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MINISTRY OF HEALTH AND THE SCIENCE OF KYRGYZ REPUBLIC
I. K. AKHUNBAEV KYRGYZ STATE MEDICAL ACADEMY**

“APPROVED BY”

Rector of KSMA, Doctor of Medical Sciences,

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**MAIN EDUCATIONAL PROGRAM
HIGHER PROFESSIONAL EDUCATION
Training area (specialty) 560002 “Pediatrics”**

Graduate qualification (degree) -**Specialist (Doctor of Medicine)**

Form of study-**full-time**

The standard term for mastering program is **6 years**

MEP – **360 credits (credits)**

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1. General provisions

1.1. The main educational program of higher education (hereinafter referred to as **MEP HPE**) in the direction of training **560002 "Pediatrics"**, implemented in the I. K. Akhunbaev Kyrgyz State medical Academy. (hereinafter **KSMA**) of the Ministry of education and science of the Kyrgyz Republic, is a system of documents developed and approved institution of higher education based on the needs of the labour market on the basis of the State educational standard of higher professional education (hereinafter **SES HPE**) in the relevant field of study (specialty). The MEP regulates the goals, expected results, content, conditions and technologies for implementing the educational process, as well as evaluating the quality of graduate training in this field of study. MEP includes: the curriculum, work programs of academic disciplines and other materials that ensure the quality of training of students, as well as training and industrial practice programs, a calendar training schedule, research programs and methodological materials that fully ensure the implementation of the relevant educational technology.

To determine the structure of MEP HPE and the complexity of its development, a system of credit units is used. The credit unit is a unified unit of measurement for the labor intensity of the student's academic load, which includes all types of his / her educational activities provided for in the curriculum and industrial practice.

MEP HPE training of specialists in the specialty 560002 "Pediatrics" provides for the implementation of industrial practice of students.

The organization of practical training provided for in the educational program is carried out by the I. K. Akhunbaev KSMA on the basis of contracts with medical organizations.

1.2. Basic terms and definitions.

Terms and definitions are used in MEP HPE in accordance with the Law of the Kyrgyz Republic "On Education" and international documents in the field of

higher professional education adopted by the Kyrgyz Republic in accordance with the established procedure:

- **the main educational program** is a set of educational and methodological documentation that regulates the goals, expected results, content and organization of the implementation of the educational process in the relevant field of training;
- **training area** - a set of educational programs for training personnel with higher professional education (specialists) of various profiles, integrated on the basis of the commonality of fundamental training;
- **profile** - focus of the main educational program on a specific type and (or) object of professional activity;
- **cycle of disciplines** - a part of the educational program or a set of academic disciplines that has a certain logical completeness in relation to the established goals and results of training, education;
- **competence** - a dynamic combination of personal qualities, knowledge, skills and abilities required to engage in professional activities in the specialty 560002 "Pediatrics";
- **credit (credit unit)** - a conditional measure of the labor intensity of the main professional educational program;
- **learning outcomes – competencies** acquired as a result of training in the main educational program.

Abbreviations and symbols

The following abbreviations are used in MEP:

STATE - State Educational standard;

HPE - higher professional education;

MEP - the main educational program;

EMPC-Educational and methodical profile Committee

EMD - educational and methodical associations;

GC - General scientific competencies;

IC-instrumental competencies;

SPC - social, personal and general cultural competencies;

PC - professional competencies.

1.3. Regulatory documents for the development of MEP HPE:

1. Law of the Kyrgyz Republic "On Education" of April 30, 2003 No. 92;
2. Regulation on the educational organization of higher professional Education of the Kyrgyz Republic, approved by the Resolution of the Government of the Kyrgyz Republic No. 53 of February 3, 2004;
3. National Program of Healthcare system reform of the Kyrgyz Republic "Den sooluk" developed for 2012-2016;
4. Regulatory legal acts regulating the activities of educational organizations of higher and secondary vocational education of the Kyrgyz Republic, approved by the Government of the Kyrgyz Republic Resolution No. 346 of May 29, 2012;
5. KSMA Charter (approved by the Ministry of Education and Science of the Kyrgyz Republic dated 12.09.2013. approved by the Order of the Ministry of Health of the Kyrgyz Republic dated 04.10.2013 No. 581 and registered by the Ministry of Justice of the Kyrgyz Republic dated 15.11.2013);
6. Order of the Ministry of Education and Science of the Kyrgyz Republic "On approval of Requirements for the structure, labor intensity to the mandatory minimum content of disciplines" (No. 556/1 of 28.08.2013).);
7. Resolution of the Government of the Kyrgyz Republic "On delegating certain normative powers of the Government of the Kyrgyz Republic to a number of State executive bodies and integrating higher professional education into the International Educational Space" dated September 15, 2014 No. 530;
8. Order of the Ministry of Education and Science of the Kyrgyz Republic "On approval of State educational Standards of Higher Professional Education" dated September 15, 2015 No. 1179/1;

9. Order of the Ministry of Education and Science of the Kyrgyz Republic "On Amendments to State educational Standards and curricula of Higher professional education" (No. 1455/1 of 27.11.2017);
10. Resolution of the Government of the Kyrgyz Republic " On approval of the Interim Regulation on Licensing of Educational Activities in the Kyrgyz Republic "(dated 23.07.2018, No. 334);
11. Regulations on the main educational program of higher professional education, approved by the order of the Rector of KSMA No. 411 dated 19.12.2018.;
12. Regulation on the current control of academic performance and intermediate certification, approved by the order of the Rector of KSMA dated 21.01.2018.;
13. Regulations on the elective course (elective), approved by the order of the Rector of KSMA dated 10.10.2017.;
14. Regulations on independent work of students, approved by the order of the Rector of KSMA dated 04.03.2013.;
15. Regulations on industrial practice approved by the order of the Rector of KSMA dated 03.03.2018.;
16. "Regulation on the final state certification of graduates of higher educational Institutions of the Kyrgyz Republic "(approved by Order No. 10179 of the Ministry of Education and Science of the Kyrgyz Republic dated 15.09.2015);
17. Regulations on State final certification approved by the order of the Rector of KSMA No. 137 dated 24.05.2018.;
18. Regulations on computer testing, approved by the order of the Rector of KSMA dated 16.10.2018.

1.4. General characteristics of MEP HPE

In the Kyrgyz Republic, the State Higher Education System is being implemented in the specialty 560002 "Pediatrics".

Graduates of higher education institutions who have fully mastered the MEP HPE in their specialty and have successfully passed the state final certification in accordance with the established procedure are issued a diploma of higher professional education with the qualification "Doctor" in the specialty "Pediatrics" with the right to engage in medical activities in certain medical specialties after completing clinical residency (phthisiology, children's and adult infectious diseases, occupational diseases, physical therapy and physical therapy, specialist in instrumental diagnostics, sports medicine, as well as engage in research and teaching activities in theoretical and fundamental areas of medicine).

1.4.1. The standard term for mastering the MEP HPE in the specialty "Doctor" 560002 "Pediatrics" on the basis of secondary general or secondary/higher professional education with full-time training is 6 years.

1.4.2. The total labor intensity of mastering MEP is 360 credits (credits). The labor intensity of the MEP HPE for the academic year is equal to 60 credits (credit units). The labor intensity of one semester is equal to 30 credits (credits) for a two-semester structure of the educational process, taking into account the sequence of disciplines in the curriculum, the university has the right to vary the labor intensity of one semester from 28 to 32 credits, while not exceeding the established 60 credits in the academic year. One credit (credit unit) is equivalent to 30 hours of student's academic work (including classroom work, independent work, and all types of attestation). The duration of one hour of classes is 45 minutes.

The academic year ends on time, according to the curriculum and calendar schedule of the university. The total amount of vacation time is 7-10 weeks, including at least two weeks in winter. The maximum amount of training load of students per week is set by the State Higher Professional Education System in the specialty and is 45 hours.

When carrying out educational activities in the MEP, KSMA ensures: the implementation of disciplines through training sessions (including ongoing monitoring of academic performance and intermediate certification of students); the implementation of practices (including certification of students) and state final

certification of students. When organizing educational activities of the KSMU, the modular principle of presenting MEP HPE and building curricula can be used.

1.4.3. Requirements for the applicant

The applicant must have a state-issued document on secondary (full) general education or secondary vocational education. The rules for admission to the Faculty of Pediatrics of KSMA are formed annually on the basis of the "Procedure for Admission to Higher Educational Institutions", approved by the order of the Ministry of Education and Science of the Kyrgyz Republic.

2. CHARACTERISTICS OF THE PROFESSIONAL ACTIVITY OF A UNIVERSITY GRADUATE IN THE SPECIALTY

560002 "Pediatrics"

2.1. Purpose (mission) MEP of Higher professional education

The purpose of the HPE training center in the specialty 560002 "Pediatrics" is to prepare a graduate with basic theoretical and clinical knowledge, skills in the field of providing treatment and preventive and medical care to the population of the Kyrgyz Republic, capable of postgraduate and further continuing medical education and implementing partnerships in the field of healthcare.

The purpose of the MEP HPE specialty 560002 "Pediatrics" in the field of personal education is to form traditional universal and national cultural and moral values, professional and ethical responsibility, critical thinking skills, self-organization and self-education.

2.2. The field of professional activity of the graduate in the direction of "Pediatrics". Training in the field of basic humanitarian, social, economic, mathematical and natural science knowledge, obtaining higher professional (at the level of a specialist) education that allows graduates to successfully work in the field of pediatrics, possess universal and subject-specific competencies that contribute to their social mobility and sustainability in the labor market.

2.3. Objects of professional activity of graduates:

- children from 0 to 18 years old;

- a set of tools and technologies aimed at creating conditions for maintaining health, ensuring the prevention, diagnosis and treatment of diseases.

2.4. Types of professional activity:

- * preventive maintenance;
- * diagnostic system;
- * therapeutic area;
- * rehabilitation program;
- * psychological and pedagogical support;
- * organizational and managerial support;
- * scientific research.

2.5. A doctor in the specialty 560002 "Pediatrics" should solve the following professional tasks according with the types of professional activity:

2.5.1. Preventive activities

- implementation of measures to promote the health of children and adolescents;
- carrying out disease prevention (immunization) among children and adolescents;
- formation of motivation in children and adolescents to maintain and promote health;
- carrying out preventive and anti-epidemic measures aimed at preventing the occurrence of diseases;
- implementation of dispensary monitoring of children and adolescents;
- carrying out sanitary and educational work among children, their relatives and medical personnel in order to form a healthy lifestyle.

2.5.2. Diagnostic activity

- diagnosis of diseases and pathological conditions in children and adolescents based on the possession of objective and laboratory-instrumental research methods;
- diagnosis of emergency conditions in children and adolescents;
- pregnancy diagnostics;

- conducting a medical examination.

2.5.3. Therapeutic activity

- treatment of children and adolescents using therapeutic and surgical methods based on the principles of evidence-based medicine;
- management of physiological pregnancy;
- providing medical assistance to children in emergency situations;
- carrying out medical evacuation measures in an emergency situation and providing medical assistance to children and adolescents in extreme conditions of epidemics, in foci of mass destruction;
- organization of work with medicines and compliance with the rules of their rational use in children and adolescents, storage conditions.

2.5.4. Rehabilitation activity

- conducting medical examinations and rehabilitation activities among children who have suffered a somatic disease, injury or surgery;
- use of physical therapy, physiotherapy and resort factors in children in need of rehabilitation.

2.5.5. Educational activity

- formation of children's motivation for a healthy lifestyle, including the elimination of bad habits that adversely affect the state of health;
- training of children and parents in basic health-improving activities that help prevent the occurrence of diseases and promote health.

2.5.6. Organizational and managerial activities

- knowledge of the health organization system in the country;
- organization of work of medical personnel in medical institutions, determination of functional responsibilities of medical workers;
- organization of safety measures in medical, preschool and school institutions and ensuring environmental safety;
- maintaining medical records in the hospital and at the PMC level;
- conducting an expert examination of disability in children;
- quality control of medical-diagnostic and rehabilitation-preventive care for

children;

- conducting business correspondence (memos, letters, etc.).

2.5.7. Research type of activity

- analysis of scientific literature and official statistical reviews;
- preparation of reports on the specialty;
- participation in statistical analysis and preparation of a report on scientific and practical research.

3. GENERAL REQUIREMENTS (COMPETENCIES) TO MEP IN THE SPECIALTY “PEDIATRICS”

The results of mastering MEP HPE are determined by the competencies acquired by the graduate, i.e. his ability to apply knowledge, skills and personal qualities in accordance with the tasks of professional activity. **A graduate of the specialty 560002 "Pediatrics"** with the qualification of a specialist "Doctor" in accordance with the goals of the MEP and the tasks of professional activity, **must have** the following **competencies**:

3.1. Universal:

3.1.1. General scientific competencies (GC):

GC-1-is able to analyze socially significant problems and processes, use in practice the methods of the humanities, natural sciences, biomedical and clinical sciences in various types of professional and social activities;

GC-2 - capable of analyzing worldview, socially and personally significant philosophical problems, basic philosophical categories, and self-improvement;

GC-3 - capable of analyzing significant political events and trends, mastering the basic concepts and laws of the world historical process, respecting and caring for historical heritage and traditions, and evaluating state policy; has knowledge of historical and medical terminology;

GC-4 - able to analyze economic problems and social processes, use the methodology for calculating indicators of economic efficiency;

GC-5 - is capable of logical and reasoned analysis, public speech, conducting discussions and polemics, editing professional texts, cMEPeration and conflict resolution, tolerance;

GC-6-ready to carry out its activities taking into account the moral and legal norms adopted in the society; comply with the rules of medical ethics, laws and regulations on working with confidential information, and keep medical secrets.

3.1.2. Instrumental competencies (IC):

IC-1 - ability to work independently on a computer (basic skills);

IC-2-ready for written and oral communication in the state language and official languages, able to master one of the foreign languages at the level of everyday communication;

IC-3-is able to use management methods; organize the work of performers; find and make responsible management decisions in the context of different opinions and within their professional competence;

IC-4-readiness to work with information from various sources.

3.1.3. Social, personal and general cultural competencies (SPC):

SPC-1-is able to implement ethical and deontological aspects of medical activity in communication with colleagues, nurses and junior staff, children and their parents;

SPC-2-is able to identify the natural science nature of problems that arise in the course of a doctor's professional activity;

SPC-3-capable to analyze medical information based on the principles of evidence-based medicine;

SPC-4-is able to apply modern social and hygienic methods of collecting and medico-statistical analysis of information on the health indicators of the child population;

SPC-5-is able to use methods for assessing natural (including climatogeographic) and medico-social environmental factors in the development of diseases in children and adolescents, and to correct them;

3.2. Professional services:

3.2.1. Professional competencies

PC-1-is able to analyze the results of its own activities to prevent medical errors, while being aware of the responsibility of disciplinary, administrative, civil, criminal;

PC-2-is able to conduct and interpret a survey, physical examination, clinical examination, results of modern laboratory and instrumental studies, morphological analysis of biopsy, surgical and sectional material of patients, draw up a medical card of an outpatient and inpatient sick child;

PC-3-is able to conduct pathophysiological analysis of clinical syndromes, use reasonable methods of diagnosis, treatment, rehabilitation and prevention among children, taking into account their age;

PC-4-is able to apply aseptic and antiseptic methods, use medical instruments, perform sanitary treatment of medical and diagnostic facilities, children's health organizations, and master the technique of caring for sick children and adolescents;

PC-5-is able to conduct a forensic medical examination of living persons; interpret the results of laboratory studies of objects of forensic medical examination as a specialist;

PC-6 - capable of working with medical and technical equipment used in working with patients, computer equipment, receive information from various sources, apply the capabilities of modern information technologies to solve professional problems;

3.2.2. Preventive activities

PC-7 – carry out preventive measures to prevent infectious, parasitic and non-communicable diseases, organize and conduct immunization of children and adolescents according to the national calendar of preventive vaccinations, sanitary and educational work on hygiene issues;

PC-8-is able to carry out preventive measures with the population to prevent the

occurrence of the most common diseases; implement general health measures to form a healthy lifestyle, taking into account risk factors, make recommendations on healthy nutrition, evaluate the effectiveness of dispensary monitoring of healthy and chronically ill children and adolescents;

PC-9-is able to organize tuberculin diagnostics and fluorographic examination of children and adolescents for early detection of tuberculosis, evaluate their results; to select individuals for observation, taking into account the results of mass tuberculin diagnostics;

PC-10-capable of carrying out anti-epidemic measures, protecting the population in hotbeds of particularly dangerous infections, in case of deterioration of the radiation situation and natural disasters;

3.2.3. Diagnostic activities

DA-11 is capable to make a diagnosis based on the results of laboratory diagnostic studies of biological material, taking into account the features of the course of the disease with damage to various organs and systems of the body;

DA-12-is able to analyze the results of the main clinical and laboratory research methods and assess the functional state of the child's body in order to timely diagnose diseases;

DA-13-is able to detect the main symptoms and syndromes of diseases in patients, use the algorithm for making a diagnosis (main, concomitant, complications) taking into account ICD-10, perform basic diagnostic measures to identify urgent syndromes that threaten life;

DA-14 - able to analyze and interpret the results of modern diagnostic technologies in children and adolescents for successful treatment and prevention activities;

3.2.4. Therapeutic activities

PC-15-capable of performing therapeutic measures for the most common diseases and conditions in children and adolescents that can cause severe complications and / or death;

PC-16-is able to prescribe adequate treatment to sick children and adolescents in accordance with the diagnosis;

PC-17-is able to provide first aid to children and adolescents in case of emergency and life-threatening conditions, send patients to hospital in a planned and urgent manner;

PC-18-is able to prescribe and use the basic principles of the organization of therapeutic nutrition in sick children suffering from various pathologies;

3.2.5. Rehabilitation activities

PC-19-is able to apply rehabilitation measures among children with the most common diseases, determine indications for transferring children and adolescents to specialized physical education groups, depending on the pathology;

PC-20-is able to give recommendations on the choice of motor activity mode, determine indications and contraindications for the appointment of physical therapy, physiotherapy, non-drug therapy, the use of the main resort factors in the treatment of children and adolescents;

3.2.6. Educational activities

PC-21-capable to teach secondary and junior medical personnel the rules of sanitary and hygienic regime, ethical and dientological principles;

PC-22-capable to teach children and adolescents the rules of medical behavior; to conduct hygiene procedures, to develop healthy lifestyle skills;

3.2.7. Organizational and managerial activities

PC-23-is able to use the regulatory documentation adopted in healthcare of the Kyrgyz Republic;

PC-24-is able to use the knowledge of the organizational structure of healthcare for providing medical care to the children's population, analyze the performance of medical institutions, and evaluate the effectiveness of medical services.;

PC-25-is able to provide a rational organization of work of secondary and junior

medical personnel of medical institutions and their training in healthcare organizations;

PC-26-is able to draw up appropriate documentation for sending a sick child for medical and social examination in the presence of disability from childhood, to prevent disability among children and adolescents;

3.2.8. Research activities

PC-27-ready to study scientific and medical information, domestic and foreign experience on the subject of research.

3.2.9. The following learning outcomes are formed in accordance with the purpose of MEP HPE (hereinafter referred to as RT):

RT-1. Ability to conduct and interpret a survey, physical examination, clinical examination; results of modern laboratory and instrumental studies, morphological analysis of biopsy, surgical and sectional material of patients; draw up a medical card of a sick child (PC-2, 12, 14).

RT-2. Ability to use and draw up medical documentation in the state and official languages (PC-23, 26, IC-2).

RT-3. Ability to speak publicly, conduct discussions, collaborate and resolve conflicts; apply communication skills in professional activities (GC-5);

RT-4. Ability to work on a computer and speak one of the foreign languages; apply modern information technologies in professional activities (IC-1, 2; PC-6; PC-14; PC-27);

RT-5. Ability to apply basic knowledge in the field of organizational and managerial activities and carry out their activities taking into account the moral and legal norms accepted in society; to assess the effectiveness of providing medical services by medical institutions (IC-3, SLK-1; PC-23; PC-24; PC-25; PC-26).

RT-6. Ability to apply socio-hygienic, medico-statistical methods of collecting and analyzing information, conduct medico-statistical analysis (SPC-4).

RT-7. Ability to apply aseptic and antiseptic methods, perform sanitary treatment of medical and diagnostic facilities, children's organizations (PC-4);

RT-8. Ability to carry out preventive measures to prevent various diseases; to carry out immunization of children (PC-7,8,9,12).

RT-9. Ability to apply basic knowledge in the field of professional disciplines in protecting the population and territories from possible consequences of emergencies and natural disasters (PC-10).

RT-10. Ability to follow the rules of medical ethics and deontology (SPC-1, GC-6, PC-1).

RT-11. Ability to analyze economic problems and political events, master historical and medical terminology (GC-3,4).

RT-12. Ability to apply basic knowledge in the field of psychological and pedagogical activity; to train secondary and junior medical personnel in the rules of sanitary and hygienic regime, ethics and deontology; to conduct sanitary and educational work with the population (SPC-1; PC-21; PC-22);

RT-13. Ability to make a diagnosis based on the results of objective, laboratory and instrumental studies; identify life-threatening emergencies (PC-11,13).

RT-14. Ability to prescribe adequate treatment to sick children; provide first aid in emergency situations; organize therapeutic nutrition and rehabilitation measures for various diseases in children (PC-15,16,17,18, 19,20).

RT-15. Ability to apply basic knowledge in the field of research activities (IC-1; IC-2; IC-4, SPC-2; SPC-3, SPC-4; PC-27).

3.3. Structural matrix of competence formation

(Appendix No. 1, Competence Matrix)

4. GENERAL REQUIREMENTS FOR MEP IMPLEMENTATION CONDITIONS

4.1. Requirements for the MEP structure in the specialty

MEP in the specialty 560002 "Pediatrics" provides for the study of the following training cycles:

- C. 1-the humanitarian, social and economic cycle;
- C. 2-mathematical and natural science cycle;
- C. 3-professional cycle;
- C. 4-Additional types of training;
- C. 5-practical training (training, production and prequalification).

Each academic cycle has a basic (compulsory) part and a variable one, set by the university.

The basic part is mandatory and ensures that students develop universal and professional competencies established by the State Higher Professional Education Standard that correspond to the type (s) of professional activity that the educational program is focused on.

The variable part provides an opportunity to expand and (or) deepen the knowledge, skills, abilities and competencies determined by the content of basic (mandatory) disciplines, allows students to get in-depth knowledge and skills for successful professional activity and (or) further continuation of training in postgraduate professional education programs (internship, residency, postgraduate study). The content of the variable part is formed in accordance with the orientation (profile) of the educational program.

The variable part consists of the university component and subjects of students ' choice.

The state exam is introduced at the discretion of the university.

4.2. Curriculum and academic calendar (*Appendix 2*).

The curriculum for the specialty 560002 "Pediatrics" is the main document regulating the educational process and is compiled taking into account the available recommendations that ensure the formation of competencies. It ensures the sequence of studying disciplines and passing practical training, based on their continuity, rational distribution of disciplines by semester from the standpoint of uniformity of academic work. In the direction (specialty) "Pediatrics" should be the following forms of curricula:

- basic curriculum - compiled by KSMA for the full standard period of study;
- working curriculum - compiled by KSMA for a specific academic year;
- individual curriculum of students. It determines the educational trajectory of each student, taking into account the disciplines of the student's choice.

When developing basic, working and individual curricula, the requirements of the State Higher Professional Education Standard for the relevant field (specialty) of training must be met.

The curriculum indicates the total labor intensity of disciplines, practices in credits, as well as their total and classroom labor intensity in hours. For each discipline, practice, specify the types of academic work, forms of intermediate and final control.

When forming their individual educational trajectory, a student has the right to get advice in the dean's office of KSMA on the choice of disciplines and their impact on the future training profile. The calendar schedule of the educational process sets the sequence and duration of theoretical training, examination sessions, practical training, final state certification, student vacations and is developed taking into account the requirements of the State Higher Professional Education Standard.

4.3.Staffing of the educational process

The implementation of the MEP of specialist training should be provided by scientific and pedagogical personnel who have a basic education corresponding to the profile of the discipline taught, and an academic degree or experience in the relevant professional field and are systematically engaged in scientific and/or scientific and methodological activities.

The share of teachers with an academic degree and / or academic title in the total number of teachers for each cycle of the educational program should be at least 40%. For the professional cycle, persons holding state honorary titles, laureates of state awards in the relevant professional field are taken into account when assessing the quality of the teaching staff.

At least 10% of teachers must have a Doctor of science degree and/or the academic title of professor¹⁰. The share of full-time teachers in the total number of teachers of the educational program should be at least 70%. Full-time teachers are teachers for whom work in this educational organization is the main one according to the employment record.

At least 10% of teachers from among the current managers and leading employees of specialized organizations, enterprises and institutions should be involved in the educational process in the disciplines of the professional cycle.

Up to 10% of the total number of teachers with an academic degree and / or academic title can be replaced by teachers who have practical experience in this field as managers or leading specialists for more than the last 10 years.

4.4. Educational, methodological and informational support of the educational process in the implementation of the MEP

KSMA has a sufficient, accessible and appropriate educational material and technical base and information resources, which is confirmed by the following::

The educational process involves 33 lecture halls, laboratory and practical classes are held in 525 classrooms, both in their own educational buildings and at

the clinical bases of healthcare organizations. All computer classes have a local network that allows you to connect to the global Internet via a server.

The department of distance learning is equipped, software "Doodle" and "Moodle" are installed for conducting distance classes with students in the regions.

In the library, readers are served on 7 subscriptions, 7 reading rooms, and 3 electronic resource rooms. The electronic library has 3 servers, 39 terminals, and 5 computers for book distribution. Students are provided with the necessary financial resources. The departments have 336 computers, 226 laptops, and 147 computers. projectors, 417 tablets, 2 interactive whiteboards. There are medical, sanitary and other equipment available. The electronic library has 4 servers, 52 monitors, 39 terminals, and 6 computers for book distribution. The library's book collection is more than 580 thousand copies. The library's electronic resources include 4,437 textbooks, teaching materials, and videos. There are 84 Braille books available for people with disabilities. Students are provided with appropriate conditions for working in reading rooms and libraries. In the library, readers are served on 7 subscriptions, in 7 reading rooms with 251 seats. There are 6 computers available for working with book delivery. Two electronic resource halls with 29 terminals are located in the main building. One electronic resource hall for 10 terminals in the morpho corpus. There are 3 computers in the reading room of the main building to search for the necessary textbook. The reader can use the electronic catalog to find out what subscription the book is on and in what quantity. If the book is on hand, then the reader can study in the electronic library or through the website of the KSMA library in online mode. The electronic resources sector has access to medical databases on the Internet. EB employees place them in the Russian electronic Library eLibrary.RU scientific articles from the periodical "Vestnik KSMA". Total submitted: 43 issues of the journal, 1,373 articles. To provide more complete access to electronic resources for users of the library of the I. K. Akhunbaev KSMA, the library's own official website has been created (library.kgma.kg). The library's website provides remote access to full-text databases of textbooks and teaching materials. Access to the resources of the

electronic library is only possible for KSMAA readers, using a username and password. The site contains information about new arrivals of printed publications. The library staff holds annual book exhibitions. Create and post virtual exhibitions on the library's website. The library has implemented the automated library system "IRBIS-64 "The library has installed the following modules:" ADMINISTRATOR"," PICKER"," CATALOGER"," READER","BOOK DELIVERY".

4.5. Material and technical support for the implementation of the educational process in accordance with the MEP

KSMA has its own material and technical base for high-quality training of specialists, as well as a campus for students to live on. The total area of the Academy is 20.8 hectares (built-up area of 3.15 ha), on which are located: 6 educational buildings; 6 hostels, Student campus. I. K. Akylbekova, Center for development of clinical skills, assessment of knowledge and practice, Dental educational scientific clinical, Educational and medical research medical center, Alpine, scientific and medical training center. Raimzhanova, Educational sports and recreation center "Ak-Bulun" (Ak Bulun village, Issyk-Kul region), facilities (sports grounds, football field). The total area of its own premises is 70113.0 sq. m. On the basis of contracts concluded with 148 healthcare organizations, there are educational premises on the rights of operational management, of which 72 are located in Bishkek and 76 in the regions with a total area of 15970.3 sq. m. The usable area of the premises is 67531.6 sq. m. 1 (one) student has more than 9 square meters, which meets the license requirements (67531.6/6921). The educational and material base of KSMA meets the requirements of sanitary and hygienic standards, rules and requirements of fire safety, labor protection and safety. Fire shields are equipped with powder fire extinguishers in the amount of 92 pieces, fire hoses. All buildings and dormitories have an evacuation plan and exit signs in case of fire, as well as instructions in Russian and Kyrgyz. In the laboratory rooms posted safety rules for work when performing laboratory work.

KSMA has 6 dormitories for 1602 places and a student campus for 550 places, there are 5 lecture halls, as well as study rooms, kitchens, toilets, showers, Internet is installed. Laundry machines are available in the dormitories. All dormitories are provided with furniture (beds, desks, wardrobes), equipment and necessary bedding. KSMA has a Household complex (laundry), where 7.5 tons of laundry is washed annually. In their free time from classes, students are engaged in sports fields, play chess, backgammon, toguz korgool, participate in dance clubs and other sections. To provide power there are also canteens and buffets for 420 people, and a grocery store where confectionery is also baked. All public catering establishments have a book of complaints and suggestions. For medical care of students, a contract has been signed with a student polyclinic, there is a medical center in the structure, a medical center that operates on the basis of the regulations. Each building has a first aid kit for first aid. For the full implementation of the educational process, students are provided with a wide variety of equipment (computers, printers, medical equipment, simulation installations (dummies, phantoms), textbooks, teaching aids, teaching materials and electronic resources. Every year, computers and equipment are purchased, the library stock is updated, and subscriptions to newspapers and medical journals are held for up to 550 thousand rubles. catfish and other inventory items. For research work of students in the basement of the main academic building, there is a Vivarium, where there is an operating room for performing operations on animals. Work is also underway at the A. R. Raimzhanov High-mountain Research and Medical Training Center, and conditions have been created for keeping laboratory animals, where students and supervisors conduct experiments. Every year there is an exhibition of scientific circles, Olympiads, games of pediatricians, Days of Science. Separate sections are created for participation of students with the encouragement of the best works with cash prizes and memorable gifts. Students' research achievements are published in the journal and collection Vestnik KSMA, social networks and mass media. At each department there is a student scientific circle, where diplomas and certificates of

participants of scientific conferences are stored. Also to motivate students to engage in research activities students

they take part in conferences, Olympiads, medical tournaments, FRC not only within the republic, but also in the cities of Russia and Kazakhstan.

4.6. Research work (R & D)

R & D is a main part of MEP specialist training. It is aimed at the comprehensive formation of universal and professional competencies in accordance with the requirements of State Higher Professional Education 560002 "Pediatrics". The main goal of organizing and maintaining a comprehensive research and development system is to improve the quality of graduate training through mastering the basics of professional and creative activities, methods, techniques and skills of performing research and project work, developing abilities for scientific and technical creativity, independence, initiative in study and future life.

Main research objectives:

- formation of students 'skills of research work in the professional field and, on their basis, in-depth and creative development of the educational material of the MEP in the specialty 560002 "Pediatrics".
- develop skills in reviewing, reviewing and analyzing scientific sources, summarizing and critically evaluating research results.
- formation of skills in planning theoretical and experimental research, taking into account the specifics of a particular discipline, based on general methodological and methodological principles of research.
- formation of skills for the practical implementation of theoretical and experimental research, based on the knowledge, skills and experience acquired in the educational process.
- formation of skills for qualitative and quantitative analysis of research results, their generalization and critical evaluation.

- formation of skills in designing and presenting the results of scientific work in oral (reports, reports, speeches) and written (annotations of scientific works, reports on creative and research works, articles) forms.
- gain experience in working in research teams and get acquainted with the methods of organizing scientific work.
- direct participation in solving scientific and practical tasks in accordance with the main directions of research activities of the department.
- annually holding a "Game of pediatricians" among students of the Faculty of Pediatrics.

4.7. Characteristics of the socio-cultural environment of the university to ensures the development of general scientific, social, personal and general cultural competencies of students

I. K. Akhunbaev KSMA has created all conditions for personal development and ensuring socio-cultural processes that contribute to strengthening the moral, civic and general cultural qualities of students. Strategic documents of KSMA defining the concept of forming the university environment: - Charter of the I. K. Akhunbaev Kyrgyz State Medical Academy (approved by Order of the Ministry of Health of the Kyrgyz Republic No. 581 dated 4.09.2013 and registered with the Ministry of Justice of the Kyrgyz Republic No. 0008829 on 15.11.2013); regulations on the modular rating system for assessing student academic performance; student Code of Ethics; educational work plan of KSMA and the Faculty of Pediatrics; other regulations, plans, local acts and programs of KSMA.

The main goal of educational work is to perform organizational, educational and control functions within its competence, ensure intellectual, spiritual, cultural, professional and personal growth of students, create optimal conditions for the development of creativity, initiative, meaningful leisure and the formation of a healthy lifestyle.

according with this purpose, **the main tasks of educational activities at the university are::**

- participation in the training of a competitive specialist with a professional higher education, who has the qualities and properties that are in demand in the market, is able to set and achieve personally significant goals that contribute to the development of the country's economy;
- implementation of state programs in the field of youth policy and education, as well as organization of youth development outside the educational process;
- participation - in the development and implementation of solutions for the social protection of young people, their civic education, spiritual and moral development;
- involvement of youth associations in the formation of the youth policy of the KSMA aimed at the implementation of state priorities in this area;
- participation in solving issues of ensuring primary employment and youth employment together with state authorities.
- the conditions for successful implementation of educational work are: availability of the necessary regulatory and educational-methodical base; active work of structural divisions that implement the main directions of educational activities;
- establishing a system of relations with other universities and social partners in the education of students;
- solution of personnel issues related to the training and retraining of specialists in the field of pedagogy, development of student self-government.

I. K. Akhunbaev KSMA conducts systematic, consistent, multi-stage work on the formation and strengthening of the internal information space. The tools are the Daryger newspaper (published monthly), books, booklets and other printed

publications devoted to the history and current state of the university, and the KSMA website.

The information and communication environment created at the university makes it possible to implement the educational function of the main educational programs and projects of work with young people provided for by the state youth policy of the Kyrgyz Republic.

The system of student self-government of the university is represented by various public organizations and associations that actively interact with each other: the students' trade union committee, student councils of dormitories, creative teams, sections of a sports club, etc., which create conditions for successful socialization of students, the formation of an active, self-governing student society, in which the leadership qualities of young people can be successfully implemented, a civic position and a positive worldview of students can be formed.

To implement measures to promote youth health and provide medical care to students, a student polyclinic and a medical center of KSMA have been established, where students are provided with: primary (pre-medical) health care; outpatient medical care; temporary disability examination (exemption from classes; issuance of documents allowing academic leave for health reasons); anti-epidemic measures (vaccinations, detection of infectious patients; dynamic monitoring of contact and convalescents).

All conditions for a successful dialogue between students of different countries and peoples, between representatives of different religious confessions are created and maintained at the I. K. Akhunbaev KSMA. International students actively participate in all extracurricular activities and become part of the student community. Thus, they get to know much better not only the country in which they receive their education, but also the culture of the region, and this process has a positive effect on both foreign and Russian students: internationalism, tolerance, and recognition of the values of other cultures and peoples are fostered in close cooperation and cooperation. Cultural, mass and sports events aimed at

studying, understanding and respecting the traditions and cultures of various nationalities and religious denominations have become traditional at the university.

KSMA operates a system for encouraging the best students who have both a high level of knowledge and actively participate in social activities and extracurricular activities. Every year students are awarded diplomas of the rector for scientific and sports results, active volunteer work.

Thus, the educational environment of KSMA as a whole and at the Faculty of Pediatrics in particular consists of activities that are focused on the formation of personal qualities necessary for effective professional activity, on the education of moral qualities, the development of orientation towards universal values, the instilling of skills and abilities to manage the team in various forms of student self-government, on preserving and multiplying the traditions of the academy, the formation of a sense of academic solidarity and patriotic consciousness, on strengthening and improving physical condition, striving for a healthy lifestyle.

4.8. Organization and conduct of elective courses for students.

According with the Regulations on Elective Courses for Students, elective courses are selected in accordance with individual educational needs on a voluntary basis. The right to choose is granted to all students, regardless of the form of study and whether they have academic debts. The choice of subjects is made after reading the program annotations of elective courses in the dean's office. Independent work of students is also one of the types of personality-oriented training: students prepare the topics of the IWS in any form-essay, abstract, presentation, report, role-playing game, etc.

The organization of CCS provides for the formation of students ' additional knowledge in individual disciplines, blocks of disciplines or specialty disciplines.

CCS are offered by departments taking into account the direction of study (specialty) for each of the sections of the curriculum and are fixed in agreement with the educational department in the working curricula. The amount of credits allocated to elective subjects is within the limits of credits established by the state educational standard (Appendix 3).

4.9. Organization and conduct of students independent work

Independent work of students (hereinafter referred to as IWS) is an educational, research and socially significant activity of students aimed at developing general and professional competencies, which is carried out without direct supervision of the teacher, but with his guidance, advice and control.

Independent work is an integral part of the learning process. In accordance with the requirements of the state budget, it should be 50% of the total number of hours provided for mastering the main educational program in the humanities block and 30% in the professional block.

Types of IWS are determined by the requirements of the State Educational Standard, the content of the academic discipline, the degree of readiness of students and are approved by the department when developing an educational and

methodological complex(work program), the academic discipline of the main educational program.

The method of organizing the IWS depends on the structure, nature and characteristics of the discipline being studied, the amount of hours spent studying it, the type of tasks for students ' independent work, and the conditions of educational activity.

The organization of IWS should be aimed at completing all planned tasks by all students exactly on time and with the necessary level of quality, which is a necessary condition for the formation of self-discipline and self-control skills.

IWS planning is carried out within the framework of each main educational program. The IWS should be accompanied by methodological support and justification of the time spent on its implementation. The thematic plan of IWS, taking into account the hours required for their implementation, is signed in the curriculum, and the types and forms of IWS control are established by the department and reflected in the educational and methodological complexes of each discipline.

Control over the course and results of the IWS is carried out by the teacher of the discipline systematically, including in the process of conducting classroom classes (lectures, seminars, practical and laboratory). The results of the SRS are evaluated during the current control and taken into account during the intermediate certification of students in the discipline under study. IWS is organized and implemented in accordance with the Regulations on independent work of students, approved by the order of the Rector of KSMA dated 04.03.2013.

4.10. Organization and implementation of production practices

Production practice (Appendix 4).

The purpose of practical training is to deepen and consolidate students ' theoretical knowledge, develop practical work skills, and introduce them to modern equipment and technologies.

Industrial practice provides an opportunity to gain professional skills and experience in professional activities and is carried out depending on the course of students, as a stationary or field one. All internships are regulated by the rector's order. Contracts with clinical databases are concluded for practical training. Management, coordination and methodological support of practical training is provided by the Department of industrial practice of KSMA. Responsible teachers are appointed to manage students ' practice.

Practical training is conducted in accordance with the programs developed at the relevant departments for industrial practice, reviewed by the educational and methodological profile committee (hereinafter EMPC) in the specialty "Pediatrics" and approved by the main educational and methodological committee (hereinafter MEMC) of the I. K. Akhunbaev KSMA.

When implementing the State Higher Professional education program, the following **types of production practices are envisaged:**

- volunteer practice 1 year - 2 credits.
- nurse's assistant 2nd year – 2 credits;
- assistant paramedic of emergency medical care 3rd year – 2 credits;
- hospital assistant 4th year – 4 credits;
- GPW doctor's assistant course 6 – 6 credits.

The bases of industrial practice are medical organizations:

- National Center for Mother and Child Health;
- Republican Clinical Infectious Diseases Hospital;
- Red Crescent of Kyrgyzstan;
- Bishkek City Residential Home for the Elderly;
- Bishkek City Perinatal Center;
- Bishkek City Clinical Children's Emergency Hospital;
- Bishkek City Ambulance and Emergency Medical Service Station;
- Family Medicine Centers No. 2,3,4,6,7,8,9,10,15,18 Bishkek;
- Chui Regional Center for Family Medicine;

- Chui Regional United Hospital;
- Sokuluksky FMC; Moscow Territorial Hospital;
- United Territorial Hospital of Zhayyl district;
- Tokmok Territorial Hospital;
- Oktyabrskaya Territorial Hospital;
- Jalal-Abad Regional Joint Hospital;
- Jalal-Abad Center for Family Medicine;
- Suzak Territorial Hospital;
- Ala-Buka Territorial Hospital;
- TSOVP of Toguz-Toruz district;
- Issyk-Kul Territorial Hospital;
- ZOVP of Zheti-Oguz district;
- Naryn Regional Joint Hospital;
- Naryn Regional Center for Family Medicine;
- At-Bashinskaya Territorial Hospital;
- Ak-Talinsky FMC;
- Kochkor Territorial Hospital;
- Kochkor Center for Family Medicine;
- Talas Regional United Hospital;
- Talas Regional Center for Family Medicine;
- Osh Inter-Regional Clinical Hospital;
- Osh Regional United Hospital;
- Osh Inter-Regional Cancer Center;
- Alai Territorial Hospital;
- Karasui Regional Center for Family Medicine;
- Karasui Territorial Hospital;
- Nookat Territorial Hospital;
- Batken Regional Center for Family Medicine;

- Batken Regional Joint Hospital;
- Kadamzhai Territorial Hospital;

When completing an internship, the student keeps a practice diary, where he writes down the work performed for the day on a daily basis. The diary is signed by the direct manager of the business unit on a daily basis. Upon completion of the internship, the student draws up a "Summary report on the internship", certifying it with the signature of the head of the practice and the seal of the health care institution. At the end of the PP, the student passes a test with a differentiated assessment of the attestation commission in the UCC. Students who have completed internships at their place of residence are certified according to the schedule drawn up by the PP sector of the certification commission, established by order of the rector from among the teaching staff of KSMA in the Clinical Training Training Center and in the OSCE Center.

5.0. Order and organization of assessment of the quality of students ' development of the educational program.

At KSMA, the quality assessment of students ' development of the educational program is provided by implementing the following areas::

- creating a quality management system for the educational process;
- monitoring updating and reviewing work programs in various disciplines;
- ensuring the professionalism and competence of the teaching staff;
- regularly conduct an internal audit according to agreed criteria for evaluating the activities and comparing the quality indicators of the educational process with other medical educational institutions (with the involvement of employer representatives);

In accordance with the State Higher Professional Education Standard 560002 "Pediatrics", the assessment of the quality of students ' development of basic educational programs includes current monitoring of academic performance, intermediate and state final certification of students.

5.1 Forms of ongoing monitoring of academic performance include:

- recitation;
- test control;
- checking the completion of written homework assignments;
- protection of laboratory work;
- evaluation of control works;
- checking the solution of situational problems;
- assessment of the level of mastering practical skills;
- evaluation of the implementation of research papers, reports, medical records, etc.;
- control of work with biological material;
- other forms of control.

5.2. Intermediate attestation (examination, test) is conducted in accordance with the following requirements : Regulation on the current control of academic

performance and intermediate certification, approved by the order of the Rector of KSMA dated 21.01.2018.

Credit is a form of final verification of students ' assimilation of theoretical material and practical skills in the academic discipline, as well as a form of verification of the results of practical training. In accordance with the working curricula of specialties, credits can be set both for the subject as a whole and for its individual parts. Tests are held after completion of all types of training sessions in the relevant discipline provided for in the academic schedule before the start of the examination session.

The exam is a form of final verification of students ' assimilation of theoretical material and practical skills in the academic discipline. Exams are taken during the periods of examination sessions provided for in the curriculum. The list of exams and tests, as well as the period of their implementation, are established by the curriculum. At all departments, in accordance with the ongoing changes, educational and methodological complexes of disciplines are regularly updated.

5.3. State and regional certification of graduates

The State final Attestation (hereinafter referred to as the SFA) is aimed at establishing the compliance of the level of professional training of graduates with the requirements of the State Educational Standard of Higher Professional Education (hereinafter referred to as the State Higher Professional Education Standard) in the direction of "Pediatrics" in order to assess the theoretical and practical readiness of students - graduates of the Faculty of "Pediatrics".

The procedure for conducting SFA (types, procedure, forms and means of certification activities) is determined by the "Regulations on Final State Certification of Graduates" (hereinafter referred to as the Regulations), approved by the order of the Rector of the I. K. Akhunbaev KSMA (hereinafter referred to as the KSMA) No. 137 dated 24.05.2018.

Purpose State final certification is the establishment of compliance of the level of development of competencies that ensure the appropriate qualifications

and level of education of students with the State Educational Standard of Higher Professional education in the field of Pediatrics.

Tasks:

1. conduct an assessment of the formation of competencies that graduates should master as a result of mastering the main educational program of higher professional education (MEP HPE);
2. summarize the implementation of all forms and methods of teaching students in accordance with the MEP HPE.

General provisions

1. The development of MEP HPE is completed by the mandatory SFA of graduates.
2. Admission to the SFA in the specialty is carried out by order of the rector of the KSMA named after I. K. Akhunbaev on the recommendation of the dean of the faculty.
3. A student who does not have academic debt and has fully completed the curriculum or individual curriculum for the corresponding educational program of higher education is allowed to participate in the SFA.
4. Before the SFA, students are provided with the necessary teaching materials, and the necessary conditions for training are created for them.
5. In the course of the state final attestation, the competence of the graduate, which students must master as a result of MEP, is subject to verification, which is expressed in his ability to use in practice.
6. The duration of the SFA is set by the university independently.
7. SFA results are determined by the rating "excellent", "good", "satisfactory", "unsatisfactory". Grades "excellent", "good", "satisfactory" indicate successful completion of the SFA.
8. Subject to successful completion of all the established types of SFA, a graduate of the Faculty of Pediatrics is awarded the professional qualification degree "Pediatrician" and a state-issued diploma of higher professional education.
9. Appeals are filed and considered in accordance with these Regulations.

Types of SFA

SFA is conducted in the form of a state exam, which is established by the State Higher Professional Education System. SFA programs, conditions and terms of conducting, as well as criteria for evaluating state exams are approved by the university in accordance with the State Higher Professional Education Standard, taking into account the recommendations of educational and methodological profile committees.

State attestation commissions

1. State attestation commissions are guided in their activities by the legislation of the Kyrgyz Republic in the field of education, the Regulations on conducting SFA, the State Educational Standard of Higher Professional Education, and educational and methodological documentation developed by the university.
2. The main functions of the State attestation Commission are:
 - determination of the compliance of graduate training with the requirements of the State Educational Standard of Higher Professional Education and the level of its preparation;
 - making a decision on awarding a professional qualification based on the results of the SFA and issuing a corresponding state-issued diploma of higher professional education to the graduate;
 - development of recommendations aimed at improving the training of graduates based on the results of the work of the state attestation commission.
3. For conducting SFA by the university, in agreement with the relevant state body, the composition of the state attestation commission for the specialty is proposed, which is valid for one calendar year.
4. The State Attestation Commission is formed from the teaching staff of the I. K. Akhunbaev KSMA, leading teachers and researchers of other higher educational institutions, employers.
5. The State Attestation Commission is headed by the chairman, who organizes and controls the activities of the commission, ensures the unity of requirements for graduates.

6. The chairman of the state attestation commission must be a person from among employers.

SFA procedure

1. The procedure for conducting the SFA is developed by the university on the basis of the Regulations on the SFA and is brought to the attention of students no later than six months before the start of the SFA. Students are provided with the SFA program, they are provided with the necessary conditions for training, and consultations are held.

2. Graduates who have successfully completed the full development of MEP HPE in the specialty developed by the university in accordance with the requirements of the State Educational Standard of Higher Professional Education, and have successfully passed all other types of control, are allowed to pass the SFA.

3. The decision on awarding a graduate qualification in a specialty and issuing a state-issued diploma of higher professional education is made by the state attestation commission based on the positive results of the SFA, drawn up in the protocols of state attestation commissions. Decisions of the state attestation commission are made at closed meetings by a simple majority of votes of the members of the commissions participating in the meeting, with the mandatory presence of the commission chairman or his deputy. If the number of votes is equal, the chairman of the commission (or the deputy chairman of the commission replacing him) has the casting vote. All decisions of the state attestation commission are drawn up in protocols.

4. A graduate who has passed the state exams with "excellent" marks, who has at least 75% of the current exam scores in all disciplines "excellent", 25% - "good", who does not have "satisfactory" and "unsatisfactory" marks, is awarded a diploma with honors.

5. Students and persons involved in the SFA are prohibited from carrying or using any means of communication during the SFA. Violations of academic discipline by students during the SFA are stopped. In this case, a report on violation of the academic discipline is drawn up and the rating "unsatisfactory" is given.

Violations of academic discipline during the SFA include::

- cheating (including using mobile communications, Internet resources, as well as literature and materials that are not allowed to be used in the exam or test);
- contacting other students for help or advice when preparing a ticket response or completing a task;
- passing the SFA by persons posing as a student who is required to pass the exam.

6. The student's answer is heard by at least two members of the examination committee. Examiners have the right to ask students clarifying questions, which together with the answers are recorded in the protocol.

7. SFA results are evaluated on a four-point system: "excellent", "good", "satisfactory", "unsatisfactory". Grades "excellent", "good", "satisfactory" indicate successful completion of the SFA. The results of the interdisciplinary state exam are announced to students on the day of the exam after registration and approval of the minutes of the meeting of the state examination commission.

8. Receiving an unsatisfactory grade deprives the graduate of the opportunity to pass further stages of the SFA.

9. The average score of only positive grades (one grade) based on the results of three stages of the state final certification is entered in the diploma insert.

10. Persons who have completed the development of the MEP of higher professional education and have not confirmed the compliance of their training with the requirements of the State Higher Professional Education Standard during the SFA, when reinstating in the university, are assigned a second SFA in the order determined by the university. Repeated completion of the final certification tests is scheduled no earlier than three months and no more than five years after passing the final state certification for the first time. Repeated final attestation tests may not be assigned by a higher education institution more than twice.

11. Persons who did not pass the final certification tests for a valid reason (for medical reasons, for family reasons, documented) should be given the opportunity to pass the final certification tests without being expelled from the university.

Additional meetings of state attestation commissions are organized in accordance with the procedure established by the university.

12. Reports on the work of state certification commissions are heard at the Academic Council of the University and, together with recommendations on improving the quality of professional training of specialists, are submitted to the educational and methodological department within two months after the completion of the final state certification of graduates. The minutes of the final state certification of graduates are kept in the archive of the higher educational institution.

Form and timing of the SFA, evaluation criteria

The dates of the SFA are set by the university independently. At the same time, the deadline for conducting a comprehensive state exam in the history of Kyrgyzstan, geography of Kyrgyzstan, Kyrgyz language and literature can be set for the period immediately after the completion of the program of these disciplines.

The form and number of tasks, as well as the list of subjects included in the comprehensive state exam, are recommended by the educational and methodological profile committee.

The comprehensive state exam on the history of Kyrgyzstan, geography of Kyrgyzstan, Kyrgyz language and literature is conducted in the form of computer testing in one stage. Test tasks should cover all questions necessary to assess the graduate's competencies. The student is given 1 of the options for test tasks and 90 minutes of time.

Graduates admitted to the SFA are given a comprehensive interdisciplinary state exam in their specialty in three stages. The order of alternating stages of the state exam may be changed by a decision of the state attestation commission.

Stage 1-theoretical training-testing, which is carried out in the CRKNiOZ. Test tasks should cover all questions necessary to assess the graduate's competencies. The student is given 1 of the options for test tasks and 90 minutes of time.

Stage 2-practical training-supervision at the patient's bedside is carried out at the clinical bases of the I. K. Akhunbaev KSMA, equipped with the necessary

equipment and material. The degree of the graduate's ability to perform the scope of the upcoming real professional activity within the limits of the list of practical manipulations of the State Educational Standard is subject to assessment.

The result of testing practical skills is evaluated according to a 4-point system: "excellent", "good", "satisfactory", "unsatisfactory".

Persons who have received an "unsatisfactory" rating at one of the certification stages are not allowed to participate in the next stage.

Stage 3 – a comprehensive interdisciplinary oral exam, which assesses the overall training of graduates, the degree of integration and synthesis of acquired knowledge in the disciplines included in the comprehensive exam. When conducting the 3rd stage - a comprehensive interdisciplinary oral exam, exam cards developed by specialized departments and approved at the meeting of the UMPC are used. The structure of the exam card consists of three questions. It takes at least 30 minutes to prepare. (Appendix 6).

6. Documents regulating the content and organization educational process in the implementation of the PLO in the field of training (specialty) 560002 " Pediatrics»

According to the Law of the Kyrgyz Republic" On Education "No. 92 of 30.04.2003 and the State Higher Education Institution in the field of training 560002 "Pediatrics", the content and organization of the educational process in the implementation of this MEP is regulated by the curriculum and calendar curriculum; working programs of disciplines; other materials that ensure the quality of training and education of students; programs of industrial practices; as well as methodological materials that ensure the implementation of the educational program.

