

ANNOTATIONS OF THE WORKING PROGRAMS OF THE DISCIPLINE

C.1. HUMANITARIAN, SOCIAL AND ECONOMIC CYCLE

B.1.0. VARIABLE PART

B.1.2 "Jurisprudence"

Total effort: 2 credits (60 hours)

Lectures: 12 hours

Practical lessons: 18 hours

Independent work: 30 hours

Final control: offset

The purpose of the discipline. Formation of the necessary level of theoretical knowledge in the future doctor 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 health care 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 activity;

- instilling 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.

A summary of the discipline. 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 a medical service. 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. 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.

Expected results of mastering the discipline.

Know:

- fundamentals of the Law "On health protection of citizens of the Kyrgyz Republic".
- on the protection of motherhood and childhood;
- on the subjects of legal relations arising in the provision of medical care;
- the content of legal relations arising in the implementation of medical activities;

- the basics of the Health Insurance Law;
- fundamentals of the law on sanitary and anti-epidemic well-being of the population of Kyrgyzstan;
- articles of the criminal, civil code concerning medicine.
- general principles of conflict management;
- medical and legal issues of legal procedure; fundamentals of the constitution of the Kyrgyz Republic.

Be able to:

- analyze the articles of the foundations of laws on health protection, on sanitary and epidemic well-being and use in practice.
- to apply in practice the foundations of civil and criminal law.
- resolve disputes of medical and legal content.

Own:

- skills to reveal and analyze those changes in the health care system that have occurred in the Republic as a result of socio-economic transformations.

C.2. MATHEMATICAL AND NATURAL SCIENCE CYCLE

B.2.0. VARIABLE PART

B.2.2 "BIOETHICS"

Total effort: 2 credits (60 hours)

Lectures: 14 hours

Practical lessons: 16 hours

Independent work: 30 hours

Final control: offset

The purpose of the discipline. Training of graduates competent in the application of the principles of ethical thinking and professional responsibility of a medical worker in the field of preventive medicine.

Discipline objectives:

- acquainting students with the theoretical background and foundations of the emergence and development of bioethics;
- formation of students' understanding of professionalism, ethical values, ethical and legal norms of the profession of a doctor in medical and preventive medicine;

- formation of students' methodology of argumentation and solution of ethical problems in the field of application of biomedical technologies;

- formation of students' methodology of argumentation and solution of ethical problems in the implementation of preventive and anti-epidemic measures in health care;

- developing the skills of ethical analysis of research activities of a medical worker in the field of preventive medicine.

A summary of the discipline. Bioethics, history and conditions of origin. Basic Principles of Biomedical Ethics. Classic problems of bioethics: the status of the human embryo, abortion, new reproductive technologies. Ethical problems of medical genetics. Death and dying. Ethical issues of transplantation. Public health ethics. The health care profession: ethical values, legal norms and professional values. Ethicodeontological aspects of environmental hygiene. Moral, ethical and legal norms in the organization and implementation of anti-epidemic measures. Research Ethics: Principles, Rules and Procedures. Fair scientific practice and its violations: plagiarism, falsification, forgery.

Expected results of mastering the discipline.

Know:

- basic ethical terms and concepts, basic ethical theories, models of bioethics;

- basic ethical documents and guidelines of international and domestic professional medical organizations and associations;
- basic ethical principles and rules of biomedical ethics.
- basic ethical principles and requirements of research ethics.
- basic ethical principles and requirements of public health ethics and ethics in epidemiology.
- Basic principles and violations of good scientific practice (plagiarism, falsification, forgery)

Be able to:

- use the methods and techniques of ethical analysis of problems in the professional activities of a doctor of medical and preventive medicine;
- be guided by the principles of humanism and universal values in the implementation of their professional activities;
- recognize and analyze bioethical problems from opposite worldview positions;
- to conduct discussions in conditions of pluralism of opinions, using various ethical methods of conflict resolution;

- to analyze problems in the relationship of a doctor of medical and preventive medicine using ethical and deontological principles;

- carry out self-analysis of the results of one's own practical and scientific activities to prevent professional mistakes.

- prevent violations of good scientific practice (plagiarism, falsification, forgery).

Have the following practical skills:

- moral culture, presentation of an independent point of view, analysis and logical thinking;

- recognition of ethical problems in the practical and scientific activities of a physician of medical-prophylactic affairs.

- application of the principles and rules of biomedical ethics in the practice of a specialist in preventive medicine;

- argumentation and solution of problematic ethical and legal issues of protecting the interests of the patient in the practice of a doctor and a specialist in medical prophylaxis.

- application of the principles of research ethics and good scientific practice, as well as the prevention of its violations (plagiarism, falsification, forgery)

C.3. PROFESSIONAL CYCLE

B.3.0. BASIC PART

B.3.9 "COMMUNAL HYGIENE 1"

Total effort: 8.5 credits (255 hours)

Lectures: 40 hours

Practical lessons: 138 hours

Independent work: 77 hours

Final control: test, exam

B.3.14 "COMMUNAL HYGIENE 2"

Total effort: 5.4 credits (162 hours)

Lectures: 20 hours

Practical lessons: 93 hours

Independent work: 49 hours

Final control: offset, State final certification

The purpose of the discipline. Scientific substantiation of hygienic standards and measures necessary to improve the sanitary conditions of life in populated areas, to prevent diseases and improve the health of the population. This goal is one of the directions for realizing the constant and effective concern of the Government of the Kyrgyz Republic to improve the living conditions of modern and future generations of people on ways to solve environmental problems in a new emerging society.

Discipline objectives:

- provision of theoretical and practical training of students on the hygiene of planning and development of populated areas, hygiene of medical and preventive institutions, hygienic assessment of physical factors of the environment;
- providing theoretical and practical training for students on the hygienic assessment of atmospheric air pollution in residential areas, the organization of laboratory control over atmospheric pollution, as well as environmental and hygienic assessment of the main sources of atmospheric pollution;
- providing theoretical and practical training for students on the organization of current and preventive sanitary supervision in the field of soil hygiene and cleaning of populated areas;
- provision of theoretical and practical training of students on the issues of hygienic assessment of the quality of drinking water, the quality and reliability of sources of drinking water supply, methods of water treatment

- providing theoretical and practical training of students on the issues of sanitary protection of water bodies;
- provision of theoretical and practical training of students on sanitary legislation in the field of communal hygiene.

A summary of the discipline. Communal hygiene, the object, subject and purpose of communal hygiene as a scientific discipline; study methods. Hygiene of water and drinking water supply. Preventive and routine sanitary supervision in the field of water supply in populated areas. Sanitary protection of water bodies. Preventive and ongoing sanitary supervision in the field of protection of water bodies; methodology for assessing the hygienic efficiency of measures in the field of sanitary protection of water bodies. Sanitary and laboratory control; production control. Hygiene of atmospheric air. Sanitary and Epidemiological Surveillance in the Field of Atmospheric Air Protection. Soil hygiene in populated areas. Sanitary and epidemiological supervision in the field of soil protection. Methodology for assessing the hygienic efficiency of measures in the field of sanitary soil protection. Hygiene of the artificial human environment (residential, public buildings and medical institutions). Sanitary and epidemiological supervision in the field of construction and operation of residential public buildings. "Sanitary and epidemiological requirements for residential buildings and premises." Hygiene of planning and building of populated areas.

Expected results of mastering the discipline.

Know:

- fundamentals of legislation on health care, directive documents defining the activities of bodies and institutions of health care;
- directive and legislative documents defining the main goals and objectives of the SES, the rights and obligations of a sanitary doctor for communal hygiene;
- organizational structure of the sanitary service;
- the state of the problem of environmental hygiene in the conditions of populated areas;
- basic laws of interaction of an organism with environmental factors;
- principles of organizing laboratory and instrumental control over environmental factors in populated areas;
- methodological approaches to identifying the links between health status and environmental factors;
- normative and methodological materials regulating the quality of atmospheric air, drinking water, water bodies and hygienic assessment of sources of air pollution;

- types of the main regularities of the influence of air pollution, drinking water on the health of the population;
- normative documents regulating soil contamination, conditions for wastewater disposal;
- hygienic requirements for the system of collection, removal and disposal of solid household waste;
- hygienic requirements for residential and public buildings, as well as health care facilities for the conditions of the indoor environment, ways to optimize it.

Be able to:

In the field of preventive sanitary supervision over the state of communal facilities and the environment:

- assess the sanitary condition of communal facilities, natural and social living conditions of the population;
- give a sanitary conclusion on the allotment of a land plot for the construction of a settlement, a microdistrict, a residential building, a medical institution, an industrial facility, facilities for the disinfection of wastewater and solid waste;

- to assess the choice of the source of household and drinking water supply and the place of water intake;
- determine the dimensions of the II belt of the WSS of water supply sources
- determine the sanitary conditions for the discharge of wastewater into water bodies for the projected enterprise;
- to determine and estimate the maximum concentration of industrial emissions of the projected enterprise in the surface air layer;
- to evaluate the forecast calculations of the noise regime on the territory of residential buildings and in the premises of residential and public buildings;
- Use the normative-methodical and normative-technical documents in the field of sanitary protection of the human environment;
- determine and assess natural illumination in the premises of the designed residential and public buildings;
- to carry out a sanitary examination of projects of urban and rural settlements, projects of detailed planning of a microdistrict, recreation areas, water supply and sewerage systems of a settlement, standard and individual projects of residential buildings and medical institutions;

- carry out sanitary supervision over the execution of projects during the construction process;
- to carry out acceptance of finished objects as part of the working and state commissions;
- to develop a system of health-improving and preventive measures in order to protect the health of the population.

In the field of current sanitary supervision over the sanitary state of housing communal facilities and the environment of settlements:

- Conduct a sanitary inspection and assess the sanitary state of communal facilities in residential buildings, health care facilities, microdistrict territory, recreation areas, etc. using laboratory and instrumental research methods;
- draw up a sanitary description of the facility based on dynamic observation data, sanitary inspection with analysis of the results of laboratory and instrumental studies;
- draw up a hygienic map of the noise regime of the microdistrict territory;
- assess the state of atmospheric air, soil, populated area, water bodies of the served area;

- plan and organize the sampling of water from an artesian well, surface water supply sources, a well, a water supply network, industrial waste water by treatment stages, before entering a water body;
- draw up a conclusion on the quality of drinking water, water from the source of household drinking water supply;
- give a hygienic assessment of the state of atmospheric air in the residential area of a populated area;
- carry out instrumental examinations of housing and communal facilities with the definition of indicators of microclimate, noise, illumination;
- analyze and give a hygienic interpretation of the results of laboratory and instrumental studies;
- compile a list of the leading sources of pollution of atmospheric air, water bodies and soil of the served area, highlight pollution and their combinations that pose the greatest danger to public health;
- give a hygienic assessment of the calculation of the maximum permissible emission (discharge) of an industrial facility;
- draw up documents: act of sanitary inspection, sanitary description of the object, protocol on sanitary violation;

- carry out a system of measures to protect populated areas from harmful factors;

- evaluate the effectiveness of the implemented health improvement measures.

Own:

- skills in the implementation of preventive and current sanitary supervision;

- skills in hygienic research;

- methodology for conducting a seminar on strengthening the health of the population;

- a methodology for assessing the quality of drinking water based on the results of laboratory tests and preparation of the necessary documents;

- methodology for organizing monitoring of air pollution in populated areas and indoor air;

- methodology for sanitary inspection of health care facilities;

- methods of soil sampling for chemical, bacteriological and helminthological research and assessment.

B.3.10 "CHILD AND ADOLESCENT HYGIENE 1"

Total effort: 8.5 credits (255 hours)

Lectures: 40 hours

Practical lessons: 138 hours

Independent work: 77 hours

Final control: test, exam

B.3.16 "CHILD AND ADOLESCENT HYGIENE 2"

Total effort: 5.4 credits (162 hours)

Lectures: 20 hours

Practical lessons: 93 hours' Independent work: 49 hours

Final control: offset, State final attestation

The purpose of the discipline. Formation and acquisition of scientific knowledge from students about the principles and methods of hygienic assessment of the influence of environmental factors on a growing body, the development of a complex of preventive, health-improving measures and sanitary and hygienic recommendations that provide favorable conditions for education and training, contributing to the formation, preservation and strengthening of the health of children and adolescents ...

Discipline objectives:

- study of the theoretical foundations, regulatory and legal framework for organizing activities aimed at ensuring the sanitary and epidemiological well-being of the population, maintaining and improving their health, as well as exercising supervision in the field of consumer protection;

- formation of ideas about the principles of hygienic regulation and assessment of the state of the environment and activities of children, as well as other factors that determine the health and functional state of the growing

organism;

hygienic education and training of the population in order to form a healthy lifestyle

A summary of the discipline. Hygiene of children and adolescents, its goals and objectives.

Regularities of the growth and development of the child's body. Age periodization.

The main age-related anatomical and physiological features. Physical development. Physical development of children and adolescents at the present stage. Acceleration. The state of health of children and adolescents. Hygienic foundations of the daily routine of children and adolescents. Physiological foundations of children's activities. Hygienic foundations of education and training in a preschool institution. Hygienic aspects of children's functional readiness for systematic education. Hygiene of teaching children and adolescents at school. Hygienic principles of the organization of the educational process in educational institutions. Hygienic foundations of computerization of education. Physical activity and hygiene of physical education of children and adolescents. Hygienic principles of the organization of physical education of children and adolescents. Hardening and its physiological essence. Physician control over physical education. Hygiene of labor education, training and professional

education of children and adolescents. Physiological and hygienic foundations of polytechnic and industrial training. Medical and physiological foundations of vocational guidance and counseling for children and adolescents. Fundamentals of legislation on labor protection of children and adolescents in modern times. Food hygiene for children and adolescents. Features of metabolism and energy of a growing organism. Hygienic principles of catering for organized and unorganized groups. Hygienic requirements for clothing and footwear of children and adolescents. Hygienic requirements for toys. Hygienic requirements for children's books, textbooks and writing materials. Physiological foundations of the correct body position for various types of activities and work. Hygienic requirements for the equipment of preschool and preschool institutions. Hygienic requirements for educational furniture and equipment of educational institutions. Hygienic principles of placement, planning, operation and improvement of preschool and preschool institutions (preschool institutions). Hygienic principles of placement, planning, operation and improvement of educational institutions. Fundamentals of design, construction, reconstruction and operation of vocational institutions. Fundamentals of design, construction, reconstruction and operation of health institutions. Air-thermal regime, hygienic requirements for lighting, water supply, heating and ventilation of children's and adolescent institutions. Hygienic education and upbringing of children and adolescents in preschool educational institutions and in educational institutions. Formation of a healthy lifestyle for children and adolescents. The reasons for the formation of bad habits in children and their prevention. International acts and legislative framework in the field of health protection of children and adolescents. Medical support for children and adolescents. The work of a doctor in the hygiene of children and adolescents. State sanitary and epidemiological supervision over children's and adolescent institutions.

Expected results of mastering the discipline.

Know:

- basic patterns of growth and development;
- physiological and hygienic principles of standardization in the hygiene of children and adolescents; the main factors affecting the health status of children and adolescents;
- physiological and hygienic principles of organizing the pedagogical process in educational institutions, including physical education, labor and vocational training;
- methods of medical professional consultation, professional selection and career guidance;
- actual problems of nutrition, the importance of nutrients in the nutrition of children and adolescents, the needs of each age group in basic nutrients, mineral salts and vitamins;
- hygienic foundations of sanitary and hygienic control of production and use of children's household items, training and education;
- hygienic principles of placement, planning and operation of institutions for children and adolescents;

- hygienic requirements for air-thermal conditions, lighting, heating, water supply and ventilation;
- physiological foundations of a healthy lifestyle and the basics of hygienic education;
- principles of medical care for children and adolescents;
- legislative framework in the field of health protection of children and adolescents, fundamental documents on the State Traffic Safety Code for preventive and routine sanitary supervision;
- the rights and obligations of the doctor in the hygiene of children and adolescents.

