by the teacher of the academic group, after students assimilate each topic of the discipline, it is evaluated using a 4-point (traditional) system: "excellent", "good", "satisfactory" and "unsatisfactory".

The final lesson is held after the logically completed part of the discipline, consisting of a set of educational elements of the curriculum, which combines all types of training (theoretical, practical, etc.) elements of the educational and professional program (academic discipline, all types of practices, certification), which is implemented by the relevant forms of the educational process. The final lesson is conducted according to the curriculum during the semester according to the schedule, during classes. The final lesson is accepted by the teacher of the academic group or an exchange of adjacent groups between teachers is carried out.

The forms of the final training are standardized and include control of all types of training (theoretical, practical, independent etc.) provided for by the curriculum of the discipline:

The assessment is assuming:

- 1. Solving a package of test tasks on the content of educational material in the amount of 30 tests (open database of test tasks "Krok-2".
 - 2. Assessment of practical skills development (evaluation criteria "fulfilled" or "not fulfilled");
- 3. During the assessment of the student's knowledge on theoretical issues included in this final lesson, the student is given a traditional assessment, which is converted into a multi-scale, along with assessments for current academic activities. The recalculation of the average assessment of the current educational activity into the multi-scale ECTS is carried out in accordance with the "Instructions for assessing the educational activities of students of KhNMU".

The minimum number of points that a student must score for admission to the exam is 70 points, the maximum number of points that a student can score is 120 points.

The final semester control is carried out after the completion of the study of the discipline in the form of an exam.

The exam is conducted by examiners approved by the order of the Rector of the University.

On the day of the exam, the assimilation of practical skills and theoretical knowledge on all topics of the V course is carried out. Assessment of practical skills is carried out according to the criteria "performed", "not fulfilled"). The minimum positive score at the exam is 50 points. The maximum number of points is 80 points.

If the exam is not taken, the laying dates are set during the holidays, before the beginning of the next semester.

Liquidation of academic debt (working out).

3.2. Questions to diff. credit:

1. Artificial circulation.

Determining the principles of artificial circulation, features of its implementation in children. Indications and limiting factors for artificial circulation. The main risks of artificial circulation and the principles of their adjustment. Technical and practical aspects of connecting the artificial circulation device, possible complications when connecting the artificial circulation device. Age and age features of artificial circulation.

2. Congenital heart disease. Cyanotic defects and defects without cyanosis.

Classification of congenital heart defects. Characteristics of ductus-dependent PVA. Features of hemodynamics of defects with overflow of a small circle of blood circulation. Leading clinical symptoms and syndromes in congenital heart disease in children. Leading clinical symptoms and syndromes in cyanotic heart defects and heart defects without cyanosis in children. Features of congenital heart disease in children depending on the severity and level of control. Data from laboratory and instrumental studies in cyanotic heart defects and heart defects without cyanosis in children and their complications. Establishing a preliminary diagnosis of congenital heart disease in children. Tactics of patient management in different clinical variants of congenital heart defects and complications of their course in children. Emergency care for asthma-cyanotic attack. Prevention of dyspnea in patients with Fallot's tetrad in children of different ages.

3. Methods of diagnosis and surgical treatment of congenital heart defects.

Diagnostic and differential criteria of atrial septal defects, interventricular septum, open ductus arteriosus. Tactics of treatment and surgical correction of PVA with overflow of the small circulation without cyanosis. Diagnostic and differential criteria for transposition of main vessels, common arterial trunk. Tactics of treatment and surgical correction of PVA with overflow of the small circle of blood circulation and cyanosis. Features of hemodynamics of defects with impoverishment of a small circle of blood circulation. Diagnostic and differential criteria of isolated pulmonary artery stenosis, Fallot's tetrad. Tactics of treatment and surgical correction of PVA with depletion of the small circulation. Features of hemodynamics of defects with depletion of a large circle of blood circulation. Diagnostic and differential criteria of isolated aortic stenosis, aortic coarctation. Tactics of treatment and surgical correction of PVA with impoverishment of the great circle of blood circulation. Ultrasound, angiographic diagnosis of congenital heart defects and use in the diagnosis of CT and MRI.

4. Cardiac arrhythmias. Heart block.

Clinical symptoms and syndromes in extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block. Clinical variants of paroxysmal tachycardia and atrial fibrillation in children. The course of atrioventricular block in children, congenital and acquired variants of atrioventricular block in children.

5. Methods of diagnosis and surgical treatment of cardiac arrhythmias.

Data from instrumental studies in extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block. Differential diagnosis of extrasystole, paroxysmal tachycardia, atrial fibrillation and complete atrioventricular block. Tactics of patient management with extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block in children. Emergency care for paroxysmal tachycardia, atrial fibrillation, Morgan-Adams-Stokes syndrome in children. Prevention of cardiac arrhythmias and conduction in children. Possibilities and features of pacemaker implantation in children and ablation treatments.

3.3. control questions

Electrocardiography in the diagnosis of heart block.

Special research methods in the diagnosis of heart block.

Pulmonary hypertension - causes, stages, treatment

Conservative therapy of heart block.

Treatment of heart failure

Complications of surgical treatment of heart disease

Artificial blood circulation.