MEP HPE must include:

6.1. Program annotations for basic and variable disciplines, which include (Appendix 3):

6.2. Annotations of industrial practice programs (Appendix 4), which include::

6.3. Annotations of CCS programs (Appendix 5)

6.4. The State Final Certification Program (hereinafter referred to as SFA) includes (Appendix 6):

3.4. Structural matrix of competence formation (Appendix 1).

Project Appendix # 1

COMPETENCE MATRIX

Specialty: 560002-Pediatrics

I. Emerging competencies in the following disciplines

№	Name of disciplines	Credit hours	SS 2015 competencies				MEP	Departments
			GC	IC	SPC	PC	RT _{MEP}	
Pa ge	Humanitarian, social	36						

1.	and economic cycle							
	Basic part	34						
1.	Kyrgyz language and literature	8	1, 2, 3, 4, 5, 6	2, 4	1, 2			Kyrgyz language
2.	Russian language	8	1, 2, 3, 4, 5, 6	2, 4	2			Russian language
3.	Latin language	4	1, 5	4				Foreign and Latin languages
4.	Foreign language	4	5, 6	2, 4				Foreign and Latin languages

5.	History of Kyrgyzstan	3	1, 2, 3, 4	4	1, 2			Philosophy and Social Sciences
6.	Medical history	1	1, 3, 5, 6	4	1, 2			Public health and public health services
7.	Philosophy	4	1, 2, 3	4	2			Philosophy and Social Sciences
8.	Manas Studies	2	1, 2, 3	4	2			Philosophy and Social Sciences
	Variable part	2						
	<i>Subjects offered by the University</i>							
1.	Psychology	2	1,	4	1	1, 27		Medical Psychology,

			2, 3, 6					Psychiatry and Narcology
Pa ge 2.	Mathematical and natural science cycle	21						
	Basic part	15						
1.	Mathematics and Computer Science	5	1, 4, 5, 6	1, 4	3, 4	6, 27		Physics, Mathematics, Computer Science, and Computer Technology
2.	Physics	4	1, 6	4	2, 3, 5	6, 27		Physics, Mathematics, Computer Science, and Computer Technology
3.	Chemistry	4	1, 5	1, 3, 4	2	27		Biochemistry with a course in general and bioorganic chemistry

4.	Biology with elements of ecology	2	1,2	4	2, 3, 5	27		Medical Biology, Genetics and Parasitology
	Variable part	6						
	<i>Subjects offered by the university</i>							
1.	Geography of Kyrgyzstan	2	1	4				Philosophy and Social Sciences
2.	Bioethics	2	1, 2, 5, 6		1	1, 21, 22, 27		Public health and public health services
	<i>Subjects chosen by students</i>							
1.		2						
Pa ge 3.	Professional cycle	28 7						

	Basic part	20 0						
1.	Medical biology	2	1	4	2,5	7, 27		Medical Biology, Genetics and Parasitology
2.	General and clinical Biochemistry	7	1, 6	2, 4	2, 3	2, 6, 27		Biochemistry with a course in general and bioorganic chemistry
3.	Normal and topographical anatomy	12	1	4		12, 27		Normal and topographical anatomy
4.	Histology, Embryology, and cytology	7	1	4	3	2, 6, 11, 27		Histology, Cytology and Embryology
5.	Normal Physiology	9	1	4		12, 27		Fundamental and Clinical Physiology
6.	Microbiology, Virology and Immunology	9	6	4	2, 3	4, 11, 12, 14, 27		Microbiology, Virology and Immunology

7.	Basic pharmacology	7	1, 6	4	3	1, 6, 16, 17, 27		Basic and clinical pharmacology
8.	Pathological anatomy	8	1, 6	4		3, 6, 11		Pathological anatomy
9.	Pathological physiology	9	1	1,2		3, 8, 13, 27		Pathological physiology
10.	Propaedeutics of children's diseases	10	1, 6	4	1	1, 2, 3, 8, 12		Propaedeutics of children's diseases
11.	Children's diseases (1)	10	1, 6	4	1, 2, 3	2, 3, 11, 12, 13, 14, 15, 16, 17, 18, 27		Faculty of Pediatrics
12.	Children's diseases (2)	10, 1	1, 6	4	1, 2, 3	2, 3, 11, 12, 13, 14, 15, 16, 17, 18, 27		Hospital pediatrics with neonatology course

13.	Children's diseases (3)	11	1, 6	4	1, 2, 3	2, 3, 11, 12, 13, 14, 15, 16, 17, 18, 27	Faculty of Pediatrics; hospital Pediatrics with neonatology course
14.	Polyclinic Pediatrics	10	1, 6	4	1, 3, 4, 5	1, 2, 3, 7, 8, 11, 12, 13, 15, 16, 17, 18, 22, 25, 26, 27	Faculty of Pediatrics; hospital Pediatrics with neonatology course
15.	Children's Immunology and allergology	3	1, 6	4	1, 2, 3	2, 3, 8, 11, 12, 13, 14, 15, 16, 17, 18, 22, 27	Hospital pediatrics with neonatology course

16.	Clinical pharmacology	4	1, 6	4	3	1, 13, 15, 16, 19, 23, 27		Basic and clinical pharmacology
17.	Children's infectious diseases	11, 8	5, 6	4	1, 2, 3	2, 3, 7, 12, 13, 16, 17, 27		Children's infectious diseases
18.	Propaedeutics of pediatric surgical diseases	2	1, 6	4	1, 3	2, 4, 13, 14, 27		Children's Surgery
19.	Children's surgical diseases	14	1, 6	4	1, 3	2, 3, 4, 13, 14, 16, 17, 20, 27		Children's Surgery
20.	Children's outpatient surgery	4	1, 6	4	1, 3	2, 3, 4, 13, 14, 16, 17,		Children's Surgery

						20, 27		
21.	Paediatric Anaesthesiology and intensive	care 3	1, 6	4	1, 3	2, 4, 13, 17, 27		Children's Surgery
22.	Propaedeutics of internal diseases	6	1			1, 2, 13, 27		Propaedeutics of internal diseases with the course of endocrinology
23.	Faculty therapy	4	1, 6	4	3	6, 11, 13, 16, 17		Faculty Therapy
24.	Internal diseases	5	6	3, 4	2, 3	3, 11, 13, 21, 23, 27		Hospital therapy, occupational pathology with a course in hematology
25.	Obstetrics and Gynecology	5,3	1, 6	4	1, 2, 3	1, 2, 3, 11, 12, 13, 14,		

						15, 16, 17, 18, 27		
26.	Radiation diagnostics and therapy	4	1, 6	4	1, 3	2, 6, 14, 15, 16, 26, 27		Radiation diagnostics and therapy
27.	General hygiene	3	1	4	4, 5	7, 8, 10, 18, 19, 21, 22, 23, 25, 27		General hygiene
28.	Hygiene of children and adolescents	3	1, 6	3	1, 4, 5	4, 7, 8, 18, 19, 20, 21, 22, 23, 26		Hygienic disciplines

29.	Public health and healthcare, health economics	4	1, 4	3, 4	1, 3, 4	6, 8, 22, 23, 24, 25, 26, 27		Public health and health care
30.	General and clinical epidemiology	3	1, 6	4	5	7, 8, 10, 27		General and clinical epidemiology
	Variable part	80						
	<i>Subjects offered by the university</i>	52						
1.	General Surgery	2	1, 6	4	1	2, 4, 11, 13, 27		Propaedeutic surgery
2.	Surgical diseases	3	1, 6	4	3	1, 11, 13, 23		Faculty of Surgery
3.	Operative Surgery	1	1, 6	4	1	1, 4, 17, 27		Hospital surgery with operative surgery course
4.	Infectious diseases	4,3	5, 6	4	1, 2, 3	7, 10, 11, 13, 23, 27		Infectious diseases

5.	Dermatovenereology	3	1, 6	4	1, 3	2, 3, 7, 13, 14		Dermatovenereology
6.	Phthisiology	4	1, 6	4	3	1, 2, 3, 7, 8, 9, 11, 12, 13, 14, 16, 23		Phthisiology
7.	General physiotherapy, physical therapy, VC and clinical rehabilitation	3	1, 6	4	3	19, 20		Clinical Rehabilitation and Physical Therapy
8.	Pediatric neurology, neurosurgery with medical genetics	6	1, 6	4	3	2, 3, 13, 16, 20		Neurology and Clinical Genetics
9.	Child psychiatry and narcology	5	6		1, 3	2, 13, 17		Medical Psychology, Psychiatry and Narcology
10.	Otorhinolaryngology	3	1	2,	1,	2, 4, 12,		Otolaryngology

				4	3	13, 16, 17, 27		
11.	Ophthalmology	3	1	4	1, 3	2, 6, 13, 16, 27		Ophthalmology
12.	Oncology	3	1, 6	4	3	2, 11, 12, 13, 27		Oncology
13.	Children's Dentistry	2	1	4	1, 3	2, 4, 8, 13, 16, 17		Pediatric Dentistry
14.	Psychology	2	1, 2, 3, 6	4	1	1, 27		Medical Psychology, Psychiatry and Narcology
15.	Evidence-based medicine	1	1	4	2, 3	27		Public health and public health
16.	Sectional courses	1	1,6	4	1	1,2,6,11		Pathological anatomy

17.	Forensic medicine	3	1, 5, 6	1, 2, 4	1, 2, 3	1, 5, 6, 23, 27		Forensic Medicine and Law
18.	Legal	studies 2	1, 5, 6	1, 2, 4	1, 2, 3	1, 6, 23, 27		Forensic Medicine and Legal Studies
	<i>Subjects of students ' choice</i>	28						
Page 4.	Additional types of training	hour						
1.	Physical culture	400	1		1	22		Physical education
2.	Military medical training	610		3		10		Military medical training and extreme

								medicine
Pa ge 5.	Production practice	16						
1.	Junior Medical Staff Assistant	2						
2.	Assistant nurse	2						
3.	Assistant paramedic of ambulance and emergency care	2						
4.	Assistant to a hospital doctor	4						Faculty of Pediatrics
5.	Assistant of a doctor GPW		1, 2			1, 5, 12, 19, 20, 25, 27		Hospital Pediatrics with neonatology course
	State certification	5						Interdisciplinary exam (3-stage))
		36						

	TOTAL	0						
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<p>etiquette. The Latin alphabet. Word combinations. Basic medical and pharmaceutical terminology in Latin; The essence, forms, and functions of historical knowledge. Methods and sources of studying history. The concept and classification of a historical source. Historians about the ethnonym "Kyrgyz". Three main directions in studying the problem of the origin and formation of the Kyrgyz people. The history of Kyrgyzstan is an integral part of world history.</p>	4	Russian history, history of medicine	
<p>History of medicine. Main stages of medical development</p> <p>Subject of philosophy. Place and role of philosophy in culture. Formation of philosophy. Main directions, schools of philosophy and stages of its historical development. The structure of philosophical knowledge.</p>	4	Philosophy	
<p>Man, society, and culture. Man and nature. Society and its structure. A person in the system of social relations. Man and the historical process; the individual and the masses; freedom and necessity.</p> <p>The meaning of human existence. Violence and nonviolence. Freedom and responsibility. Morality, justice, and law. Moral values. The idea of a perfect person in different cultures. Aesthetic values and their role in human life. Religious values and freedom of conscience. Consciousness and cognition. Consciousness, self-awareness and personality. Cognition, creativity, and practice. Faith and knowledge. Understanding and explanation. Rational and irrational in cognitive activity. The problem of</p>	2		

truth. Reality, thinking, logic, and language.

Introduction to Manas studies. The epic "Manas" has no analogues in the world culture. The epic "Manas" should become a source of national ideology. Adoption of the law of the Kyrgyz Republic on the epic "Manas", its historical significance. The political and ideological significance of the epic "Manas" in the development of the Kyrgyz statehood. The student must utag and own: reading, speaking. . Conversation is communication and play in the main situation of communication using the most relevant and simple lexical and grammatical means in a personal, conversational form. Understand by reading the text related to the profession. It simplifies the understanding of the read literary text. To write. Dictation, essay, short essay, message, letter, essay, etc.

Speaking. Dialogical and monologue speech using the most common and relatively simple lexical and grammatical means in the main communicative situations of informal and official communication. Fundamentals of public speech (oral communication, report).

Listening skills . Reading. Types of texts: simple, pragmatic texts, texts on a wide and narrow specialty profile.

Letter. Types of speech works: abstract, abstract, abstract, message, private letter, business letter, biography.

Navigate the history of the Kyrgyz Republic from the

Manas Studies

	<p>earliest period to modern Kyrgyzstan.</p> <p>Methods and techniques of philosophical analysis of problems; forms and methods of scientific knowledge, their evolution. Basic laws and trends in the development of the world historical process;</p> <p>The canonical plot of the epics "Manas", "Semetey", "Seitek". Its lofty human ideals: Ata-Jurt, the struggle for its freedom, the unity of the people, friendship based on justice, the interests of the Fatherland, the highest interests of the people, the sacred duty to the Fatherland, the struggle for honor and dignity, Respect for ancestral traditions, humanity, tolerance, recognition of black and white. Extensive analysis of the national pedagogy, mentality and ethics in the epic. The educational effect of the epic on the formation of the younger generation as a person.</p>			
	Variable part, incl. subjects of students ' choice	6		
P. 2	Mathematical and natural science cycle	21		
	Basic part	15		
	<p>As a result of studying the basic part of the cycle, the student should know :</p> <p>Axiomatic method, basic mathematical structures, probability and statistics, mathematical models, algorithms and programming languages, standard professional software, basic concepts and methods of information security, computer workshop;</p> <p>The concept of information, the common characteristics of the processes of collection, transmission, processing, and accumulation of</p>	<p>5</p> <p>5</p>	Mathematics and Computer Science	<p>IC-1;</p> <p>IC-3;</p> <p>IC-4;</p> <p>SPC-2;</p> <p>SPC-3;</p> <p>SPC-5;</p>

<p>information; technical and software implementation of information processes; models of solutions to functional and computational problems; algorithmization and programming languages high-level programming; databases; software and technology programming; local and global computer networks; fundamentals of protection of information constituting a state secret;</p> <p>Physical properties of mechanics; vibrations and waves; molecular physics and thermodynamics; electricity and magnetism; optics; atomic and nuclear physics; solid state physics; physics workshop; basic physical phenomena and patterns underlying the processes occurring in the human body; physical foundations of the functioning of medical equipment;</p> <p>Chemical system: solutions, disperse systems, electrochemical systems, catalysts and catalytic systems, polymers and oligomers; chemical thermodynamics and kinetics: energy in chemical processes, chemical and phase equilibrium, reaction speed and methods of its regulation of oscillatory reaction; reactivity substances: chemistry and the periodic system of the elements, acid-base and oxidation-reduction properties of substances, chemical bond, complementarity; the chemical identity: a qualitative and quantitative analysis, analytical signal, chemical, physico-chemical and physical analysis, chemical workshop; chemical and biological essence of the processes occurring in a living human body at the molecular and cellular levels;</p>	5	<p>Physics</p> <p>Chemistry</p>	
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	<p>The student must be able to:</p> <p>Use educational, scientific, popular science literature, and the Internet for professional activities;</p> <p>Use physical, chemical and biological equipment; work with magnifying equipment (microscopes, optical and simple magnifiers);</p> <p>Perform statistical processing of experimental data.</p>			
	Variable part, incl. subjects of students ' choice	6		
p. 3	Professional cycle	287		
	Basic part	200		
	<p>As a result of studying the basic part of the cycle , the student should, the student should know :</p> <p>Living systems, human physiology and ecology, ecology and nature protection. Biology and ecology workshop.</p> <p>Structure and biochemical properties of the main classes of biologically important compounds, the main metabolic pathways of their transformation; the role of cell membranes and their transport systems in metabolism in the human body;</p> <p>Chemical and biological essence of processes occurring in the living organism of a child and adolescent at the molecular and cellular levels; classification, morphology and physiology of microorganisms and viruses, their impact on public health, methods of microbiological diagnostics; use of basic antibacterial, antiviral and biological drugs;</p>	<p>6</p> <p>7</p> <p>9</p>	<p>Medical Biology, Genetics, Parasitology</p> <p>General and clinical Biochemistry</p> <p>Normal anatomy</p>	<p>PC-2 and PC-3; PC-4; PC-5; PC-7 and PC-8; PC-9; PC-11; PC-12; PC-13; PC-14; PC-15; PC-16; PC-17; PC-18;</p>

<p>Basic patterns of development and vital activity of the child and adolescent's body based on the structural organization of cells, tissues and organs;</p> <p>Histofunctional features of tissue elements; methods of their research;</p> <p>Anatomical and physiological, age-sex and individual features of the structure and development of a healthy and sick child and teenager;</p> <p>Concepts of etiology, pathogenesis, morphogenesis, pathomorphosis of the disease in children and adolescents, principles of classification of diseases; basic concepts of general nosology;</p> <p>Functional systems of the human body, their regulation and self-regulation when exposed to the external environment in normal and pathological processes; structure and functions of the immune system in children and adolescents, its age characteristics, mechanisms of development and functioning, basic methods of immunodiagnostics, methods for assessing the immune status and indications for the use of immunotropic therapy;</p> <p>Fundamentals of the legislation of the Kyrgyz Republic, basic regulatory documents on health protection;</p> <p>Fundamentals of insurance medicine in the Kyrgyz Republic, the structure of the modern healthcare system of the Kyrgyz Republic, the activities of bodies and organizations of the healthcare system ;</p> <p>Fundamentals of preventive medicine aimed at</p>	<p>8</p> <p>9</p> <p>9</p> <p>9</p>	<p>Histology, Cytology, and Embryology</p> <p>Normal physiology</p> <p>Microbiology, Virology and Immunology</p> <p>Basic and clinical pharmacology</p> <p>Pathological anatomy, clinical pathological</p>	<p>PC-19; PC-20; PC-26; PC-27;</p>
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<p>improving the health of children of various age, gender and social groups;</p> <p>Sanitary and hygienic requirements for the structure, organization, and working hours of healthcare organizations;</p> <p>Fundamentals of organization of outpatient and inpatient care for children and adolescents;</p> <p>Implementation of specific and non-specific prevention of infectious diseases in children and adolescents;</p> <p>Methods of conducting emergency measures and indications for hospitalization of sick children of various ages;</p> <p>Maintaining standard accounting and reporting medical documentation in healthcare organizations, carrying out an examination of working capacity;</p> <p>Epidemiology of infectious, parasitic and non-communicable diseases in children and adolescents, principles of implementation of anti-epidemic measures, protection of the population in hotbeds of particularly dangerous infections, in case of deterioration of the radiation situation and natural disasters;</p> <p>Etiology, pathogenesis, diagnosis, treatment and prevention of the most common diseases among the population;</p> <p>Clinical picture, features of the course and possible complications of the most common diseases that occur in a typical form in children and adolescents;</p> <p>The main clinical manifestations of diseases of the</p>	<p>9</p> <p>15</p> <p>15</p> <p>15</p> <p>15</p>	<p>anatomy</p> <p>Pathological Physiology, clinical pathological Physiology</p> <p>Childhood diseases 1</p> <p>Childhood diseases 2</p> <p>Children's diseases 3</p> <p>Childhood diseases 4</p> <p>Children's</p>	
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<p>skin and subcutaneous tissue, ENT organs, eyes, nervous system, maxillofacial region, oncological pathology, features of their diagnosis and observation in children and adolescents;</p>	15	infectious diseases	
<p>Clinical manifestations of surgical diseases (syndromes); features of medical care for children and adolescents;</p>	10	Children's Surgery	
<p>Clinical manifestations of emergency syndromes; features of emergency medical care for children and adolescents;</p>	10	Internal diseases 1	
<p>Modern methods of clinical, laboratory and instrumental diagnostics of therapeutic, surgical and infectious patients; general principles and features of diagnostics of hereditary diseases and congenital anomalies;</p>	5	Internal diseases 2	
<p>Types and methods of modern anesthesia (masked, endotracheal, intravenous); methods and methods of prevention of postoperative complications; features of intensive care in children of different age and gender groups;</p>	10	Dermato-venereology	
<p>Features of the organization of medical care, resuscitation measures for children and adolescents in emergency situations, during disasters in peacetime and wartime;</p>		Pediatric neurology and medical genetics, neurosurgery,	
<p>Principles of obstetric and gynecological care for children and adolescents, diagnosis and management of pregnancy, diagnosis, treatment and rehabilitation of women with gynecological diseases;</p> <p>Features of collecting pathological materials from the</p>			

patient; precautions, special clothing;

Basic principles of prevention, diagnosis, treatment and rehabilitation of infectious diseases, indications for hospitalization of patients with infectious diseases;

Principles of organization of mass tuberculin diagnostics among the population, selection of patients for follow-up;

Features of diagnosis, treatment with etiotropic and pathogenetic agents, rehabilitation of tuberculosis patients;

Classification and main characteristics of medicinal products, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of medicinal products, side effects;

General principles of registration of prescriptions and composing prescription prescriptions for medicines;

Clinical and pharmacological characteristics of the main groups of medicines and rational choice of specific medicines in the treatment of major pathological syndromes, diseases and emergencies.

The student must be able and proficient in :

Palpate the main bone landmarks on a person, outline the topographic contours of organs and main vascular and nerve trunks;

Analyze histophysiological assessment of the state of various cellular, tissue and organ structures in patients;

Analyze and evaluate the quality of medical care, the state of health of the population, the impact of lifestyle, environment, biological factors and the organization of

medical care;

Participate in the organization and provision of medical and preventive, sanitary and anti-epidemic, rehabilitation assistance to the population;

Collect anamnesis; conduct a survey of the patient and his relatives, conduct a physical examination of children of all ages (examination, palpation, auscultation, blood pressure measurement, determination of pulse characteristics, respiratory rate, etc.);

Justify it and send it for laboratory and instrumental examination and consultation with specialists.

Interpret the results of the most common methods of laboratory and functional diagnostics, thermometry to detect pathological processes;

Analyze the results of X-ray examination;

Substantiate the nature of the pathological process and its clinical manifestations, the principles of etiotropic, pathogenetic and symptomatic therapy of the most common diseases;

Analyze the effect of medicines based on the totality of their pharmacological properties and the possibility of their use for the treatment and prevention of children of different ages;

Prescribe medicines based on their specific pharmacodynamics and pharmacokinetics.

Give an opinion on the cause of death and formulate a pathoanatomical diagnosis; fill out a medical death certificate;

	<p>Interpret the results of the examination, give the patient a preliminary diagnosis, determine the scope of additional studies to clarify the diagnosis; formulate a clinical diagnosis;</p> <p>Conduct a differential diagnosis, be able to diagnose typical and atypical forms of the disease in children and adolescents, and determine indications for hospitalization;</p> <p>Develop a treatment plan for a sick person, taking into account the course of the disease, select and prescribe drug therapy, and use non-drug treatment methods;</p> <p>Identify life-threatening syndromes and provide first aid to children and adolescents;</p> <p>Conduct health education work with patients and their relatives, promote a healthy lifestyle;</p> <p>Maintain medical records of various types in outpatient and inpatient healthcare organizations.</p>			
	Variable part, incl. disciplines for students ' choice	87		
p. 4	Additional types of training	110 0h.		
	<p>As a result of studying the basic part of the cycle , the student should know:</p> <p>Social role of physical culture in personal development and preparation for professional activity;</p> <p>Principles of a healthy lifestyle.</p> <p>Tasks and organization of the medical service and the</p>	400	Physical culture	

	<p>Armed ForcesOf the Kyrgyz Republic.</p> <p>Training of students as reserve medical service officers who know the basic provisions of combined arms and combat regulations of the Armed Forces</p> <p>The student must be able and proficient in:</p> <p>Rbe well versed in the issues of physical culture used for prevention and treatment.</p> <p>Apply the requirements of the combined arms and combat regulations of the Armed Forces in the performance of official duties.</p> <p>Combined-arms and medical protective equipment. Civil defense in emergency situations. Protection of the population in emergency situations. Assessment of the emergency situation.</p>	700	Military medical training	
p. 5	Production practice	16		
	<p>Study of the work of junior medical personnel and performing manipulations for patient care.</p> <p>Study of the work and performance of manipulations of a ward nurse.</p> <p>Studying the work of a procedural nurse and performing manipulations and procedures of secondary medical personnel.</p> <p>The student should know:</p> <p>types of sanitary treatment of sick children and adolescents;</p> <p>features of observation and care of sick children and adolescents with diseases of various body systems.</p> <p>The student should be able to possess</p>	2	<p>Volunteer practice</p> <p>Assistant Nurse</p>	SPC-1; PC-25

<p>to produce sanitary treatment of the patient at admission and during hospital stay, change of underwear and bed linen of the patient, treating bedsores;</p> <p>to care for sick children of various ages suffering from diseases of various organs and systems</p> <p>to transport the sick;</p> <p>to measure the body temperature, daily diuresis, to collect biological material for laboratory tests, for kids and teenagers anthropometry, different types of enemas;</p> <p>to conduct feeding sick children and adolescents;</p> <p>to carry out disinfection and pre-sterilization preparation of medical instruments, materials and care for sick children.</p>	2		
<p>Study of the work <u>of an ambulance and emergency medical assistant.</u></p> <p>The student should be able to:</p> <p>examine patients with the most frequent emergency conditions, evaluate the data of examination and interviewing the patient;</p> <p>provide pre-medical care;</p> <p>Study of the work <u>of a doctor at the hospital level</u> of therapeutic, surgical, obstetric-gynecological, and pediatric profile.</p> <p>The student should be able to possess:</p> <p>to examine patients with the most frequent therapeutic, surgical and obstetric, pediatric diseases, evaluate the data of inspection and survey of the patient;</p>	4	<p>Assistant paramedic of ambulance and emergency care</p> <p>Assistant to a hospital doctor</p>	

	<p>to formulate a preliminary diagnosis, to make a plan of survey, to give the closest and long-term prognosis, recommendations for outpatient treatment;</p> <p>treatment of patients under the direction of a physician;</p> <p>right to obtain medical documentation;</p> <p>participate in the appointment of physiological birth;</p> <p>to produce primary treatment of newborns.</p> <p>The student should be familiar with:</p> <p>the procedure for discharging, storing, recording and prescribing medicines (especially: strong, narcotic, expensive);</p> <p>the work of the physiotherapy department, the technique of procedures;</p> <p>the work of the pathology department;</p> <p>the organization and conduct of anti-epidemic work.</p> <p>Study of <u>a doctor's work in an outpatient</u> institution (Family Medicine Center).</p> <p>The student should be able to:</p> <p>diagnose at the outpatient level the most common diseases in children and adolescents, taking into account the peculiarities of their course, treatment, prevention, medical examination, examination of working capacity;</p>	6	Assistant physician FMC	
Total		360		

(*) 1. The labor intensity of individual disciplines of the MEP specialist's UD is set in the range of up to 10 credits.

Appendix No. 3

ANNOTATED PROGRAM CONTENT

Academic discipline

“History of Kyrgyzstan, history of medicine”

The purpose of the discipline: teaching the course "History of Kyrgyzstan, history of medicine" in universities of Kyrgyzstan is to provide students with a holistic view of the history of the Kyrgyz and other peoples of Kyrgyzstan, instilling in the younger generation a sense of patriotism and active citizenship, respect for the historical past of the people of Kyrgyzstan.

The course is designed to give the medical student knowledge about the main stages of the historical development of Kyrgyzstan from antiquity to the present, the ethnogenesis and formation of the Kyrgyz people, to show the inseparability of the connection between the history of the development of Kyrgyzstan and the history of world civilizations. The study of national history is one of the important means of strengthening interethnic harmony and mutual understanding of the people of Kyrgyzstan, patriotic education of young people. Study of the main stages of the development of medicine.

Objectives of the discipline:

- form ideas about the main historical stages in the formation and development of the Kyrgyz statehood;
- show the organic relationship of the Kyrgyz history with the world history on the examples of different epochs;
- analyze the general and special in the process of development of the state and society;
- form historical concepts and categories;

- introduce the basics of the civilizational approach in the analysis of historical events and phenomena;
- cultivate students ' sense of citizenship and patriotism;
- develop students ' skills of independent work, interest in it;
- acquaint the student with the main stages of the development of medicine.

The content of the discipline. The ancient period in the history of the Kyrgyz and Kyrgyzstan. The Turkic Epoch: the main stages of the formation of statehood. Kyrgyzstan during the conquests of Genghis Khan. Kyrgyz people in the XVI-XIX centuries. Relations with neighboring peoples and States. Kyrgyz people and the Kokand Khanate. Kyrgyzstan-a colony of the Russian Empire (1855-1917). Stages of formation of the Kyrgyz Soviet statehood. The Great Patriotic War. Socio-political and socio-economic development of Kyrgyzstan in the 50s-early 90s of the XX century. Sovereign Kyrgyzstan. Problems of socio-political and socio-economic development. History of medicine.

As a result of mastering the discipline "History of Kyrgyzstan, history of medicine", the student should know:

- the main historical events, stages of the evolution of statehood and its institutions,
- features of socio-economic development,
- the specifics of the modernization process,
- foreign policy trends and changes in the geopolitical situation,
- content of cultural traditions and historical heritage,
- the main stages of the development of medicine.

be able to:

- independently analyze socio-political and scientific literature,

- to plan and evaluate your activities based on this analysis.

own:

- skills of reasoned presentation of one's own point of view;
- skills of public speech, argumentation, introduction of discussion and polemics, critical perception of information.

The total labor intensity of mastering the discipline is 4 credits

ANNOTATED PROGRAM CONTENT

Academic discipline

" Philosophy»

The purpose of the discipline: the assimilation of philosophical knowledge is a necessary condition for the formation of a systematized worldview and the development of conceptual and categorical thinking and one of the ways of modern socialization of the individual. The course of philosophy is designed to develop students' ability to critical thinking, the development of dialectical thinking, which is an objective basis for the formation of medical, and later clinical thinking. To give the student the minimum knowledge necessary for every educated person about spiritual realities and philosophical and methodological values. The development of the proposed program based on the comprehension of historical-philosophical and system-problem material will allow future doctors to form their own philosophical and civic position on the most important issues of modern medicine, as well as the ability to independently comprehend current problems in modern public life.

Tasks of the discipline:

- acquaint students with the main stages of the development of the theoretical thought of mankind, expressed in philosophy. To reveal the interrelation of

philosophical concepts that influenced the formation of medicine as a science, using the examples of the life of great, outstanding medical thinkers throughout the entire historical development.

- highlight the moral and medical problems of a general practitioner.
- introduce students to the Kyrgyz philosophical tradition.
- Education of patriotism, through familiarization with the nomadic culture of our ancestors.
- help understand the unique role of philosophy in the development of civilization and human culture,
- understand the interaction with other areas of human activity and cultures, especially with medical activities.
- reveal the interaction and interrelation of philosophy, bioethics, deontology, principles, norms that determine the development of medicine as a special field of human practice throughout the history of all mankind.
- identify the continuing relevance of philosophy, its main ideas, problematic reflections, research in the formation and development of a mature human personality, in creating a civilized socio-cultural environment, in understanding the contradictions and difficulties of the development of modern man, revealing the content of the category "society" and determining the characteristics of society as a system.
- reveal the specifics of consciousness as 1) the highest form of reflection of the surrounding reality; 2) the properties or functions of highly organized matter (brain) to reflect the world in ideal images. Define cognition as: 1) the form of activity; 2) an active, purposeful reflection of the surrounding world in the human mind.

- Moral and ethical orientation of medical university students in the context of the scientific and technological revolution, global progress and civilizational crisis.
- help students master the categorical apparatus of philosophy, the mastery of which develops the humanitarian and philosophical culture and the worldview of the future doctor. Develop a holistic vision of the world on a rational basis of knowledge.
- develop students' skills in studying philosophical literature, to teach them to work on abstracts on philosophy, taking into account the relevant formal and substantive requirements.

The content of the discipline.

Section 1. "History of philosophy", reflection on the formation of the theoretical thought of mankind. Philosophy as a way of forming and developing a worldview. The relationship between philosophy and medicine. The moral orientation of medical art and philosophy in the cultures of the Ancient East. Anthropocentrism of ancient Greek philosophy. Philosophical understanding of medicine in the Ancient era. Formation and development of medical education in theological schools. Theosophical foundations of human health in the Middle Ages. Philosophy of the Renaissance, Modern Times, and Enlightenment. German classical philosophy. Philosophy and medicine in this period. Development of protomedical knowledge and skills of the ancient Kyrgyz from the standpoint of spontaneous materialism.

Section 2. "Ontology and theory of knowledge" Philosophy of Being. Information as a state of matter, information-wave medicine and biology. Philosophical and medical aspects of consciousness, physiological foundations of spiritual and psychic phenomena. The problem of the criterion of truth in philosophy and medicine. Dialectics as a science. Synergetics as a method of complex consideration of the concepts of disease and health.

Section 3 "Social Philosophy" Philosophical analysis of society and man.

Medicine as a sphere of universal culture. Global problems of humanity.

As a result of mastering the discipline "Philosophy", the student must know:

- philosophical aspects: worldview, socially and personally significant problems and processes;
- the general concept of man and his multidimensionality;
- general understanding of consciousness and self awareness;
- the essence and meaning of knowledge; fundamentals of social philosophy;
- philosophical foundations of epistemology, methods and techniques of research;
- methods and techniques of philosophical analysis of problems;
- forms and methods of scientific knowledge, their evolution;
- the main categories and concepts of the academic discipline;
- basic principles of construction of oral and written speech, rules of argumentation;
- types of information sources.

be able to:

- to choose and apply methods and various techniques for solving social and professional tasks;
- to evaluate the adequacy, fruitfulness and effectiveness of the methods of the humanities (philosophical) sciences in solving social and professional problems;
- be aware of the basic nature of socio-humanitarian sciences in solving social and professional problems;

- to differentiate the possibilities of different views on the solution of worldview, socially and personally significant philosophical problems;
 - independently perform actions to solve non-standard tasks that require a choice based on a combination of known methods, in an unpredictably changing situation;
 - determine the place, role and significance of philosophical problems of worldview, social and personal significance;
 - independently perceive information from various sources: extract and analyze information;
 - select notes from various sources;
 - compare the presentation of the same issues in different sources, identify commonalities and find differences; use reference and additional literature;
 - think critically: find errors in a particular text;
 - supplement incomplete text material;
 - quote and make different types of comments;
 - convert text material: highlight the main thing, reduce the text to a few lines without distorting the meaning;
 - make a plan, theses; take notes;
 - make a conclusion about the read text;
 - make generalizations, formulate, argue conclusions, understand, evaluate and process the text;
 - independently perform actions to solve non-standard tasks that require a choice based on a combination of known methods, in an unpredictably changing situation.
- own:

- the ability to solve social and professional problems, using the basic provisions of the humanities (philosophical) sciences;
- skills of analysis, problem setting and choosing the optimal way to solve them, different forms of presentation of the text (report, state (description);
- tell, (narration);
- compare, summarize, summarize (definition, explanation);
- justify, prove, refute (argumentation, reasoning);
- skills of presenting an independent point of view, analysis and logical thinking, public speech, conducting discussions and round tables;
- skills of analysis and logical thinking.

The total labor intensity of mastering the discipline is 4 credits.

ANNOTATED PROGRAM CONTENT

The purpose of the discipline: to create accurate and correct ideas about the subject "Manas Studies", and its essence, the basics of the worldview and traditional medicine of the Kyrgyz people, reflected in the epic.

Tasks of the discipline:

- determining the place and role of the folk epic "Manas" in the world culture;
- disclosure of the essence of the spiritual culture of the Kyrgyz people according to the epic "Manas", religions, folk traditions and games, features of the ethics of the Kyrgyz;
- determination of the place and role of traditional medicine of the Kyrgyz people according to the epic " Manas»

- study of the historical periodization of Kyrgyz folk medicine based on the epic "Manas»;
- introduction of the psychotherapeutic effects of prisoners in the "power of the word" used in folk medicine
- familiarization with representatives of traditional medicine and the scope of their functional responsibilities.
- study of empirical and rational methods of treatment by ancient Kyrgyz according to the epic "Manas»;
- study of medicines of animal and mineral origin according to the epic "Manas".

Content of the discipline.

The study of the epic "Manas" in the pre-Soviet, Soviet and modern period. Genre features of Kyrgyz oral folk art. Traditional medicine based on the epic "Manas". Historical periodization of Kyrgyz folk medicine. Representatives of traditional medicine and the scope of their functional responsibilities for the epic "Manas". Rational and empirical aspects of the treatment of Kyrgyz people according to the epic "Manas". Mystical and religious aspects of traditional Kyrgyz medicine based on the epic "Manas". Kyrgyz ideas about the magical causes of diseases. Ritual actions related to the treatment of various diseases according to the epic "Manas". Empirical methods of treatment according to the epic "Manas". Medicines of animal and mineral origin. Folk surgery, climatotherapy. Phytotherapy, organotherapy. Psychotherapy or the power of words in folk medicine. Sacred symbolism of diseases, animistic and fetishistic aspects of traditional medicine. Kyrgyz worldview and its characteristic features. Pre-Islamic beliefs and Islam based on the epic "Manas". Folk customs and traditions, folk games and entertainment of the Kyrgyz people based on the epic "Manas".

As a result of mastering the discipline "Manas Study", the student should

know:

- the formation of "Manas Study as a science;
- the methodology of studying "Manas Study»;
- principles of the Kyrgyz folk medicine according to the epic "Manas»;
- chronology of the development of Kyrgyz folk medicine according to the epic "Manas";
- methods of psychotherapeutic influences used in folk medicine;
- representatives of traditional medicine and the scope of their functional responsibilities;
- empirical and rational methods of treatment by ancient Kyrgyz according to the epic Manas»;
- study of medicines of animal and mineral origin according to the epic "Manas";
- the main historical stages of the origin and formation of the epic "Manas";
- the main variants of the epic "Manas»;
- names of storytellers-manaschi; the role and place of manaschi in the spiritual life of the Kyrgyz;
- cultural, historical and educational values of the epic "Manas".

be able to:

- describe the historical era reflected in the epic "Manas" –
- know the names of the main characters of the epic "Manas" and their role in the life and fate of the Kyrgyz;
- name the names of the great Manaschi and their role and place in the life of the Kyrgyz people;

- name the researchers of the epic "Manas";
- quote from the poetics of the epic "Manas";
- distinguish the plot of the trilogy of the epic "Manas";
- distinguish religious-mystical, empirical and rational methods of treatment of traditional medicine of the Kyrgyz people according to the epic "Manas".

possess:

- the ability to solve social and professional problems, using the basic provisions of the humanities (philosophical) sciences;
- skills of analysis, problem setting and choosing the optimal way to solve them;
- different forms of presentation of the text (report, state (description);
- tell, (narration); compare, summarize, summarize (definition, explanation);
- justify, prove, refute (argumentation, reasoning);
- skills of presenting an independent point of view, analysis and logical thinking, public speech, conducting discussions and round tables;
- skills of analysis and logical thinking.

The total labor intensity of mastering the discipline is 2 credits.

ANNOTATED PROGRAM CONTENT

The purpose of the discipline: the creation of accurate and correct ideas about the subject "Geography of the Kyrgyz Republic", and its essence, the formation of the foundations of the geographical worldview of students.

Tasks of the discipline:

- Review of the literature on the geography of the republic.

- Geographical location and borders of the Kyrgyz Republic.
- The connection of nature features with the mountainous terrain and the intra-continental location of the region.
- History of geographical research of Kyrgyzstan.
- Complex physical and geographical studies and their national economic significance.

Content of the discipline. Climatic conditions. The main types of landscapes in Kyrgyzstan. Water resources and land cover. Non-ferrous metallurgy, mechanical engineering and metalworking, construction in the industry of Kyrgyzstan. The main branches of agriculture and their placement. Animal husbandry. Agriculture. Transport complex and tourism development of the Kyrgyz Republic.

As a result of mastering the discipline "Geography of Kyrgyzstan", the student should know:

- patterns of formation of natural conditions of the republic, history
- formation of the territory, the structure of the relief, about the features of the formation of the climate
- patterns of formation and distribution of rivers, lakes, underground waters, glaciers;
- water reserves, the structure of their modern use; features of the formation of soil and vegetation cover;
- distribution of land resources, their current use and ecological status;
- the animal world, its current ecological state, protection;
- patterns of landscape distribution;
- Protected areas of Kyrgyzstan;

- Natural and socio-economic prerequisites for the socio-economic development of the Kyrgyz Republic;
- population and labor resources, social policy aimed at improving the standard of living of the population, migration processes;
- the history of the formation of the economy of the Kyrgyz Republic;
- major changes in the location of industry in the regions, the geography of the fuel and energy industry, non-ferrous metallurgy, mechanical engineering, food, light industry, production of building materials;
- economic and geographical problems of the development of agriculture in the republic;
- the main branches of agriculture, the features of their location, problems and prospects for the development of agricultural sectors in the republic;
- the importance of transport in the national economy, changes in geography, the state and prospects of their development;
- recreational resources, placement of tourism industries, problems of development of resort economy and tourism in Kyrgyzstan;
- main foreign economic relations, prospects for the development of foreign economic relations;
- economic and geographical regions of the Kyrgyz Republic, internal differences, specialization of districts.

be able to:

- work with the map and analyze it; analyze and evaluate

the socio-economic consequences of new phenomena in science, technology and technology, and the professional sphere;

- analyze particular and general problems of rational use of natural conditions and resources, manage natural resources under the guidance of specialists and qualified researchers;
- collect and analyze information from various sources to solve professional and social problems;
- analyze the patterns of formation of natural resources, economy and population of the Kyrgyz Republic;
- analyze and predict the development of territorial socio-economic systems of different levels, the territorial organization of society, the location of productive forces under the guidance of specialists and qualified researchers.

own:

- methods of working with geographical maps;
- a complete system of scientific knowledge about the surrounding world, be able to navigate the values of life;
- skills and techniques, the necessary tools for complex geographical analysis; modern research methods in the collection and primary processing of the material;
- a complete system of scientific knowledge about nature, natural conditions, population and economy of the Kyrgyz Republic;
- - information about the current ecological state of nature, natural components of the territory of the republic;
- information on the current state of development and placement of industries, agriculture, transport and tourism;
- information on the foreign economic relations of the republic and its priority areas;

- information about natural conditions, resources, population, and the economic state of the regions of the republic.

The total labor intensity of mastering the discipline is 2 credits.

ANNOTATED PROGRAM CONTENT

Academic disciplines

1. "Kyrgyz language and literature" (for beginners))

The purpose of the lesson: the innovation of teaching the Kyrgyz language is aimed not only at providing substantive information, but also at implementing interesting two-way communication; achieving clear and effective speech in the Kyrgyz language; developing the skills necessary for correct, convincing speech, cultural communication in various life situations encountered in real life.

Course objective:

- determination of the means of constructing the studied language material;
- definition of the subject of text materials used as a means of teaching the language, which is the basis for the study of language materials;
- creation of the possibility of preparing business documents using the language communication services, orientation and request for correction of various texts and sentences.

Program contents

Kyrgyz language and literature lesson. Goals and objectives. Kyrgyz is the official language of the Kyrgyz Republic. Ethnomedicine is a branch of medicine that studies the features of the prevention and treatment of diseases. History of the Kyrgyz language. The place of the literary language and dialects. Medical examples in oral folk works. The epic "Manas" is an example of ethno-social memory and a treasure trove of traditional medicine. Rules, norms, patterns of word formation.

Medical examples in the traditions, customs, and rituals of the Kyrgyz people. Totem, Shaman, and others B. Remnants of faith. Word types: simple, complex words. Lullaby health benefits, harm. Information about the Kyrgyz vocabulary. Circumcision, medical scientific views. Explain the direct and transitive meanings of the words. The influence of Kyrgyz music on health. The meaning of lyrical songs. Establishment of a high ideological and artistic level of the epics of the Kyrgyz people. Active vocabulary. Health-related prohibitions. Passive vocabulary. The way of life of nomadic peoples, the interpretation of their culture. Polysemy of the word. National cuisine, food hygiene. Homonyms and their differences from polysemantic words. Ways to enrich your vocabulary. National games as an object of medical research. Professional vocabulary. National clothing and age psychology. The place of medical terminology in the general vocabulary. Yurt-housing of nomads. Phraseological units. Proverbs related to health. The place of phraseological units in medical communication.

As a result of mastering the subject "Kyrgyz language and literature", the student must

Biography:

- learns to speak depending on the situation;
- the ability to formulate factual and conceptual questions to the text is growing;

Assimilation: forms

correct speech and writing through language exercises; assimilates ethno-cultural vocabulary;

Apply:

master a special vocabulary; through the analysis of works, a worldview is formed.

The total amount of work is 3 credits.

ANNOTATED PROGRAM CONTENT

Academic disciplines

2. "Kyrgyz language and literature" (for intermediate level)

The purpose of the lesson: to expand the horizons of students, studying the basics of linguistic and philological sciences, and to achieve a deep assimilation of the culture of speech of our people; to deepen school knowledge, to inform them about modern news in the field of the Kyrgyz language and to instill interest in the artistic word; to instill respect for the art of the word of our people, to instill in artistic texts such noble qualities and character traits as the life history of famous people, folk traditions, customs. Kyrgyz Republic, development of national consciousness; fluency in oral and written activities through further study of the Kyrgyz language in accordance with life situations.

Course objective:

- determination of the means of constructing the studied language materials; determination of the subject of text materials used as a means of teaching the language, which is the basis for the study of language materials;
- creation of the possibility of preparing business documents using the language communication services, orientation and request for correction of various texts and sentences.

Program content

General information about the concept of Ethnomedicine. The main sections of linguistics. The place of language in the medical field. History, types of Kyrgyz folk medicine. The epic "Manas" and traditional medicine. The problem of literary language and dialect. Orthoepic norms of the Kyrgyz literary language. The meaning of the spelling norms of the Kyrgyz language.

The influence of Kyrgyz music on health. work on punctuation norms. The way of life of nomadic peoples, the interpretation of their culture. Rules for working with spelling dictionaries. Examples of health-related Kyrgyz traditions, customs, and rituals. Health benefits and harms of the cradle, scientific analysis. Circumcision, health effects. To convey the customs, traditions, songs, proverbs and sayings of the Kyrgyz people, the culture that has developed over the centuries. The meaning of lyrical songs, their impact on health. Analysis of the philosophy related to health. Listening is a huge culture. Ancient and medieval Kyrgyz J. Balasagyn and M. Get acquainted with the works of such major representatives as Kashgari. The concept of prohibitions. Examples related to health. The benefits of hospitality, the harm. The place of eloquence in medicine. Verbal, non-verbal means. The peculiarity of nonverbal means in medicine. Knowledge of the seven Fathers is mandatory. Work style and features of its genetic disorders. Water is a source of health. Office work, rules of writing. Medicinal plants, classification. The procedure for conducting personal affairs. Medicinal plants growing in Kyrgyzstan, the nature of application. Statement, explanatory note, rules of writing. Fauna, species. Write a description. Kyrgyzstan is a mountainous country. The impact of mountain caves on health. Types of working paper. Working with aromatherapy. Rules for the registration of official documents. The development of Kyrgyz literature in historical social and cultural conditions in 1925-1929. To note his great contribution to the creation of the Kyrgyz national script, to the formation of its orthography, to the Kyrgyz Soviet literature. Analysis of the works of the Kyrgyz people reflecting difficult times. The poet's poetry differs from the poetry of other poets in depth, scale, artistic basis, and imagery. Medical science: yesterday, today, tomorrow. A feature of the scientific style.

As a result of mastering the subject "Kyrgyz language and literature", the student must

know: learns to speak according to the situation; develops the ability to formulate factual and conceptual questions to the text;

assimilation: through language exercises, forms correct speech and writing;
assimilates ethno-cultural vocabulary;

usage: develops a specialized vocabulary; through the analysis of works, a worldview is formed.

The total amount of works are 3 credits.

ANNOTATED PROGRAM CONTENT

The purpose of the discipline: Humanization of education in medical universities, improving the speech culture of future doctors, familiarizing students with the theoretical foundations of Russian language culture and technology, the formation of speech culture as one of the aspects of the formation of the language competence of the future doctor.

Tasks of the discipline:

- formation of students ' general cultural and professional competencies;
- students ' mastery of the basic concepts of speech culture: correctness and communicative qualities of speech, competent speech;
- students ' mastery of speech techniques in various speech and etiquette situations;
- familiarization of students with various styles of the Russian literary language, the scope of their functioning, features and capabilities;
- familiarizing students with the possibilities of expanding the vocabulary and phraseological stock of speech, using a variety of morphological forms and syntactic constructions;
- familiarization of students with various dictionaries, reference books, encyclopedias, etc.;
- the formation of students ' ability to conduct a conversation on various topics, the formation of skills of action in words, the ability to build public speeches in the

educational, scientific and business spheres of communication, telephone conversations, etc.;

- familiarization of students with the ethical norms of communication in professional activities, with business etiquette;
- formation of skills to listen to the interlocutor and be a "talented reader»;
- formation of an understanding of the quality of oral and written speech (correctness, accuracy, brevity, logic, imagery, expressiveness, correspondence to the situation, etc.);
- mastering the application of the acquired theoretical knowledge in the process of professional activity, as well as in the process of intercultural communication;
- mastering the skills of working with scientific literature;
- formation of skills to create secondary scientific texts, annotations, resumes, reviews on the basis of course papers and theses of graduates;
- formation of skills to understand special medical texts with different depth and accuracy of penetration into their content, i.e.

master all types of reading (learning, introductory, viewing, search),

- formation of skills to transform a scientific text, abstract, expand and shorten;
- mastering the learning reading – with a full understanding of the content and the use of special dictionaries;
- formation of skills to fully and accurately understand the content of the text on the basis of its information processing (lexical, grammatical, translation analysis);
- formation by introductory reading – with an understanding of the main content of the read (90%);

- formation of skills to determine the general content of the title, highlight the main idea, choose the main facts, omitting the secondary ones;
- mastering the viewing reading – get a general idea of the topic, the range of issues that are addressed in the text;
- mastering search reading – with selective understanding of the necessary information;
- formation of skills to view a special text and select the information of interest;
- formation of skills to understand and adequately interpret original texts of any subject, including professional orientation, with subtext and conceptual meanings;
- formation of skills to adequately perceive the socio-cultural and emotional features of the speaker's speech;
- formation of skills to interpret well-known statements and hidden meanings;
- formation of skills to achieve any communication goals in a situation of prepared and unprepared monological and dialogic communication, including public, demonstrating the ability to implement the tactics of speech behavior characteristic of the communication organizer who seeks to influence the listener.
- the formation of skills to show knowledge of the language system, demonstrating the skills of using language units and structural relations necessary for the design of written speech communication (registration of various business papers);
- mastering the competent design of statements, points of view that are part of the original texts or their fragments, taking into account their stylistically highlighted use; - mastering the skills to refer and annotate professionally oriented texts, taking into account different degrees of semantic compression.

Content of the discipline. Start control. Russian is the language of the profession. Language as a means of communication. The main functions of the language.

Language and speech. Speech as a process of using a language. Non-verbal means of communication (gestures, facial expressions). The role of communication and the culture of speech in the social, professional and spiritual activities of the physician. The use of greetings and goodbyes, as well as the use of pronouns. You and you when addressing the interlocutor. Language norms as the main category of speech culture. Orthoepic norms. Normative pronunciation (the laws of reduction, accommodation, assimilation, the law of the end of the word). Formulas of speech etiquette in certain situations. The concept of epenthesis, dieresis, metathesis. Use of phrases when meeting and saying goodbye to a doctor and a patient.

Accentological norms. Stress as the most important element of speech. The meaning of accents. Facts of determining the topic of conversation with unfamiliar people. Stress as a means of distinguishing words.

The meaning-distinguishing function of stress. Rules for non-recommended topics. The formative function of stress. The main and secondary stress in complex words. A compliment. Variable stress. Conversation with strangers, rules of not recommended topics. Situations in which a compliment is unacceptable. Rules and principles of spelling. Spelling of consonant prefixes. The request and their synonymous variants. Y, and in the root after the Russian prefixes. Expression of sympathy and comfort in accordance with the patient's complaints. Spelling o, e after hissing. A compliment is an expression of approval, respect, recognition, or admiration. The spelling of the particles is NOT and NEITHER. Spelling H, NN in adjectives and participles. Spelling of complex nouns and adjectives. Spelling of adverbs. About prohibitions in communication situations. Lexical norms.

Compliance with lexical norms as the most important condition for the accuracy of speech and its correctness. Types of speech supports. Synonyms, antonyms, homonyms, polysemantic words, paronyms. Phraseological units, foreign language words. Emotional reactions. Polysemy, tautology, pleonasm, lexical compatibility of the word. Telephone etiquette. Morphological norms. The gender of non-declinable nouns of foreign origin. Gender of substantive nouns, abbreviations, and

compound nouns. Fluctuations in the case forms of nouns. Features of the formation of forms of feminine nouns. Features in the use of the forms of I C. in singular. The use of adjectives (short adjectives and adjectives in the form of a comparative degree). Similar forms of adjectives and passive participles. Case forms of pronouns. Adding H to the forms of personal pronouns. Differences in the use of interrogative pronouns how many, which. The use of negative and indefinite pronouns. The possessive pronoun yourself. Rules of conflictfree behavior. Norms for the use of complex and composite numerals. Descriptive turns in combinations of compound quantitative numerals on 2, 3, 4 with nouns. Declination of numerals 40, 90, 100; thousand, million, billion; one and a half – one and a half. Complex words with the form of two -, two -. The use of collective numerals (two - ten; both, both, pair). Norms of verbs. Verbs that do not form in the singular of the 1st person . ch. Alternation of o / a to distinguish the forms of perfect and imperfect verbs. Verbs to put / put. Verbs with suff. Functional and stylistic characteristics of verb forms. The use of adverbs and participles in speech. Adverbs on suff -ya, - ti, with the particle-vshu, with the suffix-lice. Prevention of conflict situations. Rules for overcoming stressful conditions. Types of texts. The phrase. Types of subordinate relationship. Formation of noun phrases. Mixing of words with similar meaning and the same root in case forms. Variants of the norms of case endings in phrases with geographical names. Errors in the choice of the case form in words that are close but identical in meaning. Service words. Nominal prepositions + nouns in R. P., D. P. Cases of non-normative management (incorrect connection of words). Options for matching the predicate with the subject. Predicate in the form of a single number. Forms of the plural number of verbs as a predicate. Forms of apologies, forms of responses to comments. Compatibility in the sentence of minor terms. Violations of the agreement of the minor members of the sentence. Norms for the use of adverbial phrases in the role of circumstances. Errors in the use of independent adverbial verbs. Form options related to management. The use of direct complement in R. P., D. P., V. P. Errors in the use of complex sentences. Rules for the construction of complex sentences: the location of the main and

subordinate parts; The exact use of conjunctions and allied words that are close in meaning to words. Observing sentence boundaries, avoiding unnecessary complexity, and dividing a complex sentence into simple sentences. Observing logical connections. Setting a dash in a simple sentence. Punctuation marks for homogeneous sentences. Punctuation marks for participial and adverbial turns. Request as an element of speech ethics. Isolation of introductory words and phrases. Setting dashes in simple sentences. Not categorical in communication. Techniques for mitigating negative ratings in communication. Various forms of expression of consent. Official-business style. Stylistic features of official business speech. Structure and content of official documents. The use of nominal prepositions with nouns in R. P. and D. P. Clichéd forms. Scientific style. Characteristics of the scientific style. General features of the scientific style. Morphological and syntactic features of scientific medical texts. Scientific text as a structure. Genres of scientific style of speech (abstract, abstract, review, review). Teaching to write an abstract: introduction, relevance, problem-solving. The main part, conclusion, bibliography. As a result of mastering the discipline "Russian language", the student must

know:

- language - as a sign system and social phenomenon;
- theoretical foundations of culture and speech techniques;
- styles of the Russian literary language, the scope of their functioning, features and opportunities;
- the possibility of expanding the vocabulary and phraseological stock of speech, the use of a variety of morphological forms and syntactic constructions;
- methods of working with various dictionaries, reference books, encyclopedias, etc.;

- ethical norms of communication in professional activity, business etiquette; basic concepts and laws of the world historical process, for a respectful and careful attitude to the historical heritage and traditions, for the assessment of state policy, for the formation of a civil position; the possibilities of speech activity that can affect the assessment of morphofunctional, physiological states and pathological processes in the human body for solving professional tasks;
- the culture of educational, scientific and business communication (oral and written forms); methods of writing reports, abstracts, theses, reviews.
- Preparation of business documents of various genres (receipt, power of attorney, resume).

be able to:

- conduct a conversation on various topics; influence the word, build public speeches in the educational, scientific and business spheres of communication, telephone conversations, etc.;
- listen to the interlocutor and be a "talented reader»;
- evaluate the quality of oral and written speech (correctness, accuracy, brevity, logic, imagery, expressiveness, compliance with the situation, etc.);
- create secondary scientific texts, abstracts, resumes, reviews on the basis of course papers and theses of graduates;
- fully and accurately understand the content of the text based on its information processing (lexical, grammatical, translation analysis);
- determine the general content by the title, highlight the main idea, select the main facts, omitting the secondary ones;

- view the special text and select the information of interest; understand and adequately interpret the original texts of any subject, including professional orientation, with subtext and conceptual meanings;
- adequately perceive the socio-cultural and emotional features of the speaker's speech;
- interpret well-known statements and hidden meanings; achieve any communication goals in a situation of prepared and unprepared monological and dialogic communication, including public, demonstrating the ability to implement the tactics of speech behavior characteristic of the communication organizer who seeks to influence the listener; show knowledge of the language system, demonstrating the skills of using language units and structural relations necessary for the design of written speech communication (design of various business papers);
- create secondary scientific texts, abstracts, summaries, reviews based on scientific works; understand special medical texts with different depth and accuracy of penetration into their content, i.e. master all types of reading (studying, introductory, viewing, search);
- transform scientific text, format, expand and shorten it;

own:

- application of the acquired theoretical knowledge in the course of professional activity, as well as in the process of intercultural communication;
- the main concepts of speech culture: correctness and communicative qualities of speech, competent speech;
- speech technique in various speech and etiquette situations;
- technologies of language communication (monologues, dialogues, polylogues);

- competent design of statements, points of view that are part of the original texts or their fragments, taking into account their stylistically highlighted use;
- introductory reading – with an understanding of the main content of the read (90%);
- preview reading-get a general idea of the topic, the range of issues that are addressed in the text;
- learning reading – with a full understanding of the content and the use of special dictionaries;
- skills of working with scientific literature;
- the ability to refer and annotate professionally oriented texts, taking into account the varying degrees of semantic compression.