Be able to:

- conduct anthropometric research;
- assess the physical, mental development and health status of children and adolescents:
 - plan a program and collect, process and analyze information on the health of children and adolescents, analyze data from medical examinations;

- to identify the cause-and-effect relationships of indicators characterizing the state of health of the child population and environmental factors;

- assess the performance and functional state of the body of children and adolescents;

- conduct a hygienic assessment of the organization and conditions of education and upbringing in preschool and educational institutions, as well as in social protection institutions;

- conduct a hygienic assessment of the organization of physical and labor education and vocational training;

- conduct a hygienic assessment of children's household items and publishing products;

- conduct a hygienic assessment of projects, buildings, premises of institutions for children and adolescents;

- to assess the compliance with the sanitary rules of the operating conditions of institutions for children and teenagers;

draw up acts of sanitary inspection of the main types of institutions for children

and adolescents;

- conduct hygienic training and education of children and adolescents, their parents and staff of institutions for children and adolescents;
- draw up and substantiate a plan of measures for health protection and organization of preventive and health-improving measures for children and adolescents;
- to plan and analyze the activities of the department of hygiene of children and adolescents of the centers of state sanitary and epidemiological supervision;
- identify risk factors for major human diseases, carry out preventive measures; analyze issues of general pathology and evaluate modern theoretical concepts and trends in medicine;
- independently work with regulatory and legal, regulatory

methodological and normative-technical documents in the field of hygiene of children and adolescents.

Own:

- methods of anthropometric measurements and variational-static processing of the collected material;

- methods of researching the duration and nature of children's activities;

- methods of the functional state and working capacity of the organism of students (proofreading tests, chronoreflexometry, ergography, etc.);

- the skills of hygienic assessment of the organization of the educational process, lessons, workload, schedule of classes and educational and production process in preschool educational institutions, schools and vocational schools;

- methods of studying the functional state of the body in physical education classes and determining the hardening of the body, as well as the method of timing and analysis of the organization of a physical education lesson;

- methodology for studying nutrition of organized groups and individuals;

- skills of hygienic assessment of equipment and educational furniture in preschool educational institutions and schools;

- methodology for assessing the student's fit;

- the skill of hygienic examination of the main elements of the textbook printing design and the characteristics of the external design;

- the skill of hygienic examination of toys;

- a method for determining the fixing strength of paints;

- methodology for the hygienic assessment of children's clothing and its heat-shielding properties;

- skills of hygienic examination of a new sample of consumer goods for children made of polymer materials;

- methodology for the sanitary assessment of the project of institutions for children and adolescents.

- methods for assessing lighting, ventilation, heating, water supply and sewerage;

- methodology for conducting preventive and current sanitary and epidemiological surveillance;

- methods of laboratory and instrumental research in the current sanitary supervision;

- methods of organizational and methodological work in the hygiene of children and adolescents;
- a methodology for conducting a sanitary examination of children's and adolescent institutions and draw up a survey report.

B.3.11 "LABOR HYGIENE 1"

Total effort: 8.5 credits (255 hours)

Lectures: 40 hours

Practical lessons: 138 hours

Independent work: 77 hours

Final control: test, exam

B.3.15 "LABOR HYGIENE 2"

Total effort: 5.4 credits (162 hours)

Lectures: 20 hours

Practical lessons: 93 hours

Independent work: 49 hours

Final control: offset, State final attestation

The purpose of the discipline. Theoretical and practical training of a doctor in the field of Occupational Hygiene, allowing the use of elements of current and preventive sanitary supervision, substantiating the need to develop complexes of preventive recommendations in the field of creating healthy and safe working conditions, maintaining and strengthening the health of workers, and ways of their implementation, taking into account modern methodological approaches, and legislative materials. Discipline objectives:

- mastering the skills of sanitary and hygienic supervision in the field of occupational hygiene;

- study and application of methods and methods for assessing the impact of the labor process, harmful and hazardous occupational factors on the health and performance of workers;
- master the principles of hygienic regulation of harmful production factors;
- development and implementation of measures aimed at preventing general production-related and occupational diseases, overwork and injuries.

A summary of the discipline. Occupational hygiene as an independent preventive science, its role in maintaining the health and productivity of workers at the present stage of development of society. Harmful and hazardous production factors, and their impact on the body of a working person. Fundamentals of Labor Physiology. Features of working conditions at high and low atmospheric pressure. Industrial microclimate. Industrial dust as an occupational hazard. Industrial noise as an unfavorable factor in the working environment. Ultrasound and infrasound as unfavorable factors of the working environment. Industrial vibration as an unfavorable factor in the industrial environment. Electromagnetic fields of radio frequencies and laser radiation as industrial hazards. Modern problems of industrial toxicology. Industrial poisons as occupational hazard. Fundamentals of toxicometry. Metals as a harmful and hazardous production factor. Prevention of mercury and lead intoxication. Organic solvents as occupational hazards. Irritant gases and carbon monoxide as professional poisons. Occupational health issues when working with pesticides and mineral fertilizers. Occupational hygiene issues when working with occupational carcinogenic factors. Hygienic bases of natural and mechanical ventilation of industrial premises. Hygienic bases of natural and artificial lighting of industrial premises. Hygienic aspects of the use of means of collective and individual protection of workers from industrial harmful and dangerous factors. Occupational hygiene in the mining and coal industry. Occupational hygiene in

agricultural production. Occupational hygiene in light industry. Hygienic criteria and principles for the classification of working conditions by indicators of hazard and hazard of production factors. Classes of working conditions in terms of the severity and intensity of the labor process. Basic legislative documents on occupational health and safety. Forms and methods of work of a doctor in occupational hygiene. Chemical analysis of harmful substances in the air of the working area. Express methods for the determination of harmful substances in the air. Methods for assessing the toxicity and hazard of chemical compounds. Methods for establishing toxicometric indicators of KVIO, OBUV, MPC of harmful substances. Methods for the hygienic assessment of the toxicity and hazard of metal compounds, organic solvent compounds and diluents widely used in production. Accounting, registration and investigation of occupational diseases and poisoning. Methods for recording and analyzing the overall morbidity of workers (with VUT). The procedure for registration, accounting, analysis of industrial injuries. The role of the occupational health doctor in organizing and conducting mandatory medical examinations. The role of the occupational health doctor in the development and implementation of medical and preventive measures to improve working conditions and health protection of workers. Hygienic assessment of the situational and general plans of industrial enterprises. Hygienic assessment of the project of a complex of auxiliary (sanitary and household) premises of enterprises.

Expected results of mastering the discipline.

Know:

- normative, normative-technical, legal and legislative documents within the limits of their professional activities;

- theoretical and organizational foundations of state supervision and its provision;
- main indicators characterizing the health of the working population;
- physiological methods for assessing the body's reactions to the impact of unfavorable factors of the working environment and the labor process, especially this action on the body of women and working adolescents;
- sanitary and hygienic methods of research of factors of the working environment;
- goals, objectives, content and methods of state sanitary and epidemiological supervision at production facilities.

Be able to:

- apply the regulatory legal acts of the Kyrgyz Republic in the field of ensuring the sanitary and epidemiological well-being of the population, protecting the rights of consumers in their professional activities;
- make basic physical measurements of the factors of the working environment;

- determine indicators and analyze the impact of individual factors of industrial production on humans and the environment;
- inspect and evaluate the effectiveness of sanitary installations;
- to conduct a sanitary inspection of industrial enterprises of various profiles, in order to establish the compliance of technology, equipment, parameters of the working environment and the labor process with hygienic standards;
- to identify the impact of the labor process on the health and performance of persons employed in industry, agriculture, transport and other industrial institutions;
- establish the causes, conditions for the occurrence of an occupational disease by conducting a sanitary and epidemiological investigation (to identify cause-and-effect relationships between the health of workers and working conditions);
- retrospective assessment of the level, structure, dynamics of workers' morbidity and predict the health of workers;
- exercise control over the organization and conduct of preventive medical examinations, the implementation of measures based on the results of examinations;

- to develop health-improving recommendations to improve working and rest conditions for workers, to prevent production-related and occupational morbidity.

Own:

- skills of working with normative, normative-technical, legislative and legal documentation within the limits of professional activity;
- methods of sanitary and hygienic control of working conditions in various types of labor activities;
- methods of physiological studies of the body's reactions during the labor process;
- technique of processing materials for laboratory and instrumental research and methods of analysis of indicators
- methodology for collecting, processing and analyzing data on the factors of the working environment and information on the health status of the working population;
- methods of preventing the impact of harmful and dangerous factors of the working environment on the human body.

B.3.12 "RADIATION HYGIENE"

Total effort: 5 credits (150 hours)

Lectures: 26 hours

Practical lessons: 79 hours

Independent work: 45 hours

Final control: test, exam

The purpose of the discipline. Study of theoretical and practical foundations and the acquisition of hygienic knowledge and skills to assess the impact of the radiation factor on human and population health.

Discipline objectives:

- master the features of the effect of ionizing radiation on the human body;
- master the methods of sanitary and dosimetric research to obtain objective information about the radiation safety conditions, both of individual professional groups and the population.
- master the methodology for calculating stationary radiation protection equipment at projected radiation facilities;

- acquisition of skills in preventive and routine sanitary supervision at radiological facilities.

A summary of the discipline. Subject and content of the discipline.

Fundamentals of Nuclear Physics and Radiobiology. The main regularities of the effect of ionizing radiation on the body. Regulation of human exposure (TR KR). Natural sources of ionizing radiation and their hygienic value. Occupational hygiene when using radioactive substances and other sources of ionizing radiation in medicine. Issues of ensuring radiation safety when working with closed and open sources of ionizing radiation. Hygienic aspects of transportation and storage of radionuclides. IRS registration methods. Radiometric and spectrometric methods. Radiation-hygienic and social-hygienic monitoring in the Kyrgyz Republic. Basic principles of radiation protection against AI. External exposure dosimetry. Radioactivity in the air. Radioactivity in water, soil and building materials. Food radioactivity. Internal radiation dosimetry. Methods for the study of radioactive contamination of working surfaces. Methods for decontamination of radioactive substances and assessment of its effectiveness. State sanitary supervision in the field of radiation hygiene. Preventive sanitary supervision of facilities working with sources of ionizing radiation. Current sanitary supervision of facilities working with sources of ionizing radiation. Prevention of radiation accidents and elimination of their consequences. Radiation monitoring of radiological facilities and the environment. Protection of the environment from radioactive contamination. Problems of uranium tailings in the Kyrgyz Republic.

Expected results of mastering the discipline.

Know:

- fundamentals of radiation hygiene;
- types of ionizing radiation and their characteristics;
- the effect of ionizing radiation on the body;
- natural sources of ionizing radiation;
- maximum permissible radiation doses as a basis for radiation safety;
- basic principles of radiation safety and radiation protection when working with sources of ionizing radiation;
- the basics of organizing environmental protection from radioactive contamination;
- basics of sanitary and dosimetric control;
- fundamentals of the legislation of the Kyrgyz Republic in the field of radiation hygiene.

Be able to:

- use normative-methodical and normative-technical documents in the field of radiation hygiene for conducting examinations, studies, examinations and tests;
- to reveal the causal relationship between the morbidity of the population and the impact of radiation sources;
- identify sources of pollution of the human environment and determine the nature of their adverse effects on health;
- to conduct a sanitary examination (control, supervisory measures) of supervised objects;
- select and organize optimal methods of sanitary and radiation control and evaluate their effectiveness;
- to carry out sampling of radiation objects for various types of research;
- determine the levels of doses of ionizing radiation at workplaces by calculation methods;
- analyze hygienic indicators reflecting the impact of the radiation factor on the health of the population;

- prevent and eliminate the consequences of the negative impact of the radiation factor on the health of personnel and the environment;
- predict the nature and degree of pathological manifestations depending on the type and dose of exposure to ionizing radiation;
- be able to conduct hygienic training among the population;
- recommend on the formation of a healthy lifestyle and rational behavior in the current radiation and environmental conditions.

Own:

- methods of radiological control;
- methods for assessing the impact of factors of the working environment on the health of personnel;
- development of measures for the prevention of diseases caused by exposure to ionizing radiation and the prevention of contamination of the environment with radionuclides;

- methods (algorithms) for conducting sanitary and epidemiological examinations, investigations, examinations, studies, tests and toxicological, hygienic and other types of assessments, incl. project documentation;
- methodology for laboratory studies of environmental and industrial environment factors (physical, chemical, radiological and other research);
- methods for assessing the degree of compliance of objects of sanitary supervision with sanitary rules;
- methods of identifying the consequences of radiation exposure on the population;
- methodology for collecting, processing and analyzing data on environmental factors and information on the health status of the population;
- the skill to carry out propaganda of the way of life among the population in a radiation-ecological situation.

B.3.13 "FOOD HYGIENE 1"

Total effort: 8.5 credits (255 hours)

Lectures: 40 hours

Practical lessons: 138 hours Independent work: 77 hours

Final control: test, exam

B.3.17 "FOOD HYGIENE 2"

Total effort: 5.4 credits (162 hours)

Lectures: 20 hours

Practical lessons: 93 hours

Independent work: 49 hours

Final control: offset, State Final Attestation

The purpose of the discipline. Formation of skills aimed at preventing diseases related to the nature of nutrition, monitoring the nutritional status of the population, nutritional value and food safety by developing a set of medical and preventive measures based on knowledge of the cause-and-effect relationships of nutrition and the health status of the population. Discipline objectives:

- implementation of improvement of the foundations of state policy in the field of healthy nutrition of the population of the Kyrgyz Republic;

- teaching methods of fundamental research of physiological and biochemical foundations of nutrition;
- implementation of constant monitoring of the nutritional status of the population of the Kyrgyz Republic;
- implementation of state sanitary supervision in order to prevent alimentary-dependent diseases of an infectious and non-infectious nature;
- implementation of the improvement of sanitary legislation based on the study of sanitary and epidemiological risk factors at all stages of production, storage, transportation and sale of food products;
- development and improvement of scientific and methodological approaches to the assessment of non-traditional and new food products;
- development and improvement of scientific foundations and practice of children's, dietary and preventive nutrition;
- scientific substantiation and practical implementation of the alimentary adaptation system in modern environmental conditions;
- widespread introduction of educational and educational programs and projects both in the education and training system and in society as a whole.

A summary of the discipline. Rational nutrition and basic hygienic requirements for its construction. Energy costs. The energy requirement of the body for nutrients and energy. Carbohydrates as the main source of energy The biological role and nutritional value of proteins, fats, carbohydrates. Methods for the determination of proteins, fats and carbohydrates. Vitamin value of the diet and their importance in nutrition. Vitamin deficiency. Sources. Methods for the determination of vitamins in food. Minerals and their importance in nutrition. Sources. Hygienic examination of food products for quality and safety. Nutritional and biological value of milk and dairy products, meat and meat products, grain products, fats and oils, fish and fish products, canned food and concentrates, non-alcoholic and national drinks. The current state, the doctrine of food poisoning. Food poisoning of microbial and non-microbial etiology. Mycotoxicosis. Prevention. The concept of medical, dietary and functional nutrition. The value of food products and dishes in medical nutrition. Modern hygienic requirements for catering units in hospitals. State sanitary supervision in the field of food hygiene. Preventive food rations under especially hazardous working conditions Safety of food additives, their classification, characteristics, indexation and regulation. Food fortification principles. Nutritional features of the population living in the Far North, highlands and hot climates. Features of rational nutrition of the adult working-age population, pregnant and lactating women, the elderly and old people, athletes. Technological progress and nutrition. Expected results of mastering the discipline.