Congenital heart disease. Cyanotic defects and defects without cyanosis. Methods of diagnosis and surgical treatment of congenital heart defects.

Cardiac arrhythmias. Heart block. Methods of diagnosis and surgical treatment of cardiac arrhythmias.

3.4. Individual tasks (the list approved at the meeting of the department with the determination of the number of points for their performance, which can be added as incentives): The 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.

The individual tasks of the applicant are evaluated for participation with reports in student conferences and competitions, especially with the receipt of prizes, for the publication of scientific papers, for the preparation of analytical reviews with presentations, for writing a scientific review of modern scientific literature on the subject in ECTS credits. to the basic points on ZND of the applicant from discipline as encouraging (at the request of the applicant) in number no more than 10 (thus the sum of points should not exceed 120 points).

3.5. Rules for appealing the assessment. On the basis of the "Regulations on the appeal of the results of the final control of applicants for higher education of KhNMU", the applicant has the right to file an appeal (appeal) against the final grade, which is set in the discipline. The applicant submits an application to the head. department at which he studies. Applications are considered at a meeting of the appeal commission. The results of the appeal are announced to the student immediately after the consideration of his application. The decision of the appeal commission is final and not subject to appeal.

4. DISCIPLINE POLICY

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 on each lesson; be able to work in a group; to address to the teacher on various questions on subjects of employment and to receive the answer.

Active participation during the discussion in the audience, students should be ready to understand the material in detail, ask questions, express their views, discuss. During the discussion it is important:

- respect for colleagues,
- tolerance for others and their experiences,
- susceptibility and impartiality,
- the ability to disagree with the opinion, but to respect the personality of the opponent,
- careful argumentation of one's opinion and courage to change one's position under the influence of evidence,
- expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,
- obligatory acquaintance with primary sources.

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 educational process. Students are not allowed to be late for practical classes.

Students are expected to attend all lectures and workshops. 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 lecture, students are recommended to keep a synopsis of the lesson and keep a sufficient level of silence. Asking questions to a lecturer is perfectly normal.

Visiting patients during hospital treatment is possible provided that students have the appropriate form of clothing and in the absence of infectious diseases, according to the current epidemic situation.

Class attendance and behavior

If students missed classes, it is necessary to work it out (according to the schedule on the information stand of the department). If the sum of points is less than 50 points, the evaluation of the DR is determined by the criterion "failed" and requires its re-assembly with the permission of the dean's office.

Provide students who have academic debt with an additional opportunity to eliminate it in their free time on Saturdays and during the holidays.

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 (see Academic Expectations from Students).

forbidden:

- to 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.

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.

All KhNMU students are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University (http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog-sex_.doc), which is designed to define an effective mechanism for resolving conflict situations related to discrimination and sexual harassment.

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.

5. 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. Link to "Regulations on Academic Integrity and Ethics of Academic Relations at Kharkiv National Medical University" http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_ad_etyka_text.pdf

6. RECOMMENDED LITERATURE

Basic

- 1. NelsonTextbookofPediatrics 21th Edition. Robert M. Kliegman, JosephSt. Geme. Publisher: Elsevier. 2019. P. 4112.
- 2. Pediatric Surgery, Devendra K Gupta, 2010.
- 3. Ashcraft's Pediatric Surgery, 7th Edition By George W. Holcomb, III, MD, MBA, J. Patrick Murphy, MD and Shawn D. St Peter, MD, 2019
- 4. Essential Practice of Pediatric Surgery, 3VOL, by Ayman AL-Baghdady, 2019.
- 5. Handbook of Pediatric Surgery, Jessica L. Buicko, 2019.
- 6. Newborn Surgery, 3e, Prem Puri, 2011.

- 7. Operative Pediatric Surgery, 2e, Moritz M. Ziegler, 2014.
- 8. Pediatric Cardiac Surgery, 4e, Constantine Mavroudis, 2011.

Guidelines

Auxiliary

7. INFORMATION RESOURCES

Link to the Discipline in MOODLE http://distance.knmu.edu.ua/course/index.php?categoryid=34

8. Additional onformation

Useful links:

Provisions on prevention and settlement of cases related to sexual harassment and discrimination in KhNMU

http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog-sex.doc

Regulations on Academic Integrity and Ethics of Academic Relations at Kharkiv National Medical University

 $http://files.knmu.edu.ua: 8181/upload/redakt/doc_uchproc/polog_ad_etyka_text.pdf$

The order of conducting classes on in-depth study by students of Kharkiv National Medical University of individual disciplines beyond the scope of the curriculum http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/nak-poriad-pogl-vyv-dysc.docx

Regulations on the Commission on Academic Integrity, Ethics and Conflict Management-KhNMU http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_komis_ad_text.pdf

Regulations on the recognition of the results of non-formal education at Kharkiv National Medical University http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_neform_osv.pdf

INCLUSIVE EDUCATION:

http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=7108%3A2021-03-10-14-08-02&catid=12%3A2011-05-10-07-16-32&Itemid=33&lang=uk

Academic Integrity:

http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=2520%3A2015-04-30-08-10-46&catid=20%3A2011-05-17-09-30-17&Itemid=40&lang=uk http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/kodex_AD.docx