The total labor intensity of mastering the discipline is 6 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Foreign language" The purpose of the discipline: professionally-oriented foreign language training for future doctors, the formation of the foundations of foreign language competence necessary for professional intercultural communication, mastering, first of all, written forms of communication in a foreign language as a means of information activity and further self-education.

The objectives of the discipline: the formation of language and speech skills that allow you to use a foreign language to obtain professionally relevant information, using different types of reading; the formation of language and speech skills that allow you to participate in written and oral professional communication in a foreign language;

Content of the discipline: Introductory and remedial course. The specifics of articulation of sounds, intonation and rhythm of neutral speech in the studied language, the main features of the full pronunciation style characteristic of the field of professional communication, reading transcription. A lexical minimum of 4,000 educational lexical units of a general and terminological nature. The basic rules of morphology, the main components of the sentence (the core of the sentence, the secondary members of the sentence).

The concept of differentiation of vocabulary by areas of application. The concept of free and stable phrases. The concept of the main ways of word formation.

Grammatical skills that ensure communication without distortion of meaning in written and oral communication and of a professional nature. The main lexical and grammatical features of scientific and professional speech styles. Speaking.

Dialogic and monologue speech in the main communicative situations of scientific and professional communication. Fundamentals of public monologue utterance.

Listening skills. Fundamentals of Medicine: Learning to read and translate medical texts. The main types of reading. The main principles and goals of various types of reading: viewing, familiarization, search, studying; the principles of working with the text in the specialty in accordance with the purpose of information search.

Basics of annotation and abstracting. Culture, traditions, medical education, the health system in the countries of the language being studied, the rules of speech etiquette, taking into account the socio-cultural and intercultural characteristics of language and speech. Medical education in Kyrgyzstan. Lexical and grammatical support of the topic. The main grammatical constructions characteristic of the oral style of communication in a foreign language. Medical education abroad. Lexical and grammatical support of the topic. The main grammatical constructions characteristic of the oral style of communication in a foreign language.

As a result of mastering the discipline "Foreign language", the student must know:

- a minimum of lexical and grammatical material for the correct design of their thoughts and conduct;
- the history, culture, traditions, and political system of the country of the language being studied.
- the system of medical education and services of the country of the studied language.

be able to:

- clearly and expressively in intonation, read aloud a text containing mainly learned lexical material;
- understand the speech of native speakers;
- conduct a conversation in the studied language within the limits of the passed speech material;
- understand and convey the content of the read unfamiliar text;
- understand and convey the content of the listened text;
- express a value judgment about the extracted information;
- express your own opinion on the text read or listened to, either orally or in writing.

possess: skills:

presentation in writing of the content of the material read in the form of annotations, summaries, abstracts;

situationally conditioned conversation;

preparation and presentation of reports and reports.

The total labor intensity of mastering the discipline is 4 credits.

ANNOTATED PROGRAM CONTENT

The purpose of the discipline: Professionally-oriented training of future medical professionals in the Latin language and the basics of medical terminology formation of the basics of terminological competence necessary for professional activity.

The task of the discipline: Formation of the basics of language and speech competence for the rapid and competent use of international nomenclature, clinical and pharmaceutical names, in particular:

1. Teaching students the elements of Latin grammar necessary for understanding and correct use of terms in Latin.
2. Teaching students the basics of medical terminology in its three subsystems: anatomical, pharmaceutical and clinical.
3. Formation of students ' skills of fast and competent writing of recipes in Latin
4. Formation of students ' ability to quickly and competently translate recipes from Russian into Latin and vice versa.
5. Formation of students ' skills of working with scientific literature and preparing abstracts.
6. Improving the level of literacy in oral and written speech of students.

Content of the discipline: Introduction. A brief history of the Latin language. Alphabet. Phonetics. The noun. The name is an adjective. Agreed definition. The structure of three-word and multi-word anatomical terms. Nouns of the third declension. Male gender. Feminine nouns of the third declension. Neuter nouns of the third declension. Nominativus Pluralis of nouns and adjectives. Genetivus Pluralis of nouns and adjectives. The structure of the pharmaceutical term. Frequency intervals in trivial names of medicines Verb. Prescription formulations with verbs and prepositions. Recipe and its structure. Chempharmnomenclature.

Acids, oxides. Salt. Word formation in terminology. Clinical terminology. Part 1. Clinical terminology. Part 2 Clinical terminology. Part 3. Clinical terminology. Part 4.

As a result of mastering the discipline "Latin language", the student must know:

- language functions, norms, and style;
- latin alphabet, rules of pronunciation and accent,
- elements of Latin grammar necessary for understanding and education of medical terms,
- lexical minimum in the volume of 900 units
- principles of creating international nomenclatures in Latin;
- basic medical and pharmaceutical terminology in Latin;
- requirements for the design of the Latin part of the recipe;
- methods and means of forming anat-x, farm-x and wedge-x terms, -900 lexical units and t/e at the level of long-term memory as an active terminological stock,
- 50 Latin proverbs and aphorisms about health and medicine.
- the necessary lexical and grammatical material for the correct understanding of the information received; translations and meanings of medical terms (anatomical, pharmaceutical and clinical)

Be able to:

- express your own opinion on the information received, based on the knowledge of lexical and grammatical material; find the necessary information about terminological units in bibliographic sources.

- analyze scientific and journalistic literature of professional purpose; present and edit subject material;
- translate anatomical, pharmaceutical and clinical terms and prescriptions from Latin into Russian without a dictionary,
- determine the general meaning of clinical terms based on knowledge of Greek term elements,
- form clinical terms to the specified values,
- correctly draw up the Latin part of the recipe,
- join the frequency segments that carry certain information about the drug as part of the name of the drug,
- work with reference literature

Own:

- skills of competent presentation of the point of view in oral and written form,
- the basics of writing essays and reports
- the basics of public speech; skills of reading and writing in Latin, klin-x, anat-x and farm-x terms and recipes and translating them from Latin to Russian and vice versa.
- skills in the analysis of anatomical, pharmaceutical and clinical terminology

The total labor intensity of mastering the discipline is 4 credits.

P. 2 Mathematical and natural science cycle

ANNOTATED PROGRAM CONTENT

Academic discipline

"Mathematics"

The purpose of the discipline: to prepare a highly professional specialist with mathematical knowledge, skills and abilities to use mathematics as a tool for logical analysis, numerical calculations and estimates, and to build mathematical models of physical, chemical, biological and medical content.

Objectives of the discipline: to teach students to produce differential and integral calculus of functions describing biological objects and to solve differential equations describing medical and biological processes.

Content of the discipline: The derivative of a function. The differential of a function and its application in approximate calculations. Limit of the function. Some great limits. Theory of integrals. Indefinite integral. A definite integral. Application of the indefinite integral to the solution of biomedical problems. Geometric and physical applications of a particular integral. Theory of differential equations. Differential equations of the first and second orders. Composing and solving differential equations using examples of biomedical and biophysical problems. Application of a certain integral to the solution of medical and biological problems. Problems leading to differential equations. The wave equation and the Laplace equation. Application of differential calculus to the study of functions and plotting.

As a result of mastering the discipline "Mathematics", the student should know:

- mathematical methods for solving intellectual problems and their application in medicine;
- basic mathematical structures,
- probability and statistics,
- mathematical models, algorithms, and programming languages,

- standard professional activity software,
- basic concepts and methods of information protection.

be able to:

- make calculations based on the results of the experiment,
- perform elementary statistical processing of experimental data;
- use information computer systems in medicine and healthcare.

own:

- methods for determining various physical characteristics of biological objects;
- practical skills in the use of individual samples of medical and diagnostic equipment.

The total labor intensity of mastering the discipline is 1 credit.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Computer Science"

The purpose of the discipline: the formation of students ' general ideas about the possibilities of using information and communication technologies that provide extensive opportunities for processing medical information, mastering the techniques of working with modern standard application software packages.

Tasks of the discipline:

- teaching students the basics of working with a computer, modern software tools for system and application purposes, with Microsoft Office tools for processing various types of information on a computer,

- mastering the methods of statistical processing of medical and biological information.

Content of the discipline: Basic concepts of computer science. Software and hardware of a personal computer (PC). Working with the MS WINDOWS operating system and its applications. MS WORD text editor. A program for creating Power Point presentations. MS EXCEL spreadsheets. Calculation of biomedical models in MS Excel. Statistical processing of medical and biological information in MS Excel. Descriptive statistics. MS ACCESS database and DBMS. Working with tables and forms. Data entry. Work on the Internet. Medical resources and search engines.

As a result of mastering the discipline "Computer Science", the student should know:

- theoretical foundations of computer science,
- the content of basic concepts and terms; the procedure for collecting, grouping and processing data in computer programs;
- methods of storing, searching, processing, transforming, and distributing information in healthcare;
- the principles of using information computer systems in clinical and medical-preventive activities; the main approaches to formalization and structuring of various types of medical data used to form decisions in the course of the medical-diagnostic process;
- types, structure, characteristics of medical information systems;
- principles of automation of management of healthcare institutions using modern computer technologies.
- be able to: perform text and graphic processing of documents using standard software tools;
- perform statistical processing of experimental data;
- use modern means of the Internet to search for professional information during independent training and professional development in certain sections of medical knowledge;

- use computer medical and technological systems in the course of professional activity.

own:

- terminology related to modern computer technologies in the application to solving problems of medicine and healthcare;
- basic information conversion technologies: text, tabular, graphic editors; search for information on the Internet;
- basic principles of statistical data processing;
- general methods of creating and working with databases;
- the main methods of working in medical information systems used in the medical and diagnostic process;
- primary skills in the use of medical information systems for the implementation of the main functions of a pediatrician.

The total labor intensity of mastering the discipline is 4 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Physics"

The purpose of the discipline: To form students' knowledge, skills and abilities necessary for successful mastering of general cultural and professional competencies in the field of physics and mathematics. To form in medical students a systematic knowledge of the physical properties and physical processes occurring in biological objects, including in the human body, necessary for the development of other academic disciplines and the formation of professional medical qualities, the disclosure of its integrative links with other disciplines, providing a complex training of a specialist in this profile, with the formation of a dialectical worldview of students based on physical laws and teach them to recognize the physiological states of the human body through physical phenomena; providing in-depth knowledge of the features of the manifestation of physical laws in the biosystem; understanding the structure and operation of medical equipment.

Tasks of the discipline:

- study of the biophysical and physico-chemical bases of the processes of vital activity of the human body;
- study of the biophysical basis of the damaging and therapeutic effects; physical and chemical environmental factors on the body;
- application of physical laws to explain the processes occurring in the human body;
- getting an idea of modern physical methods of prevention, diagnosis and treatment of diseases.

Content of the discipline: The importance of physics for medicine. Medical biophysics. Classification of medical equipment. Methods of introscopy. Biophysical bases of clinical laboratory diagnostics. Molecular biophysics. Dynamic mobility of macromolecules during their functioning. Intramolecular changes. Methods of research of biological membranes. Permeability and transport of substances in biological membranes. Electrical membrane potentials. Electrical characteristics of the ion channels of the excitable cell. Electrochemical gradients.

Biophysics of tissues and organs. Biomechanics. Determination of the elastic modulus of various biological tissues. Biomechanics of the human musculoskeletal system. Bioacoustics. The physical basis of the impact of sound, infrasonic and ultrasonic waves on the human body. Rheological properties of blood. Physical fundamentals of hemodynamics. Physical principles of the use of sound waves in medicine. Ultrasound and its use in medicine. Self-oscillating processes. Sound research in medicine. Physical mechanisms of signal conversion in the human sensory organs. Mechanisms of visual cells functioning. Electrical properties of tissues and organs. The effect of electromagnetic fields on the human body. Electrocardiography. Electroencephalography. Endoscope, its device and purpose. The Earth's magnetic field and its impact on humans. Bio-optics.

Biophysics of reception. Bioluminescence. Radiation biophysics. Study of the effect of UHF fields on tissues and organs. Human exposure to radiation.

Application of laser radiation in medicine. Sources of radiation. Methods for measuring radioactivity.

Physical fundamentals of methods used in the diagnosis and treatment of diseases of the nervous system. Biophysical foundations of sensory systems. Stages of registration of medical and biological information. Application of biophysical methods in the diagnosis and treatment of diseases of the nervous system.

As a result of mastering the discipline "Physics", the student should know:

- the basic laws of physics, physical phenomena and patterns underlying the processes occurring in the human body;
- characteristics and biophysical mechanisms of the impact of physical factors on the body;
- the physical basis of the functioning of medical equipment, device and purpose.

be able to:

- use the main measuring instruments;
- investigate the physical properties of substances;
- work on physical medical equipment;
- perform the simplest statistical processing of measurement results.

own:

- methods for determining various physical characteristics of biological objects;
- practical skills in using individual samples of medical and diagnostic equipment.

The total labor intensity of the discipline development is 4 credits.

Block of medical and biological disciplines:

ANNOTATED CONTENT OF THE PROGRAM

Academic discipline

Chemistry

The purpose of the training:

Formation of students ' holistic physical-chemical, natural-scientific approach to the study of the human body, as well as justification of chemical and physico-chemical aspects of the most important biochemical processes and various types of equilibria occurring in a living organism.

Learning objectives:

- The student will be able to apply the basic laws of physical and colloidal chemistry to characterize living organisms and describe the biochemical processes occurring in the body, as well as to solve situational problems.
- The student will be able to give a quantitative description of the concentration of solutions and their colligative properties, as well as the acidity of solutions of acids and bases, buffer solutions and explain the mechanism of their action.
- The student will be able to explain the influence of the structure of the main classes of natural organic compounds and biopolymers on their chemical properties.
- The student will be able to explain the relationship between the chemical composition, structure, properties and biological activity of substances, including organic components of living organisms and medicines;
- The student will have an incentive to study professional literature and use an electronic database.

Content of the discipline: Introduction to bio-organic, biophysical and bio-organic chemistry. The subject, tasks and methods of bio-organic, biophysical and bio-organic chemistry, its place in the system of natural sciences and its significance for the development of medicine. Basic laws, regulations, and concepts of chemistry. Safety precautions and rules of operation in chemical laboratories. Processing of the results of observations and measurements. The main ways to

express the concentrations of solutions. Elements of chemical thermodynamics and bioenergetics. Types of thermodynamic systems of processes. Internal energy. Work and heat are two forms of energy transfer. Hess' law. Enthalpy. Energy flows in the body: catabolic and anabolic processes. Spontaneous and non-spontaneous processes. The concept of free energy. Gibbs energy. Entropy. A combined expression for the first and second principles of thermodynamics. Chemical equilibrium. Chemical equilibrium constant. Principles of chemical equilibrium displacement; chemical reaction isotherm equations. Stationary state of the body. Homeostasis. Physico-chemical bases of the kinetics of biochemical reactions. Classifications of reactions used for kinetics: homogeneous and heterogeneous reactions; isolated and simultaneous (parallel, conjugate, sequential, chain). The rate constant of the chemical reaction. Kinetic equations of reactions of the first and zero orders. Activation energy. The energy profile of the reaction. The Arrhenius equation. Catalysis. Enzymatic kinetics. Molecular activity. The structure of enzymes and the mechanism of action. The Michaelis-Menten equation. The doctrine of solutions. Classification of solutions. Methods of expressing solutions. Physical and chemical properties of water, which determine its unique role. The concept of an ideal solution. The mechanism of the dissolution process. Colligative properties of aqueous solutions. The main types of equilibria and processes in life. Protolytic equilibria and processes. Buffer systems. Their classification and mechanism of action. The Henderson-Hasselbach equation. The capacity of buffer solutions and the factors that determine it. Buffer action is the main mechanism of protolytic homeostasis of the body. Blood buffer systems: bicarbonate, phosphate, hemoglobin, protein. The mechanism of action of blood buffers. Buffer capacity and acid-base balance. Complex connections. Werner's coordination theory and its development by the Chugaev School. Introduction to bioorganic chemistry. History. Subject and tasks. Classification and nomenclature of organic compounds. Polyfunctional connections. Poly- and heterofunctionality. Features of the manifestation of acid-base properties (ampholites). Cyclization and chelation. Polyatomic alcohols: ethylene glycol, glycerin, inositol. Diatomic

phenols: hydroquinone, resorcinol, pyrocatechin. Dibasic carboxylic acids: oxalic, malonic, succinic, glutaric, fumaric. Carbonic acid and its derivatives (urethanes, ureides of acids, urea). Heterofunctional connections. Biologically important heterocyclic compounds. Heterocycles. Pyrrole, indole, pyridine, quinoline. Nicotinamide, pyridoxal, isonicotinic acid derivatives. 8-hydroxyquinoline derivatives are antibacterial agents of complexing action. Heterocycles with multiple heteroatoms. Barbituric acid and its derivatives. Hydroxypurines. Lactim-lactam tautomerism. Biotin. Thiamine. Peptides and proteins. Carbohydrates. Disaccharides. Nucleic acids. Lipids.

As a result of mastering the discipline "Chemistry", the student must

know:

- the main patterns and prospects of the development of chemical sciences in the application to medical and biological problems
- general laws of chemical reactions in solutions, fundamentals of chemical thermodynamics and kinetics; classification and nomenclature of organic compounds, the most important classes of organic compounds, structure, methods of preparation, physical and chemical properties, basic theoretical concepts in organic chemistry, mutual transformations of classes of organic compounds
- physico-chemical methods of analysis in medicine. Safety regulations and work in chemical laboratories with reagents and devices.

Be able to:

- analyze the experimental results obtained and draw appropriate conclusions
- apply theoretical knowledge about the structure, changes in the composition and reactivity of reacting substances to predict the characteristics of the course of reactions, the composition, structure and properties of products; use the Periodic

System; solve problems in organic chemistry, make equations of reactions, use reference, review and monographic literature in the field of organic chemistry;

- basic technologies for converting information to text, table editors, and Internet search. Skills of safe work in the chemical laboratory with chemical utensils, reagents, chemical equipment and electrical appliances

- basic technologies for converting information to text, table editors, and Internet search.

skills of safe work in the chemical laboratory with chemical utensils, reagents, chemical equipment and electrical appliances;

Own:

- the ability to express the conclusions made in an understandable form

- skills of chemical experiment taking into account the safety rules when using chemical reagents, analysis of the results of experiments and formulation of reasoned conclusions; theoretical concepts of organic chemistry, knowledge of the composition, structure and properties of organic substances, representatives of the main classes of organic compounds; skills of safe work with chemical utensils.

- skills in performing calculations based on the results of the experiment

The total labor intensity of mastering the discipline is 5 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"General and clinical biochemistry"

The aim of the study: the creation of knowledge, the main chemical processes that underlie the life of a healthy person, familiarity with molecular mechanisms, the violation of which may lead to the development of pathological conditions, the development of the most important methods of laboratory studies of metabolism

and the ability to interpret the results of research; to develop a pediatrician who can use all the achievements of biochemistry for practical work.

Learning objectives:

- study of the structure and functions of simple and complex proteins;
 - study of the structure and mechanisms of action of enzymes-biological catalysts;
 - study of the biological role of vitamins necessary for normal growth and development of the body;
 - study of the mechanisms of the influence of hormones on the metabolism and physiological functions of the body;
 - study of biological oxidation processes and energy generation;
 - study of the metabolism of carbohydrates, lipids, and amino acids in the body;
 - study of the chemical composition of human organs and tissues, biochemical processes occurring in specialized tissues;
 - study the peculiarities of carbohydrate metabolism in children;
 - study the features of lipid metabolism in children;
 - study the peculiarities of protein and amino acid metabolism in children;
 - study of the molecular basis of the physiological functions of the human body, the mechanisms of disease pathogenesis, as well as treatment and prevention;
- the ability to apply the results of biochemical studies to diagnose diseases and monitor the effectiveness of treatment.

Topic content:

Introduction. The subject and tasks of biochemistry. Structure and functions of proteins. Physical and chemical properties of proteins. Methods of separation and

quantitative determination of proteins. Classification of simple and complex proteins, their structure and biological functions. Complex proteins: phosphoproteins, lipoproteins, glycoproteins, nucleoproteins and their expression, biol in the human body. Enzymes are biological catalysts of a protein nature. Physical and chemical properties of enzymes. Chemical structure, active forms, role of water-soluble vitamins in metabolism, mechanisms of absorption and excretion from the body. Features of the structure and mechanisms of action of fat-soluble vitamins. Influence on the metabolism and development of the body. Biochemistry of hormones. Structure, synthesis, mechanism of action, target cells, and biological effects of pancreatic and adrenal hormones. Male and female sex hormones, structure and biol. Bioenergetics. Biological oxidation and tissue respiration. The mechanism of oxidative phosphorylation according to Mitchell. Carbohydrate metabolism. Anaerobic and aerobic pathways of glucose utilization in the cell

Exchange of fructose and galactose. Shuttle systems. Mechanism of oxidative decarboxylation of pyruvate. The Krebs cycle, its meaning. The pentose-phosphate pathway of glucose oxidation and its significance. Glucogenogenesis. Regulation and pathology of carbohydrate metabolism. Lipid metabolism. Biosynthesis of triglycerides, phospholipids, and FFA. Metabolism of ketone bodies. Cholesterol biosynthesis. Regulation and pathology of lipid metabolism. Exchange of proteins and amino acids. Intermediate exchange of amino acids. Neutralization of ammonia in tissues. Specific ways of exchanging individual AMCs. Biosynthesis of nucleic acids. Matrix biosynthesis of nucleic acids. Broadcast, broadcast stages. Biochemistry of urine and water-salt metabolism. Biochemistry of shelter. Liver biochemistry. Biochemistry of connective and bone tissue. Biochemistry of muscle and nervous tissue. The relationship of metabolism.

As a result of mastering the discipline, the student must:

Know:

- The subject and tasks of biochemistry. The importance of biochemistry for medicine and the training of a pediatrician.
- The main stages of the development of biochemical science. The role of domestic and foreign scientists in the creation and development of biochemistry.
- Fundamentals of the structural organization of the most important biological molecules, its relationship to function.
- Basic provisions of enzymology. The concept of enzymes, coenzymes, and cofactors. Kinetics of enzymatic reactions.
- Influence of temperature, pH, substrate and enzyme concentrations on the rate of the enzymatic reaction.
- Activators and inhibitors of enzymes. Types of inhibition.
- The main provisions of the doctrine of vitamins and their importance in the biochemistry of nutrition.
- Bioenergetics and biological oxidation, energy exchange.
- Biochemical bases of the regulation of metabolism. The role of hormones and the nervous system in regulatory processes.
- Reception and mechanisms of hormonal signal transmission to target cells (the role of secondary mediators – c-AMP, c-GMF).
- The main processes of lipid metabolism. Regulation and pathology of lipid metabolism.
- Basic processes of amino acid metabolism. Regulation and pathology of metabolism .
- The main features of the metabolism of individual organs and tissues. The relationship of metabolism with the function of organs and tissues.

- Biochemical bases of the regulation of metabolism. The role of vitamins, hormones, and the nervous system in regulatory processes.
- Molecular basis of the biosynthesis of nucleic acids and proteins. Principles of regulation of these processes. Drugs as regulators of the biosynthesis of nucleic acids and proteins.
- The concept of the stages of the implementation of genetic information: replication, transcription, translation.
- The concept of molecular pathology. Mechanisms of occurrence of "molecular diseases", principles of their diagnosis and treatment.
- Practical application of biochemistry in practice for a pediatrician.

Be able to:

- Independently work with educational and scientific literature.
- Independently set up a simple biochemical experiment and give a critical assessment.
- Work with devices when performing biochemical studies: photoelectrocolorimeter, refractometer, polarimeter, spectrophotometer, pH meter, electrophoresis apparatus, chromatography methods, etc.
- Determine the activity of enzymes in biological objects.
- Determine the amount of protein fractions in blood plasma and protein preparations.
- Determine the content of vitamins in products of plant and animal origin.
- Determine the content of certain components of metabolism in biological fluids.

Possess:

- in practice, use the knowledge gained in biochemistry in the practice of a pediatrician; apply the results of biochemical studies to diagnose diseases and monitor the effectiveness of treatment.

The total labor intensity of mastering the discipline is 7 credits.

C. 3 PROFESSIONAL CYCLE

ANNOTATED PROGRAM CONTENT

The purpose of the discipline: The formation of students' biological thinking, holistic natural science thinking, understanding of the essence of life, individual development, the relationship between organisms and the environment, the relationship between health and the environment.

Tasks of the discipline:

- To form basic knowledge and general concepts of modern biology;
- study the general patterns of the effect of environmental factors on human health;
- study the metabolism, individual development and forms of reproduction of organisms;
- study the evolutionary process and anthropogenesis;
- study parasitism and the basics of medical parasitology;
- learn the basic laws of heredity and variability;
- determine the biosocial essence of a person;
- to teach competent perception of practical problems of biology and education of ecological culture.

The content of the discipline. The origin of life on Earth. The flow of information, energy, and substances in the cell. Forms of reproduction of organisms. Ontogenesis. The proembryonic period. General patterns of embryonic development. Evolution of the organic world. Anthropogenesis. Environmental factors and their impact on human health. Ecological systems. Features of human ecology. The subject and tasks of genetics. The genetic system of the body. Genotype and phenotype. Inheritance of attributes. Interaction of allelic and nonallelic genes. Hereditary properties of blood. Patterns of inheritance at the cellular level. Patterns of inheritance at the molecular level. Modifications and mutations. Genomic, chromosomal, and gene mechanisms of mutations. The main directions of human genetics. Human genetics and eugenics. Introduction to medical parasitology. Fundamentals of medical protozoology. The Simplest type. Class Flagellates. Class of Infusoria. The Simplest type. Sporoviki class. The Sarcodaceae class. Fundamentals of Helminthology. Type Flatworms. Class Suckers. Type Flatworms. Tapeworms class. Type Roundworms. The class is actually roundworms. Type Arthropods. Subtype Cheliceræ. Class Arachnids. The pincer squad. Family Ixodaceae, Argasaceae, acarimorphic. Class insects. A group of lice, fleas. Squad diptera. Blood-sucking insects. Family of mosquitoes, mosquitoes.

As a result of mastering the discipline "Medical Biology, genetics, parasitology", the student must

know:

- subject, tasks and methods of studying biology;
- theories about the origin of life on Earth;
- evolutionary factors; reproduction and its forms; types, forms, periods of ontogenesis;
- proembryonic period;

- factors of growth and development; the subject and objectives of the science of ecology;
- ecological types of people;
- physical factors of environmental pollution; chemical factors of environmental pollution;
- biological factors of environmental pollution; anthropogenesis and its stages;
- driving forces of anthropogenesis;
- the subject and tasks of genetics;
- laws of heredity; forms of interaction of allelic and non-allelic genes;
- inheritance of human blood groups;
- features of the human karyotype; the gene and its properties;
- mutations and their role;
- the subject and tasks of medical parasitology;
- the role of vector-borne diseases;
- parasitism as a biological phenomenon;
- the influence of the parasite on the host; the influence of the host on the parasite;
- morphological adaptation of parasites;
- parasite life cycles;
- parasite control measures;
- the doctrine of natural focal diseases.

be able to:

- determine the components of cells and tissues;

- determine the types of eggs;
- distinguish the stages of gametogenesis;
- determine the dominant factor among the complex of factors;
- recognize environmental types of people;
- make a pedigree of a person;
- determine the inheritance of blood groups;
- exclude paternity according to the schemes;
- determine the sexual chromatin of a person;
- solve problems on inheritance of attributes;
- identify parasitic protozoa;
- determine the stages of development of flukes;
- identify the characteristics of tapeworms;
- distinguish the stages of ticks;
- fight against vectors of infections and infestations;
- to conduct sanitary and educational work to
own:
- microscopy techniques; human chromosome analysis skills;
- methods of studying human heredity (genealogical, twin);
- methods of diagnosing pathogens of parasitic diseases;
- methods of compiling and analyzing pedigrees;
- parasite control and infection prevention skills;

- methodology of preparation of reports, essays, abstracts

The total labor intensity of mastering the discipline is 6 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

" Microbiology, Virology and Immunology»

The purpose of the discipline: general laws of the structure, life activity and distribution of microorganisms of various classes in the Earth's biosphere, to have a clear understanding of the pathogenicity of microorganisms and its implementation in specific conditions of the occurrence of infectious diseases, about immunity as a state of a macroorganism in which the infectious process and immunopathological conditions develop, about drugs that provide specific treatment and prevention of infectious diseases, about the role of science in solving the problem of reducing and eliminating infectious diseases.

Tasks of the discipline:

- formation of students ' general ideas about the structure and functioning of microbes as living systems, their role in ecology and methods of decontamination, including the basics of disinfection and sterilization techniques;
- have an idea of the laws of interaction of the human body with the world of microbes, including modern ideas about the immune response to infectious agents (antigens);
- study the principles and methods of interpretation of the results obtained during microbiological, molecular biological and immunological studies of biological fluids, microbe-containing materials and pure cultures of microbes;
- teach students methods of carrying out preventive measures for the prevention of bacterial, fungal, parasitic and viral diseases;

- study the main directions of treatment of infectious human diseases (bacterial, fungal, parasitic, viral);
- develop students ' skills of working with scientific literature;
- acquaint students with the principles of organization of work in the microbiological laboratory, with measures for labor protection and safety.

Content of the discipline: The subject and tasks of medical microbiology, virology and immunology, the importance in the practical activity of a doctor. The device and equipment of the bacteriological laboratory. Research methods in microbiology. Microscopes, the principle of operation. Principles of systematics and nomenclature of bacteria. Structure of the bacterial cell. Functions of various structural elements of the bacterial cell. Physiology and biochemistry of bacteria. Carbohydrate and protein metabolism. Bacterial nutrition, types, and mechanism. Nutrient media, purpose and classification. Growth and reproduction of bacteria. Bacterial respiration, types and mechanism. Microbe enzymes, their classification, and significance. Morphology, classification, and nature of viruses. Reproduction of viruses. Methods of cultivation. Genetics of microbes and viruses. Variability of microbes. Mutations, mutagens, and their classification. Morphology of fungi. Microbiological and molecular-biological bases of chemotherapy. Antibiotics, sources and methods of preparation, mechanism of action, classification. Distribution and role of microbes in the environment. Microflora of air, water, and soil. Microflora of the human body. The value of conditionally pathogenic microflora. The concept of infection and the infectious process. Basic protection mechanisms. The concept of the body's immune system. Central and peripheral organs of the immune system. Immunity: types and forms. Non-specific factors of the body's defense. Specific forms of the immune response: humoral and cellular; immunological memory, immunological tolerance. Antigens, their properties, characteristics. Practical value. Antibodies. Characteristics, structure, and functions. Regulation of the immune response. Diagnostic reactions and methods.

Immunobiological preparations: immune sera, immunoglobulins. Vaccines. Classification, meaning. Methods of production and application. Allergy. Hypersensitivity of types I, II, III, and IV. The concept of clinical immunology. Immunopathology. Immunological insufficiency. Autoimmune diseases. Pathogens of purulent inflammatory processes. Staphylococci, streptococci. Morphology, cultural, virulent, and antigenic properties.

Epidemiological features. Pathogens of meningococcal and gonococcal infections, not gonorrheal urethritis. Morphology, cultural, virulent, and antigenic properties. Epidemiological features. Pathogens of diphtheria, pertussis, paracocclusis. Morphology, cultural, virulent, and antigenic properties. Epidemiological features. Pathogens of tuberculosis, leprosy. Morphology, cultural, virulent, and antigenic properties. Epidemiological features. Pathogens of intestinal infections. E. coli. Pathogens of typhoid fever, paratyphoid A and B. Morphology, cultural, virulent, and antigenic properties. Epidemiological features. Pathogens of salmonellosis - food toxicoinfections and dysentery. Pathogens of cholera. Morphology, cultural, virulent, and antigenic properties. Pathogens of gas gangrene, tetanus, botulism. Morphology, cultural, virulent, and antigenic properties. Pathogens of zoonotic infections: plague and tularemia, anthrax, brucellosis. Morphology, cultural, virulent, and antigenic properties. Pathogens of syphilis and recurrent typhus, leptospirosis. Morphology, cultural, virulent, and antigenic properties. Pathogens of typhus and Ku-fever. Morphology, cultural, virulent, and antigenic properties. Pathogens of mycoses and candidiasis. Morphology, cultural, virulent, and antigenic properties. Influenza virus, ARI viruses. Morphology, antigenic structure. Cultivation, methods of indication and identification. Influenza virus, ARI viruses. Morphology, antigenic structure. Enteroviruses, polio pathogens, Cocksackie, ESNO. Viral hepatitis. HIV. Morphology, antigenic structure. Cultivation, methods of indication and identification. Arboviruses, oncogenic viruses. Morphology, antigenic structure. Measles and rubella viruses. Morphology, antigenic structure. Measles and rubella viruses. Morphology, antigenic structure. Oncogenic viruses.

Rabies virus. Morphology, antigenic structure. Cultivation, methods of indication and identification.

As a result of mastering the discipline "Microbiology, Virology and Immunology", the student should

know:

- The main stages of the development of microbiology. The relationship of science with other disciplines, tasks and methods of research, the principle of systematics of microorganisms.
- The structure and shape of the bacterial cell with the function of various formations, their chemical composition, physiology, biochemistry of bacteria, features of nutrition, respiration, growth, reproduction.
- Distribution and role of microbes in the environment. Influence of environmental factors on microorganisms.
- Morphology, ultrastructure, classification, and nature of viruses. Cultivation, antigens, production and use of phages.
- Sources and methods of obtaining antibiotics, their classification by structure, spectrum and mechanism of action. About the reasons for the formation of drug resistance, complications in antibiotic therapy, methods for determining the sensitivity of microbes to antibiotics.
- The concept of the infectious process. Pathogenicity and virulence, toxicity of microbes. On the role of conditionally pathogenic microflora in human pathology, on nosocomial infections.
- Immunity, its types, mechanisms and factors: immunocompetent cells, their interaction in cellular and humoral immunity. Antigens, their properties, types. Antibodies, characteristics of different classes of immunoglobulins, mechanisms of interaction of antigens and antibodies.

- Allergies of immediate and delayed types, forms of manifestation, mechanisms of occurrence and preventive measures.
- Immunobiological preparations: diagnostic and therapeutic serums; vaccines. Principles of their production and application.
- Morphology, the main physiological properties of pathogens: bacterial (drip, intestinal, zoonotic), rickettsiosis, viral, fungal, protozoal infections. Have an understanding of the pathogenesis, the main clinical manifestations, methods of laboratory diagnostics, preventive measures and treatment principles.

be able to:

- Have the skills to comply with the rules of sanitary and hygienic and anti-epidemic regime and safety in bacteriological laboratories.
- Be able to take material for bacteriological and virological studies (sputum, pus, nasal and pharyngeal contents, feces, urine, blood).
- Have the skills to read the results of microbiological, virological, serological laboratory tests.
- Have the skills of decontamination of infected material, antiseptic treatment of the hands of laboratory workers contaminated with the test material, cultures of pathogenic microorganisms.
- Have the skills to prepare microscopic preparations from pure cultures of microbes, from pathological material (pus, sputum, blood). Be able to color drugs with simple and complex methods (according to Gram, Zil-Nelsen, Gins, Neisser, Romanovsky-Giemsa).
- Have the skills to differentiate microorganisms by morphological characteristics under microscopy.

- Have the skills of bacteriological work: to isolate pure cultures of aerobes and anaerobes, to be able to identify the isolated cultures by morphological, tinctorial, cultural, biochemical, and antigenic properties. Be able to determine phage sensitivity, phagotype and determine the sensitivity of bacterial cultures to antibiotics.
- Be able to set, take into account and evaluate the results of serological reactions: agglutination, indirect (load) agglutination, precipitation (in test tubes and in gel), complement binding, viral hemagglutination and inhibition of hemagglutination, virus neutralization in cell cultures and on a color sample.

Master:

- Methods of preparation and coloring of micro-preparations in simple and complex ways; as well as the method of immersion microscopy.
- Skills of sowing on solid and liquid nutrient media to obtain pure cultures of aerobic and anaerobic bacteria.
- Skills of isolation of pure culture and identification of pathogenic and conditionally pathogenic microorganisms.
- The ability to analyze the microbiological purity and sanitary-bacteriological state of water, soil, and air; to determine the total microbial contamination and sanitary-indicative microorganisms of water, air, hand washes, and objects.
- Perform work under aseptic conditions: disinfect and sterilize laboratory utensils, instruments, etc.
- Methods for determining the sensitivity of bacteria to antibiotics: decipher the antibioticogram and determine the minimum-overwhelming concentration of antibiotics.
- Use basic immune responses to diagnose infectious diseases.

- Provide explanations on the use of immunobiological drugs.

The total labor intensity of mastering the discipline is 9 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Normal anatomy" The purpose of the discipline: is to provide students with information for mastering the knowledge of the clinical anatomy of the human body in the amount necessary to continue their studies at the clinical departments of the Faculty of Pediatrics of the medical university and further professional activities.

Tasks of the discipline:

- formation of knowledge about the general principles of the layered structure of the human body, the anatomy of internal organs, muscle-fascial beds, cellular spaces, neurovascular bundles, bones and joints, weak points and abdominal hernias, about collateral blood circulation in violation of the patency of the main blood vessels, about areas of sensitive and motor innervation by large nerve trunks, topographic anatomy of specific areas.
- on the basis of the acquired knowledge, give an anatomical justification of the main clinical symptoms and syndromes, choose rational approaches and surgical interventions, and prevent possible intraoperative errors and complications.
- to form knowledge for clinical and anatomical justification and correct implementation of nursing, medical - diagnostic and therapeutic measures

Content of the discipline: Anatomy as a science. General osteology. Bones of the trunk: vertebrae, ribs, sternum. Upper limb bones: the bones of the shoulder girdle and the free upper limb. Bones of the lower limb: the bones of the pelvis and the free lower limb. General syndesmology. Joints of the bones of the trunk. Joints of the shoulder girdle bones. The joint of the bones of the free upper limb. Joints of

the pelvic bones. The pelvis as a whole. The size of the pelvis. Age-specific features. Joints of the bones of the lower limb. Skull. Bones of the medullary skull. Bones of the facial skull. Development of the facial skull and their anomalies. The whole skull. Connections of the skull bones. The temporomandibular joint. Introduction to myology. Muscles and fascia of the head. Neck muscles and fascia. Chest muscles and fascia. The aperture. Muscles and fascia of the back. Abdominal muscles and fascia. Weak points of the abdominal wall. Muscles and fascia of the shoulder girdle and shoulder. Muscles and fascia of the forearm and hand. Muscles and fascia of the pelvic girdle and thigh. Muscles and fascia of the lower leg and foot. Heart. Structure, blood supply, innervation. Conducting system. Pericardium. Large vessels of the heart. Circulatory circles. Fetal blood circulation. Regional lymph nodes. The aortic arch and its branches. Common carotid artery. The external carotid artery and its branches. Internal carotid artery and its branches. Subclavian artery and its branches. Veins of the head and neck. Regional lymph nodes of the head and neck. The thoracic aorta and its branches are visceral and parietal. Veins of the thoracic cavity. Regional lymph nodes of the thoracic cavity. Abdominal aorta, visceral and parietal branches. Abdominal veins. Regional lymph nodes of the abdominal cavity. Vessels of the small pelvis (arteries, veins). Regional lymph nodes of the pelvis. Axillary and brachial arteries and veins, their branches. Arteries and veins of the forearm and hand. Superficial and deep palmar arterial arches. Regional lymph nodes. Arteries of the lower extremity (femoral, popliteal artery). The arteries of the lower leg and foot. Veins of the lower limb. Regional lymph nodes of the lower extremity. Overview of the peripheral nervous system. Ganglia and roots. Spinal nerves and their formation. Anterior and posterior branches. Cervical plexus, branches. Brachial plexus, branches. Formation of the lumbar plexus, branches. Sacral plexus, short and long branches. General anatomy of the cranial nerves. Motor cranial nerves. III, IV, VI, XI, XII pairs. Mixed nerves. VII, IX, X pairs of cranial nerves. Mixed nerves. V pair of cranial nerves. Branches, areas of innervation. Vegetative nodes along the course of the trigeminal nerve. Sensitive nerves. I, II, and VIII pairs of cranial nerves.

Introduction to splanchnology. Anatomy of the digestive system. Anatomy of the respiratory system. Anatomy of the urinary system. Anatomy of the male and female genitalia. Anatomy of the central nervous system. Anatomy of the senses. Parasympathetic and sympathetic divisions of the autonomic nervous system. Age-related features in children.

As a result of mastering the discipline "Normal Anatomy", the student should know:

- the structure of organs, their position in the human body and the relationship with other organs in the body; the relationship between the structure and function of organs;
- anatomical and physiological, age-sex and individual features of the structure and development of a healthy person;
- topography of internal organs and their anatomical and topographic relationships, the projection of internal organs on the surface of the body;

be able to:

- show organs, their parts, and other anatomical formations on the corpse, preparations, tables, models, and other visual aids;
- on the human body, palpate (probe) and determine the position of individual organs, bone protrusions;
- project organs, large vessels and nerves on the surface of the body, to find the points of palpation of vessels (pulse);
- show organs, their parts and other anatomical formations on radiographs;
- use the knowledge of topographic anatomy and skeletotopy of organs in the diagnosis and treatment to

possess:

- the technique of the correct location of the bones of the axial skeleton, chest, free part of the skeleton, which is necessary for the description and assessment of their condition during X-ray and X-ray studies;
 - the technique of demonstrating the biomechanics of the joints of the human body in normal condition in accordance with the available axes of rotation, necessary for the correct assessment of the completeness of their movements during diagnosis, as well as their correct documentation;
 - appliances arrangement of internal organs and parts of the norm with respect to "I" to the "patient" for the proper evaluation of the results of physical research methods (inspection, palpation, percussion, and homotopie syntopia bodies), and methods of x-ray and endoscopic examinations, computed tomography (CT), magnetic resonance imaging (MRI), ultrasonography (us);
- anatomical terminology and eponyms that are required for the academic discipline "human Anatomy".

The total labor intensity of mastering the discipline is 9 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Clinical and topographic anatomy" The purpose of the discipline: the development of the discipline: anatomical and surgical training of students to provide the basic knowledge and skills necessary for subsequent classes in clinical departments and in independent medical activities to achieve the set learning goals. The objectives of the discipline: the study of topographic anatomy is primarily to give a layered description of the areas. Areas in topographic anatomy are the parts of the body that are separated from each other by natural or artificially drawn (conditional) lines (for example, the lateral area of the face, the anterior area of the

thigh). The natural boundaries are the skin folds (for example, inguinal), bony protrusions (for example, the iliac crest, clavicle). Topographical anatomy provides a synthesis of anatomical knowledge, while normal anatomy is primarily an analytical science that deals with the study of individual systems and the internal structure of individual organs.

Content of the discipline: Topographic anatomy of the chest, chest wall and their clinical significance, Topography of the diaphragm. Topographic anatomy of the thoracic cavity and its organs. Features of the topographic anatomy of the lung and pleura in children. Topographic anatomy of the pleura.

Topographic anatomy of the pericardium, heart, aortic arch and its branches. Topographic anatomy of the upper and lower vena cava, and the brachiocephalic veins. Age characteristics in children. Topographic anatomy of the vessels of the thoracic and abdominal cavities. Age characteristics in children. Topographic anatomy of the vessels of the upper and lower extremities.

Topographic anatomy of the anterior abdominal wall, borders, external landmarks. Dividing it into regions. Layered topography of the anterior abdominal wall. Formation of the peritoneum in the upper floor of the abdominal cavity. Topographic anatomy of the stomach, liver, gallbladder, and pancreas. Formation of the peritoneum in the lower floor of the abdominal cavity. Topographic anatomy of the small and large intestine. Age-related features in children.

Topographic anatomy of the lumbar region. Topographic anatomy of the organs of the retroperitoneal space. Age-specific features. Topographic anatomy of the bladder, ureter, prostate, and urethra. Age-specific features.

Topography of the cerebral part of the head. Age-specific features. Topographic anatomy of the visual organ. Age-specific features. Topographic anatomy of the outer, middle, and inner ear. Age-specific features. Topographic anatomy of the spinal cord and pathways. Age-specific features.

Topographic anatomy of the organs of the hematopoietic system. Age-specific features.

Features of topographic and anatomical formation of fascial-muscular cases of the upper limb. Topographic anatomy of the upper arm and shoulder. Topographic anatomy of the forearm and hand. Features of topographic and anatomical formation of fascial-muscular cases of the lower limb. Topographic anatomy of the lower limb.

Clinical anatomy of the internal female genitalia. Age-specific features. Clinical anatomy of the breast. Clinical anatomy of the male genitalia. Age-specific features. Clinical anatomy of the pituitary gland.

As a result of mastering the discipline "Clinical and topographic Anatomy", the student should know:

- the basic concepts of topographic anatomy;
- the principle of the layered structure of areas and the ability to use this knowledge in surgical interventions;
- general provisions on the structure of fascial-cellular structures, the topography of blood vessels, the structure and pathways of lymph outflow;
- topography of fascial-cellular spaces, principles of opening and draining purulent cavities, possible ways of pus congestion;
- topography of the "weak points" of the abdominal walls and topographical and anatomical justification of the formation of hernias;
- on the basis of this knowledge, present diagnostic methods and methods of treatment of hernias;

- topography of internal organs (holotopy, skeletotopy, syntopy) and topographical and anatomical justification for the choice of methods of examination and diagnosis, access to organs;
- topography of neurovascular formations and the use of this knowledge in accessing the main vessels and nerve trunks;
- the main sources of collateral blood circulation in various areas of the human body in order to predict the consequences of thrombosis or ligation of the main vessels at various levels and methods for eliminating their consequences;
- zones of sensitive and motor innervation, elements of topical diagnostics of peripheral nerve diseases.

be able to:

- properly use anatomical tools for dissecting cadaver material;
 - hold the scalpel and tweezers correctly (in a certain position) when making incisions;
 - choose the direction of the cuts in the head, neck, trunk, upper and lower extremities;
 - do longitudinal and transverse cuts of the bone saw canned and fresh bones;
 - to determine the compact and spongy bones;
 - make transverse cuts of the limbs and parts of the torso;
 - to study the various approaches to obtain a stand-alone drug;
 - identify the differences between arterial and venous trunks from nerve trunks;
- use knowledge of topographic anatomy for understanding the pathogenesis of pathological processes, their location, extent and manifestations of symptoms and syndromes, rationales, diagnosis and treatment and prevention of diseases;

– use external benchmarks to determine the boundaries of the areas of the human body to construct the projections of the internal organs and neurovascular bundles during various medical procedures and operative accesses to the organs, for diagnosing diseases;

- independently work with educational, scientific, normative and reference literature.

possess:

- skills of working with anatomical tools;

- skills in determining (measuring) the anthropometric parameters of a person;

- skills of sketching schematic images of generally accepted concepts;

- in the course of topographic anatomy:

- cross sections of the trunk and limbs, sinuses of the dura mater, fascia of the neck, triangles of the neck, weak points of the abdomen, inguinal and femoral canal, Krenlein Bryusova diagram.

The total labor intensity of mastering the discipline is 3 credits.

ANNOTATED PROGRAM CONTENT

Educational discipline

"Histology, cytology, embryology" The purpose of training: the formation of students' scientific ideas about the microscopic functional morphology and the development of human cellular, tissue and organ systems, including oral organs, providing a basis for the study of clinical disciplines and contributing to the formation of medical thinking.

Learning objectives:

- study of general and specific structural and functional properties of cells of all body tissues and patterns of their embryonic and postembryonic development;
- study of histofunctional characteristics of the main body systems, patterns of their embryonic development, as well as functional, age-related and protective-adaptive changes in organs and their structural elements;
- study of the main histological international Latin terminology; - formation of the ability to microscopize histological preparations using a light microscope

Program content

The subject and tasks of histology, its significance for medicine. Stages of histology development. Histology as a science and academic discipline. Methods of manufacturing preparations for light microscopy. The essence and methods of fixing micro-objects. Methods of compaction. Microtomy. The freezing method. The essence and methods of coloring micro-preparations and their conclusion in balsam, resin, gelatin. Types of micro-preparations. Microscopy techniques in light microscopes. Cytology, as a branch of histology, its significance for medicine. Cell theory, the main provisions of cell theory at the present stage of the development of science. General plan of the structure of the eukaryotic cell. The cell nucleus. The main components of the core. The nuclear envelope, its structure and functions. Nuclear envelope membranes, perinuclear space, nuclear pores, internal fibrous layer. Euchromatin and heterochromatin. Sexual chromatin. Mitosis, the phases of mitosis. Fundamentals of general embryology. Tasks of embryology. Comparative vertebrate embryology as a basis for understanding human embryonic development. Comparative embryology. Cytology. General embryology. The doctrine of fabrics. Epithelial tissue. Classification of fabrics. The concept of physiological and reparative tissue regeneration. Epithelial tissues. General characteristics of epithelial tissues. Blood and lymph. The concept of the mesenchyma. Mesenchyma derivatives. Blood as a tissue, its functions. Blood plasma. The doctrine of hematopoiesis. Sources and course of development of

blood as a tissue. Embryonic and postembryonic hematopoiesis. Actually-connective tissues. General morphofunctional characteristics of connective tissue. Cartilage tissue. Bone tissue. Muscle tissue. General characteristics, classification. Smooth muscle tissue. Striated skeletal muscle tissue. Development, structure, function, vascularization, innervation. The structure of the muscle fiber. Muscle tissue of the heart. Development, features of the structure. Types of cardiomyocytes. Ultramicroscopic structure of a typical cardiomyocyte. Nerve tissue. The concept of nervous tissue. The concept of neurosecretion. Neuroglia. Macroglia and microglia. Structure, classification, functional significance. Nerve fibers and nerve endings. Myelin-free nerve fibers: structure, location, properties. Myelin (pulp) nerve fibers. The concept of an axial cylinder and a mesaxon. Nerve endings. General characteristics. Classification. General histology. The doctrine of fabrics. Private histology. Development of the nervous system in embryogenesis. The central nervous system. The brain. The concept of cyto- and myeloarchitectonics of the cerebral cortex. Reticular formation, its structure and functional significance. The cerebellum. Structure, function. The spinal cord. General characteristics of the structure. The brain stem. Structure and neural composition. The peripheral nervous system. General characteristics of the structure of the central and peripheral parts of the parasympathetic and sympathetic systems. The senses. The concept of analyzers. Classification of the senses. The organ of smell. Structure and cellular composition of the olfactory lining: receptor, supporting, and basal cells. Organs of hearing and balance. Embryonic development. Structure. Histophysiology of sound perception. Age-related changes. The organ of taste. General characteristics. The endocrine system. General characteristics and classification of the organs of the endocrine system. Central and peripheral links of the endocrine system. Cardiovascular system. General principles of structure, tissue composition, embryonic development. Dependence of the structure of blood vessels on hemodynamic conditions. Arteries. Veins. Lymphatic vessels. Endocardium and heart valves. Myocardium, working, conducting, and secretory cardiomyocytes. Features of blood supply,

regeneration. The conducting system of the heart, its morphofunctional characteristics. Epicardium and pericardium. Innervation of the heart. Age-related changes in the heart. Organs of hematopoiesis and immune defense. General characteristics of the hematopoietic system and immune defense. The digestive system. General characteristics of the digestive system. Development and structure of the tooth. General plan of the structure, fabric composition. Dental development. Age-related changes. Digestive tube. Pharynx and esophagus. Stomach. Small intestine. The large intestine. Characteristics of different departments. Liver. The pancreas. The pancreas. General characteristics. Respiratory system. Characteristics of the respiratory system. Leather and its derivatives. Tissue composition, development. Regeneration. The epidermis. The dermis. Features of the structure of the dermis in the skin of various parts of the body. Age-related features of the skin and its glands. Excretory system. Characteristics of the urinary system. Nephron - as a morphofunctional unit of the kidney, its structure. Age-related changes in the kidney. Urinary tract. The structure of the wall of the renal calyces, pelvis, ureters and bladder. The male sexual system. The female sexual system. Human embryology. Periodization of development. Extra-germ organs. Factors affecting development: genetic, maternal, external (radiation, alcohol, smoking, drugs, infection, chemical and medicinal substances, pesticides, etc.). As a result of mastering the discipline "Histology, cytology, embryology", the student should know:

basic patterns of development and vital activity of the body based on the structural organization of cells, tissues and organs;

on histofunctional features of tissue elements, the physical basis of the functioning of medical equipment, the device and purpose of medical equipment;

general laws of the structure and functioning of organs and systems of the body;

scientific and medical information about the structure and development of organs and systems of the body.