Know:

- organizational and legal foundations of the state sanitary and epidemiological supervision in the field of food hygiene;

- rights and obligations, professional and deontological principles and main activities of a doctor in food hygiene;
- methodology for conducting sanitary and epidemiological expertise of construction projects, reconstruction and modernization of food facilities;
- the procedure for the examination and state registration of new types of food products, new food sources, food additives, pesticides, materials in contact with food products;
- purpose, objectives, methods of sanitary inspection and sanitary and epidemiological requirements for food industry, catering and trade enterprises;
- types of sanitary and epidemiological conclusion;
- the basics of sanitary and educational work to improve hygienic knowledge among the population and hygienic training of workers at food facilities;
- main chemical and microbiological contaminants of food raw materials and food products;
- classification and sanitary rules for the use of food additives;

- classification, epidemiology, etiology, pathogenesis, clinic, laboratory diagnostics, prevention and investigation of food poisoning;
- the role of certain foods in the occurrence of food poisoning;
- guidance materials regulating the procedure for investigating and recording food poisoning;
- hygienic foundations of physiology and biochemistry of nutrition;
- fundamentals and principles of organizing rational nutrition for various age and professional groups of the population norms of physiological requirements for nutrients and energy for different groups of the population;
- methods of studying the actual nutrition of the population;
- anthropometric and clinical signs of nutritional imbalance and laboratory markers of nutritional status;
- the main nutritional imbalances typical for the nutrition of the population of different countries, the causes and consequences of their development, scientific principles for the prevention of nutritional-dependent diseases;

- main directions and tasks of the state policy in the field of healthy nutrition of the population of the Kyrgyz Republic;
- hygienic foundations of therapeutic and prophylactic nutrition at enterprises with particularly harmful working conditions, types of therapeutic and prophylactic nutrition;
- fundamentals of alimentary adaptation, hygienic aspects of organizing food for the population under conditions of radioactive load;
- hygienic principles and sanitary and hygienic requirements for the organization of dietary meals at the place of work, study, recreation and residence of the population in the public catering system;
- basic principles of organization and methodology for monitoring nutrition in medical institutions and sanatoriums;
- indications for appointment, chemical composition, purpose, general characteristics, culinary processing, list of recommended and prohibited products in medical nutrition.

Be able to:

Carry out organizational and methodological work:

- prepare materials for drawing up a comprehensive plan of sanitary and recreational activities, develop proposals for improving the sanitary condition of facilities;
- prepare for approval draft decisions, orders and other regulatory acts in the field of food hygiene;
- evaluate the effectiveness of ongoing health improvement activities;
- draw up a plan and report on the work of the department for a month, quarter, year;
- draw up medical and sanitary documentation;
- conduct reception of the population and officials of the supervised facilities, work with letters from the population;
- work with scientific literature and documents of sanitary legislation, plan and carry out scientific and practical work. Carry out preventive sanitary supervision:
- to issue a sanitary conclusion on the allotment of land plots for the allotment of land plots for the construction of food facilities;

- to take into operation newly built, reconstructed catering establishments of the food industry;

- conduct a hygienic assessment of new types of food products, raw materials, dishes, containers, inventory, packaging materials, coatings for technological, refrigeration and special equipment for food purposes;

- conduct a hygienic assessment of new types of food additives, pesticides, detergents.

Conduct ongoing sanitary supervision:

- develop measures to rationalize nutrition;

- to carry out measures to eliminate the deficiency of vitamins, macro and microelements, primarily among socially unprotected segments of the population and in ecologically unfavorable regions;

- to carry out prophylaxis of common alimentary-dependent diseases;

- carry out constant monitoring of the nutritional status, nutritional status, the prevalence of nutritional-dependent diseases and the health status of various groups of the population;

- to clarify the needs of various age groups of the population in nutrients and energy, to develop recommendations on nutrition on their basis;
- for compliance of the design and maintenance of food items with the current sanitary and hygienic and sanitary and anti-epidemiological rules and regulations;
- observance of hygienic and sanitary-anti-epidemiological rules and norms in the manufacture, release, storage, transportation and sale of food products;
- carry out a sanitary and hygienic examination of food products and draw up a conclusion based on the results of the analyzes;
- for the preservation of the nutritional value and quality of the products produced through the use of modern technologies and equipment, excluding the possibility of bacterial, chemical and physical contamination;
- compliance with the established hygienic requirements when using food additives, pesticides, etc.;
- to prevent food poisoning, acute intestinal infectious diseases and diseases of alimentary origin.
- supervise the catering units of medical and preventive institutions and evaluate their menu-layout;

- compose a balanced diet in accordance with the principles of rational, therapeutic and prophylactic and therapeutic nutrition.

Conduct hygiene training:

- develop measures to improve the hygienic knowledge of the medical personnel of the Central State Sanitary and Epidemiological Service and hygienic training and education of workers at food facilities;
- conduct educational and advisory work among the population on the issues of primary and secondary nutritional prophylaxis of diseases;
- to promote hygienic knowledge among the population in the field of rational nutrition with the involvement of the mass media.

Own:

- methods for assessing the impact of food products and food raw materials on human health, sampling and assessing the body's reactions to their impact;
- skills of working with normative, normative-technical, legislative and legal documentation within the limits of professional activity;

methods (algorithms) for conducting a sanitary examination (control, supervisory measures) of supervised objects;

- methods of organoleptic examination of food products, polymeric materials in contact with food products;

- methods of physical and chemical research of food products, polymeric materials in contact with food;

- methods (algorithms) for conducting sanitary and epidemiological examinations, investigations, examinations, studies, tests and toxicological, hygienic and other types of assessments, incl. project documentation;

- methodology for retrospective and operational epidemiological analysis of alimentary-dependent morbidity in the population;

- methodology for collecting, processing and analyzing data on environmental factors and public health; methodology for collecting, processing and analyzing data on environmental factors and public health;

- basic technologies for transforming information: text, tabular editors, information retrieval on the Internet.

B.3.18 "CLINICAL EPIDEMIOLOGY"

Total effort: 6.4 credits (192 hours)

Lectures: 46 hours

Practical lessons: 88 hours

Independent work: 58 hours

Final control: offset, state final attestation

The purpose of the discipline. Mastering competencies in identifying the causes of the onset and spread of diseases among the population and substantiating decisions on conducting preventive and anti-epidemic measures using the principles of evidence-based medicine Objectives of the discipline:

- to provide theoretical knowledge on the epidemiology of infectious and non-infectious diseases;
- instill practical skills in conducting epidemiological investigations, anti-epidemic and preventive measures;
- develop independent epidemiological thinking aimed at 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, by self-assessment, of the results of their activities;
- to prepare a graduate for the practical performance of functional duties in special health units and institutions of the medical service of civil defense and the service of disaster medicine;
- to train students in the implementation of supervisory functions for health care facilities to ensure sanitary and epidemiological well-being.

A summary of the discipline. Diseases with the fecal-oral transmission mechanism. General characteristics of the group Bacterial and viral diseases. Diseases with a contact transmission mechanism. General characteristics of the group. Bacterial, viral and sexually transmitted infections (STIs). Diseases with the transmission mechanism of transmission. General characteristics of the group (epidemic typhus, Brill's disease, relapsing fever). Zoonoses. General characteristics of the group. The importance of zoonotic infections in human infectious pathology. Definition of concepts: zoonoses, anthroponoses, zooanthroponoses, saproozoonoses, sapronoses. Sapronose. General characteristics of the group. Definition. Socio-economic importance. Hospital-acquired infections. Definition of the concept. Terminology. The urgency of the problem at the present stage. Epidemiological, economic and social significance. Parasitic diseases. Definition of the concept. Grouping of parasitic diseases depending on the systematic affiliation of the pathogen: protozoa, helminthiasis. Prevalence. Socio-economic significance

Military epidemiology. Definition of military epidemiology, its sections, tasks, formation and development. The mechanism of development of the epidemic process in the troops, the relative autonomy of its development. Manifestation of the epidemic process among personnel, the structure of infectious morbidity and its features when the enemy uses weapons of mass destruction.

Expected results of mastering the discipline.

Know:

- main measures to ensure the sanitary and epidemiological well-being of the population;
- statistical techniques used in epidemiological analysis
- indicators of public health, factors shaping human health (environmental, professional, climatic, endemic, social, epidemiological, psychoemotional, professional, genetic);
- basic rules for sampling for laboratory research in the outbreak;
- causes and conditions, mechanism of development and manifestation of the epidemic process in certain groups and nosological forms of infectious diseases;
- etiology, clinic and disease prevention measures;
- types of prevention (primary, secondary, tertiary). Their goals and objectives;

- current directive documents on the organization of epidemiological surveillance of the most pressing infectious and non-infectious diseases. Your functional responsibilities;

- on the need for intersectoral and interdepartmental coordination in the prevention of certain infectious and non-infectious diseases;

- the basics of the rules of medical ethics and deontology, regulations, the basics of office work;

- main sources of scientific and medical literature;

new methods for studying environmental factors.

Be able to:

- apply the skills of conducting state sanitary and epidemiological surveillance;

- apply methods of epidemiological analysis of indicators of infectious and non-infectious morbidity of the population;

- use official accounting and reporting documents, the results of periodic and preventive examinations to assess the health status of the population;

- correctly select samples for laboratory research;
- establish the source (s) of infection, mechanism, routes and factors of transmission;
- recognize the symptoms of various infectious diseases;
- to carry out sanitary-explanatory work to increase the literacy of the population in the field of prevention of infectious and non-infectious diseases;
- use the requirements of regulatory documents on the organization of anti-epidemic support of the population to assess the effectiveness of anti-epidemic work;
- draw up inter-coordinating planned measures for the prevention of infectious and non-infectious diseases;
- comply with the rules of medical ethics, laws and regulations on working with confidential information, keep medical secrets
- use educational, scientific, popular science literature, the Internet for professional activities;
- assess the influence of environmental factors on the human body.

Own:

- methodology for the selection of pathological material from patients and contact and samples from objects in the focus of an infectious disease;
- the ability to determine the course of the development of the epidemic process with the definition of the source of infection, the main routes of transmission and active risk factors
- the ability to recognize etiologically and clinically infectious diseases;
- an algorithm for conducting primary and secondary preventive measures to prevent the occurrence of infectious and non-infectious diseases and timely implementation of anti-epidemic measures in the foci of infectious diseases;
- methods of assessing the effectiveness of preventive and anti-epidemic measures in the outbreaks and their professional activities;
- methods of organizing and conducting interagency anti-epidemic and preventive measures;
- Ability to use the rules of medical ethics, laws and regulations, and confidential information;

- information obtained from various sources for solving professional problems;
- new methods of research and assessment of human habitat factors.

B.3.19 "PROFESSIONAL DISEASES"

Total effort: 4 credits (120 hours)

Lectures: 40 hours

Practical lessons: 44 hours

Independent work: 36 hours

Final control: test, exam

The purpose of the discipline. Formation of a doctor with clinical thinking, medical deontology and skills in examining and treating patients with occupational and general somatic diseases, which are necessary for a future specialist, regardless of his field of activity. At the same time, it is planned to teach him the modern basics of primary and secondary prevention of occupational diseases, medical labor expertise and occupational rehabilitation in occupational diseases. Objectives of the discipline:

- study of the main nosological forms of occupational diseases;
- mastering the basics of diagnosis of occupational and work-related diseases, differential diagnosis of diseases that have the same clinical symptoms, but different in etiology;
- mastering the methods of prevention, rehabilitation and examination of the ability to work in occupational diseases;
- mastering the methods of prevention and emergency medical care in acute occupational diseases and conditions;
- mastering the principles of deontology and medical ethics in occupational pathology.

A summary of the discipline. Occupational diseases: subject, tasks. Occupational lung disease caused by exposure to industrial aerosols. Chronic obstructive pulmonary disease of professional etiology. Occupational allergic diseases. Intoxication with heavy metals (lead, mercury). Occupational diseases caused by physical factors. Vibration disease. Intoxication with aromatic hydrocarbons. Occupational diseases arising from exposure to pesticides. Cyanide intoxication. Explosive gas intoxication. Features of diagnostics, organization and main types of emergency medical care in acute occupational intoxication.

Expected results of mastering the discipline.

Know:

- the main harmful factors of the working environment and the degree of their potential danger for the development of occupational diseases;

- etiology, pathogenesis, classification, clinical manifestations, laboratory - instrumental diagnostics, differential diagnostics, treatment features, issues of examination of working capacity, preventive measures for the main forms of occupational diseases provided for by the program;

- occupational lung diseases (pneumoconiosis, dust bronchitis, occupational bronchial asthma);

professional intoxication (lead, mercury, benzene, pesticides);

- occupational diseases caused by a physical factor (vibration disease, the influence of electromagnetic waves of radio frequencies, laser radiation);

- occupational diseases of the musculoskeletal system and get acquainted with their various manifestations, with a list of occupational diseases;

- methods and principles of individualization of diagnosis and differentiated therapy; principles of assessment of emergency conditions and methods of rendering emergency care;

- principles of prevention of occupational diseases;
- issues of examination of work capacity in case of occupational diseases.

Be able to:

- analyze the data of the sanitary and hygienic characteristics of working conditions and professional route to determine the possibility of development

occupational disease;

- collect anamnesis of the disease, taking into account his profession and determine the possibility of the relationship of clinical symptoms with working conditions;

- make an objective examination of the patient in all organs and systems using the methods of general examination, palpation, percussion, auscultation;

- draw up a patient examination plan, taking into account the etiological production factor and interpret the results of clinical, laboratory, instrumental examination;

- to carry out differential diagnostics of occupational diseases with non-professional ones;

- to formulate and substantiate the clinical diagnosis of an occupational disease - to resolve the issue of the relationship between the disease and the profession;

- prescribe adequate treatment;

- make an opinion on the patient's ability to work;

- correctly draw up a history of occupational disease.

Have the following practical skills:

- examination and physical examination of a professional patient.

- Collecting a professional route (anamnesis), interpretation of the presented sanitary and hygienic characteristics of working conditions, the results of PME, extracts from the outpatient card of a professional patient;

- preparation of an outpatient care and medical history with justification of clinical occupational disease;

- carrying out capillaroscopy, cold test with electrothermometry, pallestimetry.

B.3.20 "MILITARY HYGIENE"

Total effort: 2 credits (60 hours)

Lectures: 16 hours

Practical lessons: 26 hours

Independent work: 18 hours

Final control: offset

The purpose of the discipline. Studying the patterns of influence of various factors of combat training, combat activity and everyday life of troops on the body of a serviceman in order to find measures and means that contribute to the high combat effectiveness of soldiers and officers.

Discipline objectives:

- development of rules to ensure healthy working and living conditions in a military unit;
- study of changes in the health of personnel, ways and means of improving it; supervision over the hygienic provision of servicemen in units and formations.

A summary of the discipline. Subject, content and tasks of Military hygiene. Organization of hygienic provision of troops. Sanitary inspection in the Armed Forces. Hygiene of the deployment of troops. The basics of organizing and conducting sanitary supervision of water supply in the field. Fundamentals of the organization and conduct of sanitary supervision over the nutrition of the troops.

Food in the field. Hygienic examination of water and food in the field. Occupational hygiene in the Armed Forces. Barracks survey technique. Drawing up and evaluating the layout of the main soldier ration. Research of canned food and control over C-vitamin supply of personnel. Study of water in the field. Clarification of water. Methods for improving water quality in the field. Study of the deployment of troops.

Expected results of mastering the discipline.

Know:

- hygienic provision of a military unit in peacetime and in a combat situation;
- maintenance and organization of sanitary supervision in the armed forces;
- the forces and means of the medical service in the organization of hygienic provision;
- hygiene of the deployment of troops;
- the basics of organizing and conducting sanitary supervision of water supply to troops in the field;
- the basics of organizing and supervising the food supply of troops in the field;

- habitability problems;
- occupational health in various branches of the armed forces;
- hygiene of troop movements;
- hygienic education of servicemen.

Be able to:

- conduct sanitary and epidemiological reconnaissance and survey of water supply sources, field food points, shelters;
- analyze the data obtained as a result of the survey;
- develop preventive measures;
- interact with other officials in solving the problems of sanitary supervision.

Own:

- methods for assessing the conditions for the deployment of troops;
- methods of water purification in the field;

methods for assessing the quality of food for military personnel in barracks and field conditions.

B.3.21 "INFECTIOUS DISEASES"

Total effort: 6 credits (180 hours)

Lectures: 26 hours

Practical lessons: 100 hours

Independent work: 54 hours

Final control: test, exam

The purpose of the discipline. Formation of students' knowledge, skills and practical skills in the diagnosis, treatment and prevention of infectious diseases.

Discipline objectives:

- study of general patterns of development of the infectious process

(etiopathogenesis, clinical features, principles of treatment and prevention).

- formation of clinical thinking and practical skills in the diagnosis and treatment of infectious diseases
- training in methods of providing emergency care for infectious diseases
- training in the principles of conducting preventive and anti-epidemic measures in the foci of infectious diseases

A summary 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.

Expected results of mastering the discipline.

Know:

- modern ideas about the prevalence of infectious pathology, etiology, features of the epidemiological process, pathophysiological mechanisms of the development of infectious diseases.
- features of the clinical course, differential diagnosis of leading clinical syndromes, methods of laboratory and instrumental diagnostics of infectious diseases;
- principles and methods of modern therapy of infectious diseases, issues of intensive care and resuscitation of emergency conditions;

- indications for their outpatient and inpatient treatment; principles of medical examination and rehabilitation for convalescents;

- organization and implementation of preventive and anti-epidemic measures in the foci of infectious diseases; forms and methods of sanitary and educational work.

Be able to:

- conduct a correct questioning of complaints and anamnesis, including the epidemiological history, carry out a clinical examination of the patient (examination, palpation, percussion, auscultation);

- comply with the required volume of laboratory and instrumental examination methods for infectious diseases and be able to interpret them;

- substantiate and prescribe a treatment plan for patients with infectious pathology;

- independently carry out a set of measures in case of emergency conditions;

- to carry out preventive and anti-epidemic measures, to make an analysis of morbidity;

- use personal protective equipment (type 1 anti-plague suit). Own:
- the method of taking material from the patient for bacteriological, virological, serological, biological and other research (blood, feces, urine, vomit, sputum, cerebrospinal fluid, mucus from the nose and throat);
- method of gastric lavage.

B.3.22 "CHILDREN'S INFECTIOUS DISEASES"

Total effort: 2 credits (60 hours.

Lectures: 8 hours

Practical lessons: 34 hours

Independent work: 18 hours

Final control: offset

The purpose of the discipline. Formation of the student's clinical thinking in the field of childhood infectious diseases by teaching the skills of diagnosis, differential diagnosis, and treatment-and-prophylactic measures.

Discipline objectives:

- to study the etiology, pathogenesis and pathomorphological changes in infectious diseases.
- to teach the mechanisms of development and manifestation of the epidemic process in infectious diseases.
- to develop practical skills in the diagnosis, differential diagnosis and treatment of infectious diseases depending on age, as well as to teach methods of providing emergency care.

A summary of the discipline. Acute intestinal infections caused by unconditionally pathogenic microbes. Acute intestinal infections caused by opportunistic enterobacteriaceae (UPE). Dehydration in children, diagnosis of the degree of dehydration, the principle of treatment. Etiological structure and features of the course of viral hepatitis in children. Enterovirus infection in children. Acute respiratory viral infections in children. Streptococcal infection in children. Far Eastern scarlet fever. Controlled exanthema in children. Herpetic infections in children. Modern features of controlled drip infections in children. Diphtheria of the oropharynx and respiratory tract. Meningococcal infection in children. Polio. Septic shock and cerebral edema in children with infectious diseases. Primary and secondary encephalitis in children. HIV infection in children, vertical transmission from mother to child. Opportunistic infections in children.

Specific and antibiotic therapy in children with infectious diseases. The most common helminthiasis in children (ascariasis, enterobiasis, giardiasis).

Post-vaccination complications in children.

Expected learning outcomes:

Know:

- properties of the pathogen that determine the characteristics of the clinical manifestations of an infectious disease;
- pathogenesis and development of an infectious disease, as well as urgent syndromes;
- classification of clinical forms;
- the main symptoms and syndromes characteristic of a particular infectious disease;
- typical forms of the disease, complications;
- laboratory and instrumental diagnostic methods, differential diagnostics;

- principles of inpatient and home treatment;
- the need for prophylactic medical examination and especially observation after an infectious disease.

Be able to:

follow the basic rules of working at the bedside of an infectious patient;

- collect anamnesis of the disease with an assessment of epidemiological data;
- examine the patient in order to identify the main clinical signs of the disease characteristic of a particular infectious disease;
- to appoint a plan of examination of the patient;
- master the technique of taking material for laboratory research;
- substantiate the clinical diagnosis indicating the type, severity of the course and period of the disease;

- prescribe treatment depending on the etiology, timing of the disease severity, the presence of an urgent syndrome, aggravated premorbid background;

- interpret the results of the study of cerebrospinal fluid;

- conduct serotherapy.

Own:

- methods of sampling material from the patient for bacteriological, virological, serological, biological and other research (blood,

feces, urine, vomit, sputum, cerebrospinal fluid, mucus from the nose and throat);

- all types of injection manipulations (subcutaneous, intramuscular, intravenous);

- technique of gastric and intestinal lavage;

- the technique of rehydration therapy;

- manipulations for the provision of emergency care (stopping bleeding, artificial respiration "mouth to mouth", "mouth to nose", cleaning the upper respiratory tract, chest compressions, defibrillation, Heimlich, Safar reception).

B.3.24 "CHILD DISEASES"

Total effort: 5 credits (150 hours)

Lectures: 36 hours

Practical lessons: 69 hours

Independent work: 45 hours

Final control: test, exam

The purpose of the discipline: Formation of competencies in the diagnosis, treatment and prevention of diseases of internal organs.

Discipline objectives:

- to study the etiopathogenesis and clinical manifestations of the main diseases of early age, endocrine, digestive, urinary systems;
- to form students' skills in determining the volume and sequence of diagnostic measures for major diseases of early age, endocrine, digestive, urinary systems;

- to teach to draw up a differential diagnostic series for diseases of young children, endocrine, digestive, urinary systems in children;

- to form students' skills of formulating a clinical diagnosis for each nosological form of diseases of early age, endocrine, digestive, urinary systems in children;

master the basic principles of treatment and prevention of diseases of early age, endocrine, digestive, urinary systems in children;

- to teach methods of providing emergency care for diseases of an early age, endocrine, digestive, urinary systems in children, taking into account the recommendations of the pocket guide “Providing inpatient care for children” (2013).

A summary of the discipline. History of Pediatrics. Periods of childhood and age-related pathology. Ethics and deontology in pediatrics. Organization of the work of the children's hospital. Principles of hospitalization and placement of patients. Anti-epidemic regimen. Collecting anamnesis. Rules for writing a medical history. Physical development of children. Physical development indices by WHO. Anatomophysiological features (AFO) of the nervous system in children, age characteristics of the neuropsychic development of children. Semiotics and syndromes. AFO of skin, subcutaneous fat, lymph nodes, bone and muscular systems in children. Anomalies of the constitution. Prevention. Rickets, hypervitaminosis D, spasmophilia. Prevention. AFO of the respiratory system in children. Semiotics and syndromes of lesions of the upper and lower respiratory tract. Prevention of bronchopulmonary pathology. AFO of the circulatory system in children. Semiotics and syndromes of the main lesions of the circulatory system in children. Congenital heart defects. Prevention. Acute rheumatic fever in children. Prevention. AFO of the digestive system in children. Semiotics and

syndromes of major lesions of the digestive system. Gastritis, gastroduodenitis, gastric ulcer and duodenal ulcer, biliary tract disease in children. Prevention. Helminthiasis in children. Treatment and prevention. AFO of the urinary system in children. Semiotics and syndromes of the main lesions of the urinary system. Prevention. AFO system of blood and hematopoiesis in children. Semiotics and syndromes. Iron deficiency anemia in children. Prevention. AFO of the endocrine system. Immunity. Semiotics syndromes of major lesions. Feeding children of the first year of life. Natural feeding. Artificial and mixed feeding. Regulatory documentation in the children's hospital of the Ministry of Health of the Kyrgyz Republic (main orders). Eating disorders in young children. Prevention. Expected learning outcomes.

Know:

- periods of childhood, their characteristics;
- the role of joint work of sanitary and family doctors in child health protection;
- patterns of physical development of a child (increase in body weight and length, head and chest circumference, proportionality indices);
- anatomical and physiological features (AFO) and a methodology for studying all organs and systems in children and the semiotics of their main disorders.
- premorbid conditions in children (rickets, iron deficiency anemia, malnutrition, constitutional abnormalities) and their prevention.

- major broncho-pulmonary diseases in children, their diagnosis and prevention;
- acute rheumatic fever in children: Kessel-Johnson criteria, diagnosis, prevention;

diseases of the digestive system (chronic gastritis and gastroduodenitis, peptic ulcer and duodenal ulcer, cholecystitis and dysplasia) in children and their prevention;

- diseases of the urinary system (glomerulonephritis, urinary tract infections) in children and their prevention;

- the concept of a newborn baby: signs of a full-term and premature baby. Borderline conditions in newborns;

- principles of rational feeding of young children.

- the benefits of breastfeeding, 10 principles of successful breastfeeding;

- measures to prevent hypogalactia and preserve natural feeding;

- artificial and mixed feeding. The main mixtures used in artificial and mixed feeding of a child (IV, SV);

- calculation of the daily amount of food during IV and SV;
- the concept of eating disorders (acute and chronic). Chronic eating disorders: causes, clinical manifestations and prevention; calendar of preventive vaccinations in the Kyrgyz Republic.

Be able to:

- collect complaints from the patient;
- to collect anamnesis of life and illness of a sick child;
- determine the status of the patient: assessment of the severity of the condition, physical and neuropsychic development of the child (according to WHO recommendations);
- assess the condition of the skin, subcutaneous fat, bone, muscle and lymphatic systems;
- to conduct a study of systems - respiratory, blood circulation, digestion, urinary excretion, endocrine;
- draw up a survey plan;

- collect material for analyzes and interpret the results of laboratory and functional research methods;
- give an opinion on the affected system;
- draw up medical documentation (medical history, temperature sheet, examination sheet, nutrition sheet);
- conduct anthropometry;
- care for a newborn child;
- to carry out the treatment of the mucous membrane of the mouth, eyes, ears, nose;
- measure body temperature, count the pulse, the number of breaths in 1 minute, make their graphical record, measure blood pressure;
- assess the nature of the stool in children;
- to reorganize the upper respiratory tract;

- administer artificial respiration;
- perform an indirect heart massage;
- transport a seriously ill child;
- to receive and sanitize the patient during hospitalization;
- to organize rational nutrition for children 1 year of age with various types of feeding;
- evaluate Form 63;
- install a gas outlet pipe; to carry out a cleansing enema.

Own:

- collection of anamnesis, physical examination and assessment of the patient's condition with these diseases;
- registration of the medical history;

- interpretation of the results of laboratory and instrumental research methods; recommendations for the care and diet of patients.

B.3.25 "PROPEDEUTICS OF INTERNAL DISEASES"

Total effort: 4 credits (120 hours)

Lectures: 30 hours

Practical lessons: 54 hours

Independent work: 36 hours

Final control: offset

The purpose of the discipline. Teaching students the basic clinical methods of examining a patient for the construction of clinical syndromes, which are often encountered in the practice of a doctor, with the identification of risk factors for the development of lesions of internal organs. Learning objectives:

- to teach students the basic clinical methods of examining a therapeutic patient;
- familiarize with the basic laboratory and instrumental examination methods;
- teach the recognition of the main clinical and laboratory-instrumental symptoms of diseases of internal organs;
- on the basis of the identified clinical and laboratory-instrumental signs to teach the construction of the syndrome;

- to familiarize with the principles of emergency treatment for frequently occurring emergency conditions for diseases of internal organs;
- to acquaint students with the basics of medical ethics and deontology;
- identification of risk factors for the development of lesions of internal organs.

Expected learning outcomes.

Know:

- basic clinical and laboratory - instrumental examination methods;
- main clinical, laboratory - instrumental symptoms and syndromes of common diseases of internal organs;
- symptomatology and basic principles of medical care in emergency conditions in internal medicine.

Be able to:

- conduct a questioning of the patient and / or relatives and obtain complete information about the disease, establishing possible causes and risk factors for development;

- conduct a physical examination of the patient (examination, palpation, percussion, auscultation, blood pressure measurement, determination of the properties of the arterial pulse, etc.) and identify objective signs of the disease;

- draw up a plan of basic laboratory and instrumental examinations of the patient;

- independently identify the main symptoms and clinical syndromes;

- to interpret the main indicators of ECG in 12 leads of a healthy person;

- to evaluate the indicators of instrumental examination methods in healthy individuals and in diseases of internal organs;

- evaluate the results of a general analysis of blood, urine, sputum, feces, analysis of gastric and duodenal contents, pleural effusion, biochemical blood test;

- to present the results of the examination of the patient in the form of a medical history with the justification of the further diagnosis in the form of a syndrome and drawing up a plan for the examination of the patient.

Own:

- the method of collecting the main additional complaints, the assessment of the patients' perception of his / her problems;
- the method of purposeful collection of anamnesis of the disease (questioning about the history of the given): the onset of the disease, the time of onset and dynamics of symptoms; the ability to maintain a history of the disease in chronological order from the first symptoms to the moment of going to the doctor; the reason for going to the doctor;
- by the method of collecting an anamnesis of life, an allergic anamnesis; identification of harmful risk factors associated with the patient's behavior, drug history;
- a method for assessing the general condition of the patient;
- by the method of documenting anthropometric data (height, weight, BMI, waist circumference, hips);
- method of examination of the skin and mucous membranes, lymph nodes; nails; definitions of dermographism;

- by examination, palpation, percussion, auscultation of the respiratory system in adults in normal conditions and with diseases of the respiratory system;
- by examination, palpation, percussion, auscultation of the organs of the cardiovascular system in adults in normal conditions and in diseases of the cardiovascular system;
- by examination, palpation, percussion, auscultation of the gastrointestinal system in adults in normal conditions and in diseases of the gastrointestinal system;
- the method of examination, palpation, percussion, auscultation of the urinary system in adults in normal conditions and in diseases of the urinary system;
- by examination, palpation, percussion, auscultation of the organs of the hematopoietic system in adults in normal conditions and in diseases of the organs of the hematopoietic system; by the method of examination, palpation, percussion, auscultation of the organs of the endocrine system in adults in normal conditions and in diseases of the organs of the endocrine system;
- by examination, palpation, percussion, auscultation of the organs of the musculoskeletal system in normal adults and in diseases of the organs of the musculoskeletal system.