Be able to:

- use physical, chemical and biological equipment;

- work with microscopes.

use educational, scientific, popular science literature, the Internet for professional activities.

analyze and describe the morphological features of the microscopic preparations and electronic micrographs under study;

use educational, scientific, popular science literature;

Own:

skills of microscopy of histological preparations

skills in working with scientific literature and the Internet.

medical and morphological conceptual apparatus

The total labor intensity of mastering the discipline is-8 credits.

Academic discipline

"Normal physiology" The purpose of the discipline: To form students ' systematic knowledge about the vital activity of the whole organism and its systems, about the basic laws of their functioning and the mechanisms of their regulation in interaction with the external environment, about the physiological foundations of clinical and physiological diagnostics and in the study of the integrative activity of the body.

Objectives of the discipline:

- Formation of ideas about the morphofunctional unity of the human body and the mechanisms of regulation of its various systems.
- Formation of ideas about the body as a single functional system that preserves homeostasis in changing environmental conditions.
- Students ' mastering of methods and methods of studying various body systems.
- Application of the acquired knowledge and skills in the study of biomedical and general professional disciplines.

Content of the discipline: The subject and tasks of physiology. Physiological methods of research. Mechanisms of maintaining homeostasis. Properties and functions of various proteins. Biomembranes, properties and functions. Mechanisms of substance transport. Excitability. Measurement measures. Characteristic of excitation. Bioelectric potentials in various cells (muscle, nerve). Functions and properties of skin, bone and nerve tissue. Physiological properties of the myocardium. Functions of the heart and blood vessels. The main parameters of hemodynamics are blood pressure, peripheral vascular resistance, linear and volumetric blood flow rates. Features of the cardiovascular system in children. Functions of the airways and lungs. Mechanisms of inhalation and exhalation. Lung volumes and capacities. Features of the respiratory system in children. The main processes occurring in the gastrointestinal tract (secretion, motility, absorption, incretion, excretion). Features of the gastrointestinal tract in children. Composition, functions, and physico-chemical properties of blood. Age-related features of blood parameters in children. Functions of the kidneys and nephron divisions. Mechanisms of urination. Humoral regulation of function. Physiology of nerves and synapses. Functions of the central nervous system. Classification, functions, and properties of neurons and glial cells. Reflexes (classification, functions), reflex arc. Feedbacks, views. Characteristics of the somatic and autonomic nervous systems. Gas exchange in the lungs and tissues. Digestion in the mouth and stomach. Digestion in the small and large intestines. The

physiological basis of hunger and satiety. Features of digestion in children. Anticoagulation system of the blood. Musculoskeletal system. Functions of joints, ligaments and tendons, and bones. Mechanisms of muscle contraction and relaxation. Hypothalamic-pituitary endocrine system. Principles of regulation of the activity of the endocrine glands. Hormones of the peripheral endocrine glands. Human reproductive function. Visual, auditory, and somatovisceral analyzers.

As a result of mastering the discipline "Normal Physiology", the student must know:

- the physiological basis of the vital activity of cells, organs, tissues and the whole organism in the conditions of its interaction with the environment of existence;
- the physiological functions of the body at various levels of organization, the mechanisms of their regulation and self-regulation;
- the main indicators that characterize the normal state of the physiological functions of the body and its systems, especially in children;
- physiological foundations of a healthy lifestyle;

be able to:

- physiological studies of the human body;
- give a physiological interpretation of the indicators obtained as a result of the study of individual functions of a healthy body, especially in children;
- evaluate the normal state of the body's functions and their reserve capabilities;

possess:

- a systematic approach to the assessment of physiological functions and their characteristic indicators.

The total labor intensity of mastering the discipline is 9 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Pathological physiology, clinical pathological physiology»

The purpose of the discipline: to study the main patterns and mechanisms of the development of the disease and recovery of a person. Formation of scientific knowledge about the general patterns and specific mechanisms of the occurrence, development and outcomes of pathological processes, individual diseases and pathological conditions, the principles of their detection, therapy and prevention. To train the student to conduct a pathophysiological analysis of the professional tasks of the doctor, as well as model situations; to form a methodological and methodological basis for clinical thinking and rational action of the doctor.

Tasks of the discipline:

- introduce students to the concepts of general nosology, etiology and pathogenesis.
- study the main typical pathological processes, such as local circulatory disorders (ischemia, hyperemia, stasis), typical metabolic disorders, etc.
- pay attention to the issues of modeling and experimental therapy of the most common pathological processes of some major diseases.
- mastering the theoretical foundations of general and private pathophysiology;
- familiarization with experimental methods of studying pathological processes, their capabilities, limitations and prospects;
- mastering the skills to solve situational problems and tests, to interpret the data of clinical and laboratory research methods;
- acquisition of skills to use the acquired knowledge to justify the principles of pathogenetic therapy of the most common diseases.

Content of the discipline: Subject, tasks, methods and sections of pathophysiology. Cell pathophysiology. Gene mutations. Chromosomal aberrations. Causes and mechanisms of the development of congenital malformations. Etiology and pathogenesis of regional circulatory disorders. Reactivity and resistance. Immunopathology. Allergy. Infectious process. Etiology and mechanisms of inflammation development. Proliferation and regeneration. Principles of inflammation therapy. Fever. Hyperthermia. Hypothermia. Protein-energy deficiency. Gout. Fasting. Obesity. Mechanisms of atherosclerosis development. Principles of therapy and prevention. Hypo- and hyperglycemia. Principles of therapy. Hypohydration. Hyperhydration. Edema. Types of hypoxia. Stages of carcinogenesis. Antitumor protection of the body. Principles of prevention and therapy. Etiology and pathogenesis of extreme conditions. Pathophysiology of obstructive and restrictive respiratory disorders. Pathophysiology of coronary insufficiency. Arterial hypo- and hypertension. Pathophysiology of heart failure. Maldigestion and malabsorption syndrome. Pancreatitis. Pathophysiological characteristics of jaundice. Pathophysiology of liver failure. Etiopathogenesis of portal hypertension syndrome. Pathophysiology of the kidneys. Pathophysiology of nephrotic and nephritic syndrome. Study of the mechanisms of development of AKI and CRF syndromes. Pathophysiology of uremia syndrome. Etiopathogenesis of diseases of the musculoskeletal system. Osteoporosis. Etiopathogenesis of arthrosis and arthritis. Etiopathogenesis of brain edema. Etiopathogenesis of neuroses.

Pathophysiology of anemic syndrome. The pathophysiology of the white blood system. Pathophysiology of endocrine disorders. Etiopathogenesis inflammatory diseases of the pelvic organs. Pathophysiological characteristic of menstrual cycle disorders. Pathophysiological characteristic of disorders of generative and capulitative function in men, leading to infertility.

As a result of the mastery of the discipline "Pathological Physiology, Clinical Pathological Physiology" the student should know:

- Basic concepts of general nosology;
- the role and importance of the body's causes, conditions and reactive properties in the occurrence, development and completion (exodus) of diseases;
- causes and mechanisms of typical pathological processes and reactions, their manifestations and importance to the body in the development of various diseases;
- Causes, mechanisms and most important manifestations of typical disorders of organs and systems of the body;
- the importance of the experimental method in the study of pathological processes: its possibilities, limitations and perspectives;
- the importance of pathological physiology for the preventive direction of Kyrgyz health and clinical medicine;
- the relationship of pathophysiology with other life sciences and medical disciplines;
- functional human systems, their regulation and self-regulation when interacting with the external environment, especially in children;
- basic patterns of development and vital activity of the body and principles of the development of pathological processes;
- Determining the pathological process in the development of various nosologies;
- morphofunctional patterns of adaptation processes in human activity, especially in children;
- etiology, development mechanisms and principles of diagnosis of pathological processes and conditions.

can:

- Apply the knowledge in the study of clinical disciplines and in subsequent treatment and prevention activities;
- analyze the issues of general pathology and correctly evaluate modern theoretical concepts and directions in medicine;

- plan and conduct (in accordance with the relevant rules) experiments on animals, process and analyze the results of experiments, correctly understand the importance of the experiment for the study of clinical forms of pathology;
- to register mechanograms and breathing in acute experiments on animals;
- master the cytological methods of determining sexual chromatin and its interpretation;
- determine the basic types of hypoxia by the gas blood test;
- Build temperature curves and determine the types of feverish reaction;
- be able to interpret the results of basic diagnostic, allergic samples;
- be able to interpret the results of the experiment correctly and conduct etiopathic analysis;
- Apply knowledge about the structure and functions of organs and systems of the human body in the provision of medical care;
- analyze the importance of morphofunctional changes in organs and tissues in the development of typical pathological processes.

possess:

- conceptual module and algorithms to differentiate the normal indicators of the constants of the internal environment of the body;
- skills in differentiating the causes and conditions of typical pathological processes;
- skills of differentiating the causes and conditions of pathological processes and diseases, assessing the risks of chronicization, complications and relapses, especially in children;
- conceptual module and algorithms, allowing to differentiate the normal indicators of the constants of the internal environment of the body, features of childhood;

The total labor-intensiveness of mastering the discipline is 9 credits.

ANNOTATED CONTENT

Educational discipline

"Pathological anatomy, clinical pathanatomy"

The purpose of the training:

- Study of the structural foundations of diseases, their etiology, pathogenesis and morphogenesis for the use of the knowledge gained in clinical departments for the training of a broad-based physician.

Learning tasks:

study:

- stereotypical pathological processes, the totality of which determines the morphological manifestations of a disease;
- etiology, pathogenesis and morphology of diseases at different stages of their development (morphogenesis), structural foundations of recovery, complications, outcomes and individual consequences of diseases;
- morphology and mechanisms of the body's adaptation and compensation processes in response to the impact of pathogenic factors and changing environmental conditions;
- changes in diseases arising, both in connection with changing human conditions and treatment (pathomorphosis), and as a result of therapeutic and diagnostic manipulations (pathology therapy);
- pathology service, its tasks in the health care system and organizational and practical forms of solving these problems.

Discipline content:

Introduction to pathological anatomy. autopsy. Stromal vascular dystrophy. Mixed dystrophy. death. necrosis. infarct. Circulatory disorders-I. plethora. bleeding. anemia. Violations of lymph perception. Violations of tissue fluid content. Circulatory disorders-II. thrombosis. embolism. shock. General pathology of inflammation. Exudative inflammation. Productive inflammation. Compensatory and adaptive processes. General pathology of tumors. Organone-specific epithelial tumors. Mesenchymal tumors. Tumors of melanin-forming tissue. Tumors in children. Prenatal pathology. Perinatal pathology. Introduction to nosologies. Immunopathological processes. atherosclerosis. Ischemic (coronary) heart disease. Hypertension. Rheumatic diseases. Acquired heart defects. Respiratory diseases. Endocrine system diseases. Digestive diseases. Liver disease. Kidney disease. Intestinal infections. tuberculosis. Particularly dangerous infections. Children's bacterial infections. Children's viral infections. Acute respiratory-viral infections. sepsis. Placenta pathology. Pre-tumor diseases and tumors of the uterus, ovaries and breast.

As a result of the discipline "Pathological Anatomy, Clinical Pathological Anatomy" the student must

To know:

- Content, tasks, objects and methods of research of pathological anatomy, its place in medical science and health practice. Historical development of pathological anatomy. Tasks, goals, autopsy methods.
- Definition, mechanisms, causes, pathogenesis, classification, morphological manifestations, outcomes of dystrophy.
- Definition, cause, classification, signs of death, necrosis, apoptosis.
- Classification, causes, morphology of circulatory disorders, lymph circulation and tissue fluid content.
- The essence, biological and medical value of adaptation and compensation. Definition, essence, morphogenesis, causes, morphology of regeneration, hypertrophy, hyperplasia, atrophy.

- Definition, biological essence, etiology, pathogenesis, morphology, classification, inflammation outcomes
- Definition, distribution, classification, etiology, morphogenesis, histogenesis, morphology and tumor properties
- Causes, development mechanisms, morphological characteristics
- pathological processes of the prenatal period.
- Perinatal pathology, its causes, pathogenesis, morphological characteristic.
- Etiology, pathogenesis, morphological characteristics of atherosclerosis, hypertension and coronary heart disease.
- Etiology, pathogenesis, pathological anatomy of rheumatic diseases, heart defects, cardiomyopathy, vasculitis.
- Etiology, pathogenesis, classification and pathological anatomy of acute inflammatory and chronic non-specific lung diseases.
- Etiology, pathogenesis, classification and pathological anatomy of endocrine system diseases.
- Etiology, pathogenesis, pathological anatomy and classification of gastritis, ulcers and appendicitis.
- Etiology, pathogenesis, morphological characterization and classification of glomerulopathy, tubulopathy, nephrosclerosis, kidney-stone disease and pyelonephritis.
- Etiology, pathogenesis, morphological characteristics and classification of hepatosis, hepatitis and cirrhosis of the liver.
- Biological and social factors in the development of infectious diseases. Signs and classification of infectious diseases.
- Etiology, pathogenesis, classification, pathological anatomy and pathomorphosis of primary, hematogenic and secondary tuberculosis.
- Etiology, pathogenesis, classification and morphological characteristics of typhoid, dysentery and salmonellas.

- Features of particularly dangerous infections, etiology, pathogenesis, morphology of especially dangerous infections. Features of autopsy and burial of corpses of dead from particularly dangerous infections.
- Differences between sepsis and other infectious diseases. Etiology, pathogenesis, classification and pathological anatomy and pathomorphosis of sepsis.

can:

- To work on a light biological microscope, to read electrons correctly.
- Diagnosis of signs of biological death, macroscopic and microscopic manifestations of necrosis
- Macroscopically and histologically diagnose signs of blood and lymph-processing disorders.
- Diagnose macroscopic and histological manifestations of dystrophy.
- To diagnose macro- and microscopic signs of inflammation.
- To diagnose macroscopic and histological signs of compensatory and adaptive processes.
- Diagnose macroscopic and microscopic signs of tumors.
- Diagnose morphological changes that occur in prenatal and perinatal pathology.
- To diagnose macroscopic and histological manifestations of atherosclerosis, hypertension and coronary heart disease.
- Diagnose macro- and micro-signs of lung disease.
- To diagnose macroscopic and histological manifestations of endocrine system diseases.
- Diagnose macroscopic and histological characteristics of gastritis, ulcers and appendicitis.
- Diagnose macroscopic and histological signs of hepatitis, hepatosis and cirrhosis of the liver.
- Diagnose macroscopic and microscopic characteristics of kidney disease.
- Diagnose macro- and micro-TB.

- To diagnose macroscopic and histological signs of intestinal infections.
- Diagnose the macroscopic and microscopic characteristics of particularly dangerous infections.
- Diagnose macroscopic and histological signs of sepsis.
- To diagnose macroscopic and microscopic manifestations of childhood infections.
- Diagnose macroscopic and microscopic signs of SARS.
- To carry out differential diagnosis of various general pathological processes and diseases, to decipher the mechanism of their development, as well as to assess their functional value.
- Compare clinical data and morphological manifestations of pathological processes and diseases.
- Be able to draw up a protocol (written description) and give an oral description of the objects studied (macro- and micro-drugs).
- To be able to work with additional and scientific literature and write abstracts.

possess:

- The skills of macroscopic diagnosis of pathological processes.
- The skills of drawing up a written description (protocol) of changes in organs in pathological processes and diseases.
- Skills on a light biological microscope.
- The main methods of determining the criteria of histological diagnosis of pathological processes.
- Basic skills of macroscopic and microscopic diagnosis of various human diseases
- The skills of comparing clinical manifestations and morphological changes in pathological processes and diseases

The total labor-intensiveness of mastering the discipline is 9 credits.

ANNOTATED CONTENT

Educational discipline

“Basic Pharmacology”

The purpose of the discipline is to train a specialist with systemic pharmacological thinking, knowledge, skills and skills capable of applying them in professional activities in the conditions of innovative development of society.

Discipline tasks:

- introduce students to the basic patterns of pharmacokinetics and pharmaceutical dynamics of medicines;
- teach students to analyze the action of medicines on the totality of their pharmacological effects, mechanisms and localization of action, pharmacokinetic parameters;
- to develop students' ability to evaluate the possibilities of choosing and using medicines based on ideas about their properties for the purposes of effective and safe prevention, pharmacotherapy and diagnosis of diseases of individual human systems;
- teach students to recognize possible side and toxicological manifestations when using medicines and to treat them;
- to develop the skills of students to solve individual research and applied tasks in the field of pharmacology, taking into account the ethical, deontological aspects, basic requirements of information security;
- teach students the methodology of mastering pharmacology with scientific, reference literature, official statistical reviews, Internet resources and evidence principles.
- to develop students' healthy lifestyle skills, work organization, safety regulations, and environmental safety monitoring.

Content discipline: Introduction. The history of pharmacology. The subject and tasks of pharmacology, the connection with medical and biological sciences. General pharmacology. Cholinergic remedies. Adrenergic means. Drugs for anesthesia. Analgesing agents. Sleeping pills, anticonvulsants. Psychotropic drugs. Means that affect the function of the respiratory system. Remedies that affect the functions of the digestive organs. Cardiogenic drugs. Anti-arrhythmics. Antianginal remedies and hypolipidemics. Hypotensive. Urinary, uterine. Uricosuric means. Means that affect the blood system. Anti-inflammatory drugs. Anti-allergic agents. antibiotics. Antiproto-zo. Antifungals. Anti-worm remedies. Antiseptic and disinfectant. Anti-TB, antischistosomal. Antivirals.

As a result of the basic pharmacology discipline, the student must

To know:

- classification and the main characteristics of medicines, pharmacodynamics and pharmacokinetics, indications and contraindications to the use of medicines; Side effects;
- General principles for prescriptions and prescriptions for medicines;

can:

- To analyze the action of medicines on the totality of their pharmacological properties and the possibility of their use for therapeutic purposes;
- - to write prescriptions of medicines, to use various drug forms in the treatment of certain pathological conditions, based on the characteristics of their pharmacodynamics and pharmacokinetics;
- Use basic antibacterial, antiviral and biological drugs;
- Assess possible drug overdoses and ways to eliminate them;

possess:

- skills in the use of medicines in the treatment, rehabilitation and prevention of various diseases and pathological conditions

The total labor-intensiveness of mastering the discipline is 7 credits.

ANNOTATED CONTENT

Educational discipline

“Clinical Pharmacology”

The purpose of the discipline: to form sustainable knowledge, clinical thinking and competence in the rational use of medicines, based on the methodology of personalized medicine, the combination of clinical value and safety of LS and the principles of evidence-based medicine.

Discipline Tasks: Educate students:

- principles and methods of choosing the most effective and safe LS for personalized drug therapy in mono or combination therapy, taking into account the basic parameters of clinical pharmacokinetics and pharmacodynamics, dosing regimen, methods of monitoring effectiveness and safety;
- the choice of appropriate LS taking into account age-related aspects, physiological conditions, changes in the functions of the elimination organs, correction of the dosing regime and methods of monitoring efficiency and safety;
- analysis and evaluation of the effects of the interactions of LS with their combined use, the effect of food, alcohol, smoking;
 - Develop skills in pharmaco-surveillance, forecasting, prevention, detection and correction of undesirable drug reactions and fulfilling the requirements of the legislative framework in the field of LS treatment in the Kyrgyz Republic;
 - competent analysis of the results of significant randomized, controlled LS studies, use and skill of the principles of evidence-based medicine.

Content of discipline: Introduction to clinical pharmacology. Drug side effect. Classification. Monitoring and evaluation of drug safety. Drug-based drug-based drug selection. Clinical-pharmacological approaches to the choice of medicines in

iron deficiency anemia. Clinical-pharmacological approaches to the choice of medicines in diabetes. medicines for coronary heart disease. Clinical-pharmacological approaches to the choice of medicines for chronic heart failure. Clinical-pharmacological approaches to the choice of medicines used for the treatment of thyroid diseases. Clinical-pharmacological approaches to the choice of medicines used in gastroduodenal ulcers. Types of clinical research designs. Formulating a clinical question. Components of a properly worded clinical question (PICO). General principles of rational use of antibacterial products. General principles of perioperative antibiotic prophylaxis. Clinical trials of medicines, phases. Drug promotion: Aggressive marketing of pharmaceutical companies. Clinical-pharmacological approaches to the choice of medicines used for the treatment of helminthiasis.

As a result of the mastery of the Clinical Pharmacology discipline, the student must
To know:

- The main symptoms and syndromes are the most common diseases of the organs and systems of the child's body depending on the periods of development.
- Group affiliation and pharmacodynamics of the main groups of medicines;
- The characteristics of the main pharmacokinetic parameters of LS, their dynamics, the dosing regime for various pathologies, as well as in newborns, children and the elderly, during pregnancy and lactation, depending on the nature of the disease and the functional state of the patient's body, the presence of bad habits (smoking, alcoholism, drug addiction);
- The basic principles of drug-therapeutic (especially LS with a narrow therapeutic index).
- Features of dosing of medicines taking into account chronobiology and chronopharmacology; Including features of suction, metabolism, excretion of LS, manifestations of pharmacological effects;

- Methods for assessing the clinical efficacy and safety of the use of key drug groups;
- The main adverse drug reactions, their detection, classification and registration. Ways to prevent and correct unwanted drug reactions;
- The main types of drug interaction (pharmaceutical, pharmacokinetic and pharmacodynamic), drugs-inductors and medicines- inhibitors of liver enzyme systems;
- The relationship between pharmacokinetics and pharmacodynamics, clinical efficacy and safety of medicines in patients with different stages of damage to the main functional systems.
- Phases of clinical study of new drugs: pharmacological study on healthy volunteers, placebo-controlled trials in patients with a specific disease, randomized controlled trials in large groups, post-regional studies.
- Principles of clinical-pharmacological approaches to the selection of groups of medicines used for pharmacotherapy of the main diseases of internal organs, taking into account the level of "Evidence-based medicine."
- The means of choice for cupping the main symptom complexes in urgent conditions.

can:

- To comply with the rules of medical ethics and deontology; to solve a set of problems related to the relationship between the doctor and the patient.
- Analyze the results of the study of pharmacokinetics and pharmacodynamics of medicines.
- Make adequate choices and prescribe the most effective, safe and affordable medicines.
- Choose the necessary set of routine (poll, examination) and special laboratory and functional methods of research on systems to assess

the pharmacodynamic effects of medicines and interpret the data; choose methods of adequate control of the effectiveness and safety of treatment and predict the risk of adverse reactions.

- Collect pharmacological and allergological history.
- Determine the optimal dosing regime; choose the drug form, dose, pathway, multiple and duration of LS administration.
- Know the specifics of the choice of LS depending on the timing of pregnancy, lactation, in preterm and newborns; pharmacological samples to assess individual sensitivity to LS.
- Identify undesirable drug reactions when prescribing the most common LS, classify, register and suggest ways to prevent and correct them.
- Use scientific literature, personal form, reliable and objective sources of information, electronic databases, Internet resources.
- To carry out an expert assessment of the correctness of choice, effectiveness and safety of the use of LS in a particular patient.
- To present the impact of medicines on quality of life parameters.

possess:

- Choose p-group (personal) medicines, depending on the diagnosis and purpose of treatment;
- choose A-drug based on efficiency, safety, acceptability and cost.
- to choose a drug form, the way of administration, dosing regimen of the drug in a particular clinical situation;
- predict and determine the risk of side effects of LS;
- To carry out a combined prescribing of medicines;
- Compliance with the rules of medical ethics and deontology;
- inform the patient about the planned drug therapy;
- explain to patients the way and time of taking the drug or their combination.
- assess the effectiveness and safety of drug therapy.

The total labor-intensiveness of mastering the discipline is 2 credits.

ANNOTATED CONTENT

Educational discipline

"Dentistry with Pediatric Dentistry"

purpose:

Tasks:

The content of the program:

A pediatric student should know:

The main features of the anatomical structure of teeth and jaws in childhood;

Features of the clinical manifestation of major dental diseases and diseases and maxillary heart damage in children and adolescents;

The influence of hereditary factors and environmental factors on the occurrence of major dental diseases;

Existing methods of diagnosis, treatment of major dental diseases and diseases and damage to the maxillofacial area in children, methods of their prevention and ways of rehabilitation of children.

can:

- - to examine children with diseases of teeth, oral organs and maxillofacial area;
- to make diagnosis and differential diagnosis for diseases of teeth, mucous membrane of the mouth and periodont in children;
- to survey children of different age groups;
- establish psychological and speech contact with a healthy and sick child;
- establish emotional and psychological contact with the child and his parents;
- - to diagnose acute dental diseases and provide first medical care for them;
- - to diagnose injuries and injuries to the face and jaws, to provide first aid in them;

- To be able to feed a child if the face and jaws are damaged;
- assess the child's neuro-mental development, physical and intellectual development, his general condition;
- explain the specifics of the clinical course of various inflammatory diseases and damages of the maxillofacial region (CHLO), based on the anatomical and physiological features of the child's body;
- to comply with sanitary standards, to use personal protective equipment correctly;
- assess the child's condition based on the examination data and the results of additional study methods based on the diagnosis;
- to make differential diagnosis of various inflammatory diseases between themselves and other diseases;
- Determine the place of treatment of the child (polyclinic, hospital) and the amount of surgical care;
- Prescribe and use drugs at an age dosage;
- prescribe vitamin therapy, immunomodulatory therapy and medicines that stimulate the non-specific protection of the child's body;
- read review X-rays of jaw bones, orthopantomograms, panoramic and intraortic X-rays, contrast X-rays;
- to identify children with pronounced dental abnormalities and deformities and refer them to a dentist, a pediatric surgeon and an orthodontist to provide specialized care and take them to the dispensary;
- - to be able to issue a referral for hospitalization of a child in a specialized institution.

possess:

- Medical documentation skills
- - emergency skills in emergency conditions (fainting, collapse, shock) at a children's outpatient appointment;

- - methods of external examination of chLO, torso, limbs, palpation of CHLO, methods of bimanual palpation of TMHS, clinical study of joint function (opening the mouth, displacement of the lower jaw, sound symptoms of disorders, etc.);
- - methods of oral examination in children (the condition of the mucosa, alveolar growths, tongue, soft and hard palate, the position of the teeth, palpatorial examination of soft tissues, jaw and facial bones for signs of inflammatory process or tumor growth (the presence of pigment spots on the skin, vascular pattern, symptoms of compression, infusion, etc.);
- Methods of external examination of the face and neck for the detection of congenital malformations of chLO.
- to solve the issue of hospitalization of the child and to issue a referral to a specialized institution.

The total labor-intensiveness of mastering the discipline "Dentistry with Pediatric Dentistry" is 2 credits.

ANNOTATED CONTENT

Educational discipline

“Ophthalmology”

purpose:

Acquisition of theoretical knowledge, skills and practical skills required by the doctor of the general practice to provide ophthalmological care to adults and children with visual organ pathology.

Tasks:

- Teach students basic research techniques in ophthalmology. To master the method of determining the functions of the organ of vision.
- Introduce students to the common diseases of the anterior and posterior segments of the eyeball, the principles of their diagnosis and medical treatment.

- Introduce the indications for surgical treatment of cataracts, glaucoma.
- To teach students to provide emergency care in case of acute glaucoma, acute vascular visual impairment, to introduce the methods of early diagnosis and treatment of glaucoma.
- To study the clinical picture of damage to the visual organ, to teach to determine the urgency of referral to an ophthalmologist, to provide first aid for blunt, penetrating wounds, eye burns.
- Be able to diagnose congenital visual anomalies, retinoblastoma, visual impairment in order to refer to specialists in a timely manner.

The content of the program:

Clinical features of the visual analyzer. The overall structure of the visual organ. The structure and functions of the fibrous shell (cornea, sclera), vascular shell (iris, ciliary body, retina). Anatomy of an appendage, physiological features. Visual-nervous pathways. The structure of the eye socket, the eye muscles. Anatomy and physiology of the eyelids. The connective shell of the eye. Anatomy and physiology of tear organs. Blood supply to the eyeball and its appendages. Nerves of the eye and eye sockets. The functions of the visual analyzer. Central vision. Visual acuity. Color perception. The concept of visual acuity. The angle of view. Methods of determining visual acuity (objective and subjective methods). Snellen's formula. Definition of visual acuity is below 0.1. Determining visual acuity in children. Color perception. Three-part theory of color vision. Diagnosis of color perception. Peripheral vision. sight. Lighting. The field of view and methods of its definition (control method, campimetry, types of perimeter). Physiological changes. Pathological changes in the field of vision (concentric narrowing of the field of vision, classification of diseases, types of hemianopia). Exploring light. Twilight vision disorders. Optical eye system. Physical and clinical refraction. The concept of astigmatism, classification. Accommodation, accommodation mechanism. Pathology of the optical system of the eye - hypermetropia, myopia, astigmatism, presbyopia. Clinic of emmetropia, hypermetropia, myopia. Methods of research in ophthalmology. The method of lateral lighting, research by passing light.

ophthalmoscopy. Biomicroscopy. Gonioscopy. Scleral translucent. Study of intraocular pressure. Study of corneal sensitivity. Fluorescent angiography. OCT. Ultrasound of the eye. Binocular vision. squint. Swelling of the eyelids, blepharitis, chalazion: etiology, clinic, treatment. Exogenous infectious conjunctivitis, allergic conjunctivitis, dystrophic changes in conjunctiva. Scleritis, episcleritis (clinic, etiology, treatment). Acute dacryoadenitis. Narrowing, twisting, tear-pointing. Dacryocystitis of adults and newborns: etiology, clinic, treatment. Meibomian tear sac: etiology, clinic, treatment. Corneal disease. Red eye syndrome. Keratomycosis. Tuberculosis, herpetic, syphilitic, neuroparalytic, avitaminous keratitis. Vascular diseases. Features in children. Clinic of iritis and iridocyclitis. Clinic of peripheral uveitis. The clinic of chorioiditis (hearth and dissected). Diseases of the orbit and vitreous body. Congenital cataracts: clinical forms, treatment principles, timing of surgery. glaucoma. Classification, clinic, principles of treatment. Retinal disease. White eye syndrome. Retinal diseases in cardiovascular pathology. Diabetic retinopathy. Changes on the eye bottom in rheumatism. Eye injury. Concussions, penetrating wounds. Damage to the orbit, appendages of the eye. General and local treatment of eye diseases. Methods of administration of eye medicines and features of their pharmacodynamics. Parasitic diseases of the eyelids. Blepharitis. Computer visual syndrome. Dry eye syndrome. Allergic diseases of the eyelids. AIDS and eye. Tuberculosis lesions of the eyes.

As a result of the "Ophthalmology" discipline, the student must

To know:

- diseases associated with adverse effects of climatic and social factors, socially significant diseases, history of disease research.
- concepts of etiology, pathogenesis, morphogenesis, pathomorphosis of disease, nosology, principles of classification of diseases, basic concepts of general nosology in ophthalmology
- diagnostic methods, diagnostic capabilities of methods of direct study of the ophthalmological patient, modern methods of clinical, laboratory, instrumental examination of patients;

- diagnostic methods, diagnostic capabilities of methods of direct study of the ophthalmological patient, modern methods of clinical, laboratory, instrumental examination of patients;
- Criteria for the diagnosis of various eye diseases;
- classification and the main characteristics of medicines, pharmacodynamics and pharmacokinetics, indications and contraindications to the use of medicines, side effects;
- Criteria for diagnosing eye disease;
- features of the organization and the volume of work of the outpatient and polyclinic doctor, modern diagnostic capabilities of the outpatient service, methods of emergency measures, indications for the planned hospitalization of patients;
- principles of first aid and follow-up medical tactics in emergency ophthalmic conditions.

can:

- analyze socially significant processes in society and causes of socially significant diseases, identify these diseases, identify measures to reduce them.
- use educational, scientific, non-fiction, Internet for professional activities;
- work with magnifying techniques (microscopes, optical and simple magnifying glass);
- determine the patient's status:
- collect history, conduct a survey of the patient and/or his relatives, conduct a physical examination of the patient
- Assess the patient's condition to decide whether to provide medical care;
- to outline the amount of additional research in accordance with the disease prognosis, to clarify the diagnosis and obtain a reliable result;
- to examine and examine the visual organ
- use basic antibacterial, antiviral and biological drugs;
- Interpret the results of the most common methods of functional diagnostics;

- To formulate a clinical diagnosis;
- to formulate indications to the chosen method of treatment taking into account etiotropic and pathogenetic means, to justify pharmacotherapy in a particular patient in the main pathological syndromes and emergency conditions, to determine the pathway, regimen and dose of drugs, to assess the effectiveness and safety of the treatment;
- to choose an individual type of care for the treatment of the patient in accordance with the situation: primary care, ambulance, hospitalization;
- use in therapeutic activities methods of primary and secondary prevention (based on evidence-based medicine).

possess:

- practical work on reducing social diseases and social factors that influence the development of eye diseases.
- medical-anatomical conceptual apparatus;
- basics of medical diagnostic and medical measures to provide first aid for urgent and life-threatening conditions
- General clinical examination methods;
- Interpretation of laboratory results, instrumental diagnostic methods;
- to provide first medical care for urgent ophthalmological conditions in accordance with the modern requirements for the quality of medical care and to decide on follow-up medical tactics:
- skills in the use of medicines in the treatment, rehabilitation and prevention of eye diseases;
- algorithm of pre-diagnosis, followed by sending the patient to the appropriate specialist.

The total labor-intensive mastery of discipline is - 3 credits.

ANNOTATED CONTENT

Educational discipline

“Otolaryngology”

The purpose of the discipline: the formation of the clinical thinking of the student in the field of ENT diseases by training diagnostic skills, differential diagnosis, and therapeutic and preventive measures.

Discipline tasks:

- to study etiology, pathogenesis and pathomorphological changes in ENT diseases;
- to teach mechanisms of development and manifestation of the pathological process in ENT diseases;
- develop practical skills in diagnosing ENT diseases, as well as to teach methods of first aid;
- to explore preventive measures to prevent the ENT from occurring and spreading diseases.

Content of discipline: Introduction and history of otolaryngology service in THE CR. Rinogen and otogenic intracranial complications. Clinical anatomy and methods of study of the outer and middle ear. Clinical anatomy, physiology and methods of study of the ear and ear. Chronic rhinitis and sinusitis. Allergic diseases of the nasal cavity and sinuses. Acute diseases of the throat. Chronic pharyngitis. Hypertrophy of the non-lung and nasopharyngeal tonsils, symptoms and treatment. Acute inflammatory diseases of the outer and middle ear. boil. Acute otitis medium. Mastoiditis. Chronic inflammatory diseases of the middle ear. Mesotimpanitis. Epitimpanitis. Differential diagnosis and complications. Diseases of the larynx, trachea, bronchi and oesophagus. Acute and chronic laryngitis, diphtheria, paresis and larynx paralysis. Bleeding, foreign bodies, injuries and burns to ENT organs. Stenosis of the throat, larynx and trachea, acute stenosis laryngotracheitis. Non-dark ear diseases. The middle ear. Meniere's disease. otosclerosis. Neuritis of the auditory nerve.

As a result of the mastery of the discipline "Otolaryngology" the student must

To know:

- etiopathogenesis, clinical picture, diagnosis,

- differential diagnosis, treatment of diseases of the nose and sinuses; The development of rhinogenous orbital and intracranial complications;
- features of surgical treatment of diseases of the nose and sinuses; Principles of front and back swabs of the nose and patient care;
- Diagnostic methods and principles of treatment of foreign bodies of the respiratory tract;
- conservative and surgical treatment of larynx stenosis,
- diagnostic methods and principles of treatment of diseases of the ear and outer ear canal, acute and chronic purulent diseases of the ear;
- etiology, pathogenesis, clinical picture, methods of diagnosis, treatment and prevention of intracranial complications of diseases of otolaryngological organs;
- principles of differential diagnosis of meningitis.

can:

- to investigate the function of nasal breathing,
- olfactory function of the nose;
- investigate hearing acuity with whispering, auditory function by tuning;
- Read your auditory passport and audiogram;
- Explore the vestibular function of rotating on Barani's chair;
- to detect signs of disease and damage to otolaryngological organs on X-rays of the bones of the nose, sinuses, temporal bones.

possess:

- method of using frontal reflector, otoscopy;
- methods of performing pharyngoscopy, anterior and posterior rhinoscopy, examination of the nose;
- Technique of performing the anterior tamponade of the nose; method of performing a conicotomy.

The total labor-intensiveness of mastering the discipline is 3 credits.

ANNOTATED CONTENT

Educational discipline

"The Propedeutics of Internal Diseases"

The subject of internal disease propedeutics at the Faculty of Pediatrics is a clinical procedure for the patient's clinical examination, and on the basis of the identified symptoms and signs of building major clinical syndromes.

Discipline tasks:

To teach students the basic clinical methods of examination of the therapeutic patient;

To familiarize yourself with the main laboratory and instrumental methods of examination;

Identify the main clinical and laboratory-instrumental symptoms;

- based on the identified clinical and laboratory-instrumental signs to build major clinical syndromes;

To introduce students to the basics of medical ethics and deontology.

Content of discipline: The subject and tasks of propedeutics of internal diseases. Internal medicine and its place among other medical disciplines. Mastering the skills of questioning: general information, patient life history. Methods of physical examination of respiratory organs: examination, chest palpation. Percussion and pulmonary auscultation in adults are normal. Palpation of the heart area. Percussion of the heart. The boundaries of the heart in adults are normal. Auscultation of the heart. Order and points of auscultation of the heart. Hypertension syndrome. Heart valve disorder. Acute heart failure syndrome. Dysphagia syndrome. Gastrointestinal bleeding syndrome. Methods of pancreatic research. Physical methods of liver and gallbladder research (palpation, percussion). Liver failure syndrome. Nephrotic syndrome. Methods of research of blood organs. Hemorrhagic syndrome. Methods of research of the endocrine system. Thyroid hypofunction syndrome. Methods of

researching the skeletal-muscle system. Inflammatory syndrome. A diagram of the medical history. Bronchial obstruction syndrome. Pulmonary airborne syndrome. Lung seal syndrome. Tobacco smoking and its effect on the main causes of respiratory diseases. Inquiry, general examination of patients with cardiovascular diseases. The basic methods of vascular research. Examination, palpation, percussion of the heart area of patients with cardiovascular diseases. Heart rhythm syndrome. Heart muscle inflammation syndrome. Heart valve disorder. Acute and chronic coronary insufficiency syndrome. Chronic heart failure syndrome. Surface and deep palpation of the abdomen. Percussion and abdominal auscultation in adults are normal and patients with digestive diseases. Laboratory-instrumental methods of research of digestive organs. Organic and functional dyspepsia syndrome. Peptic ulcer syndrome. Malabsorption syndrome and malabsorption. External secret insufficiency syndrome of the pancreas. Jaundice syndrome. Cholesterol syndrome. Portal hypertension syndrome. Gallbladder inflammation syndrome and bile dyskinesia syndrome. Jade syndrome. Acute and chronic renal failure syndrome. Anemia syndrome. Hyperglycemia syndromes and hypoglycemia. Thyroid hyperfunction syndrome. Syndrome of degenerative and dystrophic changes of joints. Curation of patients and writing medical history. Evaluating the results of the study. Mastering the practical skills of musculoskeletal research. anthropometry. Determining height, weight, BMI calculation in healthy individuals and patients. The circumference of the waist, the hips. thermometry. Assessing the temperature curve. Indicators of analysis of sputum, pleural fluid in diseases of the respiratory system. Study of the function of external breathing. spirometry. Pictometry. Pneumococcythometry. Methods of radiation diagnosis of the respiratory system. Endoscopic methods of respiratory examination. Echocardiography (heart ultrasound). Photoecardiography. Daily ECG monitoring. The main clinical-laboratory methods of examination in digestive diseases. Methods for diagnosing Helicobacter pylori infection. Rh-metro stomach. scatology. Endoscopic and X-ray studies of the gastrointestinal tract and their

importance in digestive diseases. Renal swelling, causes, clinical and laboratory signs.

Additional methods of researching hemorrhagic syndrome. Determining blood sugar, urine express method. Assessment of glycemic profile indicators. Oral glucose-tolerant test. Glycosylated hemoglobin. Pituitary dysfunction syndrome (diabetes insipidus, acromegaly, gigantism, hypopituitarism).

As a result of mastering the discipline "Propedeutics of Internal Diseases" the student should know:

- the chemical and biological essence of the processes occurring in the living organism at the molecular and cellular levels.
- moral and ethical norms, rules and principles of professional medical behavior.
- symptoms and syndromes in internal diseases.
- principles and methods of use of educational, scientific, non-fiction, Internet for professional activities

can:

- use educational, scientific, non-fiction, Internet for professional activities
- identify leading disease syndrome.
- to be guided in existing labour regulations, to apply labour laws.
- apply the knowledge of life sciences and clinical sciences in various types of professional and social activities.

possess:

- in practice, to use the knowledge of humanities, natural sciences, life sciences and clinical sciences in various types of professional and social activities.
- principles of medical deontology and medical ethics.
- skills in the characteristic construction of symptoms and syndromes in diseases of internal organs.
- methods of maintaining medical records in medical organizations.

The total labor-intensiveness of mastering the discipline is **8 credits**.

ANNOTATED CONTENT

Educational discipline

Internal diseases

BY FACULTY THERAPY

4th year of pediatric faculty

The aim is to study the most common diseases of internal organs and to develop the skills of independent clinical thinking among students, namely, planning laboratory-instrumental examination, interpreting the results and developing a plan of therapeutic and preventive measures.

Tasks:

1. Fixing and expanding the skills of the therapeutic patient.
2. Study of etiopathogenesis, clinical and functional-laboratory signs of the most common diseases of internal organs in their typical manifestation.

Mastering the basic principles of treatment and prevention of therapeutic diseases.

4. Learning to predict and determine capacity to work.

5. Studying a number of urgent conditions, methods of assessing them, rapid and effective diagnosis and determining patient management tactics.

The content of the theme:

aetiology. Risk factors, classification of pneumonia, clinical morphological characteristics of periods of inflammation, the nature of the course. diagnostics. treatment. forecast. prophylaxis. Comprehensive assessment of the condition of COPD patients. Clinical symptomatology of bronchial asthma. Bronchoectatic disease. Diagnostic Criteria: Clinical, Laboratory, Instrumental. Treatment Principles. Hypertonic Heart. Classification. Clinical picture of myocarditis. Classification of heart failure. Mitral valve failure. mitral stenosis. Definition of rheumatoid arthritis. Classification. Laboratory and X-ray changes. Diagnosis criteria. Current and prognosis. Treatment.

Definition of SLE. Etiopatogenesis. Classification. Clinical pattern of organ and system lesions. : immunosuppressive therapy, pulse therapy by corticosteroids, cytostatics. Opportunities to achieve remission. Forecast and prevention. Gastroesophageal reflux disease: definition, etiopathogenesis. Food and extra-food manifestations. The definition is chronic gastritis. Etiology. Pathogenesis. Classification. Evaluation of the results of the study of gastric content.

PRIMARY and secondary dyskinesia. Clinical manifestations. Options for dyskinesia (hyper- and hypotonic). Clinical and laboratory-instrumental diagnostics. treatment. Chronic enterocolyte. Chronic pancreatitis. Chronic hepatitis. Cirrhosis of the liver.

As a result of mastering the discipline "Propedeutics of Internal Diseases" the student should know:

1. Etiology, pathogenesis, classification, clinical picture, laboratory instrumental diagnosis, complications. treatment, prevention, prognosis
 - 1.1. Respiratory diseases: COPD, pneumonia, asthma, bronchoectatic disease;
 - 1.2. Diseases of the circulatory organs: atherosclerosis and hyperlipidemia, coronary heart disease (primary circulatory, angina, acute myocardial infarction), hypertension, infectious myocarditis, infectious endocarditis, mitral and aortic malformations, heart failure;
 - 1.3. Connective tissue diseases: rheumatoid arthritis, systemic lupus erythematosus;
 - 1.4. Diseases of the gastrointestinal tract: GERD, chronic gastritis, chronic enterocolytes, chronic cholecystitis, cholangitis, bile dyskinesia, stomach ulcers and 12-finger bowel, chronic hepatitis, cirrhosis of the liver;
 - 1.5. Urinary diseases: acute and chronic glomerulonephritis;
2. Etiology, pathogenesis, clinic, diagnostic methods and emergency care for the following conditions:

asthma attack, hypertensive crisis, heart asthma, primary circulatory

arrest.

3. Electrocardiogram is normal, with atrial and ventricular hypertrophys, coronary heart disease; primary cardiac arrest caused by ventricular fibrillation.

The student should be able to:

- on the basis of complaints, history, physical examination to identify in the patient,
The disease studied on the topic;
- Make a laboratory and instrumental examination plan to confirm the suspected diagnosis and interpret the results;
- to formulate a detailed clinical diagnosis, guided by the current classification of diseases;
- to make a detailed diagnosis in a particular patient, namely, etiology, the mechanism of disease development, complications;
- to substantiate a clinical diagnosis in a particular patient with an assessment of the results of the examination and identify the criteria for diagnosis;
- Prescribe adequate individual therapy;
- Determine the prognosis of the disease in a particular patient;
- Identify secondary prevention measures;
- recognize the clinical manifestations of certain urgent conditions (hypertensive crisis, heart asthma, primary circulatory arrest, asthma attack);
- to decipher ECG normally, with atrial and ventricular hypertrophys, coronary heart disease, ventricular fibrillation.

The student must own:

- methods of general clinical examination (collection of history, examination, palpation, percussion, auscultation) with the evaluation of epidemiological data.
- skills in the detection of various symptoms, syndromes and pathological conditions in common diseases in adults.
- the method of dispensation in adults with the most common diseases of internal organs.
- diagnosis skills based on the results of biochemical studies
- skills in the detection of various symptoms, syndromes and pathological conditions in the most common diseases of internal diseases.
- the method of providing emergency care to patients with respiratory and cardiovascular pathology: resuscitation measures for clinical death of artificial respiration mouth in mouth, mouth to nose, methods of cleaning the upper respiratory tract, first aid for the following urgent conditions of OIM, hypertensive crises, severe asthma attack, heart asthma, pulmonary edema and other conditions.
- Principles of first aid in the event of an urgent and life-threatening

The total labor-intensiveness of mastering the discipline is 4 credits.

ANNOTATED CONTENT

Educational discipline

"General military training"

Discipline Purpose: Training of reserve medical officers from among students (men)

Discipline Tasks: Know the basic provisions of the combined military and combat charters of the Armed Forces of the Kyrgyz Republic and apply them correctly in accordance with the wartime purpose

The content of the theme:

Introduction to the military specialty. Military personnel and the relationship between them. Military discipline. The rights and duties of the head of the medical center of the regiment (brigade). Topographical maps. Prepare the map to work. The basic rules of keeping a work card. Organization, armament, platoon military equipment. Organization, armament, military equipment of the company. Organization, armament, military equipment of the battalion. The basics of controlling parts and units in combat. The organization of the military rear. Defense of the Motorized Rifle Regiment (Brigades). Offensive motorized rifle regiment (brigade). Movement of motorized rifle regiment (brigades).

As a result of the mastery of the discipline "General Military Training" the student should know:

- basic provisions of the national statutes.
- rights and duties of the regiment's chief medical officer (brigade)

can:

- apply the requirements of the general military statutes in the performance of their official duties.
- assess the tactical and rear environment in the interests of medical support for units, units in combat

possess:

regular weapons in service with the Armed Forces of the Kyrgyz Republic. Forms and ways of fighting units and units

Total labor: 3 loans

ANNOTATED CONTENT

Educational discipline

"Organization and tactics of the medical service"

The purpose of the discipline: Training students as medical officers who know the impact of training and combat conditions on the health of personnel in order to

develop and implement effective medical and preventive (medical-evacuation, sanitary and anti-epidemic) and other special measures in the trMEPs.

Discipline tasks: Training of officers of the medical service of the Armed Forces of the Kyrgyz Republic, who have knowledge of the basics of military medicine, providing medical care to the wounded and injured in combat conditions, providing medical assistance at the mass arrival of the wounded, when the enemy uses weapons of mass destruction.

The content of the theme:

Organization of medical and evacuation activities. The basics of organizing sanitary and hygienic and anti-epidemic measures in the trMEPs. The basics of organizing the provision of medical property parts and connections. Sanitary trMEP losses. Medical intelligence. The basics of managing the medical service. Medical service brigade. Medical service of the division. Medical units and facilities

As a result of the discipline "Organization and tactics of the medical service"

The student should know:

- organizational and staff structure of military-medical institutions.
- types of infections, how they are spread, methods of localizing and eliminating epidemic hotbeds.

can:

- to organize the work of medical personnel of military medical institutions to receive the wounded and sick, their medical sorting,
- providing all types of medical care, pre-evacuation preparation and treatment.
- to organize the work of subordinate medical personnel to identify persons at risk of infection, as well as those with chronic forms of infectious diseases.

possess:

- rules of medical sorting,
- receiving medical care for the wounded and the injured.

- skills in the localization and elimination of epidemic hotbeds, preventive vaccinations, emergency and specific prevention

Total labor: 4 loans

ANNOTATED CONTENT

Educational discipline

Military Toxicology and Medical Protection

The purpose of the discipline is to improve the system of evidence-based organizational and medical activities, tools and methods to prevent or weaken the effects of poisonous highly toxic substances and military-professional poisons, as well as to preserve the life, health and professional performance of the affected military and civilian personnel.

Discipline tasks:

- Study of toxicity of substances, assessment of the risk of their impact on the health of military and civilian personnel of the Armed Forces of the Kyrgyz Republic;
- Identification of toxicokinetics and toxicology of poisonous highly toxic substances and military-professional poisons;
- Study of pathogenesis and clinical manifestations of toxic processes; Assessment of the functional condition of those exposed to excess doses of highly toxic substances and military-professional poisons;
- Introduction into practice of medical and other means of prevention and treatment of chemical lesions, means and methods of preservation of combat and ability to work, prevention and minimization of harmful effects of chemical effects;
- introduction of regulations aimed at ensuring the chemical safety of military and civilian personnel in the event of a threat to emergencies in both peacetime and wartime

Content of the theme: A common characteristic of chemical weapons. Medical-tactical characteristic of chemical lesion centers. Poisonous and highly toxic substances of neurotoxic action. Poisonous and highly toxic substances of cytotoxic action. Poisonous and highly toxic substances psychotomimetic action. Poisonous and highly toxic substances of irritating action. Poisonous and highly toxic substances of common-venomous action. Poisonous and highly toxic substances of pulmonotoxic action. Highly toxic substances used for technical purposes. Field oxygen equipment and ventilators. Weapons of mass destruction. Medical and tactical characteristics of hotbeds of use of nuclear weapons. Medical remedies used in radiation lesions and in chemical lesions. Radiation reconnaissance tools and methods. Chemical intelligence tools and methods. Special treatment tools and methods. The basics of assessing the chemical situation.

As a result of the mastery of the discipline "Military Toxicology and Medical Protection"

The student should know:

- Pathogenesis, clinic, prevention of lesions by combat poisons and potent poisonous substances.
- The use of medical forces and means intended to provide medical assistance to the personnel of trMEPs from poisonous and highly toxic substances.

can:

- Organize the first medical, pre-medical, first medical care for servicemen in the case of poisoning and highly toxic substances.
- Organize sanitary and hygienic and anti-epidemic events in the centers of destruction.

possess:

- Methods of assessing the medical and tactical situation that is developing.
- Methods of organization and conduct of radiation and chemical reconnaissance and control

Total labor: 3.3 credits

Hours: 100

ANNOTATED CONTENT

Educational discipline

"Extreme medicine"

Discipline goal:

- the formation of the systemic knowledge of students, which is necessary for the organization of the disaster medical service and the health service of the civil defense of health in the aftermath of peaceful and wartime emergencies and the conduct of medical and evacuation activities;
- the development of the skills to apply theoretical knowledge in providing the affected population and first aid rescuers in peacetime and wartime emergencies;
- the formation of the ability to organize the provision of medical care in emergency situations in the conditions of mass admission of the affected.

Discipline tasks:

- training of medical personnel, establishment of administrations, medical units, institutions, maintaining them in constant readiness, logistics;
- preserving the health of the population, timely and effective provision of all kinds of medical care in order to save the lives of the affected, reducing disability and unjustified irretrievable losses, reducing the psychoneurological and emotional impact of disasters on the population, ensuring sanitary well-being in the emergency area; Forensics, etc.;
- maintaining the health of medical personnel, planning the development of health and health forces and keeping them in constant readiness to work in disaster zones, to eliminate the consequences of emergencies

The content of the theme:

Civil defense in emergency situations. The role and tasks of Civil Protection in today's environment. State Civil Protection System of the Kyrgyz Republic. Assessment of the situation in emergency situations caused by radiation accidents. Organization of medical interventions at the threat of enemy attack. Health care for the aftermath of chemical accidents. Medical and psychological protection of the population and rescuers in the emergency.