B.3.25 "INTERNAL DISEASES"

Total effort: 3 credits (90 hours)

Lectures: 30 hours

Practical lessons: 54 hours

Independent work: 36 hours

Final control: test, exam

The purpose of the discipline. to form students' knowledge of internal medicine, possessing general and special competencies for practical activities and readiness for postgraduate training with the subsequent implementation of professional medical activities in the chosen field.

Discipline objectives:

- to study the etiopathogenesis and morphological manifestations of the main diseases of internal organs in adults;

- to study the clinical and functional laboratory manifestations of diseases of internal organs in adults, depending on age and gender;
- to form students' skills in determining the volume and sequence of diagnostic measures for diseases of internal organs in adults;
- to develop students' skills in setting and formulating a clinical diagnosis for each nosology in diseases of internal organs in adults;
- to teach to carry out differential diagnosis of diseases of internal organs in adults;
- study the complications of diseases of internal organs in adults, as well as the most common comorbid conditions;
- to master the basic principles of treatment and prevention of diseases of internal organs in adults, as well as to teach the issues of forecasting, determining the ability to work;
- formation by students of knowledge about the basics of rehabilitation measures in the clinic of internal diseases;
- train in methods of providing emergency care.

Discipline summary: Patient supervision. Pneumonia. Pleurisy. COPD. Bronchial asthma. Atherosclerosis. KBS. Angina pectoris. Acute and repeated rheumatic fever. Chronic rheumatic heart disease. Heart defects: stenosis of the left atrioventricular foramen and mitral valve insufficiency. Aortic defects. AMI. Essential hypertension and symptomatic hypertension. Rheumatoid arthritis. Gout. Osteoarthritis. Chronic gastritis. Peptic ulcer (PU) stomach and duodenal ulcer. Complications of YB. Glomerulonephritis. Chronic kidney disease. Chronic pyelonephritis. SLE. Systemic progressive sclerosis (PCS), systemic polymyositis (SPM). Suppurative lung diseases: lung abscess, bronchiectasis. Heart failure. Acute and repeated rheumatic fever. Chronic rheumatic heart disease. Heart defects: stenosis of the left atrioventricular foramen and mitral valve insufficiency. Aortic defects. Chronic cholecystitis. Chronic hepatitis and cirrhosis of the liver. Ulcerative colitis. Functional bowel disease. Irritable Bowel Syndrome.

Expected learning outcomes.

Know:

- modern ideas about the prevalence of diseases of internal organs in adults among the population of the Kyrgyz Republic;
- etiology, pathogenesis, morphology, classification, clinical picture, laboratory and instrumental diagnostics, differential diagnostics, principles of therapy, indications for surgical treatment (if necessary), primary and secondary prevention, diet therapy, rehabilitation and prognosis of diseases of internal organs in adults;

- quantitative and qualitative criteria of the main laboratory and functional research methods in health and in diseases of internal organs in adults;
- peculiarities of diagnostics and treatment of diseases of internal organs in adults, taking into account age, complications and comorbid conditions;
- methods of providing emergency care for acute myocardial infarction, sudden death, anaphylactic and cardiogenic shocks, acute left ventricular failure, paroxysmal tachycardia, hypertensive crisis, hypovolemic shock, asthma attack, status asthmaticus, renal colic;
- management of patients with diseases of internal organs in outpatient practice. Focused collection of anamnesis and approaches to examining a patient in an outpatient setting of a GP;
- indications for consultation of narrow specialists. Counseling rules.

Be able to:

- independently conduct an examination of a patient with diseases of internal organs;
- on the basis of questioning (complaints, anamnesis of illness and life), as well as physical examination (examination, palpation, percussion, auscultation), identify diseases of internal organs studied on the topic;

- draw up a plan for additional (laboratory and instrumental) research to confirm the diagnosis and interpret their results;

- formulate a clinical diagnosis, guided by the modern classification of diseases;

- substantiate the clinical diagnosis in a particular patient, identify the diagnostic criteria;

- prescribe basic treatment, taking into account the etiology and mechanism of development of the disease, pay attention to the peculiarities of the diet for various diseases of internal organs;

recognize urgent conditions (cardiogenic shock, acute heart failure, an attack of bronchial asthma, etc.) and provide emergency care for them;

- to determine the measures of primary and secondary prevention of diseases of internal organs.

Own methods:

- focused collection of anamnesis in patients with diseases of internal organs; examination and physical examination of a patient with diseases of internal organs;

- interpretation of laboratory and instrumental results;
- registration of the medical history;
- substantiation of the clinical diagnosis; providing emergency care in case of shock.

B.3.26 "Physiotherapy"

Total effort: 4 credits (120 hours)

Lectures: 24 hours

Practical lessons: 60 hours

Independent work: 36 hours

Final control: test, exam

The purpose of the discipline. The acquisition by students of the knowledge and skills necessary to perform the functions of an IVD doctor in carrying out preventive and anti-epidemiological measures to prevent the emergence and spread of tuberculosis. Discipline objectives:

- to form a deep volume of knowledge on the identification and management of tuberculosis patients, primarily for work at the primary health care level, in the context of a tense epidemiological situation with regard to tuberculosis;

- to train a specialist who is able to carry out a differential diagnostic search using possible clinical and laboratory, radiological, genetic-molecular and other diagnostic methods among the population and groups at risk for tuberculosis;
- to teach the maintenance of medical records for a patient with tuberculosis;
- train on preventive measures to prevent transmission of tuberculosis infection in medical institutions at all levels of health care.

A summary of the discipline. Tuberculosis as an infectious disease. Historical information about tuberculosis. Epidemiology of tuberculosis in the world and the Kyrgyz Republic. Classification of tuberculosis. The causative agent of tuberculosis, properties. Pathomorphology, the importance of humoral and cellular immunity. Basic methods of TB diagnosis. Laboratory and X-ray diagnostics of TB. Tuberculin diagnostics. Specific and non-specific prevention of tuberculosis. Fundamentals of Infection Control. Basic principles of treatment. Principles of treatment for patients with drug-susceptible and resistant tuberculosis. Characteristics and classification of anti-tuberculosis drugs. WHO-recommended TB chemotherapy. Treatment outcomes. Adverse events of TB chemotherapy. Primary tuberculosis. Pathogenesis, classification. Dollocal forms of primary tuberculosis. Primary tuberculosis complex. Tuberculosis of the intrathoracic lymph nodes. Diagnostics, clinic, treatment, prognosis. Disseminated pulmonary tuberculosis. Classification. Pathogenesis of miliary pulmonary tuberculosis. Subacute and chronic course of disseminated TB. Diagnostics, clinic, treatment, complications, prognosis. Tuberculosis of the central nervous system: as a form of miliary TB of the lungs and as a complication of the main pulmonary and extrapulmonary forms of TB. Diagnostics, clinic, treatment, complications, prognosis. Secondary tuberculosis. Pathogenesis, classification. Limited forms of secondary pulmonary tuberculosis: focal, pulmonary tuberculoma, infiltrative pulmonary tuberculosis. Destructive forms of

pulmonary tuberculosis: caseous pneumonia, cavernous and fibrous-cavernous pulmonary tuberculosis. Diagnostics, clinic, treatment, prognosis. Tuberculous pleurisy. Tuberculosis of bones and joints. Tuberculosis of the genitourinary organs. Diagnostics, clinic, treatment, complications, prognosis. Tuberculosis in patients with diabetes mellitus, cancer, mental and other diseases. Identification, treatment. Tuberculosis in pregnant women. Chemotherapy tactics. HIV-associated tuberculosis. Epidemiology in the world and the Kyrgyz Republic. Peculiarities of detection and treatment of patients with Coinfection.

Expected learning outcomes. Know:

- main problems of modern phthisiology;
- basic methods of professional activity in the work of an MPD doctor;
- causes and factors of development of the tuberculous process;
- etiology of tuberculosis;
- basic preventive measures to prevent TB in healthy people and at risk groups;
- clinical and laboratory manifestations of a specific lesion;
- basics of infection control in medical institutions;

- basic preventive measures to prevent TB in healthy people and at risk groups;
- organize and carry out primary preventive measures to prevent the spread of tuberculosis.

Be able to:

- to analyze the results of the activity of the Preventive Medicine doctor at all levels of healthcare;
- to carry out primary preventive measures to prevent the spread of tuberculosis;
- organize and carry out primary preventive measures to prevent the spread of tuberculosis among tuberculosis patients and risk groups.

Own:

the skills of carrying out sanitary and educational work on prevention tuberculosis;

- skills in recognizing clinical signs of tuberculosis;

- skills in conducting sanitary and educational work on the prevention of tuberculosis;
- skills in conducting sanitary and educational work on the prevention of tuberculosis;
- methodology for calculating TB epidemiological indicators;
- the skills of carrying out medical activities for sanitary and epidemiological surveillance of tuberculosis.

B.3.0. VARIANT PART

B.3.1 "BASIC PHARMACOLOGY"

Total effort: 3 credits (90 hours)

Lectures: 36 hours

Practical lessons: 90 hours

Independent work: 54 hours

Final control: offset

The purpose of the discipline. the formation of students' ability to correctly select the most effective and safe drugs for their pharmacodynamic and

pharmacokinetic characteristics, drug interaction; alertness to undesirable drug reactions in a given pathology and elimination of the consequences of these reactions; the basics of prescription document flow and the rules for writing prescriptions for medicines, storage and use of medicines.

Discipline objectives:

- to form students' understanding of the role and place of pharmacology among the fundamental and medical sciences, the directions of the development of the discipline and its achievements;

- to acquaint students with the history of the development of pharmacology, the activities of the most prominent persons in medicine and pharmacy, the contribution of domestic and foreign scientists to the development of world medical science;

- to acquaint students with the main stages of the formation of pharmacology as a biomedical discipline, the main stages of development,

fundamental approaches to the creation of medicines;

- to acquaint students with the modern stages of drug development, the use of modern international standards in preclinical (GLP) and clinical (GCP) research and production (GMP) of drugs, the general principles of clinical research, taking into account evidence, with the basic laws of pharmacokinetics and pharmacodynamics of drugs;

to teach students to analyze the action of drugs in terms of the totality of their pharmacological effects, mechanisms and localization of action, pharmacokinetic parameters;

- to teach students to recognize possible side and toxicological manifestations when using drugs and to treat them;

- to teach students the principles of making prescriptions and drawing up prescription prescriptions, the ability to write prescriptions for medicines in various dosage forms, as well as for certain diseases and pathological conditions in patients, based on the characteristics of the pharmacodynamics and pharmacokinetics of drugs;

- to teach students how to work with medications in medical institutions, basic skills of prescription document circulation, rules for storing medicinal products from the list of potent and poisonous, as well as lists of narcotic drugs and psychotropic substances;

- to form students' skills necessary for solving individual research and scientific-applied problems for the development of new methods and technologies in the field of pharmacology and taking into account ethical, deontological aspects, the basic requirements of information security;

- to form students' skills of a healthy lifestyle, work organization, safety rules and control over the observance of environmental safety.

A summary of the discipline. Introduction. History of pharmacology. The subject and objectives of pharmacology, communication with medical and biological sciences. General pharmacology. Cholinergic agents. Adrenergic drugs. Drugs for anesthesia. Analgesics. Sleeping pills, anticonvulsants. Psychotropic medicines. Drugs affecting the functions of the respiratory system. Means that affect the functions of the digestive system. Cardiotonic drugs. Antiarrhythmic drugs. Antianginal drugs and lipid-lowering drugs. Antihypertensive drugs. Diuretics, uterine drugs.

Uricosuric funds. Drugs affecting the blood system. Anti-inflammatory drugs. Antiallergic drugs. Antibiotics

Antiprotozoal drugs. Antifungal agents. Anthelmintic drugs. Antiseptic and disinfectants. Anti-tuberculosis, anti-spirochete drugs. Antiviral agents.

Expected learning outcomes.

Know:

- classification and main characteristics of medicines, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of medicines; side effects;
- general principles of preparation of prescriptions and preparation of prescriptions for medicines.

Be able to:

to analyze the action of drugs in terms of the totality of their pharmacological properties and the possibility of their use for therapeutic purposes;

- write out prescriptions for medicines, use various dosage forms in the treatment of certain pathological conditions, based on the characteristics of their pharmacodynamics and pharmacokinetics;
- use basic antibacterial, antiviral and biological drugs;
- evaluate possible manifestations of drug overdose and ways to eliminate them.

Own:

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

B.3.2 "PUBLIC HEALTH AND HEALTHCARE"

Total effort: 4 credits (120 hours)

Lectures: 32 hours

Practical lessons: 52 hours

Independent work: 36 hours

Final control: offset

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
Objectives of the discipline:

- 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;
- carrying out scientific and practical research on public health problems, organization, management, health economics;
- independent work with educational, scientific, normative and reference literature.

A summary of the discipline. Public health and healthcare as a scientific discipline and subject of instruction. 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.

Expected learning outcomes.

Know:

- fundamentals of the legislation of the Kyrgyz Republic, the main regulatory documents on the protection of public health;
- fundamentals 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:

- apply the statistical research method in practical and scientific activities;
- calculate statistical values using computer technologies, evaluate the significance of sample statistical indicators and their differences;

- fill out the main registration forms for medical records of healthcare organizations;
- to calculate the main indicators of the population's health using computer technologies;
- calculate the main indicators and analyze the activities of healthcare organizations :
- plan the activities of healthcare organizations based on the state minimum social standards.

Own:

- skills of statistical analysis;
- basic methods of processing scientific data;
- methods of assessing public health of the population;
- methods of assessing the activities of healthcare organizations;
- methods of making managerial decisions;

- the skill of developing a set of preventive measures; Methods for assessing efficiency in healthcare.

B.3.3 "DENTAL"

Total effort: 4 credits (120 hours)

Lectures: 8 hours

Practical lessons: 10 hours

Independent work: 12 hours

Final control: offset

The purpose of the discipline: to teach students modern methods and means of prevention, diagnosis and treatment of dental diseases. Discipline objectives:

- conducting preventive examinations and epidemiological dental examination of the population;
- hygienic education and training of children of different ages and adults in rational oral hygiene;

- identification and elimination of risk factors for dental diseases;
- implementation of a set of measures for the primary prevention of dental diseases (dental caries, periodontal disease, dentoalveolar anomalies, etc.) among various contingents of the population at the individual and group levels;
- possession of methods of dental education and the implementation of motivation of the population to maintain dental health;
- possession of methods of diagnostics of dental diseases;
- possession of methods of providing medical care for dental diseases.

A summary of the discipline. The subject and objectives of dentistry. The history of the development of dentistry. The main problems of dentistry and their importance for the general practitioner. Problems of medical examination and prevention of dental diseases. Prevention of major dental diseases. Revealing, elimination of cariogenic situation. Fluoroprophylaxis, health education work Anatomophysiological features of the MAP. Diseases of the teeth: caries and its complications, etiology, pathogenesis, prevention. Periodontal diseases: periodontitis, periodontal disease. Diseases of the oral mucosa. The relationship between dental and somatic diseases. Inflammatory diseases of the maxillofacial region and neck: (periodontitis, periostitis, abscesses, phlegmon, osteomyelitis of the jaws). Etiology, pathogenesis, diagnostics, clinical picture, treatment, prevention. Providing emergency assistance. Defects of MHO, ZFA. Prevention of dental diseases. Methods of epidemiological research in dentistry. Methods of examination of dental patients. Acquaintance with the toolkit. Elements of asepsis and antiseptics.

Expected learning outcomes.

Know:

- clinical manifestation, etiological factors of occurrence, diagnosis and differential diagnosis of diseases of the oral cavity, methods of treatment of major dental diseases.

Be able to:

- conduct a dental examination, diagnosis of diseases of the oral cavity, differential diagnosis of diseases of the oral cavity, provide first aid in emergency situations in dentistry;
- to carry out sanitary and educational work.

Have the following practical skills:

- examination of the maxillofacial area;
- examination of the oral cavity (oral mucosa and dentition);

- writing a dental formula;
- filling out medical dental documentation;
- conducting a dental epidemiological study.

B.3.4 "SURGICAL DISEASES"

Total effort: 3 credits (90 hours)

Lectures: 18 hours

Practical lessons: 44 hours

Independent work: 28 hours

Final control: test, exam

The purpose of the discipline. mastering by students the basics of clinical examination of surgical patients, acquaintance with the principles of surgical methods of treatment and semiotics of some types of surgical diseases.

Discipline objectives:

- train students in etiology, pathogenesis, clinical, functional and laboratory manifestations, criteria for the diagnosis of surgical diseases;
- to consolidate the practical skills of examining patients, including during independent work of students;
- to teach students the basic principles of the treatment of surgical diseases, incl. emergency conditions;
- to train students in methods of prevention of surgical diseases.

A summary of the discipline. Introduction. Desmurgy. Antiseptic. Asepsis. Fundamentals of transfusiology. Acute supportive diseases of soft tissues. Toxic goiter and nodular goiter. Acute appendicitis. Abdominal hernia (strangulated, postoperative and rare forms). Gastric ulcer 12p intestine (perforation, bleeding, stenosis and penetration). Post-resection syndromes. Intestinal obstruction (dynamic and mechanical), adhesive disease. Cholelithiasis. Surgical infection. Bleeding. Wounds and wound infection, wound treatment. Burns, frostbite, electrical injury. Fractures and dislocations. Transport immobilization. Plaster equipment. Varicose veins of the lower extremities. Atherosclerotic lesions of the arteries. Obliterating endoarteritis and thromboangitis. Disease of the liver and spleen (echinococcus, abscess, surgery of portal hypertension, torsion and thrombophlebitis of the spleen). Colon diseases (diverticulum, nonspecific ulcerative colitis, Hirschsprung's disease). Acute and chronic pancreatitis Diseases of the rectum: acute paraproctitis, hemorrhoids, anal fissure.

Expected learning outcomes.

Know:

- general principles of diagnosis, main clinical manifestations, etiology, pathogenesis, classification of wounds, pyoinflammatory processes, tumor diseases, injuries, various kinds of bleeding and methods of their replenishment;
- basic principles of surgical management of patients and basic concepts of surgery, wound healing;
- principles of organizing the provision of medical care to persons who have suffered from bites of various animals.

Be able to:

- to conduct examination and physical examination of a patient with suspected surgical pathology; study of the local status, to determine the type of wound and the phase of the wound process;
- draw up a plan for laboratory and instrumental examination of the patient;

- analyze the results of laboratory blood tests (general and biochemical analysis, blood culture), urine (general analysis), wound contents for the sensitivity of flora to antibiotics;

- to determine the nature of the pathological process underlying the surgical disease;

- to make a preliminary diagnosis with subsequent referral to a surgical hospital for purulent diseases (carbuncle, hydradenitis, abscesses, phlegmon, lymphadenitis, lymphangitis; ulcers, gangrene, necrosis, fistulas, osteomyelitis; sepsis), perform artificial ventilation of the lungs by simple methods and closed heart massage;

- temporary stop of bleeding, bandaging and packing of wounds;

- applying bandages to various parts of the body; transport immobilization with standard tires and improvised means;

- intravenous and intramuscular administration of drugs; determination of blood group and Rh-affiliation;

- transfusion of blood components and blood substitutes;

- diagnose and provide emergency medical care to patients at the prehospital stage and determine the tactics of providing further medical care in emergency

conditions (clinical death, acute blood loss, injuries and fractures, traumatic and anaphylactic shock, electrical trauma, extensive burns and frostbite).

Own:

- general principles of diagnosis, basic clinical techniques, etiology, pathogenesis, classifications of pyoinflammatory processes, tumor diseases, injuries;
- methods for determining group affiliation and blood compatibility;
- the technique of bandaging and immobilization on various parts of the human body.

B.3.5 "Obstetrics and Gynecology"

Total effort: 4 credits (120 hours)

Lectures: 18 hours

Practical lessons: 48 hours

Independent work: 27 hours

Final control: test, exam

The purpose of the discipline. Formation of students' scientific knowledge about the causes and general patterns, specific mechanisms of occurrence, development and outcomes of diseases of the reproductive system and form a methodological and methodological basis for clinical thinking.

Discipline objectives:

- To acquaint and teach the basic methods of examination of pregnant women and gynecological patients;
- To teach the basics of clinical thinking in order to diagnose obstetric and gynecological diseases;
- give an idea of the principles of their treatment;
- to teach the main methods of providing emergency care in obstetrics and gynecology before the hospital stage, as well as the diagnosis of the most important forms of pathology of female genital organs requiring surgical treatment;
- teach the basics of preventive measures aimed at preventing complications of pregnancy and gynecological diseases.

A summary of the discipline. Perinatology. Physiology of pregnancy. Physiology of intrauterine development of the fetus. Physiological childbirth. Abnormalities of labor. Narrow pelvis in modern obstetrics. Anomalies of insertion of the fetal head. Bleeding during pregnancy and childbirth. Hypertensive disorders of pregnancy. Structure and obstetrics in the city and in the countryside. Critical terms. Diagnosis of pregnancy. Dispensary observation of pregnant women. Survey methods in obstetrics. Signs of pregnancy. Methods for determining the term of pregnancy, term of delivery. Physiological childbirth. Assessment of the condition of the fetus during pregnancy and childbirth. Biomechanism of labor with anterior and posterior occipital presentation. Assessment of the condition of newborns at birth. Newborn care. Breech presentation of the fetus. Diagnostics. The course and management of childbirth. Miscarriage and prolonged pregnancy. Abortion. The course and management of preterm labor. Narrow pelvis. General characteristics. Diagnostics. Injuries to the soft tissues of the birth canal. Ruptured uterus. Diagnostics. Treatment. Bleeding in obstetric practice. Hypertensive disorders during pregnancy. Diagnostics, treatment. Symptomatology of gynecological diseases. Research methods in gynecology. Physiology of the formation of the menstrual cycle. Basics of regulation. Menstrual irregularities. Amenorrhea. Dysfunctional uterine bleeding. Inflammatory diseases of the pelvic organs. Purulent-septic complications in gynecology. Sharp abdomen in gynecology. Background and precancerous diseases in women. Tumors of the uterus and appendages. Symptomatology of gynecological diseases. Physiology and regulation of the menstrual cycle. Functional diagnostic tests. Violation of the menstrual cycle. Violation of sexual development. Amenorrhea. Dysfunctional uterine bleeding. Neuroendocrine syndromes. Inflammatory diseases of the genitals of women. Classification. Diagnostics. Treatment Abortion and its complications. Sepsis. Septic shock. Classification. Health education in the fight against abortion.

Expected results of mastering the discipline.

Know:

- organization and provision of health protection for women, mothers and children for epidemiological and hygienic control over the ecological environment and the activities of obstetric and gynecological institutions;
- diagnostics and differential diagnostics of changes in specific functions of the female body;
- physiology and pathology of the gestational cycle and gynecological diseases.
- Carrying out preventive work to eliminate the influence of unfavorable industrial and social and domestic causes affecting the development of obstetric and gynecological pathology;
- anatomical and physiological, age and sex characteristics of a healthy woman, pregnant and gynecological patient;
- modern classifications, clinical symptoms of pregnancy complications, major diseases of the female genital organs, sexually transmitted infections, their diagnosis, treatment, prevention, rehabilitation measures.

Be able to:

- mastering a set of knowledge for examining the state of the reproductive system in women;
- diagnostics, treatment and prevention of various types of pathology of the female genital area;
- Carrying out recreational activities for expectant mothers;
- to provide primary medical care in case of emergency conditions for women of obstetric and gynecological profile;
- apply the knowledge gained in the medical and preventive work of a doctor.
- analysis of the state of health care facilities, their quality indicators; development of measures to improve the hygienic conditions for the provision of care in obstetrics and gynecology;
- use the knowledge gained to conduct a clinical analysis of symptoms of the pathological course of pregnancy and gynecological diseases;
- apply the legislative and other normative legal acts of the Kyrgyz Republic in the field of providing obstetric care and rendering assistance to gynecological patients;

- to complete the list of works and services for the diagnosis of the disease, assessment of the patient's condition and the clinical situation in accordance with the standard of medical care.

Own:

- the initial stage of providing emergency care for emergency conditions in obstetrics and gynecology.
- method of examination in order to identify the pathology of pregnancy and gynecological pathology;
- general and special research methods in obstetrics and gynecology.

B.3.6 "MEDICAL CONTROL AND exercise therapy"

Total effort: 2 credits (60 hours)

Lectures: 10 hours

Practical lessons: 32 hours

Independent work: 18 hours

Final control: offset

The purpose of the discipline. Students gain knowledge on the basics of physiotherapy, balneology and exercise therapy for full complex therapy of patients, as well as rehabilitation and preventive measures in order to restore the functional state of the body and prevent diseases.

Discipline objectives:

- to study the physical characteristics of natural and preformed physiotherapeutic factors, the principles of physiotherapy equipment, the mechanisms of physiological and therapeutic effects of physical factors on the body, taking into account the peculiarities of the course of pathological processes, as well as indications and contraindications for the appointment of physiotherapy;
- master the drawing up of a plan for complex physiotherapy and rehabilitation of patients with various nosological forms;
- acquaintance with the basics of spa therapy;
- resorts of Kyrgyzstan and their features;

- training in the basics of sports medicine, medical supervision. study of the basics of physiotherapy exercises, fixed assets, forms and rules for the use of exercise therapy.

A summary of the discipline. The subject and objectives of physiotherapy. The mechanism of the therapeutic action of physical factors. Galvanization and medicinal electrophoresis.

The mechanism of the therapeutic action of constant, alternating and impulse currents. The mechanism of the therapeutic action of light and water-thermal procedures. The mechanism of the therapeutic action of physical exercises. Spa treatment. Therapeutic use of direct current. Equipment, electrodes, procedures, indications, contraindications. Therapeutic use of alternating current.

Darsonvalization. Inductothermia. Ultrasonotherapy. Equipment, electrodes, procedures, indications, contraindications. Therapeutic use of alternating current. UHF-, EHF-, microwave therapy. Electrodiagnostics. Muscle electrical stimulation. Therapeutic applications of magnetotherapy and ultrasound therapy. Therapeutic use of phototherapy. Infrared and visible rays. Ultraviolet radiation. Biological dose concepts. The mechanism of their action. Hydrotherapy: hydro and balneotherapy. Heat therapy. The concept of heat treatment procedures. Methodology of procedures Means and forms of exercise therapy. Indications and contraindications.

Remedial gymnastics technique. Clinical examination, anthropometry and functional tests in medical supervision. Complex application of physiotherapy methods in the treatment and rehabilitation of patients with various diseases.

Expected learning outcomes.

Know:

- characteristics of the physiotherapeutic factor;
- principles of organization of physical education and medical and physical culture service;
- forms of work of a doctor in the field of medical supervision of those engaged in physical education;
- mechanisms of action of physical training on the body;
- principles of allocation of people involved in physical education to medical groups;
- features of sports injuries and pathological conditions in athletes, preventive measures;
- mechanisms of the therapeutic effect of physical exercises on the patient's body;

- basic means and forms of physiotherapy exercises, characteristic features of the exercise therapy method, especially in pediatrics;
- basic rules for the use of physiotherapy exercises in the complex treatment and rehabilitation of sick children;
- special exercises for various diseases of internal organs; indications and contraindications for exercise therapy.

Be able to:

- conduct a comprehensive medical examination for admission to physical culture and sports;
- conduct a comprehensive assessment of physical development and health status and identify a medical group;
- to carry out medical and pedagogical observations of the state of persons involved in physical culture and sports;
- organize and provide medical care for mass sports events and competitions;
- to define the tasks of physiotherapy exercises at the stationary, polyclinic and sanatorium-resort stages of rehabilitation of patients of various profiles;

- to substantiate the motor regime, the exercise therapy scheme and to draw up a complex of the procedure for therapeutic gymnastics in stationary and outpatient conditions;

- to determine the indications and contraindications for the appointment of physiotherapy exercises, to choose an adequate method and dosage of exercise therapy, taking into account the age and individual characteristics of the patient.

Own:

- principles and methods of assessing the level of physical development and fitness of those who go in for physical culture and sports;

- to conduct a lesson in the procedure of therapeutic gymnastics by various methods, taking into account the severity of the patient's condition, to perform and teach the patient to breathing and special exercises;

- to assess the adequacy of the applied physical activity and the effectiveness of the course of physiotherapy exercises;

- carry out sanitary control over the state of sports facilities and conduct a sanitary and hygienic assessment of the conditions and places for organizing classes and competitions.

B.3.7 "RADIATION DIAGNOSTICS"

Total effort: 2 credits (60 hours)

Lectures: 18 hours

Practical lessons: 24 hours

Independent work: 15 hours

Final control: offset

The purpose of the discipline. To acquaint students with the methods of radiation diagnostics and teach how to draw up an algorithm for radiation examination of a patient.

Discipline objectives:

- to familiarize with the basic medical imaging devices used to study the radiation anatomy of human organs and the rules for working with them;

A summary of the discipline. General questions of radiation diagnostics. Regulation of radiodiagnostic procedures. Radiation diagnostics of injuries and diseases of the skeleton, diseases of the respiratory system, cardiovascular system, digestive system, urinary and reproductive, nervous and endocrine systems. Types of radiation in radiation diagnostics. X-ray method. Computed

tomography (CT). Magnetic resonance imaging (MRI). Ultrasound method (ultrasound). Endoscopy. Interventional radiology Radionuclide diagnostics (RND). Medical thermography.

Expected learning outcomes.

Know:

- qualitative characteristics of ionizing radiation. Physical, chemical and biological mechanisms of interaction of ionizing radiation with the human body;
- ways of assessing the impact of radiation on humans;
- sanitary and hygienic standards in areas with increased background radiation;
- measures to prevent the negative effects of ionizing radiation on humans;
- sanitary and hygienic standards in the departments (office) of radiology, radiation therapy. In the offices of ultrasound, MRI diagnostics;
- device of dosimeters;

- possible consequences of labor in conditions of activity with an increased radiation background;
- possible consequences of working in a developing room and with an X-ray film developing machine;
- positive and negative effects of radiation on the human body, depending on the type of radiation, dose;
- manifestations of the negative effects of radiation on human health;
- main radiation manifestations of the most common diseases of various organs and systems;
- reliable sources of scientific and medical information on radiation hygiene.

Be able to:

- assess environmental factors;
- use the data of technical passports for radiation diagnostic devices (especially X-ray machines, CT scan) in order to assess their condition;

- use means of radiation protection in conditions of work with ionizing radiation;
- to determine the degree of manifestation of the harmful effects of radiation, to diagnose occupational diseases associated with the action of radiation and solutions for developing and fixing X-ray images;
- to determine the manifestations of the harmful effects of ionizing radiation on the body;
- to determine indications and contraindications for methods of radiation diagnostics; effectively work with sources of materials.