As a result of the "Extreme Medicine" discipline

The student should know:

- The basics of providing health care for the population in the aftermath of accidents, disasters and natural disasters.
- The basic concepts of the discipline of disaster medicine, natural and man-made emergencies, natural disasters.
- Preparing health facilities for work in a peaceful and wartime emergency.

can:

- Perform your functional responsibilities when working as part of special health units.
- Assess and analyze the situation, participate in the organization and provision of preventive and sanitary-anti-epidemic assistance in the event of emergencies and natural disasters.

possess:

- Algorithm of the main medical activities in the provision of first medical care for urgent and life-threatening conditions.
- Skills in determining the circumstances of emergencies and natural disasters, the skills of providing first aid to victims in emergency situations, including medical evacuation of patients and victims

Total labor: 3.3 credits

ANNOTATED CONTENT

Educational discipline

Physiatrics

The purpose of the discipline: Students acquire the knowledge and skills necessary to perform the functions of a general practitioner to identify, prevent and treat TB patients under the National Tb Programme

Discipline tasks:

- to develop an in-depth knowledge to identify, manage TB patients, especially to work at the primary level of health, in the face of a tense epidemiological situation on tuberculosis;
- to train a specialist who is able to conduct a differential diagnostic search with the help of possible clinical-laboratory, radiological, genetic-molecular, etc. diagnostic methods among the population and risk groups for tuberculosis;
- To train preventive measures to prevent transmission of infection in health facilities at all levels of health;
- to improve the system of general and special knowledge (by physiatrics), skills that allow the general practitioner to freely navigate the diagnosis and treatment of tuberculosis in combination with other common diseases

Discipline Content: Tuberculosis as an Infectious Disease. The main methods of TB diagnosis. Primary tuberculosis. Pathogenesis, classification. Local forms of primary tuberculosis. Primary tuberculosis complex. Tuberculosis of the central nervous system: as a form of miliary pulmonary TB and as a complication of the main pulmonary and extrapulmonary forms of TB. Diagnosis, clinic, treatment, complications, prognosis. Diagnosis, clinic, treatment, prognosis. Tuberculosis pleurisy. Tuberculosis of bones and joints.

As a result of the mastery of the discipline "Physiatrics" the student must

To know:

- organization of mass tuberculosis diagnostics among the population, selection of patients for vaccination and revaccination of tuberculosis, taking into account mass tuberculosis diagnostics, vaccination reactions, post-vaccination complications
- specifics of diagnosis, treatment, rehabilitation of tuberculosis patients
- organization of anti-TB activities among urban and rural populations, depending on the epidemic situation
- structure, tasks and organization of the work of an anti-TB dispensary, an anti-TB office
- modern TB strategies, the Tb Government Program.

can:

- to collect the history of illness and the patient's life
- to carry out an objective examination, to plan treatment using the results of the patient's examination with respiratory tuberculosis and some extrapulmonary forms
- To select individuals for vaccination and revaccination of BCJ, taking into account the results of mass tuberculosis diagnostics, to assess the nature of the local vaccination response and possible post-vaccination complications;
- To form high-risk groups for tuberculosis, to assess the effectiveness of dispensary monitoring of patients;

possess:

- clinical and laboratory examination of patients with tuberculosis
- principles for the treatment of tb patients
- method of staging and accounting for the results of tuberculosis samples.

The total labor-intensiveness of mastering the discipline is 4 credits.

SURGICAL DISEASE BLOCK

ANNOTATED CONTENT

Educational discipline

"Propedeutics of Surgical Diseases"

The purpose of the discipline: is to teach students the specialty "Therapeutic case" theoretical basics and practical skills on the main sections of general surgeons

Discipline tasks:

Studying theoretical knowledge in the sections of general surgery;

-teaching students the basic practical methods necessary in the examination and treatment of surgical patients;

- training in first aid for certain emergency conditions - bleeding, injuries, fractures, dislocations, burns, etc.

Content discipline: Introduction to the subject. History of surgery. The development of surgery in Kyrgyzstan. Organization of surgical care. The structure of the surgical service. Bleeding and stopping it. blood transfusion. Wounds, wound infection. Examination of surgical patients. "The medical history of the surgical patient' disease. Periods of operations. Pain and pain relief. trauma. traumatism. Sprains. It's a sub-infection. Acute surgical infections. Pousable diseases of the skin and subcutaneous fiber. Abscesses and phlegmons. Furunkul, carbuncle. Pistic diseases of glandular organs. Pous inflammatory diseases of the fingers and hands. Acute plying diseases of bones and joints. inflammation. Surgical sepsis. Chronic surgical infection. Chronic peddular infection. Rotten infections. Clinical forms, local symptoms and diagnosis of rotten infection. Barotherapy (HBO). Gangrene, fistulas, trophic ulcers, bedsores. Disorders of arterial circulation. Acute and chronic circulatory disorders. General principles of clinical and instrumental diagnosis. Prevention of complications. Disorders of venous circulation. Lymphadenites. Lymphangoites. Skin plastic. Biological conditions of tissue transplantation. The concept of aesthetic surgery

As a result of the mastery of the discipline "Propedeutics of Surgical Diseases" the student should know:

Clinical manifestations of major surgical syndromes;

can:

- before the operation, surgical manipulations to treat the hands, the operating field,
- to wear a sterile surgical mask,
- Dress or change sterile gloves, sterile robe, independently and with the help of an operating sister;

possess:

- Hand-processing techniques in preparation for surgery; dressing in sterile clothing before surgery
- Methods of preparing the operating field for surgery;
- Ways to control an operating lamp and a desk
- The technique of disclosing and submitting sterile material during the operation;
- How to prepare the dressing material for surgery;
- Ways to overlay bandages of different types and types;
- methods and ways to temporarily stop bleeding

The total labor-intensiveness of mastering the discipline is 2 credits.

ANNOTATED CONTENT

Educational discipline

"Operational surgery"

The purpose of discipline is to develop ways, rules and make surgical interventions.

Discipline tasks:

- To study the anatomical and physiological justification of the technique of surgical interventions.

- In the course of training it is also necessary to present questions of surgical physiology - the study of body reactions and the technique of operations.
- To give future doctors on surgical surgery a solid basis for the correct diagnosis and the choice of a rational method of treatment.

Discipline content: General surgery, equipment, tools, pain relief and surgery of the upper and lower extremities.

As a result of the "Operational Surgery" discipline, the student must

To know:

- Anatomy and topography of the head and neck, upper and lower limb, chest and abdominal cavity, peritoneal space, small pelvis and perineum.
 - Blood supply and innervation of the head and neck, upper and lower limb, chest and abdominal cavity, peritoneal space, small pelvis and perineum.
 - Medical and diagnostic measures.
 - Surgical tools.
 - Seam materials.
 - Stages and key elements of the operation.
 - Surgery for injuries to the upper and lower limbs.
 - Amputation, exarticulation of the lower limb.
 - Access to joints of the upper and lower limbs.
 - Technique of venepuncture and venesection.
 - Tracheotomy Technique
 - Tracheostomy technique
 - Clinical chest anatomy.
 - Puncture of the pleural cavity, pericardium.
 - The boundaries of the lungs and the heart.
 - The technique of thoracotomy, arteriotomy.
 - The technique of seam on the heart and lungs.

- Modern diagnostic methods (ultrasound, thoracoscopy, nuclear-magnetic resonance imaging, computed tomography)
- Anatomy and topography of the anterior abdominal wall.
- Anatomy and topography of the abdominal cavity and its organs, peritoneum, peritoneum.
- Methods of draining the abdominal cavity.
- A set of tools for abdominal surgery.
- Species of laparotomy.
- Abdominal punctures.
- Autopsy of the cavity of organs (gastrotomy, iononotomy, cystotomy).
- Seam materials.
- Intestinal stitches.
- Anatomy and topography of the pelvis and perineum.
- Methods of draining the pelvic and perineum organs.
- The technique of puncture of the straight-uterine recess.
- The technique of bladder puncture.
- The technique of bladder catheterization.

can:

- Local anesthesia: infiltration and stem.
- Knit surgical nodes (simple, marine, surgical).
- Produce primary surgical treatment of wounds.
- Temporary and final stop of bleeding.
- To assemble tools for the following surgical interventions: Special Purpose Tools of the following groups:
 - to separate soft tissues.
 - to temporarily stop the bleeding
 - Auxiliary
 - to connect tissues
 - Make a set of special surgical tools for the production of surgery:

- tracheostomy
- trepanation of the skull
- gastric and bowel resection
- pleural and abdominal puncture
- appendectomy
- hemostatic tools
- Perform venepunction, venesection.
- Apply stitches to the nerve, tendons, blood vessel.
- To produce puncture joints (shoulder, elbow, hip, knee).
- Make incisions with phlegmons and abscesses.
- To carry out operations in panariums.
- To perform primary surgical treatment of the scalp and determine the depth of the lesion.
- Put a cosmetic seam.
- Show points for the puncture of the pleural cavity.
- Point to the pleural cavity.
- To help with pneumothorax.
- Point the abdominal cavity.
- Produce laparocentesis.
- Show the weaknesses of the anterior abdominal wall.
- Identify the boundaries of the liver and gallbladder.
- Identify symptoms in peritonitis in abdominal surgery.
- catheterize the bladder.
- The technique of the finger examination of the rectum.

possess:

- Primary surgical treatment of wounds.
- Temporary stop bleeding.
- Local anesthesia on A.V. Wisniewski, conductive anesthesia.
- Processing the operating field.
- Tying ligature nodes (simple, marine, surgical).

- The stitching on the skin (simple, continuous).
- Work with surgical instruments.
- Removal of skin nodv sutures.

The total labor-intensiveness of mastering the discipline is 1 credit.

ANNOTATED CONTENT

Educational discipline

Oncology

Discipline goals:

Formation of the basic oncology outlook, for which a graduate of the pediatric faculty should have a clear idea about the organization of cancer care in Kyrgyzstan, know the clinical picture and methods of diagnosing major tumor diseases, the tactics of the pediatrician in the case of suspected malignancy, issues of epidemiology and prevention of cancer, medical ethics and deontology, principles of treatment, palliative care, employment of patients.

Discipline tasks:

- Familiarize yourself with the basic provisions of theoretical oncology;
- training in diagnostic tactics in case of suspicion of the presence of a malignant tumor in the patient;
- Study of the main nosological forms of malignant tumors, the possibilities of their prevention and early diagnosis;
- to learn about the specifics of the organization of cancer care for the population of Kyrgyzstan and the modern principles of treatment of cancer patients.

Discipline Content: Introductory Occupation. The organization of the oncology service in Kyrgyzstan. Accounting documentation. The patterns of the development of malignancies. Etiology, epidemiology. Ways to prevent malignancies. Deontology in oncology. Thyroid cancer. Clinic, diagnosis and

treatment. Cancer of the tongue, mucous oral cavity, lower lip, precancerous conditions. Cancer of the nasopharynx. Clinic, diagnosis, treatment. Cancer of the larynx. Clinic, diagnosis, treatment. Cancer of the parotid salivary gland, submandibular salivary gland, small salivary glands. Clinic, diagnosis, treatment. Skin cancer. Precancerous diseases. Epidemiology, treatment, prevention of skin cancer. melanoma. Epidemiology, treatment, prevention, prognosis. Lymphomas: Hodgkin's disease, clinic, diagnostic features, treatment. Non-Hodgkin's lymphomas, clinic, diagnosis, treatment. Bone sarcoma, etiology, clinical manifestations, X-ray symptoms, treatment. Soft tissue sarcoma, etiology, clinical manifestations, diagnostic methods, treatment. Lung cancer. Precancerous diseases, classification. Lung cancer. Clinic, diagnostics, treatments, prognosis. Oesophageal cancer, classification, clinic features, diagnosis and treatment. Precancerous stomach diseases. Stomach cancer, etiopathogenesis, classification, clinic, diagnosis, treatment, prognosis. Cancer, etiology, clinical manifestations, diagnosis and treatment. Rectal cancer, etiology, clinical manifestations, diagnosis and treatment. Cancer of the liver and bile ducts clinical manifestations, diagnosis, treatment, prognosis. Pancreatic and Vater's papilla cancer, clinical manifestations, diagnosis, treatment, prognosis. Precancerous diseases and benign breast tumors. Breast cancer. Clinical manifestations, diagnostic methods, treatment, prognosis. Trophoblastic disease, etiology, clinic, diagnosis, treatment, prevention. Cervical cancer, epidemiology, precancerous diseases. Clinic, diagnostics, treatments. Uterine body cancer, etiopathogenesis, clinic, diagnosis, treatment. Ovarian cancer, etiology, classification, clinical features, diagnosis and treatment. Kidney cancer, etiology, pathogenesis, clinic, diagnosis, treatment. Bladder cancer, clinic, diagnosis, treatment. Prostate cancer, etiopathogenesis, clinical manifestation, diagnosis, treatment. Testicular tumors and penile cancer, clinic, diagnosis, treatment, prognosis. Features of diagnosis, clinic, current and treatment of malignancies in children. Frequent childhood tumors. HIV/AIDS and malignant tumors. Etiology, clinical manifestations.

As a result of the "Oncology" discipline, the student must

To know:

- Organization of specialized medical care for patients with cancer in outpatient and inpatient settings;
- issues of diagnosis of tumor diseases (radiation, endoscopic, cytological and morphological, laboratory diagnostic methods);
- Treatments in oncology; private sections of oncology: oncomammology, tumors of the thoracic cavity, tumors of the abdominal cavity and abdominal space, oncocurology, oncogynecology, tumors of the head and neck, tumors of the skin, soft tissues and bones, malignant lymphomas.

can:

- To carry out a general examination and to assess the patient's condition;
- interpret the results of clinical and biochemical examination, including tumor markers;
- to solve the deontological and ethical problems associated with the presentation of the diagnosis and plan of the upcoming treatment to the patient, relatives, including in the case of adverse prognosis and denial of treatment;
- to fill out medical records for cancer patients.

possess:

- The method of physical examination of the patient;
- Breast palpation technique; thyroid palpation technique;
- method of performing puncture biopsy, tumor smears;
- the technique of sputum collection for research on atypical cells;
- rules for performing a hemocult test.

The total labor-intensiveness of mastering the discipline is 3 credits.

CHILDREN'S DISEASE BLOCK

ANNOTATED CONTENT

Educational discipline

"Propedeutics of children's diseases"

The purpose of discipline: Formation of competence for the management of children when defeating all systems of the body.

Discipline tasks:

- 1. To master practical skills by the method of researching all systems of the body in healthy children and when these systems are defeated, using examination, palpation, percussion, auscultation.
- Train students to identify the main symptoms and lesions of all systems in children.
- 3. Identify laboratory and instrumental signs in the defeat of all systems of the child's body.

Content of discipline: A brief introduction to the subject. Physical development of children from birth to 16-17 years. Functional features of the child's nervous system. Nervous - mental development of children (NPR). Features of collecting history in children with nervous system lesion. Semiotics and nervous system lesions in children. Morphological and functional features of the structure and function of the skin in children of different ages. The method of skin and subcutaneous fat in children. Features of the structure of the bone system in children. The method of researching the bone-muscle system in children. Features of the method of respiratory research in healthy children of early and older age in connection with their AFO. Features of collecting a history of disease in children with respiratory system damage. Semiotics of respiratory damage in children. Respiratory syndromes in children: obstruction syndrome and respiratory failure. The method of cardiovascular research in healthy children of the first year of life due to their anatomical and physiological characteristics (AFO). The method of researching CCC in healthy children older than a year. Functional and instrumental methods of research of CCC in children. Features of ECG in healthy children.

Semiotics of the heart membranes. Clinical signs of myo, endo and pericarditis in children. Semiotics of congenital heart defects in children. Hemodynamics, clinical signs. Heart rhythm disorders in children. Acute heart failure syndrome. The method of research of digestive organs in children in connection with their anatomical and physiological features: examination, palpation, percussion, auscultation. Features of collecting history in children with digestive lesions. Semiotics and defeat syndromes. The method of researching organs of m urinary organs in healthy children . Features of the collection of history in children with urinary organ lesions semiotics and basic lesions. Anemia syndrome in children. Hemorrhagic syndrome. Syndrome of leukocytosis and leukopenia in children. Semiotics increase peripheral lymph nodes. Protecting your medical history. Natural breastfeeding. Breastfeeding newborn. The technique of correctly applying the child to the breast. Benefits of Natural Feeding (WHO). The bait: spruce and the need for introduction. Solving situational problems for natural feeding. Artificial feeding, definition classification of artificial milk mixtures. Solving situational problems for artificial feeding. Mixed feeding, definition. As a result of the mastery of the discipline "Propedeutics of children's diseases" the student should know:

- the chemical and biological essence of the processes occurring in the living organism at the molecular and cellular levels.
- Moral and ethical norms, rules and principles of professional medical behavior.
- interrogation scheme, method of physical, laboratory-instrumental research; principles of filling out medical records.
- symptoms and syndromes in internal diseases.
- principles and methods of use of educational, scientific, non-fiction, Internet for professional activities

can:

- use educational, scientific, non-fiction, Internet for professional activities

- to detect leading disease syndrome.
- to conduct a survey and collect a history, to conduct a physical examination of the patient on all organs and systems (examination, palpation, auscultation).
- To focus on existing labor regulations, to apply labor laws.
- apply the knowledge of life sciences and clinical sciences in various types of professional and social activities.

possess:

- in practice, to use the knowledge of humanities, natural sciences, life sciences and clinical sciences in various types of professional and social activities.
- principles of medical deontology and medical ethics.
- methods of general clinical examination, interpretation of the results of laboratory and instrumental diagnostic methods.
- skills in the characteristic construction of symptoms and syndromes in diseases of internal organs.
- methods of maintaining medical records in medical organizations.

The total laboriousness of mastering the discipline is 10 credits.

ANNOTATED CONTENT

Educational discipline

"Children's Diseases (Faculty Of Pediatrics)"

3-4 courses of the Faculty of Pediatrics for students of the Faculty of Pediatrics

Goal: Building competencies for the diagnosis, treatment and prevention of diseases in young children, respiratory diseases, gastrointestinal tract, kidneys and endocrine system.

Tasks:

- Study etiopathogenesis and clinical manifestations of major diseases of early age, bronchopulmonary, endocrine, digestive, urinary systems.
- To form in students the skills of determining the volume and sequence of diagnostic measures in the main diseases of early age, bronchopulmonary, endocrine, digestive, urinary systems.
- Teach to make differential - diagnostic range in diseases of young children, bronchopulmonary, endocrine, digestive, urinary systems in children.
- To form in students the skills of formulating clinical diagnosis for each nosological form of diseases of early age, bronchopulmonary, endocrine, digestive, urinary systems in children.
- To study the complications of diseases of early age, bronchopulmonary, endocrine, digestive, urinary systems in children.
- To master the basic principles of treatment and prevention of diseases of early age, bronchopulmonary, endocrine, digestive, urinary systems in children.
- Teach emergency care in early childhood, bronchopulmonary, endocrine, digestive, urinary systems in children, taking into account the recommendations of pocket

Content: During the course of this cycle, students are taught the peculiarities of clinical manifestations, diagnosis, treatment and prevention of diseases associated with pathology, it is inherent only to young children (constitutional anomalies, rickets, hypervitaminosis D, spasmophilia), as well as iron deficiency anemia, respiratory disorders. Respiratory diseases (bronchitis, typical, atypical pneumonia, bronchial asthma, chronic non-specific lung disease, hereditary lung diseases in children, such as idiopathic pulmonary hemosiderosis, Cartagener syndrome, primary pulmonary hypertension. Lung lesions caused by hereditary enzymes in children (cystic fibrosis, alpha-1-antitrypsin deficiency).

Gastrointestinal pathologies in children: gastritis, gastroduodenitis, stomach ulcer and 12-finger bowel disease. pancreatitis. Malabsorption syndrome.

Helminthoses. Taking into account etiopathogenesis, classification, diagnosis and principles of therapy of these diseases.

Endocrine system diseases in children: Diabetes. Hypothyroidism. Diffuse toxic goiter. Hypoparathyroidism. Hyperparathyroidism. Obesity in children and adolescents. Adrenogenital syndrome. Chronic adrenal insufficiency. Low-growth in children. Hypogonadism in boys and girls. Premature sexual development in boys and girls. Diabetes insipidus. Clinical options, diagnostics, tactics of management. Treatment of urgent conditions in pediatric endocrinology.

Diseases of urinary systems in children: Acute glomerulonephritis. Nephrotic syndrome. Nephrotic syndrome. Acute kidney damage in children by pRIFLE. Primary and secondary tubulopathy.

Special attention is paid to ethics and deontology when interacting with a sick child, as well as with the caregivers.

As a result of the mastery of the discipline "Propedeutics of children's diseases" the student should know:

- Etiopathogenesis diseases of early age, bronchopulmonary,
- endocrine, digestive, urinary systems in children.
- Modern international classifications

can:

- Justify a preliminary diagnosis
- Determine the volume and sequence of clinical tooling methods
- To formulate a clinical diagnosis in accordance with international classifications
- Identify a differential-diagnostic range for each disease of the studied pathology.
- Substantiate and prescribe treatment in accordance with clinical protocols.
- To carry out preventive measures in the studied diseases
- Work with literary sources, electronic sources

- To conduct a survey, examination, physical examination and assess the condition of patients with diseases of early age, bronchopulmonary, endocrine, digestive, urinary systems in children.
- Identify bone changes in rickets
- To assess physical development by indexes "WED/AGE," "WED/ROST," "ROST/S AGES"
- Identify the hidden symptoms of spasmodophilia
- Identify common signs of danger.
- Interpretation of the results of laboratory-instrumental survey methods.
- Making a medical history.
- Provide first aid with convulsive, broncho-stress syndromes apnea, shock

possess:

- By calculating doses of antibiotics, anticonvulsants, iron-containing, diuretic, hypotensive drugs, corticosteroids and insulin.
- Identify common signs of danger.

The total labor-intensiveness of mastering the discipline is 10 credit.

ANNOTATED CONTENT

Educational discipline

"Children's Diseases (Hospital Pediatrics)"

The purpose of the discipline: Formation of the graduates of the pediatric faculty of certain competences necessary in the practical activities of the pediatrician in modern conditions, the ability to use the knowledge obtained for timely diagnosis of diseases of childhood, recovery and improvement of children's health, prevention of diseases.

Discipline tasks:

- Deepening knowledge in diagnosis, differential diagnosis, treatment of diseases in children.
- Mastering the basics of medical ethics and deontology.

- Finding diagnostic and emergency skills.
- Independent work with medical information (educational, scientific, reference and other literature).

Discipline content:

Organizing the work of the clinic (CMC) in the conditions of reformed health care. GSV - structure, functions, organization of specialists. Ethics and deontology of the doctor. Sections of work with children's population. The main sections of the doctor's work are a pediatrician with a child population: preventive work, medical work, paperwork. Maintaining reporting and accounting records. The main documentation of the site. medical passport of the site: site plan, demographic indicators, general characteristics of the supervised site. Control and Information Form (CIF). Form 109 OMS/ PRESCRIPTION OMS. Additional compulsory health insurance (MHI) program. ICD-10. Performance indicators and evaluation of the doctor's work - pediatrician. Leading indicators of childcare. Maternal and child health. Monitoring the health of a pregnant woman. Organization of antenatal and primary care of newborns. Singling out pregnant women at risk, recovery. The method of assessing the risk factors of a woman's pregnancy during patronage work. The main measures to organize medical observation of newborn and children of the first year of life. Organization of foster care for the newborn. Principles of dynamic observation and recovery of children at risk: pathology of the CNS, risk of the implementation of VUI, with trophic disorders and endocrinopathy, with congenital pathology and deformities, social risk.

Methods of monitoring and assessing the state of nutrition, the level of physical and neuro-mental development of children in the first year of life and over a year. The organization of consultation of narrow specialists. Organization of medical observation of children with delayed psychomotor development. Teaching parents the basics of raising a healthy child in the family, care, rational feeding, hardening, disease prevention. Surveillance of children with background diseases. Features of training children in pre-school institutions and school. Screening

programs for children. Examinations of the pediatrician and specialists in accordance with the instructions and instructions of the Ministry of Health of the Kyrgyz Republic. Methods for assessing children's readiness for schooling. The role of the medical and educational commission. Physical education of children of preschool and school age.

Integrated Management of Children's Age Diseases (IVBD). Introduction. The IWDW strategy as a global programme by WHO and UNICEF to reduce child mortality, morbidity and disability, improve child growth and development. Evaluate and classify a sick child between the ages of 2 months and 5 years. Parents' questioning of the child's problems. Assessment and classification of child nutrition and anaemia. Assessment of child vaccination status. Identify the treatment. Decide if there is a need for a referral to the hospital. Identify treatment for patients who do not need to be taken to hospital. Treat the baby. Choose a suitable oral medication, determine the dosage and schedule of appointment. Oral rehydration salts (ORS) and preparation of these rehydration solutions. Teaching the mother to give the sick child the solutions of ORS. Treatment of lingering diarrhea. Treatment of dysentery. Advise your mother. Advice to the mother on how to treat the baby at home. Recommendations for feeding a child under 4 months, from 4 months to 6 months, from 6 months to 1 year, from one to two years, over 2 years. Full-fledged extra food. Special recommendations for children with lingering diarrhoea. Assess feeding and determine feeding problem. Recommendations for care for development. Testimony for the mother's re-treatment of the child to the health care worker. Keeping a sick baby from 1 week to 2 months. Assessment and classification of diseases in infants between 1 week and 2 months. Classification of sick infants between 1 week and 2 months. Classification of sick infants by bacterial infection. Follow-up. Follow-up and examination: in pneumonia, protracted diarrhea, dysentery, fever, local bacterial infections, measles with complications, inflammatory ear diseases, feeding problems, anaemia and low weight (hypotrophy).

Watching a sick child.

Monitoring of children with rickets, deficient anaemia, constitutional anomalies, eating disorders, teaching parents about care, and breastfeeding in the family. Nutrition care, regimen, hardening, treatment and prevention. Principles of monitoring children with mental and physical disabilities, features of working with the family, principles of recovery. The organization of the detection of phenylketonuria among newborns. Indications to medical-genetic counseling. Early diagnosis and observation of children with chronic bronchopulmonary pathology (recurrent bronchitis, chronic pneumonia). Features of dynamic observation of children with chronic bronchopulmal diseases (recurrent bronchitis, chronic pneumonia). Features of working with children with asthma, use of a set of standard psychological methods of qualitative and quantitative analysis of basic cognitive functions (intellectual health, memory, attention, training features) children with asthma. Organization of medical care for children with cardiovascular diseases and rheumatological patients. Observation of children with congenital heart defects. Evaluation of the effectiveness of treatment of patients with systemic diseases of connective tissue, monitoring of side-effects of basic diseases of connective tissue monitoring plan. Surveillance of children with chronic kidney disease (urinary tract infection, glomerulonephritis, renal dysembriogenesis, chronic kidney disease). Dynamic observation of children with chronic kidney disease depending on the activity of the pathological process, the course of the disease and the state of kidney function. Observation of children with gastrointestinal pathology (gastritis, stomach ulcers and 12-finger intestines, bile duct dyskinesia, pancreatitis, ulcerative colitis, enzymeopathy), organization of early diagnosis and recovery of children in the family. The role of diet, diet and exercise in the recovery of children with gastroenterological pathology. Helminthiasis in children. The organization of examination and treatment in the conditions of the clinic. Emergency conditions in childhood. Diagnosis.

As a result of the mastery of the discipline "Children's Diseases (Pediatrics)" the student should know:

- Current data on the prevalence of diseases of early age, bronchopulmonary, urinary, gastroenterological, endocrine systems among children in CD.
- Etiology, pathogenesis, classification, clinical picture of diseases of early age, bronchopulmonary, urinary, gastroenterological, endocrine systems.
- Laboratory - instrumental diagnosis of these nosological forms.
- Principles of therapy, indications for surgical treatment of these nosological forms.
- Primary and secondary prevention, rehabilitation and prognosis of early childhood diseases.
- Methods of emergency care for convulsive syndrome, vitamin D overdose, acetonemic vomiting, severe eating disorders, iron poisoning, obstructive syndrome, septic shock, gastrointestinal bleeding, respiratory failure, hypertensive crisis and sage syndrome.
- The main medicines used to treat these diseases.
- Dispensary surveillance of children with these diseases.
- Morally - ethical norms, rules and principles of professional medical behavior.

can:

- To formulate a preliminary diagnosis.
- To determine the volume and sequence of laboratory and instrumental methods of examination I to confirm the suspected disease.
- Make out stage and discharge epicrises
- Put the clinical diagnosis in compliance with international and classifications and diseases.
- Substantiate evidence for nephrobiopsy in children.
- Assessment of blood pressure in children by percentile. Definition of normotension, prehypertension, hypertension (1;2 degrees).
- Definition of diuresis: hourly (ml/kg/h).
- Substantiate indications for acute hemodialysis and chronic software hemodialysis in children.

- Substantiate and prescribe therapy in accordance with clinical protocols.
- To calculate the drugs used in these diseases.
- To give advice on care, and nutrition to the parents of the child with a certain pathology.

Own:

- Collecting history, physical examination and assessment of the patient's condition with these diseases.
- Making a medical history
- Interpretation of the results of laboratory and instrumental research methods.
- Determining the criteria for diagnosing these diseases.
- Determining common hazards (PBO)
- Providing first aid for convulsive syndrome, apnea, shock, obstructive syndrome, hyper and hypoglycemic coma.
- Recommendations for the care and diet of patients.

The total labor-intensiveness of mastering the discipline is 11 credits.

ANNOTATED CONTENT

Educational discipline

Obstetrics and Pediatric Gynecology

The aim of the "obstetrics and gynecology" discipline is to train a pediatrician with some knowledge in obstetrics and gynecology, taking into account further training and professional activities in the specialty of Pediatrics.

The main tasks of midwifery training are:

- To study etiopathogenesis, morphological manifestations of major obstetric pathological conditions and diseases.
- To study the clinical manifestations of pathological obstetric conditions and diseases.

- To form the student's skills to determine the volume and sequence of diagnostic measures in pathological conditions and diseases in obstetrics.
- To develop the student's skills of staging and formulating clinical diagnosis for each nosology in obstetrics.
- Teach to conduct differential diagnosis between different types of pathological conditions.
- To study the complications of obstetric conditions and diseases, to teach the methods of emergency care in them.
- To master the basic principles of treatment and prevention of pathological obstetric conditions and diseases, as well as to teach the issues of predicting the course of pregnancy and childbirth.
- Teach emergency care techniques for obstetric bleeding, an attack of eclampsia, shoulder dystocia, home birth, the threat of uterine rupture, perineum, septic complications.

The main task of training in gynecology:

- To consolidate and expand the screening skills of children and adults with female genital mutilation pathologies.
- To study etiopathogenesis, morphological manifestations of major gynecological diseases.
- To study the clinical manifestations of gynecological diseases in their typical manifestation, as well as - variants of the course and features of diseases depending on age.
- To form a student's skill in determining the volume and sequence of diagnostic measures in gynecological diseases.
- To develop the student's skills of staging and formulating clinical diagnosis for each nosology.
- Teach differential diagnosis of different variants of disease.
- To study the complications of diseases,

- To master the basic principles of treatment and prevention of diseases, as well as to teach the issues of prediction, definition of capacity to work.
- Teach abortion methods at different times of pregnancy, methods of contraception and family planning;
- Teach emergency care techniques for "acute belly" in gynecology.

The contents of the midwifery program.

The structure of childbirth in the city and in the countryside. Anatomy and topography of female genitalia in the age aspect. Fertilization and conception. Antenatal fetal development. Critical periods. The harmful effects of tobacco smoking, alcoholism, drug addiction. Female pelvis from an obstetric point of view. The fetus is like the object of childbirth. Physiological childbirth. The topography of the uterus in childbirth. Biomechanism of childbirth in the ant and a head of the occipil. Assessment of the fetus during pregnancy and childbirth. Stressful, stress-free test. Ctg. Biophysical fetal profile. The pelvic prebarrowing of the fetus. Diagnosis, classification, flow and conduct of childbirth. Miscarriage. abortion. The stages of abortion. Re-pregnancy. Anomalies of ancestral activity. It's a partogram. A narrow pelvis. A common characteristic. diagnostics. Biomechanism of childbirth. Clinically narrow pelvis. diagnostics. Obstetric tactics. Anomalies of fetal head insertion. Diagnosis, flow and delivery. Obstetric trauma. Injuries to the mother and fetus. Uterine rupture. classification. clinic. treatment. The placenta. A common characteristic. Reasons. Views. diagnostics. Obstetric tactics. Premature detachment of a normally located placenta. A common characteristic. Reasons. Views. diagnostics. Obstetric tactics. Bleeding in the post-natal and early postpartum period. Hypotenia, uterine atony. The stages of stopping the bleeding. Hemorrhagic shock. Hypertensive disorders during pregnancy. diagnostics. classification. Clinic treatment. An attack of eclampsia. Phases of an eclampsia attack. first aid. Intensive therapy. Newborn asphyxia. Resuscitation measures depending on the severity of asphyxia. Rhodo-

resolution operations: caesarean section, obstetric force tongs, vacuum-extraction of the fetus. Indications, conditions, technique of operations. Fruit-destroying operations, types, readings, conditions, equipment.

The contents of the gynecology program:

The physiology and regulation of the menstrual cycle. Functional diagnostic tests.

Disruption of the menstrual cycle. amenorrhoea. Dysfunctional uterine bleeding. Juvenile bleeding. Neuroendocrine Syndromes: Inflammatory Diseases in Girls. Features inscree diseases in girls. Inflammatory diseases of MPO specific etiology., Classification. Clinic. Diagnosis. Chlamydia, mycoplasmosis, trichomoniasis, ureaplasmosis, gardnerelosis, candidiasis. Pholy processes in the small pelvis. Sepsis. Septatic shock. background and precancerous diseases of the cervix and the body of the uterus.

When studying the discipline of obstetrics and gynecology at 4-5 courses, the student should know about obstetrics:

- Modern ideas about the prevalence of obstetric pathology in the CD. The basics of the organization and principles of the work of maternity institutions, departments of pathology of newborns and premature babies. Border conditions in newborns. The terminology used in neonatology. UNICEF's World Programme,""ingosing a child-friendly community. 11 Commandments of Successful Breastfeeding.
- Etiology, pathogenesis, morphology, classification, clinical picture, laboratory-instrumental diagnosis, differential diagnosis, principles of therapy, indications for surgical treatment, rehabilitation and prognosis in various obstetric pathology, as well as in neonatal pathological conditions and diseases:
 - miscarriage;
 - pelvic fetal beds;
 - anatomically and clinically narrow pelvis in modern obstetrics;
 - extenuation of the fetal head and irregular fetal positions;

- Anomalies of ancestral activity;
- hypertensive disorders of pregnancy (gestational hypertension, pre-eclampsia, eclampsia);
- obstetric haemorrhage during pregnancy, post-natal and postpartum periods;
- birth-resolution operations (caesarean section, fetal extraction vacuum, obstetric force tongs);
- obstetric maternal trauma;
- postpartum septic diseases;
- delays in fetal development;
- intrauterine hypoxia and asphyxia of newborn children;
- birth injuries of newborn babies;
- pathological jaundice of newborn children;
- The quantitative and qualitative criteria of the main laboratory and functional methods of research are normal and in pathology in pregnant women, women giving birth, maternity, preterm and premature infants.
- Features of diagnosis and treatment of major diseases and pathological conditions of newborn children:
 - delays in fetal development;
 - intrauterine hypoxia and asphyxia of newborn children;
 - birth injuries of newborn babies;
 - pathological jaundice of newborn children;
- Emergency services for obstetric bleeding, an attack of eclampsia, dystocia of the shoulders, home birth, the threat of uterine rupture, perineum, septic complications and acute conditions of the newborn (hyperthermia, convulsions, cardiac arrest and breathing).
- Keeping pregnant women at high risk in outpatient practice. Focused collection of history and approaches to the examination of the patient

in outpatient conditions of GPs. Indications to the consultation of narrow specialists. Rules of counseling.

can:

- To formulate a diagnosis in obstetric pathology and to draw up a plan of laboratory and instrumental examination, treatment;
- Assess the indicators of an objective examination of a newborn child, data of obstetric history and history of the disease;
- Evaluate the data of examination and physical examination of all organs and systems, physiological and pathological reflexes of the newborn;
- Identify diseases with cipher in accordance with the current international classification of diseases;
- Fill out medical documentation of inpatient and outpatient care for a pregnant woman, woman of birth, maternity and newborn;
- Evaluate data from laboratory-functional research methods.
- Determine the timing of pregnancy and the date of delivery, the timing of antenatal and postnatal leave;
- It's the right thing to do.
- Conduct BKM and NPA in case of bleeding in the post-natal and postpartum period.
- Provide first aid for eclampsia.
- Evaluate the data of vaginal research in the course of ancestral activity (on a mock)
- To conduct an examination of soft birth pathways after childbirth (on a dummy).
- Determine the integrity of the next and assess the blood loss in childbirth (on a fake).
- To prevent blood loss in childbirth by actively managing the third stage of childbirth.
- To perform acute tocolysis at the threat of preterm birth.

- To carry out operations used in the post-natal and postpartum period (separation and secretion of the afterage, manual examination of the postpartum uterus, instrumental examination of the uterus) on a dummy.
- To carry out allowances for pelvic fetal beds on a dummy.
- Prescribe treatment to a maternity hospital with septic complications (antibiotics, desensitizing agents and the like).
- Assess risk factors for septic infection;
- Identify long-term and near complications of postpartum septic complications;
- Determine the indications for intensive care, surgical treatment of postpartum septic complications.
- Diagnose morphological changes in various pathological processes occurring in the placenta;
- Determine the effect of the mother's infection on the newborn, the anti-breast feeding;
- Correctly attaching the child to the breast;
- Assess the condition of the newborn on the scales Of Apgar, Bollard.
- Take care of the umbilical residue.

possess:

- To prevent the newborn's gonorrhoea.
- Diagnose neonatal hypothermia and assist with mild hypothermia
- To prevent hypothermia.
- To provide primary resuscitation of the newborn in asphyxia to the stage of trachea intubation
- Conduct toilet skin, eyes, nose, ears.
- Weighing and thermometering the newborn.
- Measure the circumference of the head, chest, limbs, body length.
- Calculate nutrition, degree of delay in fetal development
- Advice on breastfeeding.

- Provide emergency care for the newborn '2015 (hyperthermia, hypothermia, convulsions, cardiac arrest and breathing).

The student should know from gynecology:

- Curating patients and writing a medical history for gynecology.
- Diagnosis, differential diagnosis and treatment of patients with dysfunctional uterine bleeding and hyperplastic endometrial processes.
- Diagnosis and differential diagnosis of amenorrhea. Algorithm of examination and treatment of patients with amenorrhea.
- Neuroendocrine syndromes. Diagnosis and differential diagnosis. Treatments.
- endometriosis. Therapy for different types of endometriosis.
- Inflammatory diseases of the female genitalia. Symptoms. Diagnosis and differential diagnosis. treatment.
- Issues of pediatric and adolescent gynecology.
- Diagnosis and treatment of background and precancerous diseases of the cervix and vulva.
- Clinic, diagnosis and differential diagnosis of benign ovarian tumors. Indications for prompt treatment.
- Acute stomach in gynecology. Ectopic pregnancy. An apoplexy of the ovary.
- Principles of diagnosis, treatment of urgent conditions in gynecology.
- The pingal processes in the small pelvis.
- Abortion and its complications.
- Pulp-septic complications in gynecology.
- Wrong positions of the genitals. Omissions and fallout of genitals. Traumatic genital injuries.
- Pre-operative training and post-operative care.
- Indications for the surgical treatment of uterine fibroids and stages of the head

- amputation and uterine extirpation.
 - Symptoms and physical examination data in ectopic pregnancy.
 - Indications and surgical interventions in tumors of uterine appendages (cystectomy, cysting).
 - Data of functional diagnostics tests for ovulatory and ananulatory menstrual cycle disorders.
 - Hormonal samples.
 - Methods of diagnosing endometriosis.

can:

- To conduct a survey of gynaecological patients
- Diagnose tumors of uterine appendages.
- Diagnosis of improper positions of genitals, omissions and genitals.

possess:

- Small gynecological surgeries (diagnostic uterine scraping, cervical biopsy, uterine sensing, cervical polyp removal).
- Diagnose background and precancerous cervical diseases with the help of
- colposcopy.
- The puncture of the rear vault.
- The technique of tubectomy.
- Taking smears for cytological and bacterioscopic examination.
- First medical care for emergency conditions in gynecology (uterine bleeding, twisting the legs of the kistov).

The total labor-intensive mastery of the discipline is 5 credits.

ANNOTATED CONTENT

Educational discipline

"Children's Infectious Diseases"

The purpose of the training: Formation of the student's clinical thinking in the field of pediatric infectious diseases by teaching diagnostic skills, differential diagnosis, and treatment and prevention measures.

Learning tasks:

- to study pathogenesis and pathomorphological changes in infectious diseases.
- to train the mechanisms of development and manifestation of the epidemic process in infectious diseases.
- 3. Develop practical skills in diagnosis, differential diagnosis and treatment of infectious diseases depending on age, as well as train emergency management techniques.
- to explore the organization and implementation of anti-epidemic and preventive measures to prevent the emergence and spread of infectious diseases.

Content discipline: Acute intestinal infections caused by undeniable-pathogenic microbes. Acute intestinal infections caused by conditional pathogenic anti-pathogenic anti-pathogenic (UPE). Dehydration in children, diagnosis of dehydration, treatment principle. Enterovirus infection in children. Acute respiratory viral infections in children. Septic shock and brain swelling in children with infectious diseases. encephalitis is primary and secondary in children. The most common helminthses in children (ascaridosis, enterobiosis, lambliosis). Post-vaccination complications in children.

As a result of the "Children's Infectious Diseases" discipline, the student must

Know:

- Properties of the pathogen, which cause the features of clinical manifestations of infectious disease
- Pathogenesis and the development of infectious disease, as well as emergency syndromes
- Clinical Form Classification

- The main symptoms and syndromes characteristic of a particular infectious disease
- Typical forms of the disease
- Complications
- Laboratory and instrumental diagnostic methods
- Differential diagnosis
- Principles of treatment in the hospital and at home
- The need for dispensation and the peculiarities of observation after the infectious disease

can:

- *To observe the basic rules of work at the bedside of an infectious patient*
- Collect the history of the disease with an assessment of epidemiological data
- To examine the patient in order to identify the main clinical signs of the disease, characteristic of a particular infectious disease
- Appoint a plan for the patient's examination
- To master the technique of material collection for laboratory research
- Substantiate a clinical diagnosis indicating the type, severity of the course and period of the disease
- Prescribe treatment depending on the etiology, timing of severity, the presence of emergency syndrome, aggravated premorbid background
- Interpret the results of the spinal fluid study
- Conduct serotherapy

possess:

- Taking the material from the patient for bacteriological, virological, serological, biological, etc. research (blood, feces, urine, vomit, sputum, liquor, nose and yawn)
- All types of injectable manipulation (p/k, in/m, in/in)
- The technique of washing the stomach and intestines
- Method of rehydration therapy

- Manipulations for emergency care (stopping bleeding, artificial breathing "mouth to mouth," "mouth to nose," cleaning of the upper respiratory tract, indirect heart massage, defibrillation, reception of Heimlich, Safar).

The total labor-intensiveness of mastering the discipline is 9 credits.

ANNOTATED CONTENT

Educational discipline

"Propedeutics of Children's Surgical Diseases"

3rd year of pediatric faculty

Purpose: Formation of competence for conducting semiotics and diagnosing surgical pathology and malformations in children.

Tasks:

- To study etiopathogenesis, semiotics and diagnosis of major surgical diseases.
- To study the clinical manifestations of surgical diseases, as well as variants of the course and features of the course of diseases depending on age.
- To formulate the student's skill in the volume and sequence of diagnostic measures in surgical diseases in children.
- To develop the student's skills of staging and formulating pre-diagnosis for each nosology.

The content of the theme:

Features of surgery of childhood. Modern research methods in pediatric surgery. Deontology in pediatric surgery. Anatomical and physiological features of the child's body, body size, features of the nervous, cardiovascular systems, respiratory system, basic exchange, heat regulation and heat recovery system. X-ray studies, ultrasound diagnostics, endoscopic research methods, angiography, computed tomography, radioisotope diagnostics in pediatric surgery. Semiotics and diagnosis of inflammatory abdominal diseases in children. Classification, etiology and pathogenesis, clinical picture of acute appendicitis and peritonitis in children, examination and palpation of the abdomen, the main symptoms. Semiotics and

diagnosis of congenital intestinal obstruction in children. Classification, etiology and pathogenesis, principles of diagnosis of surgical treatment. Semiotics and diagnosis of acquired intestinal obstruction in children. Classification, etiology and pathogenesis, clinical picture of acute appendicitis and peritonitis in children, examination and palpation of the abdomen, the main symptoms. Semiotics and diagnosis of hepatobiliary system diseases in children. Classification, etiology and pathogenesis, features of surgical treatment.

Semiotics and diagnosis of diseases manifested by bleeding from the digestive tract in children. Classification, etiology and pathogenesis, types of bleeding, main symptoms, interpretation of laboratory test results. Semiotics and diagnosis of purulent-inflammatory diseases of soft tissues and bones in children.

Classification, etiology and pathogenesis, principles of diagnosis of purulent surgical infection in children, necrotizing phlegmon of newborns, mastitis of newborns, erysipelas, omphalitis, furuncle, carbuncle, lymphadenitis, paronychia, hematogenous osteomyelitis, main symptoms, interpretation of laboratory data.

Semiotics and diagnosis of acute respiratory failure in children. Semiotics and diagnostics of acute suppurative diseases of soft tissues in children. Semiotics and diagnosis of congenital diseases of the esophagus in children. Semiotics and diagnosis of diseases of the urinary system in children. Classification, etiology and pathogenesis of diseases of the upper and lower urinary tract, main symptoms, examination features, interpretation of laboratory studies of ultrasound examination data in health and disease. Semiotics and diagnosis of diseases of the musculoskeletal system in children. Classification, etiology and pathogenesis, features of examination of children with diseases of the musculoskeletal system, interpretation of X-ray data, computed tomography, angiography. Semiotics and diagnosis of craniocerebral trauma in children. Semiotics and diagnosis of oncological diseases in children. Classification, etiology and pathogenesis, features of examination of children with oncological pathology, main symptoms, interpretation of X-ray data, computed tomography, angiography.

As a result of mastering the discipline "Pediatric surgery", the student should know:

- Modern ideas about the prevalence of congenital and acquired surgical pathology in children.

Etiology, pathogenesis, morphology, classification, clinical picture, laboratory and instrumental diagnostics surgical pathology in children. Peculiarities of pediatric surgery.

- Quantitative and qualitative criteria of the main laboratory and functional research methods in health and disease.

- Features of diagnostics taking into account age, complications and comorbid conditions.

be able to:

- Collecting a family history (drawing a family tree) of children with surgical pathologies

- Identification of harmful risk factors in parents of children with surgical pathologies

- Examination and palpation of the child's abdominal organs

- Examination and percussion of the chest organs in children

- Examination and palpation of the urinary system

- Determination of the child's pulse

- Blood pressure measurement

- Be able to build a history of the disease in a child with surgical pathology

Own:

- Purposeful collection of anamnesis in a child with surgical pathologies

- Collecting life history and obstetric history in a child with surgical pathology

- Possess the basic methods of diagnosing diseases of the abdominal organs in children

- Newborn baby care

- Feeding and caring for postoperative children

- Treatment of the oral mucosa of newborns

The total complexity of mastering the discipline is 2 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Pediatric Surgery"

for 4th year students of the pediatric faculty

Purpose: formation of competencies in the management of children with surgical pathology.

Tasks:

- To study the etiopathogenesis and morphological manifestations of the main surgical diseases of childhood

- To study the clinical manifestations of pediatric surgical diseases

- Formulate the student's skill in the volume and sequence of diagnostic measures in the manifestation of surgical diseases of childhood

- To develop the student's skills in setting and formulating a clinical diagnosis of the manifestation of surgical diseases of childhood

- To teach to carry out a differential diagnosis.

- To study the complications of the manifestation of surgical diseases of childhood

- To master the basic principles of treatment and prevention of manifestations of surgical diseases of childhood

- Train in methods of providing emergency care.

Topic content:

Anatomical and physiological features of the cardiovascular, nervous system, respiratory system, abdominal organs, basal metabolism, heat regulation and heat transfer systems. Features of diagnosis and surgical treatment of acute appendicitis in children. Complications. Peritonitis in children. Primary peritonitis in girls, appendicular peritonitis, etiology, pathogenesis, clinical picture, main symptoms, differential diagnosis, indications for surgical treatment

complications. Acquired intestinal obstruction in children. Mechanical and dynamic intestinal obstruction in children. Intestinal intussusception in children. Diseases of the pancreas in children. Pancreatic cyst in children. Acute pancreatitis and trauma to the pancreas in children. Doubling of the digestive tract in children (enterocystomas), dolichosigma. Hirschsprung's disease in children. Gastroesophageal bleeding in children. Anomalies of the vitelline duct in children. Complete fistula of the navel, incomplete fistula of the navel, Meckel's diverticulum, cyst of the vitelline duct. Diseases of the anterior abdominal wall in children. Syndrome of "flabby abdomen" in children, ventral hernia, umbilical hernia, hernia of the white line of the abdomen. Anorectal malformations in children. Spleen diseases in children. Inherited microspherocytosis (familial hemolytic anemia of Minkowski - Shoffard), acquired hemolytic anemia, congenital (familial) non-spherocytic hemolytic anemia, thrombocytopenic purpura (Verlhof's disease), etiology, pathogenesis, differential diagnosis, indications for surgical treatment, complications. Cysts and fistulas of the neck in children. Median and lateral cysts in children, etiology, pathogenesis, clinical picture, differential diagnosis, features of surgical treatment, complications. Acute hematogenous osteomyelitis in children: classification, etiology, pathogenesis, clinical picture, differential diagnosis, surgical treatment, complications. Features of the course of chronic hematogenous osteomyelitis in children. Features of diagnosis and treatment of surgical sepsis in children. Burns of the esophagus in children. Classification, etiology, pathogenesis, clinical picture, differential

diagnosis, emergency care, indications for surgical treatment, complications. Diaphragmatic hernia in children. Classification, etiology, pathogenesis, clinical picture, differential diagnosis, peculiarities of diagnosis and surgical treatment, complications. Acute bacterial destruction of the lungs in children. Features of the course of bronchiectasis in children. Foreign bodies of the respiratory tract in children. Classification, etiology, pathogenesis, clinical picture, differential diagnosis, emergency care. Malformations of the chest and ribs in children. Features of the course and surgical treatment of echinococcal disease in children. etiology, pathogenesis, clinical picture, differential diagnosis, peculiarities of diagnosis and surgical treatment, complications. Tumors and cysts of the mediastinum in children. Pericarditis in children. Etiology, pathogenesis, clinic, indications for surgical treatment.

Malformations of blood vessels in children. Malformations of superficial veins in children. Deep vein malformations (Klippel-Trenaunay syndrome). Congenital venous aneurysms in children. Gonad differentiation anomalies. Dysgenesis of the gonads, Shereshevsky Turner syndrome, mixed dysgenesis of the gonads. Testicular feminization syndrome. Surgical correction of violations. Gonad differentiation anomalies. Adrenal hyperandrogenism. Hypertrichosis. Viril syndrome. Hirsutism. Diseases and malformations of the genitals in girls. Rokitansky-Kustner syndrome in children.

As a result of mastering the discipline "Pediatric surgery", the student should know:

- Modern ideas about the prevalence of surgical diseases in children.

- Etiology, pathogenesis, morphology, classification, clinical picture, laboratory and instrumental diagnostics, principles of therapy, indications for surgical treatment, primary and secondary prevention, rehabilitation and prognosis of surgical diseases in children.

- Quantitative and qualitative criteria of the main laboratory functional research methods in health and disease.

- Features of diagnosis and treatment, taking into account age, complications and comorbid conditions.

- Techniques for providing emergency care for surgical diseases in children.

Be able to:

- Communication and collection of anamnesis in children with severe surgical diseases

- Collecting family history (drawing a family tree)

- Identification of harmful risk factors in parents of children of surgical diseases

- Substantiation of preliminary, clinical diagnosis in children with surgical diseases

- Evaluation of indications and contraindications for surgical intervention in children with surgical diseases

- Examination of bones, joints and muscles of the shoulder girdle in children

- Reading radiographs in children with surgical diseases

- Build a history of the disease in children with surgical diseases

Have skills:

- Completion of case histories (diaries, transferable, phased epicrisis) in children with surgical diseases

- Writing discharge and translation epicrisis in children with surgical diseases

- Examination of the skin and mucous membranes

- (signs of anemia, cyanosis, jaundice, edema, dehydration in children).

- Documenting the examination results in the medical history of children

- Evaluation of indications and contraindications for surgical intervention in children

- Examination of the abdomen in children

- Examination of the chest organs in children

- Examination of the organs of the urinary system in children

- Studies of the musculoskeletal system in children

The total complexity of mastering the discipline is 6 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Surgery of newborns" for 5th year students of the faculty of "Pediatrics"

Purpose: formation of competence for the management of newborns with surgical pathology.

Tasks:

- To study the clinical manifestations of surgical diseases in newborns.
- To formulate the student's skill in the volume and sequence of diagnostic measures in surgical diseases of newborns.
- To develop the student's skills in the formulation and formulation of the clinical diagnosis of surgical diseases of the newborn.
- To teach to carry out a differential diagnosis.
- To study the complications of neonatal surgical diseases.
- To master the basic principles of treatment and prevention of surgical diseases of newborns.
- Train in methods of providing emergency care.
- To study the manifestations of diseases of the urinary system in newborns.

- To study the clinical manifestations of diseases of the urinary system in newborns in their typical manifestation.

- Formulate the student's skill in the volume and sequence of diagnostic measures for diseases of the urinary system in newborns.

- To develop the student's skills in setting and formulating a clinical diagnosis for each nosology.

- To teach to carry out.

- To study the complications of diseases of the urinary system in newborns.

- To master the basic principles of treatment and prevention of diseases of the urinary system in newborns.

- To teach methods of providing emergency care for congenital malformations in newborns.

Topic content:

Anatomical - physiological characteristics of newborns. Features of the size of the body, nervous, cardiovascular systems, respiratory system, basal metabolism of the system of heat regulation and heat transfer. The value of the disproportion of

growth, and the occurrence of pathology in young children. Clinical genetics of surgical diseases in children. OMIM classification. Syndromology. The role of hereditary burden in the structure of child morbidity and mortality. Congenital malformations as an anatomical organ defect, disruption, deformity, dysplasia.