Own:

- skills in interpreting the results of hygienic research and assessing the radiation background;
- methods of prevention of radiation effects on the human body;
- skills in interpretation of dosimetry data;
- skills in diagnosing the consequences of work in the X-ray department (office);

- skills to search for analysis of specialized information
- skills in the interpretation of radiation images, detection of radiation symptoms and syndromes;
- skills of search, analysis of specialized information.

B.3.8 "DERMOTOVENEROLOGY"

Total effort: 4 credits (120 hours)

Lectures: 36 hours

Practical lessons: 48 hours

Independent work: 36 hours

Final control: test, exam

The purpose of the discipline. To train students in 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.

Discipline objectives:

- on the basis of lecture material, practical lessons, independent work to form in 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 peculiarities of clinical manifestations, diagnosis and treatment of skin and venereal diseases.

Expected learning outcomes.

Know:

- organizational basis for the work of a dermatovenerologist in serving the population in the conditions of work in groups of family doctors (FGP);

- orders and decrees of the Ministry of Health of the Kyrgyz Republic on prophylactic medical examination and services to the population;
- reporting and accounting documentation used in servicing the population.
- sections of the work of a dermatovenerologist in FGP (therapeutic, preventive, organizational);
- principles of patient follow-up;
- principles of rehabilitation of convalescents;
- diagnosis of emergency conditions and principles of emergency care in an outpatient setting. Be able to:
 - collect and evaluate social, clinical, epidemiological and geneological anamnesis;
 - conduct an anthropometric examination (measurement of body weight, length, circumference of the chest and head) and assess physical development according to tables of standard deviations;
 - to assess the neuropsychic development of the patient;

- conduct a clinical examination;
- measure blood pressure, respiratory rate and heart rate;
- evaluate the results of clinical, biochemical, serological, bacteriological analyzes;
- evaluate the results of instrumental (functional and endoscopic) studies;
- make a conclusion about the patient's health;
- determine the indications for hospitalization;
- to appoint a plan of examination of the patient;
- draw up a treatment plan and write prescriptions;
- carry out differential diagnosis of the underlying disease and related pathology;
- provide emergency care for anaphylactic shock, bleeding, hyperthermia, angioedema, poisoning.

Own:

- skills of examination and physical examination of the patient;
- skills in processing all types of medical documentation.

B.3.9 "NERVOUS DISEASES"

Total effort: 3 credits (90 hours)

Lectures: 18 hours

Practical lessons: 45 hours

Independent work: 27 hours

Final control: offset

The purpose of the discipline. To form the student's professional competence of clinical neurological thinking, the ability and willingness to independently diagnose the most common neurological diseases, including hereditary ones, the ability to professionally provide assistance in urgent conditions of diseases of the

nervous system and know the basics of prevention and epidemiology of these diseases.

Discipline objectives:

- to teach students the correct examination of a neurological patient (adults and children); with the identification of symptoms of the main neurological syndromes of the nervous system;
- familiarization of students with the latest achievements in the field of neurology, clinical genetics;

A summary of the discipline. Introduction to Clinical Neurology. Vascular diseases of the brain. Risk factors. Primary and secondary prevention. Damage to the nervous system associated with occupational hazards. Vibration sickness, decompression sickness. Poisoning with pesticides. Toxic polyneuropathy and encephalomyeloneuropathy. Syphilis of the nervous system. Neuro AIDS. Neurobrucellosis. Inflammatory diseases of the brain (encephalitis, arachnoiditis, meningitis) Emergencies in neurology. Differential diagnosis. Epilepsy. Modern ideas about the classification and principles of treatment. Introduction to Clinical Genetics. Molecular genetic mechanism of multifactorial diseases. Prenatal diagnostics. The principles of prevention, social adaptation and rehabilitation of patients with hereditary pathology. Cerebral circulation disorders (strokes, PNMK, NPNMK, discirculatory encephalopathy) and their prevention Damage to the nervous system in somatic diseases. Damage to the nervous system in occupational diseases (vibration sickness, writer's spasm, decompression sickness, heavy metal poisoning, radiation sickness) Inflammatory diseases of the brain and spinal cord (encephalitis, arachnoiditis, meningitis, myelitis) Hereditary diseases of the nervous system. Medical genetic counseling. Methods for the diagnosis of hereditary diseases. Chromosomal diseases (Down's disease, Klinefelter's,

Turner's syndrome). Primary muscular and secondary spinal muscular dystrophies.

Tumors of the central nervous system and traumatic brain injury. Expected learning outcomes.

Know:

- The main syndromes and symptoms of damage to the nervous system at various levels
- Manifestations of central and peripheral paralysis and paresis
- Peripheral, conductive and central types of sensitivity disorders
- Symptoms of violation of the centers of higher brain functions
- Manifestations of lesions of the roots of the cranial nerves
- Symptoms of damage and irritation of the membranes of the brain

Be able to:

- Examine the functions of the nervous system: voluntary movements, sensitivity, coordination of movements, balance, functions of the cranial nerves.

- To identify clinical syndromes of sensory disorders, symptoms of tension and pain points.

- To identify clinical syndromes of movement disorders: paralysis, paresis, hyperkinesis, convulsions, ataxia in children and adults;

- identify meningeal symptoms;

- To identify symptoms of FMN lesion at various levels of lesion; Conduct vegetative tests to determine the level of CNS damage.

B.3.10 "ONCOLOGY"

Total effort: 2 credits (60 hours)

Lectures: 18 hours

Practical lessons: 24 hours

Independent work: 18 hours

Final control: offset

The purpose of the discipline. mastering knowledge of oncology, as well as the principles of the formation of risk factors, features of the clinical course, methods of early diagnosis of cancer, as well as examination methods and diagnostic methods, treatment options and issues of prevention of malignant neoplasms.

Discipline objectives:

- acquisition by students of knowledge in the field of the theory of carcinogenesis, oncoepidemiology and statistics;
- teaching students the most important methods of diagnostics of neoplasms, allowing to determine the stage of the process;
- teaching students to recognize the symptoms of advanced cancer when examining a patient, when determining the severity of the course of the oncological process;
- teaching students the ability to highlight the leading symptoms and identify risk groups for cancer;
- teaching students the choice of optimal methods for diagnosing cancer during examination and drawing up an algorithm for differential diagnosis;
- training in carrying out the full scope of treatment, rehabilitation and preventive measures among patients with various nosological forms of neoplasms;

- teaching students to provide first aid to cancer patients in case of emergencies;
- teaching students the choice of optimal treatment regimens for patients with the most common localizations of cancer;
- training students in the preparation of medical documentation;
- familiarization of students with the principles of organization and work, oncological treatment-and-prophylactic institutions;
- developing skills in studying scientific literature and official statistical reviews on oncology;
- formation of the student's skills of communication with the team, patients.

A summary of the discipline. Organizational foundations of the anti-cancer service of the Kyrgyz Republic. The concepts of "Morbidity and mortality" from malignant tumors. Carcinogenesis. Principles of early diagnosis. "Oncological alertness". Basic principles of the treatment of malignant tumors. Regularities in the development of malignant neoplasms. Etiology, epidemiology. Primary and secondary prevention of cancer. Deontology in Oncology. Malignant tumors of the head and neck, oral mucosa, tongue, lower lip, skin cancer, melanoma, thyroid cancer. Etiology, epidemiology. Diagnostic principles. Ways and measures of prevention. Skin cancer. Melanoma. Epidemiology, clinic, diagnostics, ways and measures of prevention. Tumors of bones and soft tissues. Epidemiology, clinic, diagnostics, ways and measures of prevention. Mammary

cancer. Precancerous diseases and benign tumors. Breast cancer clinic, diagnostic methods, ways and measures of prevention. Lung cancer. Etiology. Epidemiology. Clinic. Diagnostic methods. Ways and measures of prevention Malignant tumors of the gastrointestinal tract. Epidemiology. Clinic. Diagnostic methods. Ways of prevention Malignant tumors of the female genital organs. Clinic. Diagnostics. Ways and measures of prevention Malignant neoplasms of the urinary system and male genital organs. Etiology, epidemiology, diagnostic methods, ways and measures of prevention. Expected learning outcomes.

Know:

- etiological factors of malignant tumors;
- types and methods of prevention of malignant tumors;
- precancerous diseases;
- the structure of morbidity and mortality of malignant tumors;
- determination of early symptoms of malignant tumors of various localizations;
- patterns of development of malignant neoplasms;

- principles of clinical examination of patients with precancerous diseases and malignant neoplasms;

- clinical and diagnostic minimum examination of patients with suspected malignant tumors;

- basic principles of treatment of malignant neoplasms.

Be able to:

- determine the clinical groups of dispensary observation;

- be able to read radiographs of various organs with typical signs of malignant neoplasms.

Own:

- method of palpation of peripheral lymph nodes;

- method of visual examination of the skin, oral mucosa, lower lip, breast;

- skills of carrying out sanitary and educational work among the population.

B.3.11 "Otorhinolaryngology"

Total effort: 2 credits (60 hours)

Lectures: 18 hours

Practical lessons: 24 hours

Independent work: 18 hours

Final control: offset

The purpose of the discipline. Formation of the student's clinical thinking in the field of ENT diseases by teaching the skills of diagnosis, differential diagnosis, and treatment-and-prophylactic measures.

Discipline objectives:

- to teach students to diagnose the most important clinical syndromes in diseases of the nasal cavity and paranasal sinuses, pharynx, larynx, ear, as well as auditory and vestibular analyzers;

- teach students to recognize diseases of the nasal cavity and paranasal sinuses, pharynx, larynx, ear, as well as auditory and vestibular analyzers when examining a patient, identifying leading clinical syndromes, determining the severity of the pathological process;
- to teach students the choice of optimal methods of laboratory and instrumental examination for diseases of the nasal cavity and paranasal sinuses, pharynx, larynx, ear, as well as auditory and vestibular analyzers;
- to teach students to draw up an algorithm for differential diagnostics;
- to form students' clinical thinking, the ability to independently diagnose the most common diseases of the ENT organs and carry out their treatment and prevention;
- to give students a modern understanding of the etiology, pathogenesis, clinic, diagnosis and treatment of emergency conditions of ENT organs;
- to familiarize with the elements of oncology of the maxillofacial area with a focus on the features of early manifestation and prevention of oncological diseases.

A summary of the discipline. History and development of otorhinolaryngology. Acute purulent inflammation of the middle ear. Mastoiditis. Chronic suppurative inflammation of the middle ear. Diseases of the nose: hematoma and abscess of the nasal septum, nasal furuncle, curvature of the nasal septum, acute and

chronic rhinitis. Diseases of the paranasal sinuses. Diseases of the pharynx: tonsillitis (classification), damage to the tonsils in acute infectious diseases and diseases of the blood system. Chronic tonsillitis. Diseases of the larynx: laryngitis, laryngeal edema, laryngeal diphtheria. Stenosing laryngotracheobronchitis. Non-supportive ear diseases. Neoplasms of ENT organs. Rhinogenic and otogenic intracranial complications. Occupational ear diseases, early detection, prevention and treatment. Occupational lesions of the upper respiratory tract. Principles and methods of clinical examination of otorhinolaryngological patients. Professional selection and expertise in otorhinolaryngology.

Expected learning outcomes.

Know:

- methods of examination of ENT organs⁴
- the main symptoms and syndromes of lesions of the ENT organs;
- etiology, pathogenesis, clinic, diagnosis, principles of treatment and prevention of major diseases of the ENT organs;
- the main signs of tumor lesions of the ENT organs;
- etiology, pathogenesis, clinic, diagnostics in case of emergency conditions of ENT organs;

- medical tactics for urgent otorhinolaryngological conditions.

Be able to:

- to collect anamnesis in patients with pathology of ENT organs;
- to identify the symptoms of lesions of the ENT organs, to establish a topical and preliminary clinical diagnosis, including in oncopathology;
- evaluate the results of basic and additional research methods (audiograms, radiographs of the paranasal sinuses);
- establish a preliminary diagnosis with subsequent referral to an otorhinolaryngologist for the following diseases: adenoids, sinusitis (acute and chronic), adenoid growths, sensorineural hearing loss
(acute and chronic), rhinogenic and otogenic intracranial complications;
- provide emergency assistance to foreign bodies in the nasal cavity, ear, oropharynx and laryngopharynx;
- independently work with educational, scientific and reference literature on otorhinolaryngology;

- conduct a search and turn what you read into a tool for solving professional problems;

- to identify tumors and tumor-like formations of the CLE.

Have the following practical skills:

- conduct external and endoscopic examination of ENT organs (anterior and posterior rhinoscopy, pharyngoscopy, indirect laryngoscopy, otoscopy);

- prescribe treatment for diseases of the ENT organs and perform the following manipulations: instillation of drops into the nose, toilet of the ear with instillation and insufflation of drugs into it, blowing out the ears with a Politzer balloon, performing behind-the-ear novocaine blockade, introducing a nasoesophageal probe;

provide emergency assistance for stenosis of the pharynx, larynx and trachea.

- carry out the maintenance of an outpatient care and medical history of patients with diseases of the ear, throat and nose;

- diagnose and provide emergency care for children and adults with nosebleeds and perform anterior nasal tamponade.

B.3.12 "OPHTHALMOLOGY"

Total effort: 2 credits (60 hours)

Lectures: 18 hours

Practical lessons: 24 hours

Independent work: 18 hours

Final control: offset

The purpose of the discipline. To give students the necessary knowledge in modern ophthalmology, necessary for a doctor, a graduate of the Faculty of Medical and Preventive Business for the provision of medical care and prevention to patients with pathology of the organ of vision.

Discipline objectives:

- to teach students the basic research methods in ophthalmology: determination of visual acuity (visometry), examination of the anterior segment of the eye using lateral illumination and a slit lamp (biomicroscopy), examination of the retina and optic nerve (ophthalmoscopy, retinoscopy);
- to acquaint students with the states of sudden loss of vision;

- to teach students to provide emergency medical care in case of an acute attack of glaucoma;

- to teach students to provide first aid for penetrating wounds and chemical burns of the eyes.

A summary of the discipline. Introduction. Clinical anatomy of the visual analyzer. The functions of the organ of vision, their age dynamics. Clinical refraction. Complicated myopia. Prevention. Presbyopia. Binocular vision. Concomitant and paralytic squint. Pathology of the cornea, lacrimal organs. Orbit phlegmon. Diseases of the eyelids, conjunctiva and sclera. Prevention Pathology of the vascular tract and lens. Glaucoma. Prevention. Eye trauma and occupational pathology of the organ of vision.

Expected learning outcomes.

Know:

- objective and subjective methods for the study of visual functions;
- infectious complications from the organ of vision; ? general diseases of the body, leading to loss of vision; ? methods of research of the anterior part of the eye of the organ of vision;
- the consequences of trauma to the organ of vision and chemical burns.

Be able to:

- determine the basic visual functions;
- to prevent complications from the organ of vision, using preventive measures;
- distinguish between the concepts of curable and incurable blindness;
- to identify pathological changes in the anterior part of the eye;
- provide first aid for penetrating wounds of the eyeball and chemical burns.

Own a definition method:

- visual acuity according to tables;
- absolute blindness;
- visual field by the control method.
- the skills of examining the anterior part of the eye with side lighting;

- the method of instilling eye drops and washing the conjunctival cavity.

B.3.13 "UROLOGY"

Total effort: 2 credits (60 hours)

Lectures: 18 hours

Practical lessons: 18 hours

Independent work: 24 hours

Final control: offset

The purpose of the discipline. Formation of competencies for the management of patients with urological pathology.