Surgery of congenital malformations in newborns. Features of the course of acute appendicitis in newborns and infants. Anatomical and physiological features of the abdominal organs in children. Necrotizing ulcerative enterocolitis and peritonitis of newborns, classification, etiology, clinical picture, differential diagnosis, indications for surgical treatment, complications. Congenital intestinal obstruction. Embryogenesis of the digestive system, classification, etiology, pathogenesis, clinical picture, differential diagnosis, features of surgical treatment. Embryonic hernia of the umbilical cord in newborns. The main stages of intrauterine bowel rotation. Megacolon in newborns. Anorectal pathology of newborns. Embryogenesis of the genitourinary system, etiology, pathogenesis, clinical picture, differential diagnosis, features of surgical treatment. Bleeding from the digestive tract in newborns. Classification, etiology, pathogenesis, clinical picture, differential diagnosis, indications and features of surgical treatment, complications differential diagnosis.

Malformations of the upper and lower urinary tract in newborns. Urolithiasis in children. Classification, etiology and pathogenesis, clinical picture, differential diagnosis, surgical treatment. Pathology of the vaginal process of the peritoneum in newborns. Inguinal hernia, dropsy of the testicular membranes, cyst of the spermatic cord, cryptorchidism.

Purulent-inflammatory diseases of the skin and subcutaneous fat in newborns. Anatomical - physiological features of the structure of the skin and subcutaneous

fat in newborns. Features of the course of acute hematogenous osteomyelitis in newborns. Sepsis and septic shock in newborns. Features of the clinical course and treatment.

Diseases and malformations of the esophagus. Agenesis, atresia, doubling, congenital cyst, dilatation, congenital stenosis and short esophagus, hiatal hernia, gastroesophageal reflux, chalasia and achalasia of the esophagus in newborns classification.

Acute respiratory distress syndrome caused by surgical diseases of the newborn. Choanal atresia, basal cerebral hernia, Pierre-Robin syndrome. Congenital stenosis of the trachea and bronchi in newborns. Lung malformations in newborns.

Malformations of the hepatobiliary system in newborns. Developmental anomalies and spleen cysts in newborns.

Hydrocephalus in newborns. Classification, etiology, pathogenesis, clinical picture, differential diagnosis, indications and features of surgical treatment, complications. Brain hernias in newborns. Spinal hernia in newborns. Classification, etiology, pathogenesis, clinical picture, differential diagnosis, indications and features of surgical treatment, complications. Malformations of the maxillofacial region in newborns.

As a result of mastering the discipline "Surgery of newborns", the student should know:

- Modern ideas about the prevalence of congenital malformations and surgical diseases in newborns

Indications for surgical treatment, primary and secondary prevention, rehabilitation and prognosis of congenital malformations and surgical diseases in newborns.

- 3. Quantitative and qualitative criteria of the main laboratory functional research methods in health and disease.

- Features of diagnosis and treatment, taking into account age, complications and comorbid conditions.

- Techniques for providing emergency care for congenital malformations in newborns.

Be able to:

- Collecting anamnesis from parents of newborns with severe congenital malformations and surgical diseases.

- Collecting a family history (drawing up a family tree)

- To identify harmful risk factors in parents of a newborn with congenital malformations and surgical diseases.
- To substantiate the preliminary, clinical diagnosis of a newborn with congenital malformations and surgical diseases.
- To assess the indications and contraindications for surgical intervention in a newborn with congenital malformations and surgical diseases.
- Examination of the bones, joints and muscles of the shoulder girdle in a newborn.
- Examination of newborns with urological diseases and congenital malformations of the urinary system.
- Features of reading radiographs in a newborn with congenital malformations and surgical diseases.
- Carrying out diagnostic and therapeutic punctures, puncture of the abdominal cavity.
- Ability to draw up a history of a disease in a newborn with congenital malformations and surgical diseases.

- Palpation of the bladder in newborns.

Have skills:

- work with documentation (diaries, translations, discharge epicrisis) in a newborn with congenital malformations and surgical diseases.

- Registration of discharge and transfer epicrisis in a newborn with congenital malformations and surgical diseases

- Examination of the skin and mucous membranes (signs of anemia, cyanosis, jaundice, edema, dehydration in a newborn).

- Documenting the results of the examination in the medical history of the newborn.

- Evaluation of indications and contraindications for surgical intervention in a newborn.

- Examination of the abdomen in newborns.

- Examination of the chest organs in newborns.

- Examination of the organs of the urinary system in newborns.
- Studies of the musculoskeletal system in newborns.
- External examination and palpation of the kidneys in newborns.
- Performing excretory urography in newborns.
- Bladder catheterization in newborns.
- Conducting cystography of newborns.
- Carrying out cystoscopy in newborns.
- Retropneumoperitoneum in newborns.

The total complexity of mastering the discipline is 6 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

Discipline title: "Pediatric Traumatology and Orthopedics with Military Field Surgery" for 5th year students of the Faculty of Pediatrics.

Purpose: the formation of competencies in the management of children with traumatic injuries.

Tasks:

- To study the etiopathogenesis and morphological manifestations of traumatic injuries in children.
- To study the clinical manifestations of traumatic injuries in children.
- Formulate the student's skill in the volume and sequence of diagnostic measures for traumatic injuries in children.
- To develop the student's skills in setting and formulating a clinical diagnosis for each nosology.
- To teach to conduct a differential diagnosis of nosologies.

- To study the complications of traumatic injuries in children.
- To master the basic principles of treatment and prevention of traumatic injuries.
- To teach the basics of providing emergency care for traumatic injuries.

Topic content:

Anatomical and physiological features in children. Features of fractures of the bones of the upper and lower extremities in children. Childhood injuries. The value and organization of child injury prevention. Features of surgical treatment with traumatic injuries in children. Minimally invasive treatment methods. Surgical treatment tactics with injuries to the bones of the extremities.

Injury of the chest and chest organs in children. Anatomical and physiological features of the chest in children. Fracture of ribs, sternum, compression of the chest cavity. Etiopathogenesis, clinical picture, diagnosis and treatment principles. Clinical picture and diagnosis of pneumothorax, hemothorax, contusion of the lung, traumatic diaphragmatic hernia, open injuries. Surgical treatment of injuries of the chest and chest cavity organs.

Fractures of the pelvic bones in children. Classification. Etiology, pathogenesis, clinical features. Methods of conservative and surgical treatment. Birth damage. Classification, etiology, pathogenesis, diagnostic features, indications for surgical treatment.

Traumatic brain injury in children. Classification. Features of the clinic in the age group. Clinic, diagnostics. Modern examination methods. Indications for surgical treatment. Damage to soft tissues in children. Wounds, wound infection. Damage to the ligamentous apparatus, damage to the blood vessels of the tendons and nerves. Indications for surgical treatment. Syndrome of prolonged compression in wounds, classification of the syndrome, symptoms, periods, first aid, treatment features.

Traumatic shock in children. Terminal condition with wounds. Classification, etiology, main links of pathogenesis, clinical symptoms, emergency care. Injuries and closed injuries of the abdominal and retroperitoneal organs in children. Types of injuries, classification, etiology, pathogenesis, indications for surgical treatment.

Thermal damage in military field conditions. Classification, etiology, pathogenesis, degree, burn shock, emergency care, treatment features. Frostbite and freezing in military field conditions. classification etiology, pathogenesis, periods, stages of frostbite, emergency medical care.

As a result of mastering the discipline "Pediatric Traumatology and Orthopedics with Military Field Surgery", the student should know:

- Modern ideas about the prevalence of traumatic injuries.

- Features of traumatic injuries in children. Etiology, pathogenesis, morphology, classification, clinical picture, traumatic injuries.

- Research methods. Features of fractures of the bones of the upper and lower limbs in children.

Prevention of child injuries.

- Quantitative and qualitative criteria of the main laboratory and functional research methods in health and disease.

- Features of diagnosis and treatment, taking into account age, complications and comorbid conditions.

- Techniques for providing emergency care for traumatic injuries.

Be able to:

- To collect anamnesis in a child with severe traumatic injuries, systemic diseases and congenital skeletal deformities in children.

- Collect family history (genealogical tree)

- To identify harmful risk factors in parents of a child with traumatic injuries, systemic diseases and congenital deformities of the skeleton in children.

- To substantiate a preliminary, clinical diagnosis in a child with traumatic injuries, systemic diseases and congenital skeletal deformities in children.

- To assess the indications and contraindications for surgical intervention in children with traumatic injuries, systemic diseases and congenital skeletal deformities in children.

- Read radiographs with traumatic injuries in children.

- Carry out transport immobilization for fractures of limb bones in children.

- To carry out medical immobilization in case of limb fractures in children.

- Carry out transport immobilization for spinal fractures in children

- Carry out medical immobilization for spinal fractures in children

- To carry out diagnostic and therapeutic punctures of the abdominal cavity in children

- To carry out infiltrative, local, conduction, regional anesthesia in children

- Provide vagosympathetic blockade in children
- Carry out palpation, percussion, determine the pain of the spine in the child.
- Substantiate the leading syndromes and the degree of injuries received
- Fill in case histories (diaries, transferable, discharge epicrisis) of children with traumatic injuries, systemic diseases and congenital deformities of the skeleton in children.

Have skills:

- Treatment of the burn surface in children.
- Studies of the bones, joints and muscles of the shoulder girdle in children.
- Examination of the abdomen in children.
- Directions of dislocations in children

- Studies of the ileosacral joints and the pelvis (determination of mobility, soreness, atrophy) in children

- Studies of the shape, function, mobility and soreness of the upper limbs (wrist and elbow joints, finger joints, etc.) in children

- Studies of the form of function, mobility and soreness of the lower extremities (ankle and knee joints, position, function, relief of the patella) in children

- Studies of the axis of the lower extremities (valgus and varus deformity of the knee joints) in children

- Studies of the foot axis (valgus and varus deformity of the feet) in children

- Examination of the skin and mucous membranes (signs of anemia, cyanosis, jaundice, edema, dehydration in children).

- Interpretation of examination results into the child's medical history.

- Evaluation of indications and contraindications for surgical intervention of the child.

- Studies of the spine, mobility of the spine, paravertebral muscles, standing and lying on the back (kyphosis, scoliosis, Schober test)

The total complexity of mastering the discipline is 2.3 credits.

ANNOTATED PROGRAM CONTENT

Discipline name: "Outpatient Pediatric Surgery" for 6th year students of the Faculty of Pediatrics

Purpose: Teaching students the issues of diagnosis, differential diagnosis, treatment, prevention of surgical pathology in children in a polyclinic.

Tasks:

- To teach the principles of ethics and deontology when examining children with surgical diseases.
- To develop skills in diagnosis, differential diagnosis, treatment and rehabilitation of children with surgical diseases on an outpatient basis.
- To teach methods of providing emergency care for acute surgical diseases and emergency conditions in children.
- To study the issues of clinical examination of children with surgical diseases in the centers of family medicine.

Topic content:

Organization of outpatient care for children with surgical pathology in a polyclinic. Algorithm for sorting patients at the reception. Rendering help in case of emergency. Equipping the children's surgical room of the polyclinic. The procedure for maintaining basic documentation. Sanitary and hygienic requirements for the children's surgical room of the polyclinic. Equipment. Equipment, surgical instruments. Medicines. Duties of a surgeon in a polyclinic. Rules for maintaining an outpatient card for a patient with surgical pathology. Indications and terms of outpatient operations for children with surgical pathology. Indications and contraindications for outpatient operations for children with surgical pathology. Selection and referral of patients to inpatient and spa treatment. Principles of rehabilitation and clinical examination of patients who have undergone surgery.

Features of the rehabilitation of children in the postoperative period in the clinic for abdominal surgical pathologies. (Acute appendicitis, Meckel's diverticulum, gastroesophageal reflux, pylorospasm, esophagitis, gastritis, duodenitis, gastric ulcer and duodenal ulcer, atresia, esophageal stenosis, chaliasia and achaliasia of cardia, Hirschsprung's disease, rehabilitation, etc.) intervention for diseases of the abdominal cavity.

Features of clinical examination and rehabilitation of children with surgical diseases of the mediastinal organs. Tumors and cysts of the mediastinum in children. Pericarditis in children. Clinical examination and rehabilitation of children in the postoperative period in the clinic for surgical pathologies of the

chest organs. (Pierre-Robin syndrome, congenital lobar emphysema, asphyxia of the diaphragmatic hernia).

Features of rehabilitation of children with surgical diseases of the hepatobiliary system. Features of clinical examination and rehabilitation of children with surgical diseases of the genitourinary system. (premature puberty, delayed puberty, congenital adrenogenital syndrome, gonadal dysgenesis, malformations of the uterus and vagina, hermaphroditism) Features of diagnosis and provision of emergency surgical care in a polyclinic. Features of the medical examination and rehabilitation of children with surgical diseases of soft tissues. Staphylo- and streptoderma in newborns, Finger's pseudofurunculosis, neonatal mastitis, pararitium, paronychia, paraproctitis, necrotizing phlegmon of newborns, lymphadenitis, adenophlegmon features of diagnosis and emergency surgical care. Clinical examination and rehabilitation of children with surgical diseases of the osteoarticular system. Features of management of patients with ostemyelitis. Features of congenital malformations and rehabilitation of children with surgical diseases of the spleen. Inherited microspherocytosis (familial hemolytic anemia of Minkowski - Shoffard), acquired hemolytic anemia, congenital (familial) non-spherocytic hemolytic anemia, thrombocytopenic purpura (Verlhof's disease).

Features of rehabilitation of children with gastroesophageal burns. Classification, etiology, pathogenesis, clinical picture, differential diagnosis, emergency care, indications for surgical treatment, complications.

Features of rehabilitation of children with surgical diseases of the vascular system. Malformations of blood and lymphatic vessels in children, malformations of superficial veins. Arteriovenous malformations in children, clinical and diagnostic

signs, treatment, clinical examination. Fundamentals of rehabilitation of children with neurosurgical pathology. Congenital malformations of the central nervous system: cranial hernia. Spinal hernia in newborns. Hydrocephalus, clinical examination.

As a result of mastering the discipline "Outpatient Pediatric Surgery", the student should know:

- Modern ideas about the prevalence of pediatric surgical pathology in the Kyrgyz Republic.

Etiology, pathogenesis, morphology, classification, clinical picture, laboratory and instrumental diagnostics

- differential diagnosis, principles of therapy, indications for surgical treatment, primary and secondary prevention, rehabilitation and prognosis of children's surgical diseases in a polyclinic.

- Organization of outpatient care for children with surgical pathology in a polyclinic. Equipping the children's surgical room of the polyclinic. The procedure for maintaining basic documentation.

- Quantitative and qualitative criteria of the main laboratory and functional research methods in health and disease.

- Features of diagnosis and treatment, taking into account age, complications and comorbid conditions. Methods for providing emergency care for pediatric surgical diseases in a polyclinic.

- Management of children with surgical pathology in outpatient practice.

- Indications and consultations of narrow specialists. Counseling rules.

Be able to:

- To collect anamnesis in children with surgical pathology in a polyclinic.

Collecting an allergological anamnesis. Collecting anamnesis from a third person.

- To identify harmful risk factors in newborns with congenital malformations.

- Build a history of the disease in children with surgical pathology in a polyclinic.

Filling out outpatient cards, a journal of small operations and a journal of medical examination in children with surgical pathology in a polyclinic.

- Designation of a disease with a code in accordance with the current international classification of diseases.

- Work in accordance with applicable national protocols / guidelines.

- To assess the indications and contraindications for surgical intervention in children with surgical pathology in a polyclinic.

- Assess the general condition of the patient (appearance, position, nutrition, consciousness, mental state). Assessment of vital functions of the body (body temperature, frequency and type of respiration, pulse rate, arterial and venous pressure).

- Document anthropometric data (height, weight, BMI, head circumference, waist, hip).

Have skills:

- Studies of temperature, vibration and positional sensitivity in children.

- Taking a biopsy of tumor formations and lymph nodes.

- Carrying out diagnostic and therapeutic punctures.

- Probing cavities, fistulas.

- Conducting infiltrative local anesthesia, conduction, regional, vagosympathetic blockade.

- Gastric lavage in children

- Examination of lymph nodes, peripheral and central arterial pulsation, detection of arterial noise.

- Examination of the lips, oral region, oropharynx, as well as teeth, tongue, tongue root, pharyngeal arches, tonsils, examination of the excretory ducts of the parotid glands and submandibular glands.

- Carrying out palpation of the floor of the mouth, cheeks, tonsils and the root of the tongue. Examination and palpation of the parotid and submandibular glands.

- Inspection of the shape and mobility of the chest, the study of pain with pressure and / or percussion. Determination of the magnitude of the chest excursion - examination, palpation, measurement of 2 chest circumference. Palpation of voice tremor. Percussion of the lungs, determining the excursion of the lower edge of the lungs. Lung auscultation.

- Definitions of the apical impulse (heart). Determination of the boundaries of cardiac dullness. Auscultation of the heart. Determination of pulsation of peripheral vessels.

- Examination of the abdomen. Auscultation of the abdominal cavity (intestinal murmurs). Abdominal percussion (determination of the size of the liver, spleen). Identification of soreness of the abdomen, a symptom of irritation of the peritoneum, muscle protection. Definition of "splash noise".

- Definition of pain in the kidney area.

- Studies of an inguinal hernia by examination and palpation of the hernial orifice. External examination and palpation of the perianal region. Examination and palpation of the penis and scrotum (testicles, epididymis, spermatic cord). Examination and palpation of the female external genital organs (vulva, perineum).

- Studies of the spine, mobility of the spine, paravertebral muscles, standing and lying on the back (kyphosis, scoliosis). Palpation, percussion, definition of pain in the spine.

- Studies of tactile and pain sensitivity. Assessment of the degree of impairment of consciousness. Study of orientation in space and time.

- Carrying out preoperative preparation of the operating field for minor surgical interventions, asepsis and antiseptics.

- Preparations for surgery (washing hands before surgery, putting on a sterile operating uniform, putting on sterile gloves).

- Using and explaining to the patient the technique of using a metered-dose inhaler, a spacer and a nebulizer.
- Carrying out cardiopulmonary resuscitation
- Research and first aid for external injuries (wounds, bleeding, burns, sprains, dislocations, fractures).
- Transportation of an injured patient. Stopping bleeding (compression, applying a tight bandage, applying a tourniquet).
- Probing cavities, fistulas.
- Conducting primary surgical treatment of wounds, removing stitches. Suturing the skin.
- Treatment of the burn surface, infected wounds.
- Bandages, soft bandages, splints. Dislocation directions.
- Opening of abscesses, panaritiums, phlegmon.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Pediatric intensive care and anesthesiology" for 6th year students of the Faculty of Pediatrics

Purpose: the formation of competencies for the management of children with surgical diseases, participation in the conduct of anesthesia, to teach how to provide highly qualified medical care to children in terminal conditions.

Tasks:

- To study the Etiopathogenesis , morphological manifestations of surgical diseases requiring anesthesia and intensive care

- To study the clinical manifestations of surgical diseases requiring anesthesia and intensive care in their typical manifestation, as well as the course and characteristics

- To form the student's skill of determining the volume and sequence of diagnostic measures for surgical diseases requiring anesthesia and intensive care

- To develop the student's skills in setting and formulating a clinical diagnosis for surgical diseases requiring anesthesia and intensive care

- To teach to carry out a differential diagnosis.

- To study the complications of surgical diseases requiring anesthesia and intensive care, as well as the most common Comorbid conditions.

- To master the basic principles of treatment and surgical diseases requiring anesthesia and intensive care. - To teach the methods of providing emergency care for surgical diseases requiring anesthesia and intensive care.

Topic content:

Terminal conditions and clinical death, intensive care and resuscitation in a hospital setting. Intensive therapy for hyperthermic, convulsive syndromes, cerebral edema. Intensive care for acute respiratory failure. Method and indications for mechanical ventilation.

General principles of pain relief in children. The choice of pain relief depending on the condition of the child and the type of pathology. Preparing patients for general anesthesia. Dangers and complications of anesthesia, their prevention. Indications and contraindications for various types of general anesthesia.

Blood transfusion. Modern aspects of blood transfusiology. Indications and contraindications for blood transfusion. Determination of blood group by ABO and Rh factor. Post-transfusion complications and reactions, emergency care.

Coma. Etiopathogenesis. Clinic, tactics of administering children with coma. Acute exogenous and endogenous intoxication, coma, methods of treatment.

Intensive therapy of acute circulatory disorders. Etiopathogenesis, clinical picture, examination. Cardiopulmonary resuscitation in children.

Shock in children. Pathogenesis. Classification. Shock clinic. Emergency care for shock conditions in children.

The most common poisoning in children. The principles of the introduction of children with poisoning.

As a result of mastering the discipline "Pediatric resuscitation and anesthesiology", the student should know:

- Indications for surgical treatment, primary and secondary prevention, rehabilitation and prognosis of surgical diseases requiring anesthesia and intensive care

- Terminal conditions and clinical death, intensive care and resuscitation in a hospital setting. Intensive therapy for hyperthermic, convulsive syndromes, cerebral edema

- Features of pain relief in children. Pain relief depending on the condition of the child and the type of pathology. Diagnostics, etiopathogenesis, clinic.

- Intensive therapy of acute hemodynamic disorders. Etiopathogenesis, clinical picture, examination.

- Acute exogenous and endogenous intoxication, coma, treatment methods.

- Types of pain relief.

- Theories, stages of anesthesia, components of anesthesia. Preparing patients for general anesthesia.

- Technique for various types (inhalation and non-inhalation) anesthesia. Combined anesthesia.

- Maintenance of body functions during general anesthesia.

- Dangers and complications of anesthesia, their prevention. Indications and contraindications for various types of general anesthesia.

- Terminal conditions, clinical death, pathophysiology, clinic, indications for resuscitation. Technique for resuscitation. Drug therapy for acute respiratory arrest and circulation, defibrillation.

- Criteria for brain death, decortication. Indications for termination of resuscitation. Post resuscitation disease, intensive care.

- Intensive therapy for acute hemodynamic disorders. Hypovolemia, collapse, shock. Pulmonary edema. These pathogenesis, clinical picture, diagnosis

- Intensive therapy for acute respiratory failure. Methods and indications for mechanical ventilation.

- Artificial parenteral nutrition. Methods for calculating the volume of liquids and calories.

- Features of resuscitation and intensive care in newborns

- Quantitative and qualitative criteria of the main laboratory and functional research methods in health and disease.

- Features of diagnosis and treatment, taking into account age, complications and comorbid conditions.

- Techniques for providing emergency care for surgical diseases requiring anesthesia and intensive care.

Be able to:

- Collect anemnesis from a patient with a serious illness or a dying patient.

Collecting family anemnesis (drawing a family tree)

- Identify and describe nystagmus

- Describe the optical disc and retinal vessels (the difference between a normal picture and a pathological picture)

- Determine arterial insufficiency, the Moshkovich method

- Measure temperature, determine vibration and positional sensitivity

- Communicate negative information to the patient and his loved ones

- Document the results of the examination in the medical history / outpatient card of the patient
- Write an extract and transferable epicrisis
- Fill out a drug prescription
- Fill out a death document
- Operate in accordance with applicable national protocols / guidelines
- Assess the general condition of the patient (external appearance, position, nutrition, consciousness, mental state)
- Assess the vital functions of the body (body temperature, frequency and type of respiration, pulse rate, arterial and venous pressure)
- Examine the skin and mucous membranes (signs of anemia, cyanosis, yellowness, edema, dehydration)
- Assess attention, thinking (form and content), perception, emotional and psychomotor behavior

- Estimate the time of death (cadaveric spots, rigor mortis, rectal temperature)
- Determine the suitability of blood for transfusion, blood transfusion, serum administration

Have skills:

- Studies of radicular cervical and lumbar symptoms.
- Sounding of the stomach, duodenal intubation in children.
- Tube feeding of heavy and premature babies
- Treatments of the oral mucosa in children
- Carry out drip and jet transfusion of blood substitute drugs
- Carrying out tracheo-or conicotomy, tracheostomy
- Biopsy of tumor formations and lymph nodes

- Carrying out diagnostic and therapeutic punctures, paracentesis
- Probing cavities, fistulas
- Conducting infiltrative local anesthesia, conduction, regional, vagosympathetic blockade
- Carrying out puncture cystostomy
- Injection of drugs into the larynx and bronchi with a laryngeal syringe and through a nasal catheter
- Carrying out tonometry
- Carrying out cleansing, siphon and therapeutic enemas in children
- Carrying out cardiopulmonary resuscitation, connecting to mechanical ventilation
- Conducting defibrillation

The total complexity of mastering the discipline is 3 credits.

BLOCK "NARROW" CLINICAL DISCIPLINES:

ANNOTATED PROGRAM CONTENT

Academic discipline

"Infectious Diseases"

The purpose of the discipline: the formation of competencies for the management of patients with infectious pathology.

Discipline objectives:

- To study the etiopathogenesis of the most common infectious diseases.

- To study the clinical manifestations of infectious diseases in their typical manifestation, as well as the variants of the course and characteristics of the course of diseases depending on age.

- To form the student's skill of determining the volume and sequence of diagnostic measures for infectious diseases.

- To develop the student's skills in setting and formulating a clinical diagnosis in infectious nosology.

- To study the complications of infectious diseases, to teach methods of providing care for them.

Master the basic principles of treatment and prevention of infectious diseases

Content of the discipline: Organization of care for infectious patients.

The device and mode of operation of the infectious hospital department (admission, boxed, specialized department). Clinical and epidemiological features of the course of paratyphoid fever (A and B). Complications of typhoid-paratyphoid diseases. Clinic, diagnosis and treatment. Bacterial and protozoal colitis. Clinical and laboratory diagnostics. Complications. Principles of treatment and prevention. Cholera. The degree of dehydration. Hypovolemic shock. Treatment. Conditions for the discharge of convalescents. Prevention. Salmonellosis. Clinic, diagnostics. Complications. Treatment and prevention. Botulism. Clinic, diagnostics. Complications. Treatment. Clinical and laboratory diagnostics of round helminths (ascariasis, trichocephalosis, toxocariasis). Clinical and laboratory diagnostics of flat helminths and flukes (teniasis, teniarinchiasis, opisthorchiasis). Clinical and epidemiological features of the course of HAV and

HEV. Treatment. Prevention. Clinical and laboratory diagnostics of parenteral viral hepatitis B, C and D. Outcomes of viral hepatitis (fulminant, chronic course, liver cirrhosis). Differential diagnosis of ARVI (influenza, parainfluenza, adenovirus, rhinovirus infections). Meningococcal infection. Clinic, diagnostics, complications. Treatment and prevention. Enterovirus infection. Clinic, diagnostics. Treatment and prevention. Herpesvirus infection (herpes simplex and herpes zoster). Clinic, diagnosis and treatment. Epidemic typhus. Brill's disease. Clinic, diagnostics. Complications. Treatment and prevention. Q fever. Clinic, diagnostics. Treatment and prevention. Tick-borne encephalitis. Clinic, diagnostics. Complications. Treatment and prevention. Malaria. Complicated forms. Treatment and prevention. Leishmaniasis: cutaneous and visceral. Clinic, diagnosis and treatment. Psittacosis. Clinic, diagnostics, treatment and prevention. Brucellosis. Diagnostics and treatment of subacute and chronic forms. Pseudotuberculosis and intestinal yersiniosis. Clinic, diagnosis and treatment. Leptospirosis. Clinic, diagnostics. Complications. Treatment and prevention. Erysipelas. Clinic, diagnostics. Complications. Treatment. Tetanus. Clinic, diagnostics. Complications. Treatment and prevention. Rabies. Clinic, diagnostics. Treatment. Measures for handling persons with animal bites. Anthrax. Clinical and laboratory diagnostics. Complications. Treatment and prevention. Plague. Measures for detecting especially dangerous quarantine infections. Opportunistic infections in HIV infection. Clinic, diagnostics, treatment, prevention. Principles of ART for HIV infection.

As a result of mastering the discipline "Infectious Diseases", the student must

know:

- basic principles of diagnosis, treatment and rehabilitation of infectious diseases in adults and adolescents
- indications for hospitalization of patients with infectious diseases;
- implementation of specific and non-specific prophylaxis of infectious diseases in the population;
- the structure of the infectious disease service, indications for outpatient treatment of an infectious patient, transportation of an infectious patient to the hospital, rules for isolation during hospitalization of patients, and specifics of organizing work with HIV patients.

be able to:

- examine a patient with an infectious disease (examination, percussion, palpation, auscultation);
- organize the collection of infectious material from patients with infectious diseases; carry out differential diagnostics between various infectious diseases, as well as infectious diseases with pathological conditions of non-infectious genesis; organize work in case of quarantine and especially dangerous infections.

own:

- a methodology for assessing the severity of a patient's condition with an infectious disease;
- a method for determining the nature of the rash;
- methods of collecting pathological material from a patient with an infectious disease; provide emergency care to patients in emergency situations.

The total complexity of mastering the discipline is 4 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

Dermatovenereology "

The purpose of the discipline:

to teach students the diagnostic criteria and principles of treatment of the main (in accordance with the "Program for Skin and Venereal Diseases for Students of Higher Medical Educational Institutions") skin and venereal diseases, as well as the peculiarities of their course, manifestations, diagnosis and treatment of the oral mucosa. Discipline objectives:

- on the basis of lecture material, practical lessons, independent work to form students

- knowledge of the etiology and pathogenesis of major skin and venereal diseases;
- knowledge of diagnostic criteria, practical skills in diagnosing major skin and venereal diseases;
- knowledge of the principles of treatment of major skin and venereal diseases.
- knowledge of the features of clinical manifestations, diagnosis and treatment skin and venereal diseases in the oral mucosa.

Course content: Morphological elements of the rash (primary and secondary). Pyoderma. Parasitic skin diseases. Keratomycosis. Candidiasis. Dermatomycosis (trichomycosis). Dermatitis. Eczema. Toxicoderma. Neurodermatosis (pruritus, prurigo, atopic dermatitis, urticaria). Psoriasis, lichen planus. The main types of psoriasis in childhood. Erythema multiforme exudative, lichen rosacea. Bullous dermatoses (pemphigus, Duhring's dermatitis herpetiformis). Skin manifestations of connective tissue diseases (lupus erythematosus, scleroderma). Seborrhea, acne vulgaris and rosacea. General pathology of syphilis. Etiology and pathogenesis. Classification. I syphilis. II, III syphilis. Congenital syphilis. Modern principles of diagnosis and treatment of syphilis. Gonorrhea. Trichomoniasis Bacterial vaginosis. Chlamydial, mycoplasma and ureaplasma infections. Genital herpes, urogenital candidiasis.

As a result of mastering the discipline "Dermatovenereology", the student must know.

- Basic rules for working at the bedside of a patient with cutaneous and veins. disease.

- Basic principles of collecting anamnesis and approaches to examining an adult and a child with skin pathology.

- The main medical documentation of the patient.

- pathogenesis, classification, clinical picture, laboratory and instrumental methods for diagnosing pathological conditions, symptoms and syndromes of various nosological forms, principles of therapy, prevention, rehabilitation;

- Necessity of medical examination and peculiarities of observation of chronic diseases of the skin and veins. disease.

- Specific prevention of controlled STIs

- The main pathological symptoms and syndromes of diseases in patients, taking into account ICD-10

- Techniques for providing first aid for emergency conditions with acute skin diseases.

- Management tactics for patients with skin pathology and STIs.

- Principles of treating patients at home, indications for hospitalization.

- Basic principles of treatment and rehabilitation of pathology in dermatovenerology.

Be able to:

- Develop a plan for the treatment and rehabilitation of the patient.

- Perform basic diagnostic measures to identify urgent and life-threatening conditions;

- To carry out anti-epidemic work, to determine the timing of the isolation of the patient, contact, measures in the outbreak.

- To carry out the prevention of nosocomial infections

- Interpret the results of laboratory and instrumental research methods.

Examine the patient in order to identify the main clinical signs of the disease, characteristic of a particular disease.

- Assign a patient examination plan.

- To highlight the main clinical syndromes of diseases with skin pathology.

- Analyze the results of studies with pathological symptoms and syndromes of common diseases

- Recognize the primary and secondary morphological elements of skin rashes; apply clinical protocols (standards) for the diagnosis and treatment of the most common skin diseases and sexually transmitted infections.

Own:

- Methods of general clinical examination (history taking, examination, palpation, percussion, auscultation) with the assessment of laboratory data.

- The technique of sampling biomaterial for bacteriological and other methods of laboratory research.

- Skills in identifying various symptoms, syndromes and pathological conditions in skin diseases

- Methodology for conducting sanitary education work among the population;

- Methods for providing emergency assistance:

 - o resuscitation measures for angioedema Lyell and Stevens-Johnson syndromes

Skills of etiotropic, pathogenetic and specific therapy for skin pathology and STIs
modern methods of clinical, instrumental, laboratory and other examination used in dermatovenerology;

modern methods of general and local therapy of skin diseases and sexually transmitted infections.

The total complexity of mastering the discipline is 3 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Radiation diagnostics and therapy"

The purpose of the discipline: - acquisition by students of knowledge on radiation diagnosis of syndromes of diseases of various organs, systems of the human body, correct and adequate use of the knowledge gained in the treatment and diagnostic process. Students study the issues of treatment and prevention of malignant tumors, the basic principles of planning and conducting radiation therapy in patients with malignant neoplasms. Students mastering the theoretical foundations for the use of radiation therapy in the treatment of malignant tumors in adults and children, the choice of methods.

Discipline objectives:

- to train students to independently recognize the signs of radiation manifestations of various disease syndromes when studying medical imaging documents (X-ray, CT, MR tomogram, echogram, scintigram, angiogram).
- to train students in the design of medical documentation in the form of research protocols by various methods of medical introscopy.
- to teach students the elements of differential diagnosis in the study of medical images of various syndromes of diseases of human organs and systems.
- teaching the student to tactics in case of suspicion of the presence of a malignant neoplasm in a patient.

- familiarization with the organization of cancer care for the population and with modern principles of diagnosis and treatment of cancer patients.
- study of the biological effect of ionizing radiation,
- study of indications and contraindications for radiation therapy.
- teaching students modern technologies of radiation therapy, non-traditional methods and techniques of radiation, combined and complex treatment of cancer patients.
- mastering by students of theoretical information and practical skills in the field of preparing patients for radiation therapy and its implementation.

Discipline content:

Radiation Diagnostics: A History of Radiology. Fundamentals of Medical Imaging. Radionuclide diagnostics. Types of radiation in radiation diagnostics. X-ray method. Special X-ray research methods. Computed tomography (CT). Magnetic resonance imaging (MRI). Ultrasound method (ultrasound). Endoscopy. Interventional radiology. Radiation methods for studying the respiratory system. Radiation semiotics of diseases of the respiratory system. Radiation research

methods and normal radiation anatomy of the gastrointestinal tract. Radiation methods of research and normal radiation anatomy of the hepato-bilio-pancreato-lienal zone. Radiation methods for examining the heart and large vessels. Radiation signs of congenital heart defects. Methods of radiological diagnosis of the musculoskeletal system. Radiation anatomy of muscles, ligaments, bones and joints. Comparative characteristics of methods of radiation diagnostics in the study of the brain and spinal cord. Normal radial anatomy of the brain and spinal cord. Hypertensive syndrome. Radiation anatomy of the breast. Radiation diagnostics of diffuse and focal formations of the mammary gland. Radiation diagnostics in endocrinology.

Radiation Therapy: An Introduction to Radiation Therapy. Physicotechnical, biological and organizational foundations of radiation therapy. Clinical radiobiology. Principles and biological foundations of radiation therapy for malignant neoplasms. Simulation. Radiation therapy methods.

Radiation reactions and injuries. Radiation therapy for non-neoplastic diseases. Stereotactic surgery.

As a result of mastering the discipline "Radiation Diagnostics and Therapy", the student should know:

- system of radiation protection and labor protection during diagnostic and therapeutic use of radiation;
- biophysical properties, radiosensitivity and radioresistance of tissues and organs;

- types of electromagnetic, ultrasonic and corpuscular radiation used in radiation diagnostics;

- basic and special methods of obtaining images in radiation diagnostics, a system for digital formation and transmission of images; organo-complex use of modern methods of radiation imaging and radiation therapy; use of modern methods of radiation imaging and radiation therapy;

- types and methods of radiation research,

- radiation semiotics and diagnostics of diseases of internal organs and musculoskeletal system

- be able to:

- to determine the indications and contraindications for radiation examination;

- prepare the patient for radiation examination;

- to decipher the results of radiation examination for the most frequent diseases of the lungs, heart, esophagus, stomach, intestines, gallbladder, kidneys, organs of the endocrine system, bones and joints;

- determine the presence of a fracture and dislocation, free gas in the abdominal cavity, hydropneumothorax on the radiograph;

own:

- the skills of making a preliminary diagnosis based on the results of radiation examination

- a technique for decoding the main results of radiation research in the most common pathology.

The total complexity of mastering the discipline is 5 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Pediatric neurology with a course in medical genetics and neurosurgery"

Purpose: To form the student's professional competence of clinical neurological thinking, the ability and willingness to independently diagnose the most common neurological and neurosurgical diseases of childhood, including hereditary ones, the ability to professionally provide assistance in urgent conditions of diseases of the nervous system, to determine indications for surgical treatment of neurological diseases and know the basics of preventing these diseases.

Tasks:

teaching students the recognition and treatment of the most common diseases in childhood and familiarization with the latest advances in neurology, neurosurgery and medical genetics.

Abstract of the topic: Neurology. Research technique of the motor system. Reflex sphere. Methods for the study of motor functions. Inspection. Active and passive movements. Muscle tone. Muscle strength. Normal reflexes. Pathological reflexes. Clonus. Pathological synkinesis. Gait. Types of pathological gaits. Central and peripheral paralysis. Akinesic-rigid syndrome. Hypotonic-hyperkinetic syndrome.

Sensitive sphere research technique. Types of sensitivity disorders. Meningeal and hypertensive syndromes.

Meningeal syndrome: symptoms. Hypertensive syndrome: main clinical and paraclinical signs. Research methodology. CSF is normal and pathological. Research methodology 9, 10, 11 and 12 FMN. Syndromes of defeat. Research methodology 5,7,8 FMN. Syndromes of defeat. Trigeminal nerve. Research methodology 3,4,6 FMN. Syndromes of defeat. Methods for studying the functions of the oculomotor nerves. The main syndromes of defeat. Innervation of voluntary movements of the eyeballs. Alternating syndromes with damage to the midbrain.

Research methods of the olfactory nerve. The main syndromes of defeat. Research technique and damage to the optic nerve.

Research methodology of the autonomic nervous system. Syndromes of defeat. Research methodology for higher cerebral functions. Syndromes of defeat. Basic principles of neurosurgical operations in children. Technique of craniotomy and laminectomy.

Closed and open craniocerebral trauma in children. Classification. Brain tumors in children. Additional research methods. Dislocation syndrome. Principles of treatment of brain tumors in children.

Spinal cord tumors in children. Diagnostic principles, surgical treatment and outcomes.

Parasitic diseases of the brain in children. Echinococcosis. Cysticercosis. Toxoplasmosis.

Emergencies in neurosurgery in children. Hypertension and dislocation syndromes. Status epilepticus. Treatment principles.

Injury of the spine and spinal cord in children.

Damage to peripheral nerves.

Perinatal lesions of the nervous system: hypoxic-ischemic encephalopathy, birth trauma of the nervous system.

Cerebral palsy. Etiology. Pathogenesis. Clinic

Congenital pathology of the nervous system: syringomyelia, cerebral hernias, craniovertebral abnormalities. Causes of congenital pathologies of the nervous system.

Neurotic reactions in children: tics, night fears and enuresis. Neurotic sleep disorders (night fears). Neurotic enuresis. Neurotic encopresis. Obsessive-compulsive movement neurosis. Hysterical neurosis. Tics in children.

Acute disorders of cerebral circulation: ischemic and hemorrhagic strokes.

The student should know:

- Anatomical features of the brain and spinal cord in children, as well as functional features of the child's nervous system. Methodology for collecting anamnesis reflecting neuropsychic development, behavior and character traits of the child.

- The main clinical manifestations (symptoms, syndromes) of the studied neurological diseases in children;

Medical tactics and be able to carry out first aid for urgent and life-threatening neurological conditions,

- Methods of carrying out the main neurosurgical interventions;
- Basic methods of laboratory and instrumental diagnostics, additional clinical and paraclinical research methods used in neurology, medical genetics, neurosurgery (indications and contraindications for use, theoretical foundations of the method, interpretation of results).

The student should be able to:

Master the technique of examining the patient with the allocation of individual symptoms of defeat with their subsequent grouping into syndromes, and determination of the level of topical lesion.

- To make a clinical diagnosis of major neurological and neurosurgical diseases, including those of hereditary nature in children;
- To appoint neurological, patients with hereditary diseases of the nervous system and neurosurgical patients adequate treatment in accordance with the diagnosis;
- To draw up medical histories of a neurological and neurosurgical patient;

- Recognize the general manifestations of hereditary pathology, use the appropriate terminology when describing the clinical picture (phenotype) of the patient;
- Collect anamnesis and genealogical information, draw up a pedigree, graphically and analyze the inheritance of a disease or trait in the family;
- Identify patients at risk of developing multifactorial diseases;
 - To assess the severity of the course of neurological and neurosurgical diseases; predict the course and outcome of neurological and neurosurgical diseases;

Diagnose emergency conditions in neurological and neurosurgical patients and provide emergency (emergency) and first medical aid,

The student must own:

- Methodology for the study of the child's motor system;
- Methodology for the study of the sensitive sphere in a child;
- Methods of research of higher cerebral functions in a child;

- Methods of research of vegetative functions;

Cranial nerve research method

- Methods for the study of meningeal symptoms

Lumbar puncture technique

Credit hours: 180 hours (6 credits)

ANNOTATED PROGRAM CONTENT

Academic discipline

"Jurisprudence"

The purpose of the discipline: the formation of the future doctor of the necessary level of theoretical knowledge about the basic definitions and provisions of legal science, as well as the necessary skills of lawful behavior in the implementation of professional activities and in everyday life; legal education, raising the level of legal awareness and legal culture.

Discipline objectives:

- teaching students theoretical knowledge about the principles of law, legal institutions, categories and the current level of development of legal science;
- teaching students the main provisions of the legislation of the Kyrgyz Republic in the field of health care and the environment;
- teaching students the interpretation and application of legal norms of various branches of law to specific legally significant facts;
- teaching students the correct legal orientation in the current legislation on healthcare in the Kyrgyz Republic and its adequate application in specific practical situations;
- familiarization of students with the rights of citizens, individual groups of the population and patients to health care, guarantees for the implementation of medical and social assistance;
- familiarization of students with the rights and obligations of medical workers of medical and preventive institutions, various structures of the health care system, the principles and provisions of their social and legal protection, legal responsibility for offenses in the implementation of professional activities

- fostering in students a respectful attitude towards laws and other normative legal acts as a fundamental guarantor of the observance of the rights, freedoms and interests of citizens and society.

Discipline content: Foundations of the theory of state law. Legal framework for healthcare management in the Kyrgyz Republic. Medical law. The subject of medical law. Subjects of the legal relationship arising from the provision of medical care. The content of the legal relationship arising from the implementation of medical activities. Fundamentals of Criminal Law. Various branches of law. Health protection in the Kyrgyz Republic: organization, principles, objectives, guarantees, insurance medicine system. The rights of citizens, certain groups of the population and patients in the field of health protection. Rights. Social protection, duties and responsibilities of a health worker. Law "On sanitary and epidemiological welfare of the population of the Kyrgyz Republic". Regulation on the licensing of medical and pharmaceutical activities. Legal framework for healthcare management in the Kyrgyz Republic. Fundamentals of Labor Law. A measure for assessing the quality of medical services. Assessment of professional actions. A crime against the life, health, dignity of citizens, public safety and public health. Compensation for damage caused to the health of citizens in case of improper provision of honey. help. Guarantees for the implementation of medical and social assistance to citizens and medical expertise. Dispute resolution of medico-legal content. Constitutional law. Society-Law-Medicine. Fundamentals of the Laws "Protection of motherhood", "Protection of the rights of children and minors." Healthcare system of the Kyrgyz Republic. Objects of the legal relationship arising from the provision of medical care. The legal basis for the responsibility of a doctor in the commission of a wrongful act. The right to practice medicine in the Kyrgyz Republic. Legal basis for health insurance of citizens. Legal aspects of transplantation and resuscitation . Concept and principles of international transplantology and resuscitation

The concept and principles of public international law. Fundamentals of Social Security Law. Concept of malfeasance and public health official. Fundamentals of Environmental Law. Violation of the rules for handling drugs and potent substances.

As a result of mastering the discipline "Jurisprudence" the student must

know:

- the system of organizing the production of forensic medical examination in the Kyrgyz Republic;
- the rights, duties and responsibilities of a doctor;
- methods of establishing the prescription of death, the concept of "bodily injury", the classification of bodily injury, the concept of "brain death";
- Normative provisions for the determination of death;
- probable signs of death, the concept of "experiencing" tissues (Supravital reactions), early and late cadaveric changes, the circumstances of the onset of criminal liability of medical workers in connection with the performance of their official and professional duties.

be able to:

- to apply the legal and medical aspects of ascertaining the death of a person, ascertaining biological and clinical death,
- to inspect the corpse at the place of its discovery,
- to identify material evidence of biological origin and organize their direction for examination;
- conduct forensic medical examination of living persons and interpret the results of laboratory studies, objects of forensic medical examination

own:

- the methodology for conducting a medical forensic examination to establish the nature and severity of bodily injuries methods of sampling sectional material for laboratory research (chemical, biological, medico-forensic);
- methods of ascertaining death by the method of examining a corpse at the place of its discovery (incident);
- the methodology for describing bodily injury;

- the method of examination of victims, suspects in cases of sexual crimes.

The total complexity of mastering the discipline is 2 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Forensic Medicine"

The purpose of the discipline: the main purpose of teaching forensic medicine is to educate students in theoretical and practical issues of forensic medicine to the extent necessary for the successful fulfillment of the duties of a specialist in the production of initial investigative actions, familiarizing them with the morphological features of the course of pathological processes in mechanical injury and some extreme conditions (terminal states , death and cadaveric changes, poisoning, mechanical asphyxia); legal regulation and organization of forensic medical examination, issues of responsibility of doctors for harm to health and for professional and professional offenses.

Discipline objectives:

- ensuring the auditory and informational need for teaching students by reading a course of lectures and conducting practical classes, the materials of each of which are designed to improve the theoretical training of students both in a special forensic medical and in a wider general medical sense;
- to instill in students a minimum of practical skills and abilities through conducting practical classes, where students, under the guidance of a teacher, are directly involved in the implementation of targeted forensic research methods (for example, examination of corpses, clothing, injuries, diagnosis of death, etc.);
- ensuring the effectiveness of extracurricular work of students through the rational organization of independent work of students in preparation for practical classes in forensic medicine - ensuring the development of the creative part of students' knowledge by conducting individual, educational, research, research work of students.

- control of students' knowledge at all levels of its assimilation by completing test tasks, drawing up control questions and control work (acts and conclusions of the SME) to check the self-preparation of students, organizing modules and tests.

Discipline content: Subject and content of forensic medicine, its history. Process procedural foundations of forensic medical examination in the Kyrgyz Republic. Organization of forensic medical examination in the Kyrgyz Republic. Forensic thanatology and examination (research) of a corpse. Inspection of the scene and the corpse at the place of its discovery. Forensic medical examination (research) of a corpse. Forensic medical traumatology. General questions of forensic medical traumatology. Blunt hard objects. Traffic injury and falls from a height. Damage from sharp objects. Gunshot injuries, mechanical asphyxia. Injury and death from high and low temperatures and other physical factors. Forensic medical toxicology. Forensic medical examination of victims, suspects and other persons. Forensic medical examination of material evidence of biological origin. Forensic medical examination in cases of professional and professional malfeasance of medical workers. Medical - forensic research methods in forensic medicine. General provisions of forensic biological examination. General provisions of forensic biological examination. The order, organization and technique of the forensic medical examination of material evidence. The procedure for the production of a forensic chemical examination is an independent medical examination and a commission of a forensic medical examination in medical cases.

As a result of mastering the discipline "Forensic Medicine", the student must

To know:

- the system of organizing the production of forensic medical examination in the Kyrgyz Republic;
- the rights, duties and responsibilities of a doctor;
- methods of establishing the prescription of death, the concept of "bodily injury", the classification of bodily injury, the concept of "brain death"; normative provisions for the determination of death;
- probable signs of death, the concept of "experiencing" tissues (supravital reactions), early and late cadaveric changes, the circumstances of the onset of criminal liability of medical workers in connection with the performance of their official and professional duties.

to be able to:

- apply the legal and medical aspects of ascertaining the death of a person, ascertaining biological and clinical death, examining the corpse at the place of its discovery, identifying material evidence of biological origin and organizing their direction for examination;
- conduct forensic medical examination of living persons and interpret the results of laboratory studies, objects of forensic medical examination

to own:

- the methodology for conducting a medical forensic examination to establish the nature and severity of bodily injuries;
- methods of sampling sectional material for laboratory research (chemical, biological, medico-forensic);

methods of ascertaining death by the method of examining a corpse at the place of its discovery (incident); the method of describing bodily injury

- the method of examination of victims, suspects in cases of sexual crimes.

The total complexity of mastering the discipline is 3 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Clinical psychology"

The purpose of the discipline: To teach the student the basics of effective communication with the patient.

Discipline objectives:

- To form a general idea among students about communication and communication in the treatment process.
- To teach the skills of active listening, creating an atmosphere of cooperation.

- To teach the correct interaction with difficult patients.
- To teach the skills of working in large and small groups.
- To teach the skills of correctly informing patients and their relatives about the disease.

Content of the discipline: Man as a subject of psychology. Perception of the surrounding world. The concept of consciousness as the highest form of development of the psyche. Thinking. Memory. Speech. Intelligence. Attention. Motivation and needs. Learning and creativity. Emotionally - the volitional sphere of a person. Human personality. Temperament. Character. Psychological defense mechanisms. Patient psychology. Difficult patient. Physician psychology. Psychology of the treatment process. Communication in everyday life and medical environment. Getting to know the patient. Creation of an atmosphere of cooperation. Clinical interview and features interaction between doctor and patient. Group communication. Ethics and deontology in the communication process.

As a result of mastering the discipline "Clinical Psychology", the student must to know:

- characterization of psychology as a science;
- know the main categories and concepts of scientific psychology;
- know the main directions, approaches, theories in psychology and modern trends in the development of psychological concepts;
- have an idea about the individual characteristics of a person, the emotional-volitional regulation of his behavior, the motivational sphere, self-awareness, cognitive processes and personal growth in general;
- about the peculiarities of consciousness as the highest form of mental life;
- about the basic laws of the functioning of the psyche;
- goals, functions, types and levels of communication;

- mechanisms of mutual understanding in communication;
- techniques and methods of communication, rules of listening, conducting a conversation, persuasion; ethical principles of communication;
- sources, reasons, types, and methods of conflict resolution.

be able to:

- to master the system of theoretical knowledge in the main sections of psychology;
- analyze various approaches to the categories of psychology and formulate your own definitions; scientifically substantiate their own position when analyzing psychological facts; give a reflexive assessment of their own behavior;
- scientifically substantiate their own position when analyzing psychological facts
- use the conceptual apparatus of psychology; use the scientific language of various psychological schools;
- apply techniques and techniques of effective communication in professional activities;
- use methods of self-regulation of behavior in the process of interpersonal communication.

own:

- methods of self-regulation of behavior in the process of interpersonal communication;
- techniques and methods of effective communication in professional activities.

The total complexity of mastering the discipline is 4 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Psychiatry and Narcology"

The purpose of the discipline: is the formation of competencies in identifying patients with mental and behavioral disorders and providing them with assistance at the level of primary health care.

Discipline objectives:

- the formation of students' skills in communicating with patients, taking into account ethics and deontology, the formation of a holistic approach;
- the formation of a respectful attitude towards the mentally ill, as to a person, as to an ordinary patient in need of medical care;
- teaching students the ability to identify the leading symptoms and syndromes of mental disorders teaching knowledge of etiopathogenesis, diagnostic signs, course, differential diagnosis, principles of treatment and prevention of major mental and behavioral disorders;
- teaching students to help patients with mental disorders at the PHC level
- training students to identify criteria for referral to a specialist consultation.

Discipline content: Psychiatry in the activities of a family doctor, GP, internist. Causes of mental disorders. The main measures for destigmatization in psychiatry. Application of the main provisions of the Istanbul Protocol in psychiatry. Methods of examination of patients with mental disorders in the practice of a primary care physician. Features of interaction with patients with mental disorders. Recognizing mental disorders. Assessment of the mental state. Peculiarities of counseling for patients with mental disorders. Basic information for patient and family. When a psychiatrist consultation is needed. Diagnostics and clinical manifestations of disorders of perception and thinking. Impact of Perceptual Disorders on the Diagnostic and Treatment Process. Attention disorders, memory disorders, intelligence disorders in the practice of a family doctor.

Features of counseling and diagnostics of patients with disorders of the emotional-volitional, motor sphere (aggressive behavior, types of arousal) at the PHC level. Qualification of disorders of consciousness at the PHC level. Psychotropic drugs in the work of a general practitioner. The main groups of psychotropic drugs: indications, use in general somatic practice, therapeutic and side effects, complications. ICD - 10, chapter Y - Mental and behavioral disorders: structure, principles of construction. Organic, including symptomatic disorders in the practice of a family doctor. Diagnosis of mental disorders in epilepsy. Diagnostics of acute and chronic psychotic disorders at the PHC level. Patient counseling and families. Diagnostics of depressive disorders at the PHC level. Diagnostics of masked forms of depression. Features of the course of depression in some somatic diseases Suicide. Signs of suicidal behavior. Assessment of the degree of suicidal risk. Patient and family counseling. Differential diagnosis of anxiety-phobic

disorders. Diagnosis and care for panic disorder. Features of counseling and diagnosis of patients with generalized anxiety and obsessive-compulsive disorders. The main diagnostic criteria for stress-related disorders: acute stress reaction, post-traumatic stress disorder, adjustment disorders. Qualification of the psychological consequences of torture. Providing advisory assistance. Differential diagnosis of dissociative (conversion) disorders, somatoform disorders. Diagnosis of eating disorders, sleep disorders. Specific personality disorders. Disorders of habits and impulses. Patient and family counseling. Diagnostics and differential diagnostics of mental retardation. Mental and behavioral disorders of childhood and adolescence common at the PHC level: hyperkinetic disorder, conduct disorders, inorganic enuresis, childhood autism: diagnostic signs, basic information for the patient and family, indications for consultation with a specialist. Diagnostic criteria for mental and behavioral disorders due to the use of psychoactive substances: alcohol, opioids, cannabinoids, sedatives and hypnotics, tobacco and other psychoactive substances. Peculiarities of patient and family counseling.

As a result of mastering the discipline "Psychiatry and Narcology", the student must

- to know: etiology, pathogenesis, diagnostic criteria and clinic of major mental disorders; the main groups of psychotropic drugs, indications for their use in the most common mental disorders at the PHC level.
 - to be able to: describe the mental state of patients with various mental disorders;
 - to identify the leading symptoms and syndromes of mental disorders; carry out differential diagnostic assessment of mental disorders;
 - to provide assistance to patients with the most common forms of mental disorders at the PHC level;
 - to provide emergency assistance for urgent mental disorders;
 - to use psychotropic drugs in the complex treatment of mental disorders on an outpatient basis.
-
- to possess: skills of communication with patients with mental disorders; skills in taking anamnesis and interviewing patients with mental disorders; the skills of identifying patients with the main forms of mental pathology; skills in diagnosis and differential diagnosis of major mental disorders; outpatient management skills for mental health patients; skills of providing emergency care for acute reactions

to stress, panic disorder, delirious state, suicidal behavior, acute alcohol intoxication, opioid intoxication (overdose), psychomotor agitation.

The total labor intensity of mastering the discipline is 5 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"General physiotherapy, medical supervision and physiotherapy exercises with clinical rehabilitation"

Objectives of the discipline: training of a general practitioner is the formation of competencies by students in the basics of physiotherapy, balneology and physiotherapy exercises for carrying out a full-fledged complex therapy of patients, as well as rehabilitation and preventive measures in order to restoration of the functional state of the body and prevention of diseases.

Discipline objectives:

- teaching the basics of medical rehabilitation,
- determination of indications and contraindications for medical rehabilitation means,
- familiarization with modern methods of medical rehabilitation,
- assessment of the effectiveness of rehabilitation measures.

Discipline content: Subject and objectives of physiotherapy. The mechanism of the therapeutic action of electrotherapy. The role of the general practitioner in sports medicine and medical rehabilitation of patients. Spa therapy. The main resort factors. Resorts of Kyrgyzstan. Hydrotherapy (showers, baths, rubdowns, douches). Balneotherapy (use of mineral waters). Thermal therapy (mud therapy,

paraffin therapy, ozokeritotherapy). Light therapy (ultraviolet, infrared and visible radiation). Treatment with mechanical vibrations (ultrasound, phonophoresis, vibration therapy, shock wave therapy) and its therapeutic and prophylactic use. The use of constant currents for treatment and prevention. The use of alternating currents and electromagnetic fields for treatment and prevention. Therapeutic use of magnetic fields. The use of impulse currents for treatment and prevention. The content of medical supervision. Medical groups. Medical opinion. Acquaintance with the scheme of medical examination of persons engaged in physical culture and sports (form 227). Self-examination. Fundamentals of physiotherapy exercises, mechanism of action (remedies for exercise therapy). Fundamentals of physiotherapy exercises (forms of exercise therapy).

As a result of mastering the discipline "General physiotherapy, medical supervision and physiotherapy exercises with clinical rehabilitation", the student must

know:

methods of treatment and indications for use, the mechanism of the therapeutic action of physiotherapy exercises and physiotherapy, indications and contraindications for their appointment, the peculiarities of their implementation.

be able to:

- choose the means and methods of rehabilitation and physiotherapy for the main disabling pathology;

- draw up an individual rehabilitation program with predicting the result; choose a method of physiotherapy in the treatment of acute pathology.

own:

- methods for assessing physical development;

- methods for assessing the functional state in the main disabling pathology;
- methods for conducting and evaluating standard stress tests;
- the main methods of electrotherapy and phototherapy.

The total complexity of mastering the discipline is 3 credits.

Block of preventive medical disciplines

ANNOTATED PROGRAM CONTENT

Academic discipline

"General hygiene, military hygiene"

The purpose of the discipline: is to acquire a conscious understanding of the relationship between the state of health and the environment, factors and conditions of life and work in order for them to carry out effective therapeutic and preventive measures among the population in the future in the course of professional medical activity in the chosen field.:

Discipline objectives: consist in the acquisition of academic competence by students, the basis of which is:

- the formation of positive medical behavior in the adult population, adolescents and children, aimed at maintaining and improving the level of health;
- the formation of motivation in the adult population, adolescents and children for a healthy lifestyle, including the elimination of bad habits that adversely affect the health of the younger generation;
- training of the adult population, adolescents and children in the main activities of a health-improving nature, contributing to the prevention of diseases and health promotion.
- implementation of measures to promote the health of children, adolescents and adults;
- carrying out disease prevention among children, adolescents and adults;
- formation of motivation in the adult population and children to maintain and strengthen health;
- carrying out preventive and anti-epidemiological measures aimed at preventing the occurrence of diseases;
- implementation of dispensary observation of the adult population, adolescents and children;
- carrying out sanitary and educational work among the adult population, children, their relatives and medical personnel in order to form a healthy lifestyle.

Discipline content: The place and importance of hygiene in the system of medical sciences. Teaching about environmental hygiene. Environment and health. Hygienic foundations of the organization of water supply in populated areas. Hygienic bases of sanitary protection of soil in populated areas. Physical properties and chemical composition of atmospheric air, its hygienic value. Lighting hygiene. Organization of rational lighting of premises. Modern hygienic problems of hospital construction. The importance of hygienic measures in ensuring optimal conditions for patients' stay in medical institutions. The impact on the health of working factors of the working environment. Prevention of occupational diseases. Nutrition as a factor in health. Modern aspects of balanced nutrition. Problems of prevention of alimentary diseases and food poisoning. Hygiene of children and adolescents. Methods for assessing physical development and the organization of the educational process. The basics of organizing sanitary and hygienic measures in wartime. Personal hygiene and human health issues.

As a result of mastering the discipline "physical culture" the student must

know:

- hygienic aspects of nutrition,
- hygiene of medical organizations,
- hygienic problems of health care for the working population;
- sanitary and hygienic requirements for the device, organization and mode of operation of healthcare organizations;
- organization of medical control over the state of health of the population,
- issues of examination of disability and medical and legal assistance to the population

be able to:

- carry out preventive, hygienic and anti-epidemic measures;

own:

- Skills of hygienic assessment of microclimate indicators, ventilation, lighting, quality of drinking water and food products.
- Methods for determining indicators of physical development, physical fitness;
- Methods for assessing the actual nutrition and nutritional status, drawing up and analyzing the menu-layout of products;
- Methods for assessing the quality of water and food, nutritional status and working conditions of military personnel

The total complexity of mastering the discipline is 4 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"Public health and health care, health economics"

The purpose of the discipline: On the basis of studying the basic concepts of the discipline, prepare a specialist with knowledge and skills to assess public health and its determining factors; systems ensuring the preservation, strengthening and restoration of public health; organizational and medical technologies and management processes, including economic, administrative and organizational

Discipline objectives:

- analysis of the theoretical and methodological foundations of medical statistics;
- organization of medical and statistical research;
- methods for calculating statistical indicators used in medicine;
- analysis of public health indicators and recommendations for strengthening the health status of the population;
- analysis of performance indicators of healthcare organizations;
- methods of graphical representations of statistical quantities used in medicine
- organization of the activities of healthcare institutions and their structural units, including the organization of work with personnel;
- organization of work in health care institutions;
- conducting scientific and practical research on public health problems, organization, management, economics of health care;
- independent work with educational, scientific, normative and reference literature

Discipline content: Public health and health care as a scientific discipline and subject of teaching. Fundamentals of Medical Statistics. Statistical quantities. Assessment of the reliability of average and relative values. Correlation analysis of medical phenomena. Medical and demographic indicators (general). Medical and demographic indicators (special). Methods for studying morbidity and disability. ICD-10. The role of health promotion services in shaping people's preventive thinking. Health promotion. Health for All in the 21st Century Policy Framework. Improving the health of children, women and the elderly. Human Resource Management in Healthcare. Leadership. Motivation, stimulation and communication. Organization of primary health care and inpatient care for the population. Organization and assessment of the quality of medical care to the population. Licensing and accreditation of medical institutions. Budgetary insurance medicine. Modern problems of protecting and strengthening the health of the population. Public health market.

As a result of mastering the discipline "Public health and health care, health economics" the student must

know:

- fundamentals of the legislation of the Kyrgyz Republic, the main regulatory documents on the protection of public health
- the basics of insurance medicine in the Kyrgyz Republic, the structure of the modern health care system of the Kyrgyz Republic;
- methodology for calculating indicators of medical statistics; the basics of using the statistical method in medical research, the use of statistical indicators in assessing the state of health of the population and the activities of medical organizations;
- maintenance of standard accounting and reporting medical documentation in medical organizations;

be able to:

- to apply the statistical research method in practical and scientific activities

- calculate statistical values using computer technology, evaluate the significance of sample statistical indicators and their differences
- fill out the main registration forms for medical documentation of healthcare organizations
- to calculate, using computer technology, the main indicators of public health
- calculate the main indicators and analyze the activities of healthcare organizations
- to plan the activities of health care organizations on the basis of state minimum social standards,

own:

- skills of statistical analysis;
- basic methods of processing scientific data.
- methods of assessing public health of the population;
- methods for assessing the activities of healthcare organizations;
- methods of making managerial decisions;
- the skill of developing a set of preventive measures;
- methods for assessing effectiveness in health care.

The total complexity of mastering the discipline is 4 credits.

ANNOTATED PROGRAM CONTENT

Academic discipline

"General and Clinical Epidemiology"

The purpose of the discipline: is the mastery of theoretical and practical knowledge on the peculiarities of the epidemiology of infectious and non-

infectious diseases, the organization and implementation of anti-epidemic measures aimed at preventing and reducing the incidence of the population.

Discipline objectives:

- to give theoretical knowledge of general epidemiology;
- to instill practical skills in conducting epidemiological investigations, anti-epidemic and preventive measures
- develop independent epidemiological thinking aimed at the effective use of the knowledge gained in organizing epidemiological surveillance
- develop students' competencies that establish cause-and-effect relationships and identify risk factors;
- to form competencies for self-assessment of the results of their activities;
- to prepare a graduate for the practical fulfillment of functional duties in special health units and institutions of the civil defense medical service and the disaster medicine service;
- to train students in the implementation of supervisory functions for health care facilities to ensure sanitary and epidemiological well-being

Course content: General epidemiology: Epidemiology, its place in the structure of medical science. Subject of study of epidemiology. Systemically structural characteristic of the doctrine of the epidemic process. Causes and driving forces of the development of the epidemic process. The place and importance of

immunization in the system of anti-epidemic measures for various infections. Modern trends in epidemiology. Epidemiological approach to the study of human diseases. The mechanism of development of the epidemic process. The content of immunization. Content of disinfection and sterilization.

Clinical and military epidemiology: Epidemiological research methods, their purpose in assessing health status. Epidemiological features of aerosol infections and the system of epidemiological surveillance for them. Epidemiological features of intestinal infections and the system of epidemiological surveillance for them. Epidemiological features of the group of transmissible infections and infections of the outer covers and the system of epidemiological surveillance over them. Epidemiological features of parasitosis and the system of epidemiological surveillance over them. Epidemiological surveillance of nosocomial infections. The procedure for the disposal of medical waste. Theoretical and methodological foundations of military epidemiology. Clinical epidemiology is the basis of evidence-based medicine. Subject, goals and objectives of clinical epidemiology.

As a result of mastering the discipline "General and Clinical Epidemiology", the student should know:

- Specificity of the population level of life organization and its reflection in medicine; the influence and ratio of genotypic, phenotypic and environmental (social and natural) "risk factors" that determine the pathology of people.
- General patterns of occurrence and spread of infectious, parasitic and non-infectious diseases among the population and in military groups
- Causes and conditions, the mechanism of development and manifestation of the epidemic process among the population with certain nosological forms.
- Features of the manifestation of the epidemic process in the conditions of the enemy's use of weapons of mass destruction and during natural disasters.

- Methodological and organizational foundations of epidemiological surveillance of individual groups and nosological forms of infectious and parasitic diseases.

- Fundamentals of Epidemiological Diagnostics with Evidence-Based Medicine and Clinical Epidemiology.

be able to:

- carry out the necessary anti-epidemic and preventive

- measures in the foci of certain groups and nosological forms of infectious and parasitic diseases.

- calculate indicators characterizing the incidence.

- assess the epidemiological situation of the served area based on retrospective and operational epidemiological analyzes.

- assess the potential and actual effectiveness of individual anti-epidemic measures and their complex.

- assess the sanitary and epidemiological state of the unit, the area of its deployment, with the subsequent determination of the list of measures for anti-epidemic and antibacterial protection of trMEPs.

own:

- the correct maintenance of medical records.

The total complexity of mastering the discipline is 3 credits.

ADDITIONAL TYPES OF PREPARATION

ANNOTATED PROGRAM CONTENT

Academic discipline

"Physical education"

The purpose of the discipline: is to form the worldview and culture of a person who has a civic position, moral qualities, a sense of responsibility, independence in decision-making, initiative, tolerance, the ability to successfully socialize in society, the ability to use various forms of physical culture and sports in everyday life to preserve and strengthening their health and the health of their loved ones, family and work collective for a quality life and effective professional activity.

Discipline objectives:

- Providing an understanding of the role of physical education in the development of the individual and preparing her for professional activity.

- Formation of a motivational-value attitude towards physical education, an attitude towards a healthy lifestyle, the need for regular physical exercises.

- Mastering a system of special knowledge, practical skills and abilities that ensure the preservation and strengthening of health, the formation of compensatory processes, the correction of existing deviations in the state of health, mental well-being, the development and improvement of psychophysical abilities, the formation of professionally significant qualities and personality traits.

- Adaptation of the body to the effects of mental and physical stress, as well as expanding the functional capabilities of physiological systems, increasing the resistance of the body's defenses.

- Mastering the methodology for the formation and implementation of a complex of health-improving exercises for self-study, methods of self-control when performing physical activities of a different nature, the rules of personal hygiene, a rational regime of work and rest.

- Mastering the means and methods of counteracting unfavorable factors and working conditions, reducing fatigue in the process of professional activity and improving the quality of results.

Discipline content: Physical culture in general cultural and professional training of students. The history of the formation and development of the Olympic movement and the Universiade. Socio-biological foundations of physical culture.

Fundamentals of a student's healthy lifestyle. The role of physical culture in ensuring health Therapeutic physical culture as a means of prevention and rehabilitation for various diseases. Psychophysiological foundations of educational work and intellectual activity. Means of physical culture in the regulation of working capacity General physical and special training in the system of physical education. The structure of a person's physical culture. The value of motivation in the field of physical culture. Problems of students' motivation formation for physical culture lessons. Sport. Classification of sports. Features of practicing an individual sport or a system of physical exercises.

As a result of mastering the discipline "Physical education", the student should know:

- the social role of physical culture in the development of a personality and its preparation for professional activity;
- principles of a healthy lifestyle;
- factors conducive to the stabilization of health;
- types of active family recreation;

- features of the physiological state of people of different ages;
- types and forms of independent physical culture and sports;
- the mechanism of the effect of hardening procedures on the human body;
- the main types of hardening procedures;
- characteristics of body types;
- a program for body shaping by means of physical exercises;
- classification of the reserves of the human body;
- about the reserve capabilities of a person in the conditions of labor, household and sports activities.

be able to:

- to understand the issues of physical culture used for prevention and treatment;
- to assess the functional state of a person;
- calculate the biological age of a person;
- apply methods for assessing the work of the cardiovascular system;
- carry out the selection of funds for the restoration of physical performance;
- apply methods for assessing the physical development of a person;
- apply methods for assessing the human respiratory system;

- use massage techniques for preventive and therapeutic purposes.

own:

- skills in using sources of information on healthy lifestyles, electronic databases, Internet resources;

- the skills of conducting events that increase a person's adherence to a healthy lifestyle;

- skills of filling out a diary of self-control when doing health-improving physical culture and sports;

- skills in developing recommendations for the population on the use of health-improving techniques;

- methods of physical self-improvement and self-education.

The total labor intensity of mastering the discipline is 13.3 credits.

Appendix 4

ANNOTATION OF WORKING PROGRAMS FOR INDUSTRIAL PRACTICES

VOLUNTEER PRACTICE OF STUDENTS 1 COURSE

Total labor intensity 2 credits (2 weeks)

Types of control: certification

The purpose of the discipline: assistance in the development of professional skills of interpersonal communication in caring for patients and in improving the quality of life of vulnerable groups of the population through the provision of social and social and medical assistance, consolidation and deepening in practice of the theoretical knowledge of childcare. The practice is carried out in a nursing home, in orphanages, in the «Maksat» children's rehabilitation center, in hospices, outpatient and inpatient medical and preventive institutions, single, childless couples, chronic patients, including those with disabilities, who have care of children with disabilities, etc. Volunteer practice is aimed at the formation of general cultural and professional competencies of students through "immersion" in the professional environment through the development of the social role of a volunteer (specialist) in the process of passing educational practice. Volunteering should be based on the principles of voluntariness, humanity, responsible attitude to activities, legality, self-government, continuity and systematic, freedom to determine the internal structure of forms and methods of work, awareness of the personal and social significance of their activities by participants in the volunteer movement.

Discipline objectives:

- study of working conditions in children's medical and preventive institutions; in nursing homes, in orphanages, in the «Maksat» children's rehabilitation center, in hospices;
- educating students of the principles of medical ethics and deontology, instilling love for their chosen profession;
- practical mastery of the rules and techniques of caring for children, the elderly.
- development of interpersonal skills;
- instilling certain work skills and stimulating vocational guidance and professional development;
- obtaining skills of self-realization, self-organization and socialization;

- dissemination of ideas and principles of social service among students;

Discipline content: Training for KSMA students to provide assistance to vulnerable groups of the population, including children. Provision of social, medical and social assistance to lonely elderly people. First aid training from the RCSK KR. Training for RCSC volunteers.

As a result of the internship, the student must:

Know:

- Social and medical services related to the organization of care, monitoring the health of the wards:
- Study of the life history and illness of the ward;
- Control of the patient's medication intake;
- Measurement of temperature, blood pressure, pulse measurement;
- Dressings, treatment of wound surfaces;
- Instilling drops in the eyes, nose, ears;
- Provision of primary first aid;
- Providing information on healthy lifestyle.

- Conducting classes that teach a healthy lifestyle;
- Carrying out lessons on adaptive physical culture;

Other

- Social welfare services include the following:
- General cleaning of housing (kitchen, bathroom / toilet and other rooms);
- Washing dishes;
- Assistance in cooking. Warming up food;
- Feeding weakened wards;
- Washing, help in washing;
- Brushing;
- Furnace firebox / assistance in providing fuel;
- Water delivery;

- Washing through social laundries;
- Change of bed linen;

Social services:

- Escort outside the home;
- Accompaniment at social events;
- Assistance in the provision of medicines;
- Payment of utility services;
- Assistance in paperwork, writing letters;
- Conversation / reading;
- Congratulations;

As a result of this industrial practice, the student must acquire the following practical skills:

- know the types of sanitization of sick children and adolescents;
- features of monitoring and caring for sick children and adolescents with diseases of various body systems.

- be able to sanitize, change underwear and bed linen, treat bedsores;
- to take care of patients of different ages, suffering from diseases of various organs and systems, transportation;
- to carry out disinfection, materials and means of patient care.
- possess the skills of caring for the elderly, children and adolescents, taking into account their age, nature and severity of the condition;
- to carry out their activities taking into account the moral and legal norms accepted in society; comply with the rules of medical ethics, laws and regulations on working with confidential information;
- to implement ethical and deontological aspects in dealing with children and adolescents, their parents and relatives, the elderly.

At the end of the industrial practice, the student receives a testimonial from the place of work signed by the head of the above institutions.

INTERNSHIP

"INTERNSHIP" COURSE 2

Total labor intensity 2 credits (2 weeks)

Types of control: certification

The purpose of the discipline: mastering by students of the 2nd course the general skills of the work of the nursing staff of the children's hospital. Mastering the basic professional competencies of a ward (guard) and a procedural nurse is an integral component of the formation of qualified pediatricians.

Industrial practice tasks:

- familiarization with the work of the ward (sentry) and the procedural nurse in the somatic department;
- mastering the general skills of the nursing staff of the children's hospital;
- implementation of nursing care for patients of the somatic department.

Discipline content: Medical ethics and deontology of nurses in the therapeutic department of the hospital. Duties of the ward (guard) nurse. Organization of the work of a procedural nurse. Rules of asepsis and antiseptics. Parenteral route of drug administration. The main types of injections. Parenteral route of drug administration. The main types of injections. Taking blood for tests from a vein. General examination of the patient. The principles of good nutrition. Diets. Feeding the sick. Examination of the skin, its derivatives, subcutaneous fatty tissue. Examination of the lymph nodes. Treatment of skin, hair, nails. Change of underwear and bed linen. Setting up a local warming compress. Preparation and supply of a heating pad to the patient. Rubbing, rubbing, lubricating the skin with a drug. Examination of individual parts of the body. Holding the oral cavity toilet. Conducting a toilet of the nose, ears, eyes. Instilling drops, laying ointments. Examination, palpation of the chest. Respiratory parameters assessment. Clinical and laboratory, functional and instrumental methods for the study of the respiratory system. Collection of sputum for laboratory research” Preparing patients for chest x-ray, bronchoscopy, ultrasound of the pleural cavities. Determination of the main characteristics of the arterial pulse on the radial artery. Measurement of arterial and venous pressure. ECG registration technique. Conducting gastric lavage with a thick probe. Introduction of a gas outlet tube. Enemas. Feces collection. Submission of the vessel. Washing the patient. Preparing patients for instrumental studies of the digestive system. Determination of water balance. Collection of urine. Testing according to Zimnitsky. Performing bladder catheterization with a soft catheter. Features of observation and care of sick children of different ages.

As a result of mastering the discipline, the student must:

Know:

- medical ethics and deontology of nurses;
- duties of the ward (guard) nurse;
- nursing station documentation;
- rules for processing and registering data;
- rules for the prescription, storage and distribution of medicines;
- enteral route of drug administration;
- external route of drug administration;
- organization of the work of a procedural nurse;
- basic equipment and tools of the treatment room;
- rules of asepsis and antiseptics in the treatment room;
- parenteral route of drug administration;

- types of intravenous injections;
- thermometry technique;
- a technique for measuring height, weight, chest and head circumference.
- the results of a general examination, an assessment of the general condition of the patient, his consciousness, position, physique, gait, posture, voice, speech is normal;
- composition of working chlorine-disinfecting solutions
- principles of rational nutrition;
- types of diets;
- principles of feeding patients;
- the results of the study of the skin, its derivatives, subcutaneous fatty tissue, lymph nodes are normal;
- method of processing skin, hair, nails;
- principles of prevention of pressure ulcers;

- the procedure for changing underwear and bed linen; about the method of setting a local warming compress;
- the method of preparing and supplying a heating pad to the patient;
- the method of rubbing, rubbing, lubricating the skin with a drug;
- the results of the study of individual parts of the body: face, ears, nose, eyes are normal;
- results of examination of the oral cavity and pharynx, examination of the neck, examination and palpation of the thyroid gland, examination of the musculoskeletal system is normal;
- the technique of carrying out the toilet of the oral cavity, instilling drops in the eyes; eye ointment bookmarks for the lower eyelid from a tube and an eye spatula; instilling drops in the ears, holding the toilet of the ears, nose; instillation of drops in the nose;
- the results of examination, palpation of the chest, determination of the circumference of the chest is normal;
- basic clinical and laboratory, functional and instrumental methods for examining the respiratory system;
- method of collecting sputum for general analysis;
- preparation of patients for bronchoscopy;

- the main characteristics of the arterial pulse on the radial artery are normal;
- methodology for measuring blood pressure;
- readings of arterial and central venous pressure are normal;
- method of ECG registration;
- the method of gastric lavage with a thick probe, the introduction of a gas outlet tube, setting a cleansing, siphon enemas, the procedure for collecting feces for laboratory research;
- the method of supplying the vessel, washing away the patient;
- preparation of patients for X-ray examination of the gastrointestinal tract, for ultrasound of the liver, biliary tract, pancreas;
- method of taking blood for analysis from a vein;
- methodology for determining the water balance, the procedure for collecting urine for laboratory research;
- the method of conducting the sample according to Zimnitsky;
- features of monitoring and caring for sick children of different ages.

The student should be able to:

- to use the principles of medical ethics and deontology in the daily work of a nurse assistant in a therapy department;
- carry out the distribution of medicines to patients;
- to disinfect the air with a UV radiation source;
- use correct hand washing techniques in the workplace;
- to dispose of used material, syringes;
- carry out all types of injections, including intravenous drip infusion.
- conduct a general examination of the patient, assess the general condition; consciousness, position, physique, nutritional status, gait, posture, voice, speech;
- measure and evaluate body temperature;
- measuring and evaluating height and weight;
- determine the BMI;
- measure and evaluate the circumference of the waist and hips;

- to assess the condition of the skin, its derivatives, subcutaneous fatty tissue, lymph nodes;
- carry out the treatment of skin, hair, nails;
- carry out a change of underwear and bed linen in seriously ill patients; put a local warming compress; prepare and serve a heating pad to the patient;
- carry out rubbing, rubbing, lubricating the skin with a drug;
- conduct a study of individual parts of the body: face, ears, nose, eyes; examine the oral cavity and pharynx;
- to assess the condition of the thyroid gland and musculoskeletal system by examination and palpation; hold an oral toilet; drip drops into the eyes;
- put an eye ointment behind the lower eyelid from a tube and an eye spatula;
- drip drops into the ears;
- to carry out the toilet of the ears;
- to hold the toilet of the nose;
- drip nose drops;

- to examine and palpate the chest, determine the circumference of the chest, calculate the RR, estimate the depth and rhythm of breathing; collect sputum for laboratory research;
- to determine the main characteristics of the arterial pulse on the radial artery and evaluate the results;
- measure and assess the level of blood pressure;
- carry out gastric lavage with a thick probe;
- put a cleansing enema;
- collect feces for laboratory research;
- submit the ship;
- wash the patient;
- take blood for analysis from a vein;
- determine the patient's water balance;
- collect urine for laboratory testing.

INTERNSHIP

"ASSISTANT OF EMERGENCY AND EMERGENCY AID" COURSE 3

Total labor intensity 2 credits (2 weeks)

Types of control: certification

The purpose of the discipline: to develop and consolidate the skills of diagnosing and providing emergency and emergency care in the volume of an assistant paramedic of emergency and emergency care.

Discipline objectives:

- Acquaintance of students with the peculiarities of the organization of emergency care at the prehospital and hospital stages.

- Acquisition of practical skills in diagnosing the main symptoms and providing assistance in conditions requiring emergency treatment, in the scope of the qualification characteristics of an assistant paramedic of emergency medical care.

- Acquaintance with the orders, orders of the chief physician, special methodological instructions on the functional duties of the nursing staff of the mobile teams of the ambulance station, surgical departments and intensive care units.

Discipline content: Types of medical institutions. The emergency department, its tasks. Bronchial obstruction syndrome. Acute Respiratory Failure Syndrome. Syndrome of accumulation of fluid and gas in the pleural cavity. Lung tissue compaction syndrome (croupous pneumonia). Hemoptysis. Pulmonary hemorrhage, arterial hypertension syndrome. Hypertensive crisis. Lung tissue hardening syndrome (croupous pneumonia). Hemoptysis. Pulmonary hemorrhage, arterial hypertension syndrome. Hypertensive crisis. Arrhythmia syndrome.

Syndrome of acute left ventricular failure. Syndrome of arterial hypotension. Fainting. Collapse. Stomach ache. Vomiting. Gastrointestinal bleeding. Renal colic. Acute renal failure syndrome. Acute hyperglycemia syndrome. Acute hypoglycemia syndrome. Acute post-hemorrhagic anemia syndrome. Allergic reactions: anaphylactic shock angioedema. Chest injury syndrome. Abdominal injury syndrome. Limb injury syndrome. Limb injury syndrome. Bruises. Stretching. Rupture of ligaments of joints, tendons. Dislocations. Spine Injury Syndrome. Syndrome of violation of the integrity of the skin. Wounds. Thermal injury syndrome: burns, overheating, hypothermia, frostbite. Terminal states. Cardiopulmonary resuscitation at the prehospital stage and in the delayed period. Chemical and electrical defibrillation.

As a result of mastering the discipline, the student must know:

- types of medical institutions and tasks of ambulance stations;
- duties of an ambulance paramedic. Medical records;
- rules for prescribing and storing medicines by an ambulance paramedic, rules for prescribing medicines, taking into account age-related dosage;
- rules for the storage and use of poisonous and narcotic drugs by an ambulance paramedic;
- algorithm of actions in handling medicinal products;
- febrile syndrome; temperature measurement rules, types of fever;
- the main signs of the syndrome of bronchial obstruction and croup in children;

- the main signs of the syndrome of compaction of the lung tissue;

the main signs of the syndrome of air congestion in the pleural - cavities;

- the main signs of acute respiratory failure, foreign bodies;

- arterial hypertension syndrome;

- arterial hypotension syndrome;

- syndrome of acute left ventricular failure;

- arrhythmia syndrome;

- the main symptoms requiring urgent care for diseases of the digestive system:
abdominal pain, vomiting, diarrhea, gastrointestinal bleeding;

- jaundice syndrome;

- the main symptoms requiring urgent care for kidney disease: hematuria, urinary retention;

- acute renal failure syndrome;

- renal colic syndrome;

- acute hyperglycemia syndrome;
- acute hypoglycemia syndrome;
- syndrome of acute post-hemorrhagic anemia;
- allergic reactions: anaphylactic shock, angioedema;
- syndrome of damage to the abdominal organs: closed abdominal trauma with damage to the hollow organs; closed abdominal trauma with damage to parenchymal organs, open trauma of the abdominal cavity;
- chest injury syndrome. Tracheal injury syndrome;
- limb injury syndrome: bruises; stretching; rupture of the ligaments of the tendon joint; dislocations;
- syndrome of damage to the bones of the limbs: fractures;
- spinal injury syndrome;
- syndrome of violation of the integrity of the skin: wounds;
- thermal injury syndrome: burns, overheating, hypothermia, frostbite;

- the concept of the terminal state, clinical and biological death.

The student should be able to:

- provide emergency care for fever, critical drop in temperature;
- be able to explain the rules for taking medications: enteral use, external use, etc.;
- collect the drug from the ampoule, fill the drip systems;
- provide emergency first aid for shortness of breath and suffocation;
- apply oxygen therapy;
- to help with coughing, hemoptysis; collect sputum for general, microbiological analysis and for tuberculosis;
- use a pocket inhaler;
- to carry out thoracentesis;
- take an ECG;
- to measure blood pressure, heart rate calculation, pulse characteristic;

- to provide first aid emergency care for fainting, collapse;
- to provide first aid for arrhythmia syndrome;
- to carry out an abdominal puncture;
- provide assistance with vomiting and take vomit for analysis;
- to provide assistance with diarrhea and collect feces for a general analysis, infections;
- provide emergency care for gastric and intestinal bleeding;
- supply gas, purifying and siphon enemas;
- provide first aid for abdominal pain;
- take urine for laboratory research;
- to carry out catheterization of the bladder;
- to help with renal colic;
- provide emergency first aid for acute hyperglycemia;

- provide emergency first aid for hypoglycemia;
- be able to determine the level of hemoglobin in the blood, hematocrit;
- determine the blood group;
- to provide first aid for anaphylactic shock;
- to help with angioedema;
- provide emergency first aid for limb injury syndrome;
- provide emergency first aid for spinal injury syndrome;
- to provide emergency first aid for the syndrome of violation of the integrity of the skin;
- to provide emergency first aid for the syndrome of violation of the integrity of the skin;
- provide emergency care for thermal injuries;
- to provide resuscitation measures and first aid in case of poisoning;
- to carry out artificial respiration and chest compressions.

The student must own:

Performing medical procedures. Introduction of medicinal rectal suppositories. Injections (subcutaneous, intramuscular, intravenous). Dilution of antibiotics for intramuscular administration. Preparing the system for intravenous drip infusion. Instillation of drops in the nose, ears, eyes. The use of ointments, powders, talkers in children with skin lesions. Carrying out medicinal baths. Applying a warming compress. Using a heating pad, ice pack. Oxygen therapy. Setting enemas (cleansing, siphon, therapeutic), gas outlet tube. Probing of the stomach for gastric lavage.

- Skills to determine some physical and physiological parameters.

- Skills of collecting feces, urine (samples of Nechiporenko, Addis-Kakovsky, Zimnitsky), sputum for laboratory and bacteriological examination, scraping for enterobiasis

- Skills of taking smears from mucous membranes of the pharynx, nose for bacteriological examination.

- Skills of taking blood from a vein for biochemical, bacteriological, serological examinations.

- Preparing the patient for an ultrasound examination of the abdominal cavity and small pelvis; X-ray examination of the gastrointestinal tract (stomach, large intestine, gallbladder and biliary tract); endoscopic examination (fibrogastroduodenoscopy, sigmoidoscopy, colonoscopy).

- Skills for providing first aid to sick children in case of emergency. Help with vomiting, diarrhea.

FORMS OF INTERMEDIATE CERTIFICATION (ON THE RESULTS OF PRACTICE) Practical work is reflected by the student in the practice diary, which marks the dates and hours of duty, as well as manipulations and other types of work performed on duty. At the end of the industrial practice, the student receives a testimonial from the place of work signed by the senior nurse, which is certified by the signature of the chief nurse and the seal of the medical institution. The practice diary, certified by the head of the industrial practice from the department of KSMA, together with the testimonial is submitted to the practice department of the KSMA. Regardless of the place of internship, certification of all students takes place only in the clinical skills center of the KSMA and is carried out by the certification commission, which gives an assessment ("satisfactory", "good", "excellent"). After certification, the head of the industrial practice from the department puts the mark for the practice in the student's record book and fills out the progress sheet. In case of an "unsatisfactory" result, the student is obliged to complete the full volume of practical training with re-certification. The department, represented by the person responsible for the practice, reserves the right, in some cases (in case of violation of the deadlines for the delivery of reporting documentation, their careless execution, violation of the place and time of the practice formalized by the order), not to certify the student in practice. Students who have not submitted reporting documentation to the practice department, as well as in cases of violation of the rules for passing practice, are not certified in practice, regardless of the reasons for untimely passing of practice or untimely submission of reporting documentation. The summary report on the internship is provided to the practice department of the KSMA immediately after the completion of the internship and necessarily contains a list of students, including the list of those not certified in practice. For non-certified students, the head of practice from the department submits individual reports to the dean's office of the faculty "Pediatrics". The decision on the internship by students who are not certified in due time is taken by the internship department on an individual basis by the decision of the dean's office and agreed with the responsible head of the internship. Control tasks and tests during the course are not provided. The form of ongoing monitoring of the practice is the grade given to the student on the final attestation.

MATERIAL AND TECHNICAL SUPPORT OF PRODUCTION PRACTICE.

Curriculum educational process by discipline does not need specialized laboratory equipment. The process of training students is carried out directly at the departments of hospitals belonging to the clinical bases of the Academy and at the Clinical Skills Center of the KSMA. Students are trained under the direct supervision of sentinel nurses under the supervision of the senior nurse of the department. Methodological guidance of the practice is carried out by the departments of the KSMA. Before the internship, an organizational meeting of students is held with instructions on the procedure for passing the internship, its duration according to the curriculum. A list of the necessary skills for mastering in the process of passing the practice is given. The staff of the department inspects clinical sites. The control over the entrance of students to practice, its passage is carried out. All cases of non-entry of students into practice, violation by a student of the rules for passing practice or the rules of the internal order of a medical institution are immediately reported to the practice department and the dean's office.

In addition, the Department of Pediatric Diseases Propedeutics monitors the methodological compliance of the work practice of the Emergency and Ambulance Paramedic Assistant with the curriculum, monitors the timely execution and updating of guidelines for the practice. The general management of practice from the Department of Propaedeutic of Childhood Diseases is entrusted to the department employee responsible for the practice.

The process of teaching students is carried out in the center of clinical skills and directly in the departments of hospitals related to the clinical bases of the academy. Students are trained under the direct supervision of sentinel nurses under the supervision of the senior nurse of the department. Methodical guidance of practice is carried out by the department. In the course of practical training, students continue to practice practical skills in caring for sick adults and children on various dummies at the Clinical Skills Center.

INTERNSHIP

"Assistant to the inpatient doctor"

Total labor intensity 4 credits (4 weeks)

Types of control: certification

Industrial practice of 4th year students of the faculty of "Pediatrics" as an assistant to a hospital doctor is carried out on the basis of children's hospitals. The work schedule of students in the departments is approved by the chief physician of the hospital and the head of the department.

The purpose of the industrial practice:

- master the skills of a pediatrician in the conditions of the reformed health care system of the Kyrgyz Republic;
- checking and consolidating the knowledge gained by students in the study of basic clinical and theoretical disciplines, improving the practical skills acquired at the KSMA;
- familiarization with the organization of medical care and the working conditions of a doctor, as well as with the basics of organizing health care and anti-epidemic activities;
- to teach students the skills of independent clinical thinking.

Industrial practice tasks:

- To master the role of a pediatrician in the organization of medical care for children in a hospital setting.
- To learn how to carry out work on the diagnosis of childhood diseases.

- Be able to make a diagnosis based on the information collected, substantiate a clinical diagnosis and prescribe treatment.
- Master the skills of paperwork for the supervised patient.
- Learn to justify the diagnosis, draw up milestone, discharge epicrisis, draw up extracts with recommendations.
- To get acquainted with the work of the functional diagnostic department, participate in ultrasound of the abdominal cavity, brain, thyroid gland, chest X - ray, ECG, MRI, REG, EEG, etc.
- To learn how to conduct effective sanitary and educational work among parents and children, to acquire skills in working with parents, relatives of sick children, as well as with the medical staff of the hospital.
- Master the methods of providing syndromic therapy for emergency conditions in children.
- Practical work of students consists of daily work (participation in the initial examination of the patient, in the rounds of patients, in conducting general and additional studies) in the hospital under the supervision of a resident doctor and the head of the department. The student supervises up to 5 patients a day, with daily records in the medical history, justification of the clinical diagnosis and registration of stage and discharge epicrisis.

The student should know:

- the basics of deontology (be attentive to the patient and his relatives, inspire confidence in recovery and a favorable outcome of the disease);
- basic orders when working in a secondary and tertiary level hospital;
- the methodology of the study of the patient with the analysis of clinical and

- laboratory-instrumental data, with an entry in the medical records;
- internal schedule of hospital departments (daily routine, meals);
 - organization of the work of a pediatrician in the department;
 - indicators of the work of a pediatrician in a hospital;
 - classification of background diseases in children (constitutional abnormalities, rickets, deficiency anemia, chronic eating disorders);
 - modern classifications of bronchopulmonary diseases, diseases of the kidneys, gastrointestinal tract, cardiovascular system and blood in children; criteria for the diagnosis of these diseases;
 - principles of treatment of sick children with the above pathology;
 - principles of monitoring children in hospital settings;
 - the basic principles of the work of specialized offices - cardiologist, neurologist, ENT, dentist, urologist, optometrist, etc.;
 - the principles of sanitary and educational work in the hospital.

The student must be able to:

- work with medical documentation in the hospital;
- correctly assess the patient's complaints, purposefully collect anamnesis of life and illness;
- evaluate the status of a sick child, taking into account complaints, anamnesis of the disease, examination and the main clinical manifestations of the disease;
- to assess the condition of the child's organs and systems (according to the examination, palpation, percussion, auscultation);
- justify the preliminary diagnosis and make a plan for further examination; interpret the data of laboratory and functional methods of examination;
- conduct differential diagnosis and substantiation of the clinical diagnosis;
- make a stage and discharge epicrisis, write a certificate with recommendations;
- make a treatment plan for a sick child, justify it; calculate the dose of medications;
- evaluate the correctness of breast-feeding the baby;

- prepare medical documentation in accordance with the requirements of the FOMS;
- conduct hygiene training for parents and children;
- provide assistance in emergency conditions in children;
- determine the blood type, Rh factor;
- conduct the reception during the night duty in the hospital.

The student must know the principles of work:

1. Principles of medical work of students (assistant doctor) in children's hospitals

The student (doctor's assistant) should familiarize himself with the general requirements for a doctor of a children's hospital, the doctor's work schedule, the duties and rights of the attending doctor, the duties of a doctor of a paraclinical medical and diagnostic department. The student must familiarize himself with the sanitary condition of the hospital, the order of admission and discharge of patients, the internal regulations of the hospital.

2. Principles of anti-epidemic work in children's hospitals.

During work, the doctor's assistant should observe epidemiological caution. If an infectious pathology is suspected, he must isolate the patient before transferring him to specialized departments. The doctor on duty monitors the preparation of food in the food supply unit, takes a sample with a mark in a special log.

In everyday work, the doctor's assistant must adhere to the following instructional orders:

Order No. 34-on improving the infection control system and measures for the prevention of nosocomial infections in healthcare organizations of the Kyrgyz Republic,

Decree No. 32 - on approval of the Instruction on infection control in health care organizations KR,

Order No. 202 dated 12.05.2008 -on laboratory diagnostics, control activities and monitoring of HIV infection in MPD KR

Order No. 59 dated 18.02.2013 - about the improvement of security systems medical waste management in health care organizations,

Order No. 488 - about prevention the incidence of viral hepatitis in the population KR.

2. The work of a doctor on the reception of sick children. Writing the initial examination of the patient.

The work of a doctor in the emergency department responsibly requires the ability to quickly navigate in sorting patients, in identifying dangerous, urgent and priority signs. According to the instructions of the Ministry of Health of 16.06.01. No. 213 the doctor of the emergency department examines all the patients who have been admitted, while he draws up the front part of the medical history, reflects information on the life history and illness of the child, describes the status, with an assessment of physical development according to WHO, reflects the data of the examination at the outpatient stage, justifies the preliminary diagnosis, draws up a survey plan and a treatment plan for the patient, hospitalizes the patient according to the profile and severity of the condition, taking into account questions of deontology. If necessary, the doctor together with the nurse provides emergency care to the patient.

4. Working with the main medical documentation of the hospital

The student (doctor's assistant) pays attention to the maintenance of medical records:

form 003 / U - medical card of the inpatient patient and the CIF to it; form No. 027/U - extract from the medical card;

form No. 347 - medical certificate of death;

form No. 249 - Recommended definitions, standards, and registration requirements for intrauterine, perinatal, neonatal, and infant mortality;

form No. 007/U - a list of records of the movement of patients and the bed fund of each department and a diary for it;

forms No. 12, 14, 17 - annual reporting forms of health care facilities.

Direct work with the medical documentation of the student trainee-medical history, in which he makes daily entries in the "Diary" section, clearly defines the terms of justification of the clinical diagnosis, makes competent extracts from the medical histories. Daily rounds of supervised patients with subsequent registration of the "Diary" section.

Daily rounds of supervised patients by students carried out jointly with the doctors of the department are designed to educate them in the skills of their future profession, initiative, and hard work. The work begins with a five-minute morning session. The doctor's assistant participates in the rounds of the head office. department, professor and associate professor of the department, are present at the consultations. Interprets data from laboratory tests and instrumental examination methods. Formulates and justifies the clinical diagnosis according to modern classifications. Offers its own treatment plan, taking into account the diagnosis. The main purpose of the "Diary" section is to reflect the dynamics of the course of this disease. Develops the ability to communicate with sick children and their relatives.

5. Participation in the examination of supervised patients in the functional units of the children's hospital. Interpretation of the received data.

During the practice period, the doctor's assistant accompanies the supervised patient to the laboratories, functional diagnostics rooms, physiotherapy department, dentist's offices, ENT doctors and optometrists, neurologists. This contributes to a better assimilation of practical skills and abilities.

Schemes for substantiating the clinical diagnosis, stage-by-stage and discharge epicrisis. The clinical diagnosis should be justified within the first three days of hospital stay. It should logically follow from complaints, anamnestic and objective data, the results of laboratory and functional research methods that are characteristic of this pathology. The clinical diagnosis should be made according to the accepted modern classification of diseases and put on the title page of the

medical history on the day of its justification, with the date and the signature of the attending physician. Concomitant diseases are justified separately from the main final diagnosis.

A staged epicrisis should usually be written every 9-10 days. The child's stay in the hospital. It should contain information about the dynamics of the patient's condition over a given time period, reflect the state of laboratory and functional studies, and include an assessment of the therapy performed, indicating the single, daily dos and treatment courses of the patient. The epicrisis specifies the purpose and results of expert consultations and consultations. At the end of the description, a plan for further management of the patient is outlined.

The discharge epicrisis indicates the duration of the patient's stay in the hospital, the final clinical diagnosis (main, main complications, concomitant) with its justification, indicating the scope of examinations, treatment. The discharge epicrisis ends with recommendations for further medical rehabilitation of the child.

6. Participation in the provision of emergency care at the reception and supervised patients.

The doctor's assistant should be able to provide emergency care to the child in emergency situations at the reception, as well as in the department, with the following conditions: cardiac arrest, respiratory arrest; anaphylactic shock, convulsive syndrome, bleeding, hyperthermic syndrome, arterial hypertension, pulmonary edema. These skills are also practiced by the student on night duty. When providing emergency care, follow the recommendations of the pocket guide 2013.

7. Sanitary and educational work in a children's hospital.

Along with the medical work, the doctor's assistant takes part in the sanitary

and educational work carried out in the departments of the hospital. Sanitary and educational work consists in conducting conversations with children and their parents on the main topics that characterize the profile of the department; conducting lectures, issuing health bulletins.

8. Regulations on the duty doctor of the children's hospital. Night duty.

The doctor's assistant should familiarize himself with the regulations on the doctor on duty at the hospital. During the night duty, he repeatedly makes rounds in the departments, examines seriously ill children left under supervision. The results of the bypass are recorded in the diary and journal of the doctor on duty, participates in the provision of emergency care to the child with the mandatory reflection of the dynamics of the patient's condition as a result of medical interventions. At the morning conference, the assistant physician reports together with the main doctor on duty to the Deputy chief physician and the head of the department.

9. Fundamentals of deontology. Test.

When working in departments, the assistant doctor must adhere to the basics of ethics and deontology. A doctor's assistant prepares material for a report and speaks at a conference on ethics and deontology.

The diary of the production practice, certified by the head of the health care facility, is the main reporting document for conducting the test based on the results of the practice. At the end of each cycle, the internship managers conduct an interview with the student with a differentiated assessment of the implementation of the internship program, the degree of mastering practical skills, independent work, and educational and research work. At the end of the practice, the teacher who led the practice based on the results of the interviews in the cycles, the presentation of the reporting documentation sets an overall grade, which is entered in the record book.

Internship

"Assistant doctor of the CFM»

The total labor intensity is 6 credits (180 hours).

Types of control: certification, with assessment.

Industrial practice of 5th-year students of the Faculty of Pediatrics as an assistant to a hospital doctor is conducted on the basis of children's hospitals. The schedule of students' work in the departments is approved by the chief doctor of the hospital and the head of the department (**6 credits**).

The purpose of the practical training of the 6th year students of the Faculty of Pediatrics in the cycle "Assistant to the Doctor of the Family Doctors Group" is to teach students the qualified skills of a pediatrician, a doctor of the FDG in the primary health care system.

Tasks of the production practice:

1. Introduction to the principles of the organization of the work of the doctor of the Family Doctors Group for the provision of medical and preventive care to the children's population and adults.
2. Development and consolidation of professional skills and abilities to assess physical and neuropsychiatric development, clinical and laboratory examination, diagnosis and treatment of the most common diseases of childhood in outpatient settings.
3. Consolidation and improvement of practical skills in providing emergency care to children at the primary level of health care.
4. Familiarity with the registration of medical documentation of an outpatient patient, taking into account the medical and economic standards of the mandatory insurance fund: the history of the child's development (form No. 112 / y), the vaccination record card (form No. 063), the registration form of a teenager (form No. 025/y), documents for admission to preschool and school institutions, emergency notification (F-58), CIF.
5. Familiarization with the work of specialized functional rooms (healthy child, vaccination room, functional research rooms) and physiotherapy departments.

6. Consolidation of practical skills in sanitary and educational work and anti-epidemic activities among children, parents and their relatives.
7. Compliance with the principles of medical ethics and deontology;

Type and form of the practice

Type of practice-industrial practice is carried out on the basis of Contracts between KSMA and medical institutions of the Ministry of Health of the Kyrgyz Republic in accordance with which these health institutions provide places for internships for university students.

The form of conducting the practice - "Assistant to the FDG" for students of the 6th year of the Faculty of Pediatrics is carried out according to the curriculum, in accordance with the State Standard-3.

Students who have successfully completed the necessary theoretical training, have practical skills acquired on dummies, and have passed medical examinations are allowed to practice.

Structure and organization of production practice

The bases for conducting industrial practice of students of the 6th year of the Faculty of Pediatrics as assistant doctors of the State Medical Service are city and district outpatient clinics - CFM (center of family medicine) with all relevant departments, offices, staffed with highly qualified personnel of doctors, nurses, having all the necessary equipment and documentation for the reception of patients.

The practice is managed by the staff of the pediatric departments of the KSMA. The direct managers of the practice are the leading specialists of the medical institutions, to which the students are attached.

During the internship period, the student must familiarize himself with the organization of the work of the medical institution – outpatient clinic(family medicine center), its departments, laboratories, registry, with the procedure for recording patients, the work of auxiliary diagnostic and treatment and rehabilitation rooms, forms of accounting and reporting of the work of the doctors

of the FDG, statistical processing of reporting materials and methods for analyzing the main qualitative indicators of the doctor of the FDG for providing medical care to children and adults.

The student works according to the work schedule of the medical institution, takes part in all activities related to the organizational and medical-material work of the institution. Each student must be provided with a workplace. The practical work of a student consists of a daily 6-hour work with a 5-day working week in a polyclinic.

The student works in the office of a FDG. The student must be familiar with the rules of accounting and storage of medicines, with the procedure for registration of registration forms for working with children's contingent, referrals to pediatric hospitals, certificates and other documents.

During the practical training, the student must actively conduct sanitary and educational work: read lectures, conduct a conversation, issue sanitary bulletins about the prevention of the disease, about a healthy lifestyle, and must also remember and comply with the requirements of the basics of deontology:

- 1) respect the rights of patients;
- 2) strictly follow the principles of professional ethics of the doctor;
- 3) pay special attention to the correct introduction of medical documentation, do not allow negligent attitude to work, observe medical secrecy;
- 4) show an example of a sensitive and attentive attitude to the patient and his relatives.

Control of the work of students is carried out by the staff of the department responsible for conducting practical training in the following areas:

- 1) responsibility for the correctness of the diagnosis and the treatment prescribed by the intern;
- 2) correct documentation management;
- 3) control of discipline and appearance of students;
- 4) assessment of theoretical knowledge and practical skills.

Having started work, the student daily draws up a diary of industrial practice, in which he describes all the types and volume of work performed, the methodology of medical manipulations performed. Every day, the diary is certified by the signature of the FDG and the head of the practice-the teacher and is certified by the seal of the doctor.

At the end of each cycle, the student submits a summary report.

During the practical training, in addition to medical work, the student takes part in sanitary-educational and preventive measures conducted by the staff of the departments of the outpatient medical institution, in production meetings, scientific and clinical conferences. During the practical training, the student, under the supervision of the head of the practice, must work out practical skills, according to the catalog of competencies, which is marked in the "Journal of Practical Skills".

On the last day of the internship, the student prepares a report on the production practice. The responsible doctor of the FDG gives a brief description of the student's work, in which he evaluates the volume, quality of the work performed, knowledge and practical skills acquired during the practice, the student's integrity, the ability to comply with the basic principles of medical ethics and deontology. The diary and the journal of mastering practical skills are signed by the supervisor responsible for the production practice.

The completed diary of the production practice is handed over to the teacher-the head of the practice, who gives a brief written description of the student's work and pre-evaluates it according to a five-point system. Students who do not pass the internship within the established time limits, who have passes, are not allowed to take the test.

The test is passed in the center for the development of clinical skills on dummies and phantoms with a differentiated assessment according to the five-point system of the certification commission appointed by the department of industrial practice. The assessment signed by the teacher-head of the practice is entered in the student's record book and in the test and examination sheet.

Stages of practical actions of students

№	Structure of the production practice	Types of work in practice, including independent work of students			
1	Structure of outpatient care for the population	Familiarity with all departments of the CFD, FDG		Work under the supervision of a FDG	Independent work, study of medical documentation
2	Medical work	<p>Reception of patients in the polyclinic. Collect anamnesis and conduct a clinical examination of the child, evaluate the anthropometric data, calculate the age norms of weight and height indicators at the reception in the clinic.</p> <p>Evaluate the physical, sexual, and mental (psychomotor) development of children and adolescents.</p> <p>Establish the diagnosis, health group, and targeted risk of the disease in children and adolescents.</p> <p>Prescribe medication based on the age of the child.</p> <p>Determine the timing of discharge of children after the disease to school and kindergarten</p>	Visiting patients at home	Work in a day hospital, a hospital at home	Participation in the work of specialized offices
3	Preventive work	Participation in medical examinations. Participate in routine medical examinations of children and adolescents in	Participation in vaccination	Participation in the preventive	Study of regulatory documents for conducting

		<p>organized groups.</p> <p>Determine the degree of readiness of children to enter pre-school, school.</p> <p>To assess the severity of adaptation of children to preschool and school institutions.</p> <p>Participate in the implementation of preventive vaccinations.</p> <p>Determine the physical culture group for children of preschool and school age.</p>		examination	g medical examinations
4	Reception of healthy children of the first year of life in the polyclinic	<p>Calculate and correct the nutrition of children in the first year of life.</p> <p>Make a daily routine for healthy young children.</p> <p>Make an individual plan for preventive vaccinations.</p> <p>Possess the skills of hygienic care for newborns (skin care, mucous membranes, treatment of the umbilical wound, hygienic bath).</p> <p>To prevent rickets and iron deficiency anemia in children of the first year of life.</p>			<p>Make a daily routine for healthy young children.</p> <p>Possess the skills of hygienic care for newborns (skin care, mucous membranes, treatment of the umbilical wound, hygienic bath).</p> <p>Filling out form No. 112/y;</p>
5	Registration of medical	Filling out outpatient cards and statistical	Filling out the	Filling out the	Filling out

	documentation, filling in and maintaining medical documentation	coupons	control cards of dispensary observation	sheets of non-workability and san.-resort. maps	referrals to MSE and extracts from outpatient cards
6	Dispensary work	Participation in dispensary examinations of patients	Filling out outpatient cards based on the results of dispensary examinations	Introduction to the logs of dispensary observation records	Conducting interviews with patients about risk factors
7	Examination of temporary disability (ETD)	During the examination of patients, conduct ETD – determine its cause and type, indicate the need to issue a document on VN, its term, criteria for recovery and restoration of working capacity	Filling out the documentation of the parcel list on the MSE		
8	Writing prescriptions	Writing out regular prescriptions. Calculation of age-related doses	Prescribing preferential prescriptions		
8	Providing emergency care	Providing emergency care at home	Participation in the work of the day hospital ward	Drawing up a list of medicines for emergency care	
9	Sanitary and educational work	Study of the literary material, taking into account the chosen topic.	Conducting interviews, registration		

			on of sanitary bulletins		
1 0	Preparation for passing the test based on the results of the practice	Control of knowledge and practical skills in the workplace	Making a diary and a journal of masterin g practical skills		

Internship time-meets the requirements of the State Standard -3 (2015), curricula and schedules of the educational process of KSMA. The practice of the 6th year students is conducted after the X semester for 6 working weeks (180 hours) as an assistant doctor of the FDG in city and district outpatient clinics.

No one can be exempt from the practice. It is forbidden to send students at the expense of the time of the EP and WP to other events (sports, health, etc.).

Postponement of the internship period may be allowed to individual students in exceptional cases (illness, pregnancy) in consultation with the deans of the faculties. Missed days-are worked out without reducing the hours, on duty, on weekends or practice is extended.

Students who have not completed the internship program for a valid reason are sent to practice again according to an individual plan.

Students who fail to complete the internship program without a valid reason are considered to have academic arrears.

As a result of this internship , the student must

know:

- The principles of outpatient care for children and adults.
- The content of the work of a pediatrician with children in the clinic and at home.
- The content of the work of a general practitioner in a polyclinic and at home
- The content of the work of an obstetrician-gynecologist in a polyclinic
- The content of the work of a doctor – surgeon in a polyclinic
- The content of the doctor's work on emergency care at the pre-hospital stage.
- The content of the work of the doctor of the educational institution.

- Basic standards of preventive and therapeutic and diagnostic work of the district service.
- Principles of accounting and reporting documentation.
- Principles of vaccination of children (republican vaccination calendar).
- List of contraindications to vaccination.
- Complications of vaccination (general, local).
- Fundamentals of dynamic monitoring of newborns and children of the first year of life (by risk groups).
- Dynamics of local changes after BCG vaccination
- Assessment of the level of physical development and nutritional status of children (using tables of standard deviations).
- Assessment of the neuropsychiatric development of children of the first year of life and older.
- Ten principles of breastfeeding, the frequency of breastfeeding, the time and technique of the first application, the criteria for the effectiveness of breastfeeding.
- The technique of introducing complementary foods to children.
- Etiopathogenesis, classification, clinical picture, prevention and treatment of rickets, constitutional abnormalities, eating disorders, anemia principles of observation.

be able to:

- Draw up accounting and reporting documentation for children and adult patients.
- Provide prenatal care.
- Provide patronage to the newborn.
- Collect and evaluate biological, social, and genealogical history.
- Make a step-by-step epicrisis for a child of the decreed age.
- Evaluate the physical development of children of different ages.
- Evaluate the neuropsychiatric development of children of different ages.

- Prescribe nutrition for young children, therapeutic nutrition for sick children and adolescents.
- Make a daily routine for a young child.
- Prescribe tempering procedures for a young child.
- Conduct a clinical examination of a healthy and sick child.
- Conduct a clinical examination of adults
- Evaluate the results of a pair of clinical examination methods.
- Determine the child's health group
- Make recommendations for the prevention of rickets, IDA, and eating disorders.
- Register the child in the PEI.
- Register your child for school.
- Issue a prescription to the pharmacy.
- Make a referral to a hospital.
- Fill out an emergency notification.
- Issue a health resort card
- Prepare documentation for a disabled child in the MSE.
- Write out sick lists and certificates.
- Provide emergency care for hyperthermic syndrome.
- Provide emergency care for convulsive syndrome.
- Provide emergency care for heat and sunstroke.
- Provide emergency assistance in case of poisoning.
- Provide emergency care for bleeding.
- Provide emergency care for acute allergic conditions.

Have the skills to perform work in the following sections:

- **Preventive work with healthy children and adolescents:** performing two-stage medical examinations (prenatal patronage of pregnant women, patronage of the newborn), dynamic monitoring of children of the first year of life, taking into account the level of health, monitoring of unorganized children aged 1 to 7

years, conducting planned and emergency anti-epidemic measures at the pediatric site, preparing children for admission to an educational institution;

- **Providing medical care to the children's population in a polyclinic:** early diagnosis of the most common diseases, taking into account the peculiarities of their course, treatment, prevention, medical examination; providing medical care to acutely ill children at home, dispensary supervision of children of health groups III - V; examination of temporary disability for care;

- **Provision of emergency care at the pre-hospital stage in acute and chronic diseases, urgent conditions:** the sequence of actions of the pediatrician to assess the symptoms in accordance with the features of diagnosis and physical examination of children, classification of threatening conditions, establishment of a priority syndromic diagnosis, provision of assistance in the minimum sufficient volume, choice of a tactical solution;

- **Organization of outpatient care for children,** interaction with other outpatient inpatient hospitals, work with accounting and reporting documentation, work with the district nurse, analysis and planning of the work of the district pediatrician;

Sanitary and educational work: conducting individual conversations with parents and older children, lectures on topical issues of modern medicine.

Main literature:

1. Captain T. V.-Propaedeutics of children's diseases with child care. - Ed. 2-E.- M., MED press-inform, 2004.
2. Pocket guide " Providing inpatient care for children. Guidelines for the management of the most common diseases in resource-limited settings." Bishkek. 2013. , 2004.
3. Polyclinic pediatrics. Methodological guide. Bishkek 2014.
4. Order No. 585 of the Ministry of Health of the Kyrgyz Republic dated 09. 10. 2015. "On the observation of healthy children at the primary health care level".
5. Order No. 144 of 26.02.2016 "On the organization of protection, support and promotion of breastfeeding in young children in maternity hospitals(departments), children's hospitals, General Medical Practice Centers, Family Medicine Centers/Groups of Family Doctors, PMS of the Kyrgyz Republic»
6. Shabalov N. P.-Children's diseases. - Ed. 5-e. - St. Petersburg, Peter, 2004.

Additional literature:

1. Regulations on the Group of Family Doctors (as an institution of the Ministry of Health). Approved by Order No. 202 of the Ministry of Health of the Kyrgyz Republic dated June 20, 2000. Registered with the Ministry of Justice of the Kyrgyz Republic on June 29, 2000. Registration number 130.
2. Regulations on the Group of Family Doctors (as a structural division of the AU). Approved by Order No. 202 of the Ministry of Health of the Kyrgyz Republic dated June 20, 2000. Registered with the Ministry of Justice of the Kyrgyz Republic on June 29, 2000. Registration number 131.
3. Regulations on the Compulsory Health Insurance Policy. Approved by Order No. 196 of the Ministry of Health of the Kyrgyz Republic dated June 15, 2000. Registered with the Ministry of Justice of the Kyrgyz Republic on June 29, 2000. Registration number 130.
4. Guidelines for outpatient pediatrics / Edited by A. A. Baranov – - M., 2007.
5. Website of the I. K. Akhunbaev KSMA <https://www.kgma.kg/index.php/ru/>
6. Kyrgyz Virtual Scientific Library www.kyrgyzstanvsl.org
7. Electronic resource "Electronic Library" of KSMA (library.kgma.kg)
8. Electronic resources of the eIFL project. http://bik.org.kg/ru/eifl_resources/

Appendix No. 5

Student Choice Courses (SCC) for the 2018-2019 academic year.
Specialty: "Pediatrics" 2nd year. Each student is required to earn 7 credits (ECTS) during the year.)

List and annotations of elective courses for students to choose from

1. Topic: Cellular foundations of immune processes

Discipline: Department of Histology.

Content: The elective course provides a deeper knowledge of blood cells obtained in the course of studying the basic program, and the formation of a conscious attitude to maintaining one's own health

Total labor intensity: 1 credit. (3rd semester).

2. Subject: Medical geography.

Discipline: Department of Public Health.

Content: Medical geography is a scientific discipline that studies the influence of natural, economic and social conditions of various territories on the health of the people who inhabit them. The main goal is to assist the society in improving, including improving, the living environment of the population in order to achieve the highest level of its health.

Total labor intensity: 1 credit. (3rd semester).

3. Topic: Tropical parasitology

Discipline: Department of Biology

Content: The purpose of the course is to expand students ' knowledge about the morphology, features of the development cycles, the spread of parasites of the tropical climate, their pathogenic effect, and measures to protect human health from parasites. The large migration of the population to different parts of the world, the arrival of foreign students from different countries, the presence of transit hosts of parasites and vectors suggest the expansion of the parasite range and the need for additional knowledge in tropical parasitology.

Total labor intensity: 1 credit. (3rd semester).

4. Topic: Information and communication technologies in medicine

Discipline: Department of Physics, Mathematics and Computer Science

Content: The formation of students ' general ideas about the possibilities of using information and communication technologies that provide broad opportunities for processing medical information, mastering the techniques of working with modern standard application software packages.

Total labor intensity: 1 credit. (3rd semester).

1. Topic: Features of indicators and mechanisms of regulation of the functional systems of the child's body

Discipline: Department of fundamental and clinical physiology

Content: The content of the elective course provides for familiarization of students with the age periodization of human development and the study of

age-related features of blood, cardiovascular, respiratory, digestive, and urinary systems. and the nervous system.

Total labor intensity: 1 credit. (4th semester).

2. Topic: Physical education

Discipline: Department of Physical Education

Content: Teaching students how to treat and prevent various health disorders through scientifically-based special physical exercises

Total labor intensity: 1 credit. (4th semester).

3. Topic: Free radicals and antioxidants. The struggle of evil and good

Discipline: Department of biochemistry

Content: This elective course will allow the student to understand the essence of the processes of free radical oxidation in normal and pathological conditions and to open the "door" to the world of antioxidants, which is important for the future pediatrician.

Total labor intensity: 1 credit. (4th semester).

4. Topic: Nanotechnology in pediatrics

Discipline: Department of Physics, Mathematics and Computer Science

Content: The main focus of the trainees is on new and latest methods of prevention, diagnosis and treatment of diseases of young patients. These include laser therapy, radiation diagnostics and nanotechnology, etc., without which modern medicine and healthcare are incomplete. The nanoscale of the technology ($1\text{nm}=0.000000001\text{ m}$) is the molecular interaction of bioconstructions, correction on the thin structure, "at the root" of biosystems and the child's body, which allows you to detect pathological processes at the very beginning.

Total labor intensity: 1 credit. (4th semester).

5. Topic: The role of biogenic elements in the human body

Discipline: Department of Chemistry

Content: Formation of the students ' system of natural science knowledge about the chemical and biological properties of biogenic elements, the

presence and transformation of which form the molecular basis of the vital activity of the body.

Total labor intensity: 1 credit. (4th semester).

6. Topic: Kep madaniyaty (culture of speech)

Discipline: Department of the Kyrgyz language

Content: Teaching the Kyrgyz language is aimed at forming a culture of speech, logically coherent speech, enriching vocabulary, grammatically literate writing, teaching proper office work, deepening the knowledge gained in the specialty

Total labor intensity: 1 credit. (4th semester).

7. Topic: Fundamentals of nursing

Discipline: Department of Nursing

Content: The purpose of the course is to familiarize students with the methods and principles of proper implementation of nursing care and assessment of the condition of patients in hospitals, skills of providing emergency pre-medical care to patients.

Total labor intensity: 1 credit. (4th semester).

5th semester

1. Topic: Psychohygiene

Discipline: General Hygiene Department

Content: The purpose of the course is to gain knowledge, skills and abilities to improve the stability of mental health and resistance to various harmful factors of the external environment and to prevent the development of initial forms of mental diseases and their relapses in patients.

Total labor intensity: 1 credit. (5th semester).

2. Topic: Type 1 diabetes mellitus in adults.

Discipline: Department of Propaedeutics of Internal Diseases

Content: The ability of the student to recognize the basic clinical and laboratory-instrumental signs of hyperglycemia syndrome in a timely

manner and, taking into account, both children and adults with clinical manifestations of hyperglycemia syndrome and with already developed complications turn to general practitioners. The program also takes into account the clinical manifestations of target organ damage in adults.

Total labor intensity: 1 credit. (5th semester).

3. Topic: Quantitative and qualitative assessment of health. Health diagnostics

Discipline: Department of Fundamental and Clinical Physiology

Content: The purpose of the SCC is to get acquainted with the modern definition of health, its qualitative and quantitative characteristics, risk factors, and methods for predicting, maintaining, and promoting health, the features of the lifestyle and work of students will be considered. The knowledge gained will contribute to a better assimilation of the discipline of public health and public health.

Total labor intensity: 1 credit. (5th semester).

4. Topic: Pathological anatomy of diseases of the prenatal and perinatal periods

Discipline: Department of pathological anatomy

Content

Total labor intensity: 1 credit. (5th semester).

5. Topic: Methods of research of the endocrine system. The main syndromes of the lesion.

Discipline: Department of Propaedeutics of Children's Diseases

Content: The purpose of SCC is to master the methods of studying the endocrine glands in children, to identify the main symptoms and syndromes of damage to this system.

Total labor intensity: 1 credit. (5th semester).

6th semester

1. Topic: Microbiological diagnostics of nosocomial infections

Discipline: Department of Microbiology, Immunology and Virology

The purpose of the program is to develop students ' theoretical and practical skills for conducting microbiological diagnostics and prevention of nosocomial infections in medical and preventive organizations.

Total labor intensity: 1 credit. (6th semester).

2. Topic: Semiotics and diagnosis of acute respiratory failure in newborns

Discipline: Department of Pediatric Surgery

Content: The elective course gives students the opportunity to study in depth the etiology, pathogenesis, semiotics and diagnosis of acute respiratory failure in newborns.

Total labor intensity: 1 credit. (6th semester).

3. Topic: Infection control

Discipline: Department of General and Clinical Epidemiology

Content: Infections associated with the provision of medical care are an urgent problem for practical health care, reducing the quality of medical care and increasing the social time of diseases.

A large proportion of nosocomial infection is associated with the implementation of invasive diagnostic and therapeutic procedures.

Future healthcare professionals should have a good grasp of the basics of infection prevention measures associated with the provision of medical care.

Total labor intensity: 1 credit. (6th semester).

4. Topic: Current issues of radiation diagnostics in pediatrics

Discipline: Department of Radiation Diagnostics

Content: The elective course offers an analysis of algorithms for radiological examinations of organs and systems in the most common pathological conditions in the practice of pediatricians. Prenatal screening, being an integral part of radiation diagnostics and a special interest of clinicians, is included in the elective. A separate section deals with emergency conditions, algorithms of radiation studies and radiation semiotics.

Total labor intensity: 1 credit. (6th semester).

5. Topic:

Discipline: Basic Pharmacology

Content:

Total labor intensity: 1 credit. (6th semester).

6. Topic:

Discipline: Topographic anatomy

Content:

Total labor intensity: 1 credit. (6th semester).

7. Topic: Operative surgery for congenital gastrointestinal obstruction of children

Discipline: Topographic anatomy

Content: The purpose of SCC is to master the methods and techniques of surgical interventions for congenital gastrointestinal obstruction in children: resection of the intestine, the formation of an inter-intestinal anastomosis, the imposition of an intestinal suture.

Total labor intensity: 1 credit. (6th semester).

8. Subject:

Discipline: Faculty Pediatrics

Content:

Total labor intensity: 1 credit. (6th semester).

9. Topic:

Discipline: Pathological Physiology

Content:

Total labor intensity: 1 credit. (6th semester).

7th semester

1. Topic: Valeology

Discipline: General Hygiene Department

Content: The goal of the SCC is to learn the basics of a healthy lifestyle and how to model and achieve these basics.

Total labor intensity: 1 credit. (7th semester).

2. Topic: Fundamentals of dermatocosmetology

Discipline: Department of Dermatovenerology

Content: The elective course opens up the world of medical dermatocosmetology for the student. The elective course program includes the following topics: about aging of the skin and the body, correction and prevention of various morphological-functional skin defects, prevention of premature aging of the body, early detection of diseases, basic laser technologies used in dermatology, cosmetic care for various types of skin

Total labor intensity: 1 credit. (7th semester).

3. Topic: Sports pediatric cardiology

Discipline: Department of hospital Pediatrics

Content: Currently, a large number of children are involved in sports, so the problem of selecting children for sports is becoming relevant for pediatricians. And it is also important to determine the timing of sports, after suffering from diseases. Sports activities are characterized by a high physical and emotional load, which implies high functional loads on organs and systems.

Total labor intensity: 1 credit. (7th semester).

4. Topic: Congenital anomalies of the visual organ

Discipline: Department of Ophthalmology

Content: During the classes, much attention is paid to the development of students' practical skills in ophthalmology, which are necessary in the further work of pediatricians.

Total labor intensity: 1 credit. (7th semester).

5. Topic: Modern problems of immunoprophylaxis

Discipline: Department of General and Clinical Epidemiology

Content: Immunization of the population plays an important role in the prevention of infectious diseases, which is indisputably proved by its results. During the period of formation and development of immunoprophylaxis,

new technologies for obtaining vaccines were developed, schemes and methods of administration were improved.

Knowledge of the basics of the organization of vaccinations and new directions in the development and receipt of immunobiological drugs is necessary for future public health professionals.

Total labor intensity: 1 credit. (7th semester).

6. Topic:

Discipline: Pediatric Surgery

Content:

Total labor intensity: 1 credit. (7th semester).

8th semester

1. Topic: Providing psychological support, assistance to victims in emergency situations

Discipline: Department of psychiatry

Content: This course examines a system of short-term measures aimed at regulating the current psychological, psychophysiological state and negative emotional experiences of children and adults affected by a crisis or emergency event using professional methods that meet the requirements of the situation.

Total labor intensity: 1 credit. (8th semester).

2. Topic: Problems of diagnosis of acute infectious diseases in children at the present stage

Discipline: children's infectious diseases

Content: Students will consider the problems of diagnosis and management of sick children with chickenpox, against the background of the use of corticosteroids or cytostatics in the treatment, the features of the diagnosis of pertussis at the present stage in different age groups. It is proposed to consider the issue of diagnosis of extrabuccal (extrapharyngeal) form of scarlet fever, the features of its course in children. Problems of diagnosis and

management of diseases such as oropharyngeal diphtheria in vaccinated children, parvovirus infection B-19 in children will not be ignored.

Total labor intensity: 1 credit. (8th semester).

3. Topic: Modern approaches to the diagnosis and treatment of ENT diseases

Discipline: Department of Otorhinolaryngology

Content: The elective course for students provides for the study of theoretical and practical skills and abilities to diagnose and provide timely assistance in such conditions as: injuries, foreign bodies of ENT organs, nosebleeds, laryngeal stenosis of various origins, chemical burns of the pharynx and esophagus, etc., with the allocation of characteristic symptoms of these diseases and the determination of the level of topical lesions.

Total labor intensity: 1 credit. (8th semester).

4. Topic: Private issues of medical genetics

Discipline: Department of Neurology with a course of Medical Genetics

Content: The purpose of the SCC is to master clinical and genetic methods for the diagnosis of hereditary pathology, to identify individuals with an increased risk of developing hereditary diseases.

Total labor intensity: 1 credit. (8th semester).

5. Topic:

Discipline: Faculty Pediatrics

Content:

Total labor intensity: 1 credit. (8th semester).

6. Subject:

Discipline: Pediatric Surgery

Content:

Total labor intensity: 1 credit. (8th semester).

9th semester

1. Topic: Features of the course of drip infections in adults

Discipline: Department of Infectious Diseases

Content: Currently, a special place is occupied by the problem of the spread of drip "children's" infections among the adult population (measles, rubella, mumps, scarlet fever, chickenpox, whMEPing cough). Changes in the dynamics of morbidity (measles, mumps, rubella) as a result of widespread vaccination in children, there is a shift in the incidence of older age groups, fading post-vaccination immunity with age, increasing the incidence in adults.

Total labor intensity: 1 credit. (9th semester).

2. Topic: Problems of diagnosis of acute infectious diseases in children at the present stage

Discipline: children's inf. diseases

Content: Children's infectious diseases are still an urgent problem in all countries of the world. Infectious diseases pose a threat to the development of mankind, since they account for a third of the total annual number of deaths in the world, 80 % of diseases of children under the age of 5 are caused by various infectious pathologies.

Total labor intensity: 1 credit. (9th semester).

3. Topic: Topical issues of gynecology.

Discipline: Department of obstetrics and gynecology1

Content: The purpose of the course is to increase the theoretical and practical knowledge of students on the issues of child and adolescent gynecology

Total labor intensity: 1 credit. (9th semester).

10th semester

1. Topic: Tuberculosis in children and adolescents associated with other diseases

Discipline: Department of Phthisiology

Content: The presented training cycle was compiled by the staff of the Department of Phthisiology, in order to form a deep amount of knowledge

among future pediatricians on the management of tuberculosis patients, primarily for working in outpatient settings among risk groups with various diseases. Also for the training of a specialist who can conduct a competent differential diagnostic search for tuberculosis in children and adolescents.

Total labor intensity: 1 credit. (10th semester).

2. Topic: Neurogenic bladder dysfunction in children

Discipline: Department of Pediatric Surgery

Content: Given the high relevance of the problem of neurogenic bladder in pediatrics and pediatric urology due to the high prevalence of the disease in childhood and the risk of secondary changes in the urinary organs, this topic will be informative for students.

Total labor intensity: 1 credit. (10th semester).

3. Topic: High-altitude medicine

Discipline: Department of Hospital Therapy

Content: The purpose of the SCC is to study the mountain climate, specific mountain diseases and the course of certain diseases of the lungs and cardiovascular system in high-altitude conditions

Total labor intensity: 1 credit. (10th semester).

11 semester

1. Topic: Emergency care for surgical pathologies in children

Discipline: Department of Pediatric Surgery

Content: The following syndromes and emergency surgical diseases in children will be considered by students:

- 1 . Traumatic shock in children.
2. External and internal bleeding (gastrointestinal, pulmonary, intracavitary);
3. Acute lesions of the abdominal organs: acute inflammatory diseases of the internal organs, perforations and ruptures of the organs, acute intestinal obstruction, pinched hernias, (external and internal), intestinal necrosis with mesenteric vessel thrombosis.

Total labor intensity: 1 credit. (11th semester).

2. Topic: Congenital malformations of the anterior abdominal wall in newborns

Discipline: Department of Pediatric Surgery

Content: Congenital anomalies in the structure of surgical pathology of newborns occupy a leading place and are the main cause of mortality. One of the most difficult ones is the malformations of the anterior abdominal wall: gastroschisis and omphalocele. In recent years, according to the literature, there has been an increase in the number of newborns with this pathology .

Total labor intensity: 1 credit. (11th semester).

3. Topic: Marketing in healthcare

Discipline: Department of Public Health

Content: Marketing in healthcare is a social and managerial process aimed at meeting the needs and needs of the population in medical care, through the creation, supply and exchange of valuable medical and pharmaceutical services and goods on the market.

Total labor intensity: 1 credit. (11th semester).

4. Topic: HIV and the child

Discipline: Department of Children's Inf. diseases

Content: This elective course includes questions about HIV infection and children's health, when to test a child for HIV infection, how to discuss HIV issues with a child, and many other useful information.

Total labor intensity: 1 credit. (11th semester).

5. Topic: Social Gerontology

Discipline: Department of Public Health

Content: This discipline covers issues closely related to the lifestyle of the elderly, health promotion that promotes longevity, the organization of medical care, ethical and legal issues related to the protection and guarantee of the rights of the elderly and old people.

Total labor intensity: 1 credit. (11th semester).

6. Topic: Features of forensic medical examination in extreme cases

Discipline: Department of Forensic Medicine

Content: Features of forensic medical examination in cases of mass death of people

Features of forensic medical examination in the case of causing bodily injuries

Forensic medical examination in cases of self-harm, simulation, aggravation and de-aggravation.

Total labor intensity: 1 credit. (11th semester).

12 semester

1. Topic: Dietetics

Discipline: Department of Hygiene disciplines

Content: The purpose of the study of the elective course is to teach students the basics of dietetics, to build a diet taking into account the physiological needs for nutrients and energy. This course will teach students to evaluate and make daily diets of patients taking into account the chemical composition, energy value and features of pathogenesis, clinical course, stage of the disease, the level and nature of metabolic disorders

Total labor intensity: 1 credit. (12th semester).

2. Subject:

Discipline: Department of Public Health

Content:

Discipline:

Content:

Total labor intensity: 1 credit. (11th semester).

3. Topic: Differential diagnosis of juvenile arthritis

Discipline: Department of Hospital Pediatrics

Content: Chronic juvenile arthritis leads to a lag in physical and sexual development, to psychosocial trauma. Timely diagnosis and early adequate

therapy will help to avoid or reduce these adverse outcomes of rheumatic diseases.

Total labor intensity: 1 credit. (12th semester).

4. Topic: Basic rights of citizens of the Kyrgyz Republic

Discipline: Department of Forensic Medicine

Content: Constitutional Law

Civil Law

Criminal and criminal procedure law

Administrative law

Family Law

Total labor intensity: 1 credit. (12 semester).

5. Topic: Therapeutic classical massage

Discipline: Department of clinical rehabilitation

Content: The program for students of the Faculty of General Medicine is intended for the initial study of massage. It describes all types and techniques of massage, the hygienic basics of massage, the mechanism of the therapeutic effect of massage on the body, and gives recommendations for massage of various parts of the body.

Total labor intensity: 1 credit. (12 semester).

6. Topic: Health Economics

Discipline: Department of Public Health

Content: A graduate of a medical university should have an economic mindset, he should be able to consider his professional medical activity taking into account the economic significance of the medical and recreational activities carried out by him.

Total labor intensity: 1 credit. (12th semester).

7. Topic: Current problems of rational use of medicines in pediatrics

Discipline: Department of Clinical Pharmacology

Content: The purpose of the SCC is to teach the rational choice of medicines, dosage regimen, route of administration, taking into account the APF of the child's body

Total labor intensity: 1 credit. (12th semester).

8. Topic: Selected questions of kidney pathology in newborns

Discipline: Department of hospital pediatrics

Content: The purpose of SCC is to study the prevalence, cause, clinical and laboratory signs of diseases of the kidneys and genitourinary tract of the newborn.

Total labor intensity: 1 credit. (12th semester).

Appendix 6

MINISTRY OF EDUCATION OF THE KYRGYZ REPUBLIC
MINISTRY OF PUBLIC HEALTH OF THE KYRGYZ REPUBLIC
I. K. AKHUNBAEV KYRGYZ STATE MEDICAL ACADEMY

"I approve»

Rector of

I. K. Akhunbaev, KSMA

d.m.s., prof. I.O. Kudaibergenova

"_____" 2018



WORKING PROGRAM STATE FINAL CERTIFICATION

Specialty	Pediatrics
The form of training	Full-time
Faculty	Pediatrics
Type	State exam
Total hours	

Bishkek -2018

Working program:

compiled on the basis of	Resolution of the Government of the Kyrgyz Republic of May 29, 2012 N 346 " REGULATIONS on the final state certification of graduates of higher educational institutions of the Kyrgyz Republic»
developed	Employees of the departments of the I. K. Akhunbaev KSMA: propaedeutics of children's diseases, faculty pediatrics, hospital pediatrics with a course of neonatology, children's infectious diseases, children's surgery.
reviewed	Head of the Department of Pediatrics of the B. N. Yeltsin KRSU, MD, Professor S. J. Bokombayeva Head of the Department of Hospital Pediatrics with the course of Neonatology of the I. K. Akhunbaev KSMA, Academician of the National Academy of Sciences of the Kyrgyz Republic, d.m.s, professor D. K. Kudayarov.
Discussed at the meeting	EMPC in the specialty "Pediatrics "(protocol No. of 2018)
Approved at the meeting	GUMC (Protocol No. of 2018)

Annotation

The state final certification (hereinafter referred to as the SFA) is aimed at establishing the compliance of the level of professional training of graduates with the requirements of the State Educational Standard of Higher Professional Education (hereinafter referred to as the SES HPE) in the direction of "Pediatrics" in order to assess the theoretical and practical readiness of students - graduates of the Faculty of Pediatrics.

The procedure for conducting the SFA (types, procedure, forms and means of certification activities) is determined by the "Regulations on the final State Certification of Graduates" (hereinafter the Regulations), approved by the order of the Rector of the I. K. Akhunbaev KSMA (hereinafter referred to as the KSMA) No. 137 of 24.05.2018.

The purpose of the State final certification is to establish the compliance of the level of development of competencies that ensure the appropriate qualification and level of education of students with the State Educational Standard of Higher professional education in the field of "Pediatrics".

Tasks:

1. to assess the formation of competencies that graduates should master as a result of mastering the main educational program of higher professional education (MEP HPE);
2. to sum up the results of the implementation of all forms and methods of teaching students according to the MEP HPE.

General provisions

1. The development of the MEP HPE is completed by the mandatory SFA of graduates.
2. Admission to the SFA in the specialty is carried out by the order of the rector of the I. K. Akhunbaev KSMA on the recommendation of the dean of the faculty.
3. A student who has no academic debt and has fully completed the curriculum or individual curriculum for the corresponding educational program of higher education is allowed to participate in the SFA.
4. Before the SFA, students are provided with the necessary educational and methodological materials, and the necessary conditions for training are created for them.
5. In the course of the state final certification, the competencies of the graduate, which must be mastered by students as a result of the MEP, expressed in their ability to use in practice, are subject to verification.

6. The term of the SFA is set by the university independently.
7. The results of the SFA are determined by the rating "excellent", "good", "satisfactory", "unsatisfactory". Grades "excellent", "good", "satisfactory" mean successful completion of the SFA.
8. Subject to successful completion of all the established types of SFA, a graduate of the Faculty of Pediatrics is awarded the professional qualification degree "Pediatrician" and is issued a state-issued diploma of higher professional education.
9. Filing and consideration of appeals is carried out in accordance with the Regulations.

Types of SFA

The SFC is conducted in the form of a state exam, which is established by the State Higher Education Institution.

SFA programs, conditions and terms of conducting, as well as criteria for evaluating state exams are approved by the university in accordance with the SES HPE, taking into account the recommendations of the educational and methodological profile committees.

State Attestation Commissions

1. The state attestation commissions are guided in their activities by the legislation of the Kyrgyz Republic in the field of education, the Regulations on conducting the SFC, the State Educational Standard of Higher Professional Education, and the educational and methodological documentation developed by the university.
2. The main functions of the State Attestation commission are:
 - determination of the compliance of the graduate's training with the requirements of the State Educational Standard of Higher Professional Education and the level of its training;
 - making a decision on the assignment of a professional qualification based on the results of the SFA and issuing a corresponding state-issued diploma of higher professional education to the graduate;
 - development of recommendations aimed at improving the training of graduates based on the results of the work of the state attestation commission.
3. In order to conduct the SFA by the university, in agreement with the relevant state body, the composition of the state certification commission for the specialty is proposed, which is valid for one calendar year.

3. The State Attestation Commission is formed from the teaching staff of the I. K. Akhunbaev KSMA, leading teachers and researchers of other higher educational institutions, and employers.
4. The State Attestation Commission is headed by the chairman, who organizes and controls the activities of the commission, ensures the unity of the requirements for graduates.
5. The chairman of the state attestation commission must be a person from among the employers.

Procedure for conducting the SFA

1. The procedure for conducting the SFA is developed by the University on the basis of the Regulations on the SFA and is brought to the attention of students no later than six months before the start of the SFA. Students are provided with the SFC program, they are provided with the necessary conditions for training, and consultations are held.
2. Graduates who have successfully completed the full development of the MEP HPE in the specialty developed by the university in accordance with the requirements of the State Educational Standard of Higher Professional Education, and have successfully passed all other types of control, are allowed to pass the SFA.
3. The decision to assign a graduate qualification in the specialty and issue a diploma of higher professional education of the state sample is made by the state attestation commission on the positive results of the SFA, issued by the protocols of the state attestation commissions. Decisions of the state attestation commission are taken at closed meetings by a simple majority of votes of the members of the commissions participating in the meeting, with the mandatory presence of the chairman of the commission or his deputy. If the number of votes is equal, the Chairman of the commission (or the Deputy Chairman of the Commission replacing him) has the right to vote. All decisions of the state attestation commission are drawn up in protocols.
4. A graduate who has passed the state exams with "excellent", who has at least 75% of the current exam grades in all disciplines "excellent", 25% - "good", who does not have the grades "satisfactory" and "unsatisfactory", is awarded a diploma with honors.
5. Students and persons involved in the SFA are prohibited from carrying and using means of communication during the SFA. Violations of academic discipline by students during the SFA are suppressed. In this case, an act of violation of academic discipline is drawn up and a rating of "unsatisfactory" is issued. Violations of academic discipline during the SFA include:

- cheating (including using mobile communication, Internet resources, as well as literature and materials that are not allowed to be used in the exam or test);
 - contacting other students for help or advice when preparing a ticket response or completing a task;
 - passing the SFC by persons posing as a student who is required to pass the exam.
6. The student's answer is heard by at least two members of the examination committee. Examiners have the right to ask the student clarifying questions, which, together with the answers, are recorded in the protocol.
 7. The results of the SFA are evaluated according to a four-point system: "excellent", "good", "satisfactory", "unsatisfactory". Grades "excellent", "good", "satisfactory" mean successful completion of the SFC. The results of the interdisciplinary state exam are announced to students on the day of the exam after the registration and approval of the minutes of the meeting of the state examination commission.
 8. Receiving the "unsatisfactory" rating deprives the graduate of the opportunity to pass further stages of the SFA.
 9. In the insert of the diploma, the average score of only positive assessments (one assessment) is entered according to the results of the three stages of the state final certification.
 10. Persons who have completed the development of the MEP HPE and have not confirmed the compliance of the training with the requirements of the SES HPE when passing the SFA, when reinstating at the university, are assigned a second SFC in the order determined by the university. Repeated passage of the final certification tests is appointed no earlier than three months and no more than five years after passing the final state certification for the first time. Repeated final certification tests may not be assigned by a higher educational institution more than twice.
 11. Persons who have not passed the final certification tests for a valid reason (for medical reasons, for family reasons, documented) should be given the opportunity to pass the final certification tests without being expelled from the university. Additional meetings of the state attestation commissions are organized in accordance with the procedure established by the University.
 12. Reports on the work of the state certification commissions are heard at the academic Council of the University and together with recommendations on improving the quality of professional training of specialists are submitted to the educational and methodological department within two months after the completion of the final state certification of graduates. The minutes of the final

state certification of graduates are stored in the archive of the higher educational institution.

Form and timing of the SFA, evaluation criteria

The dates of the SFC are set by the university independently. At the same time, the deadline for conducting a comprehensive state exam in the history of Kyrgyzstan, geography of Kyrgyzstan, Kyrgyz language and literature can be set for the period immediately after the completion of the program of these disciplines.

The form and number of tasks, as well as the list of disciplines included in the comprehensive state exam, are recommended by the educational and methodological profile committee.

The comprehensive state exam on the history of Kyrgyzstan, the geography of Kyrgyzstan, the Kyrgyz language and literature is conducted in the form of computer testing in one stage. The test tasks should cover all the questions necessary for the assessment of the graduate's competencies. The student is given 1 of the options for test tasks and 90 minutes of time.

Graduates admitted to the SFC are given a comprehensive interdisciplinary state exam in the specialty in three stages. The order of alternation of stages of the state examination can be changed by the decision of the state attestation commission.

Stage 1-theoretical training - testing, which is carried out in the CCSDKA. The test tasks should cover all the questions necessary for the assessment of the graduate's competencies. The student is given 1 of the options for test tasks and 90 minutes of time.

Stage 2-practical training - curation at the patient's bedside is carried out at the clinical bases of the I. K. Akhunbaev KSMA, equipped with the necessary equipment and materials. The assessment is subject to the degree of the graduate's ability to fulfill the scope of the upcoming real professional activity within the list of practical manipulations of the State Educational Standard.

The result of the test of practical skills is evaluated according to a 4-point system: "excellent", "good", "satisfactory", "unsatisfactory".

Persons who have received an "unsatisfactory" rating at one of the certification stages are not allowed to proceed to the next stage.

Stage 3 –a comprehensive interdisciplinary oral exam, during which the overall training of graduates, the degree of integration and synthesis of the acquired knowledge in the disciplines included in the comprehensive exam are evaluated. When conducting the 3rd stage - a comprehensive interdisciplinary oral exam, the exam tickets developed by the relevant departments and approved at the meeting of the EMPC are used. The structure of the exam ticket is represented by three questions. At least 30 minutes are allowed for preparation.

Test evaluation criteria

Excellent	Good	Satisfactory	Unsatisfactory
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The number of positive responses is 86% or more of the maximum test score	The number of positive responses from 76 to 85% of the maximum test score	The number of positive answers from 60 to 75% of the correct answers of the maximum test score	The number of positive responses is less than 60% of the maximum test score
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Criteria for evaluating practical skills

Excellent	Good	Satisfactory	Unsatisfactory
Knows in full, knows how to explain the manipulation, is professionally oriented, knows the indications for conducting, and independently performs the manipulation.	Knows in full, knows how to explain the manipulation, is professionally oriented, and knows the indications for the procedure. Performs manipulation under the control of the teacher.	Knows in full, knows how to explain the manipulation, is professionally oriented, and knows the indications for carrying out. Participates in performing the manipulation.	Has no idea and does not know how to explain the manipulation, professionally navigate, does not know the indications for conducting.

Evaluation criteria for the oral comprehensive interdisciplinary State Exam

Excellent	Good	Satisfactory	Unsatisfactory
is presented to a student, who has demonstrated complete mastery of the competencies stipulated program and system knowledge of material needed to the solution of	is presented to the student who has demonstrated sufficient development of the competencies provided for in the program,	is presented to a student who has demonstrated an insufficiently complete development of the competencies provided for in the program, who has found a sufficient	is presented to a student who has not demonstrated the development of the planned competencies provided for in the program, who has made a

professional tasks, knowledge of scientific language responsible presentation of program material at different levels of representation familiar with modern standards diagnosis, treatment and prevention of diseases, based on data evidence-based medicine, demonstrated creativity in the understanding and application in practice of the learning content;	complete knowledge of the program material, and is able to independently supplement and update knowledge in the course of further training and professional activity;	level of knowledge of the main program material, but has made errors in its presentation;	mistake when answering questions multiple errors of a fundamental nature.
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The final score is calculated by calculating the average score for the three stages and is entered in the SFC protocol. The results of the State Final Certification are announced to the graduate on the same day after the registration and approval in accordance with the established procedure of the minutes of the meeting of the State Certification Commission.

The student's competencies that are checked during the SFA

A graduate of the specialty 560002 Pediatrics must have the following **universal** and **professional** competencies:

Universal competencies

General scientific competencies (GC-1, 2, 3, 4, 5, 6)

GSC-1- is able to analyze socially significant problems and processes, to use in practice the methods of the humanities, natural sciences, biomedical and clinical sciences in various types of professional and social activities;

GSC -2- capable of analyzing philosophical problems of worldview, social and personal significance, basic philosophical categories, and self-improvement;

GSC -3- is able to analyze significant political events and trends, to master the basic concepts and laws of the world historical process, to respect and respect the historical heritage and traditions, to evaluate state policy; has knowledge of historical and medical terminology;

GSC -4- is able to analyze economic problems and social processes, use the methodology for calculating economic efficiency indicators;

GSC -5- is capable of logical and reasoned analysis to public speaking, management discussion, and debate, is to edit the text professional content for cMEPeration and conflict resolution, tolerance;

GSC -6 - is ready to carry out their activities taking into account accepted in society moral and legal standards; to comply with the rules of medical ethics, laws and regulations for work with confidential information, to maintain confidentiality;

Instrumental competencies (IC-1, 2, 3, 4)

IC-1- the ability to work independently on a computer (elementary skills);

IC-2- ready for written and oral communication in the state language and official languages, able to master one of the foreign languages at the level of everyday communication;

IC-3- is able to use management methods; organize the work of performers; find and make responsible management decisions in the context of different opinions and within the framework of their professional competence;

IC-4- readiness to work with information from various sources;

Socio-personal and general cultural competencies (SPC -1, 2, 3, 4, 5)

SPC-1- is able to implement the ethical and deontological aspects of medical activity in communication with colleagues, nurses and junior staff, children, and their parents;

SPC-2- is able to identify the natural-scientific nature of problems that arise in the course of a doctor's professional activity;

SPC-3- capable of analyzing medical information based on the principles of evidence-based medicine;

SPC-4- is able to apply modern social and hygienic methods of collecting and medical and statistical analysis of information on the health indicators of the child population;

SPC-5- is able to use methods of assessment of natural (including climatogeographic) and medico-social environmental factors in the development of diseases in children and adolescents, to carry out their correction;

Professional competencies

General professional competencies (PC-1, 2, 3, 4, 5, 6)

PC-1- is able to analyze the results of its own activities to prevent medical errors, while being aware of the responsibility of disciplinary, administrative, civil, criminal;

PC-2- is able to conduct and interpret a survey, physical examination, clinical examination, the results of modern laboratory and instrumental studies, morphological analysis of biopsy, surgical and sectional material of patients, to issue a medical card of an outpatient and inpatient sick child;

PC-3- is able to conduct pathophysiological analysis of clinical syndromes, use reasonable methods of diagnosis, treatment, rehabilitation and prevention among children, taking into account their age;

PC-4- is able to apply methods of asepsis and antiseptics, use medical tools, carry out sanitary treatment of medical and diagnostic rooms, children's health organizations, own the technique of caring for sick children and adolescents;

PC-5- is able to conduct a forensic medical examination of living persons; interpret the results of laboratory studies of objects of forensic medical examination as a specialist;

PC-6- is capable of working with medical and technical equipment used in working with patients, computer equipment, receiving information from various sources, using the capabilities of modern information technologies to solve professional problems;

In preventive activities (PC-7, 8, 9, 10)

PC-7- carry out preventive measures to prevent infectious, parasitic and non-communicable diseases, organize and carry out immunization of children and adolescents according to the national calendar of preventive vaccinations, sanitary and educational work on hygienic issues;

PC-8- is able to carry out preventive measures with the population to prevent the occurrence of the most common diseases; to carry out general health measures to promote a healthy lifestyle, taking into account risk factors, to make recommendations on healthy nutrition, to evaluate the effectiveness of dispensary monitoring of healthy and chronically ill children and adolescents;

PC-9- is able to organize tuberculin diagnostics and fluorographic examination of children and adolescents for the purpose of early detection of tuberculosis, to evaluate their results; to select individuals for observation, taking into account the results of mass tuberculin diagnostics;

PC-10- is able to carry out anti-epidemic measures, protect the population in hotbeds of particularly dangerous infections, in case of deterioration of the radiation situation and natural disasters;

In diagnostic activities (PC-11, 12, 13, 14)

PC-11- is capable of making a diagnosis based on the results of laboratory diagnostic studies of biological material, taking into account the peculiarities of the course of the disease with the defeat of various organs and systems of the body;

PC-12- is able to analyze the results of the main clinical and laboratory research methods and assess the functional state of the child's body in order to timely diagnose diseases;

PC-13- is able to identify the main symptoms and syndromes of diseases in patients, use the algorithm for making a diagnosis (main, concomitant,

complications) taking into account ICD-10, perform basic diagnostic measures to identify urgent life-threatening syndromes;

PC-14- is able to analyze and interpret the results of modern diagnostic technologies in children and adolescents for successful therapeutic and preventive activities;

In medical activity (PC-15, 16, 17, 18)

PC-15- is able to perform therapeutic measures for the most common diseases and conditions in children and adolescents that can cause severe complications and / or death;

PC-16- is able to prescribe adequate treatment to sick children and adolescents in accordance with the diagnosis;

PC-17- is able to provide children and adolescents with first aid in the event of urgent and life-threatening conditions, to send patients to the hospital on a planned and emergency basis;

PC-18- is able to prescribe and use the basic principles of the organization of medical nutrition in sick children suffering from various pathologies;

In rehabilitation activities (PC-19, 20),

PK-19- is able to apply rehabilitation measures among children with the most common diseases, determine the indications for the transfer of children and adolescents to specialized groups for physical education, depending on the pathology;

PC-20- is able to give recommendations on the choice of the mode of motor activity, to determine the indications and contraindications to the appointment of physical therapy, physiotherapy, non-drug therapy, the use of the main resort factors in the treatment of children and adolescents;

In educational activities (PC-21, 22),

PK-21- is capable of teaching secondary and junior medical personnel the rules of the sanitary and hygienic regime, ethical and diontological principles;

PC-22- is able to teach children and adolescents the rules of medical behavior; to conduct hygiene procedures, the formation of healthy lifestyle skills;

In organizational and managerial activities (PC-23, 24, 25, 26),

PC-23 - is able to use the regulatory documentation adopted in the health care of the Kyrgyz Republic;

PC-24- is able to use the knowledge of the organizational structure of health care to provide medical care to children, analyze the performance of medical institutions, and evaluate the effectiveness of the provision of medical services;

PC-25- is able to provide a rational organization of the work of secondary and junior medical personnel of medical and preventive institutions and their training in healthcare organizations;

PC-26- is able to draw up appropriate documentation for the referral of a sick child for medical and social expertise in the presence of disability from childhood, to carry out the prevention of disability among children and adolescents;

In research activities (PC-27),

PC-27 - is ready to study scientific and medical information, domestic and foreign experience on the subject of research.

Evaluation tools for conducting a SFA

The set of materials for conducting the SFA (test tasks, questions, tasks for assessing practical skills) is formed by the departments that are part of the comprehensive state exam, discussed at a meeting of the educational and methodological profile committee and approved by the main educational and methodological committee, no later than 3 months before the SFA.

The set of materials for conducting the SFA is given in Appendix 1.

Basic Literature:

1. Propaedeutics of children's diseases: textbook / R. R. Kildiyarova, V. I. Makarova. - 2nd ed., ispr. - M.: GEOTAR-Media, 2017. - 520 p.
2. Pediatrics. National leadership. Edited by A. A. Baranov, 2014.
3. Neonatology: Textbook: In 2 volumes / N. P. Shabalov. - M.: MEDpress-inform, 2016.
4. Children's infectious diseases. V. M. Tsyркunov, 2013.
5. Pediatric surgery. National guide. Yu. F. Isakova, A. F. Dronova. M.: GEOTAR-Media, 2009.
6. Cardiorheumatological diseases in children. Methodological guide. Bishkek, 2011. 245 p.
7. Diseases of the organs of the hematopoietic system in children (reissue). Methodological guide. Bishkek, 2011. 204 p.
8. Newborn children: care, feeding, diagnosis and treatment of pathological conditions (reissue). Methodological guide. Bishkek, 2012. 250 p.
9. Diseases of the digestive system in children. Methodological guide. Bishkek, 2013
10. Polyclinic pediatrics. Methodological guide. Bishkek, 2014. 296 p.
11. The digestive system. KSMA training Manual, 2015
12. Diseases of the endocrine system. Methodological guide. Bishkek, 2016
13. Respiratory diseases in children. Methodological guide. Bishkek, 2016. 206 p.
14. Infectious diseases. Emergency conditions. Methodological guide. Bishkek, 2016
15. Diseases associated with defects of the immune system in children. Methodological guide. Bishkek, 2017. 211 p.
16. Rheumatic diseases in children. Methodological guide. Bishkek, 2017. 123 p.
17. Diseases of the genitourinary system. Methodological guide. Bishkek, 2017. -186 p.

Additional literature:

1. Kapitan T. V. "Propedeutics of children's diseases with child care", M. "Medpress-Inform", 2009.
2. Vorontsov I. M. Propedeutics of children's diseases [Text]: textbook /I. M. Vorontsov. - St. Petersburg: Folio, 2010. - 1008 p.
3. Children's diseases. Textbook: In 2 t. N. P. Shabalov, 2013.

4. Children's diseases: Textbook/Ed. academician of the Russian Academy of Medical Sciences A. A. Baranova. - M., GEOTAR-MED , 2009
5. Pediatrics: Textbook for university students / V. G. Maidannik.- Kharkiv: Folio, 2002. -1126 p.
6. Pediatrics. N. Geppe, 2009.
7. Preventive pediatrics: A guide for doctors /M-vo health care and Social Services. Development of the Russian Federation, etc.; edited by A. A. Baranov. - M.: Union of Pediatricians of Russia, 2012-692 p.
8. Modern principles of respiratory support in neonatology. Yu. S. Alexandrovich, 2015.
9. Violations of the heat balance in newborn children. D. O. Ivanov, 2012.
10. Integrated Management Of Childhood Diseases. - WHO. Department of Child Health and Development. Kyrgyz Republic. UNICEF. – 2005.
11. On the observation of healthy children at the primary health care level./ORDER of the Ministry of Health of the Kyrgyz Republic No. 585 of 09.10.2015 - Bishkek 2015.
12. Order of the Ministry of Health of the Kyrgyz Republic No. 464 of August 5, 2013 "Pocket guide for children's hospitals. Reference book".
13. Pocket guide "Providing inpatient care for children. Guidelines for the management of the most common diseases of childhood". Second, adapted edition. Bishkek. 2017.
14. <https://itunes.apple.com/kg/app/children-in-hospital-kyrgyzstan>
15. Acute eating disorder. Mamyrbayeva T. T., Anarbayeva A. A., Shalabayeva A. S., Shukurova V. K. Educational and methodical manual-2010.
16. Diseases of the digestive organs in children with helicobacteriosis. P. L. Shcherbakov, 2011.
17. Pediatric nephrology. Edited by M. S. Ignatova, 2011.
18. Erman M. V.-Nephrology of childhood. St. Petersburg, 2010
19. Children's gastroenterology. T. G. Avdeeva, 2009.
20. Treatment of complications of cirrhosis of the liver. V. T. Ivashkin, 2011.
21. Children's endocrinology: textbook / I. I. Dedov, V. A. Peterkova, O. A. Malievsky, T. Yu. Shiryayeva. - M.: GEOTAR-Media, 2016 – - 256 p.
22. The endocrine system. KSMA training Manual, 2015
23. Diabetic nephropathy. KSMA training Manual, 2014
24. Infectious diseases in children. V. F. Uchaykin, 2011.
25. Infectious diseases /E. P. Shuvalova, 2016.
26. Intensive care of critical conditions in children. Yu. S. Alexandrovich, 2014.
27. Emergency pediatrics. Yu. S. Alexandrovich, 2010.
28. Practical course on infusion therapy for emergency conditions in children. V. I. Gordeev, 2011-2014.
29. Threatening conditions in pediatrics. E. K. Tsybulkin, 2013.
30. Emergency cardiology. Textbook / P. P. Ogurtsov, V. E. Dvornikov. - M.: GEOTAR-Media, 2016. - 272s.
31. ECG of children and adolescents. H. Gutheil, 2012.

32. Clinical ECG in the practice of a children's doctor. A.V. Prakhov, 2009.
33. Clinical allergology of children.. Edited by I. I. Balabolkin, 2011.
34. Foreign bodies of the respiratory tract in children. KSMA. MP, 2017
35. Features of bronchiectatic disease in children. UMR. KSMA 2016
36. Clinical protocol "Acute intestinal infections in children under 5 years of age" (for zinc) protocol Order of the Ministry of Health of the Kyrgyz Republic No. 144 15.06.2009
37. Clinical guide (a collection) the "Disease of the respiratory system in children" the leadership of the Order of the Order of the Ministry of health of the KR No. 844 * from 26.12.09
38. Bronchial asthma in children guide the Order of the Ministry of health No. 189 dated 18.04.2013
39. Bronchial asthma in children at the primary level Protocol of the Ministry of health Order No. 189 dated 18.04.2013
40. Bronchial asthma in children in secondary level Protocol the Order of the Ministry of health No. 189 dated 18.04.2013
41. On the diagnosis and treatment of hemophilia at the primary level of health care government Order of the Ministry of Health of the Kyrgyz Republic No. 750 of December 30, 2013
42. Tuberculosis in children Protocol Order of the Ministry of Health of the Kyrgyz Republic No. 482 of 22.08.2014
43. Screening, prevention and treatment of iron deficiency anemia in children, women of childbearing age, pregnant women and persons over 50 years of age for primary health care of the Kyrgyz Republic (Annex 3); guidelines Order of the Ministry of Health of the Kyrgyz Republic No. 392 of 08.07.2015
44. Collection of clinical protocols on Neonatology ISSUE 2 (2017)
45. Clinical guidelines-SEPSIS IN CHILDREN (2017)
46. Clinical protocols - DIAGNOSIS, TREATMENT AND PREVENTION OF PARASITIC DISEASES (2017)
47. Clinical recommendations - Respiratory distress and respiratory failure in children (2017)
48. CLINICAL GUIDELINES-ANATOMICAL AND PHYSIOLOGICAL FEATURES AND ASSESSMENT OF CHILDREN (2017)
49. CLINICAL GUIDELINES - CARDIOPULMONARY RESUSCITATION IN CHILDREN CLINICAL GUIDELINES - SHOCKS IN CHILDREN (2017)
50. NELSON TEXTBOOK OF PEDIATRICS, 2016. International Standard Book Number: 978-1-4557-7566-8.