Discipline objectives:

- to study the etiopathogenesis of the main diseases of the genitourinary system;
- study the clinical manifestations of diseases of the genitourinary system;

- to develop practical skills in the selection of laboratory and instrumental research methods for the diagnosis of diseases of the genitourinary organs;
- to teach the skills of differential diagnosis of diseases of the genitourinary system;
- teach the student the correct formulation of the clinical diagnosis, taking into account possible complications;
- to teach methods of providing emergency care in the main emergency conditions, the principles of treatment and prevention of diseases of the genitourinary organs.

A summary of the discipline. Symptoms, laboratory and instrumental methods for the study of urological patients. Anomalies in the development of MPS. Non-specific inflammatory diseases of the upper urinary tract. Non-specific inflammatory diseases of the lower urinary tract and genitals. Urolithiasis disease. BPH is benign prostatic hyperplasia. Injuries to the genitourinary system. Male infertility. Erectile dysfunction syndrome. Laboratory, instrumental, X-ray and other methods of examination of urological patients. Tumors of the kidneys, ureter and bladder.

Tumors of the reproductive system in men.

Expected learning outcomes.

Know:

- modern ideas about the prevalence of diseases of the urinary organs among the population of the Kyrgyz Republic;
- etiology, pathogenesis, morphology, classification, clinical picture, laboratory and instrumental diagnostics, principles of therapy, indications for surgical treatment (if necessary), primary and secondary prevention, rehabilitation and prognosis of major diseases of the urinary organs of adults and children;
- quantitative and qualitative criteria of the main laboratory and functional research methods in health and disease⁴
- peculiarities of diagnosis and treatment, taking into account age, complications and comorbid conditions.

Be able to:

on the basis of complaints, anamnesis, physical examination, identify the patient with the disease studied on the topic; draw up a plan for laboratory and instrumental examination of adults to confirm the alleged diagnosis and interpret the results obtained, including the results of morphological studies;

- formulate a detailed clinical diagnosis, guided by the modern classification of diseases;

- to carry out a detailed diagnosis of a particular patient, namely: etiology, mechanism of development of the disease, complications;
- to justify the clinical diagnosis in a particular patient with an assessment of the examination results and identify the diagnostic criteria.
- to determine the indices of activity and severity of urological diseases.
- determine the indications for hospitalization of the patient in accordance with the condition (nosology and severity);
- prescribe an adequate individual therapy, taking into account the variants and characteristics of the course of diseases, their complications and age;
- determine the prognosis of the disease in a particular patient;
- identify secondary prevention measures;
- Advise the patient on lifestyle-related issues (nutrition, physical activity, smoking, alcohol consumption)
- provide emergency care for renal colic;

- to draw up a medical history with a substantiation of the clinical diagnosis.

Have the following practical skills:

- focused collection of anamnesis in patients with urological pathology;
- examination and physical examination of a patient with a disease of the urological system;
- interpretation of the results of UAC, OAM, Zimnitsky's test, radiography, magnetic resonance imaging and computed tomography of the MPS organs.

B.3.14 "TRAUMATOLOGY AND ORTHOPEDICS"

Total effort: 2 credits (60 hours)

Lectures: 16 hours

Practical lessons: 26 hours

Independent work: 18 hours

Final control: offset

The purpose of the discipline. Formation of competencies for early diagnosis, emergency care for patients with damage to the musculoskeletal system and a complex of therapeutic and preventive measures at the prehospital, hospital and rehabilitation stages.

Discipline objectives:

- mastering modern theoretical and practical sections of traumatology and orthopedics, taking into account childhood and oncology;
- elucidation of the mechanism and development of diagnostic methods, as well as prevention of various traumatic injuries and orthopedic pathology;

study of treatment methods and principles of rehabilitation measures traumatological and orthopedic patients;

practicing practical skills in emergency conditions in traumatology; study of the activities and significance of trauma centers.

A summary of the discipline. Injury. Definition and classification. Organization of trauma care. Methods of examination of traumatological and orthopedic patients. Injuries to the free upper limb and shoulder girdle. Fractures of the pelvic bones. Classification. Clinic. Treatment and rehabilitation. Injuries to the hip and hip joint. Traumatic dislocation of the hip. Clinic, diagnostics, treatment. Injuries to the knee, lower leg, ankle and foot. Clinic, diagnostics, treatment.

Injuries to the chest and spine. Clinic, diagnostics, treatment. Congenital diseases of the musculoskeletal system. Congenital dislocation of the hip. Congenital clubfoot. Degenerative diseases of the joints and the peculiarity of the surgical treatment of the treatment. Diagnostics. Symptoms Osteochondropathy. Etiology. Clinic. Treatment. Features of traumatic injuries in children. Childhood injuries. Research methods. Features of fractures of the bones of the upper and lower extremities in children. Injury of the chest and chest organs in children. Traumatic brain injury in children. Traumatic shock in children. Damage to soft tissues in children. Wounds, wound infection. Features of birth injuries.

Expected results of mastering the discipline.

Know:

- features of the functioning of the musculoskeletal system in traumatic injuries;
- principles of diagnosis, treatment and prevention of trauma patients in adults and children;
- principles of asepsis, antiseptics in case of damage to the musculoskeletal system;
- mechanism of development of injuries of the musculoskeletal system, their methods of prevention;

- pathognomonic symptoms of damage to the musculoskeletal system;
- tactics and principles of treatment in traumatology and orthopedics of adults and children;
- clinically and / or instrumental mechanism of damage to the musculoskeletal system;
- anatomical and functional state of the musculoskeletal system in case of injuries, their consequences and orthopedic diseases, taking into account childhood;
- preventive measures for post-immobilization and postoperative patients for the rehabilitation of the musculoskeletal system.

Be able to:

- to assess the condition of patients with traumatological and orthopedic pathology;
- interpret the data of clinical and laboratory, physical, instrumental examination methods for further adequate treatment of trauma patients;

- to apply the methods of asepsis and antiseptics during the PHO of the wound, at the scene of the accident to patients with injuries of the musculoskeletal system;

carry out the main diagnostic measures to identify urgent and life-threatening conditions of trauma patients;

to evaluate the indications and contraindications for surgical intervention for injuries of the musculoskeletal system;

- to carry out lighting work to prevent disability due to traumatic or orthopedic pathology among adults and children.

Own:

- methods of physical and instrumental examination of a trauma patient;

- the technique of caring for trauma patients: adults and children;

- the technique of sequential diagnostic measures to identify signs of damage to the musculoskeletal system;

- the technique of applying immobilizing elements to the damaged segment or the whole human body for transportation and treatment of injuries of the musculoskeletal system;
- the technique of transport and medical immobilization in case of injuries to the bones of the skeleton: injuries of the limbs, pelvis and spine and the provision of first aid;
- the technique of temporarily stopping bleeding in case of damage to the musculoskeletal system.

B.3.15 "FOUNDATIONS OF PSYCHIATRY AND NARCOLOGY"

Total effort: 3 credits (90 hours)

Lectures: 21 hours

Practical lessons: 42 hours

Independent work: 27 hours

Final control: offset

The purpose of the discipline. recognition of the main mental disorders and the skills of providing the necessary medical psychiatric care Objectives of the discipline:

- teaching skills in diagnosing major mental and behavioral disorders;
- formation of a holistic psychosomatic approach in considering the mechanisms of formation and development of somatic and mental disorders;
- mastering basic communication skills when interacting with patients with various mental disorders and their relatives;
- training in the provision of primary medical care for emergencies in psychiatry.

A summary of the discipline. The subject and objectives of psychiatry. General ideas about the mental norm and its boundaries. The causes of mental disorders. Psychiatry in modern medicine. Issues of stigmatization and destigmatization in psychiatry. Methods and features of examination of patients with mental disorders. General psychopathology: perception disorders (senestopathies, illusions and hallucinations), thinking disorders (formal thinking disorders, delusional and obsessive ideas). Cognitive disorders. Disturbances of attention (exhaustion, distraction). Memory disorders, types amnesia. Intellectual Disorders: Congenital and Acquired. Disorders of the emotional-volitional, motor sphere (aggressive behavior, types of excitement). Disorders of consciousness: confusion, delirium. Types of dementia, diagnostic issues. Prevention issues. Features of interaction with a patient suffering from dementia. Epilepsy. Mental disorders in epilepsy. Schizophrenia. General diagnostic criteria for schizophrenia. Forms of schizophrenia. Affective mood disorders. Diagnosis of

depressive disorders. Masked variants of depression. Anxiety-phobic disorders. Other anxiety disorders. Stress related disorders: Acute stress response, PTSD. Adjustment disorders. Dissociative conversion disorders, somatoform disorders. Eating disorders. Specific personality disorders. Disorders of habits and impulses. Mental retardation. Mental and behavioral disorders due to the use of psychoactive substances: alcohol, opioids, cannabinoids, tobacco. Biological therapy for mental disorders. Classification of psychotropic drugs. Indications for use.

Expected learning outcomes.

Know:

- the main provisions of the legislation of the Kyrgyz Republic on the protection of the mental health of the population.
- diagnostics and differential diagnostics of mental disorders, their treatment and their management in outpatient settings.
- diagnosis of emergency conditions in psychiatry and the principles of providing emergency care in an outpatient setting.

Be able to:

- identify the main symptoms and syndromes of mental disorders;

- Formulate a detailed clinical diagnosis, guided by ICD-10;
- to justify the clinical diagnosis in a particular patient with an assessment of the examination results and identify the diagnostic criteria;
- determine the indications for hospitalization of the patient in accordance with the condition (mental disorder and the severity of his condition);
- carry out differential diagnosis of the underlying disease and related pathology;
- prescribe an adequate individual therapy, taking into account the variants and characteristics of the course of diseases, their complications and age;
- determine the prognosis of the disease in a particular patient;
- identify secondary prevention measures;
- to draw up a medical history with a substantiation of the clinical diagnosis.

Own:

- skills of interaction with a patient suffering from a mental disorder and his relatives;

- skills in processing all types of medical documentation;
- skills of informing the patient and his relatives about the existing mental disorder;
- skills in first aid in case of emergency conditions in psychiatry:

with convulsions, psychomotor agitation, suicidal behavior.

B.3.16 "FOUNDATIONS OF FORENSIC MEDICINE"

Total effort: 2 credits (60 hours)

Lectures: 18 hours

Practical lessons: 24 hours

Independent work: 18 hours

The purpose of the discipline. Teaching students 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 and in the conduct of forensic medical examination.

Discipline objectives:

- teaching students the skills and ability to examine and describe a corpse at the place of its discovery, ascertain clinical and biological death;
- teaching students to conduct forensic medical examination of living persons, forensic medical examination of corpses;
- teaching students the peculiarities of research of injuries caused by hard blunt and sharp objects, firearms;
- familiarization and study by students of the basic documents regulating the protection of the health of citizens and the criminal liability of health workers for professional and professional offenses.

A summary of the discipline. Introduction. Organizational and procedural foundations of forensic medicine. Objects, types of forensic medical examination. The subject of forensic medicine and a brief history of its development. Organization of forensic medical examination in the Kyrgyz Republic. Forensic thanatology. Dying and death. Cadaveric changes. Procedural and methodological foundations for the inspection of the scene. Functions of an expert doctor. The doctrine of bodily injury in forensic medicine. Algorithm for describing damage. Methods of evidence of torture. Forensic examination of a

car injury and falling from a height. Forensic examination of gunshot injuries. Shotgun forensic examination. Ricochet. Forensic examination of an explosive injury. Mechanical asphyxia. Damage from the action of high and low temperatures and other physical factors. Positional asphyxia. SME damage with a stun gun. Forensic examination of the degree of harm to health. Basic principles for determining the degree of harm to health. The main criteria for the degree of harm to health Forensic medical examination of offenses of medical workers in their professional activities.

Expected learning outcomes Know:

- criminal procedural legislation and regulations governing the appointment, conduct, documentation of examinations, the rights and obligations of forensic experts, provisions on the actions of a specialist in the field of forensic medicine in the conduct of initial investigative actions;
- general questions of forensic medical traumatology, examination of damages of mechanical origin and from other types of external influences; poisoning, mechanical asphyxia;
- UN Convention on Human Rights, Declaration of Human Rights, main provisions of the Istanbul Protocol;
- have an idea of laboratory methods of forensic medical examination of objects of biological origin, examination of blood, sperm, hair, examination of identification;

- criminal legislation in the field of responsibility for crimes against the life and health of citizens;

- responsibility for professional and professional offenses of medical workers.

- physical methods of diagnosing, describing, interviewing citizens in cases of suspicion of torture and inhuman, cruel treatment of citizens by the official authorities in accordance with the Istanbul Protocol.

Be able to:

- participating in the examination of the corpse at the place of its discovery, to establish the fact and prescription of death, to help the investigator in drawing up a protocol of external examination of the corpse, (determining the posture of the corpse, describing the clothes, establishing the sex and roughly (in appearance) age of cadaveric changes, injuries);

- describe damage of mechanical origin in accordance with the schemes accepted in forensic medicine;

- assist the investigator in the detection, fixation, seizure and packaging of material evidence of biological origin, in the formulation of questions that can be posed to the expert examining the material evidence;

Own:

- possess the technique of forensic examination of a corpse, removal of organs or parts of them for laboratory research (forensic chemical, forensic biological, histological, medico-forensic), fill out the directions for these studies and draw up the research part of the Conclusion (Act) of the forensic examination of the corpse;

- fill out a medical death certificate;

- skills of forensic medical examination of victims, suspects and other persons, describe the detected damage;

- Skills in describing injuries, sketching, photographing, and forensic interpretation.

B.3.17 "EVIDENCE MEDICINE"

Total effort: 1.33 credits (40 hours)

Lectures: 14 hours

Practical lessons: 14 hours

Independent work: 12 hours

The purpose of the discipline. Teach students an evidence-based approach to choosing effective and safe interventions that have strong evidence of their usefulness.

Discipline objectives:

- outline the basic principles of EBM and clinical epidemiology;
- formation of the course participants' ideas about the meaning and role of evidence-based medicine and clinical epidemiology, as fundamental sciences in the provision of quality medical care;
- to form the skills and abilities necessary to conduct a search for medical information and its critical assessment to make an evidence-based decision;
- to form an understanding of the importance of clinical epidemiology, biomedical statistics for the interpretation of the results of clinical trials;
- to form an understanding of the importance of clinical guidelines / protocols, standards and quality indicators for assessing the practical use of EBM principles in practical health care.

A summary of the discipline. History of the emergence of DM. Basic concepts, principles and possibilities of EBM. Types of clinical trial designs. Basic provisions and principles of clinical epidemiology. Epidemiological basis of evidence:

assessment of reliability and confidence interval. Systematic and random errors. The main stages in the practice of EBM. Formulation of the clinical question. Types of clinical questions. Correlation between the type of clinical question and the main types of clinical trial design. Medical applications of computer networks. Telemedicine. Universal search engines. Specialized portals. List of useful medical resources. The quality of medical publications and their critical assessment. General algorithm for evaluating the article.

Expected learning outcomes.

Know:

- medical sources of information, their types, inclusion and exclusion criteria; methods of critical appraisal of medical publications;
- grading of levels of evidence, their interpretation and use;
- the main components of a correctly formulated clinical question - PICO. Be able to:
- evaluate the quality of medical publications presented in medical sources;
- use educational, scientific, normative and reference literature; formulate a clinical question; analyze research results;

- search for medical information and determine the design of medical research.

Own:

- methodology for collecting social and hygienic information;
- reading and translation of foreign (English) literature;
- work on a personal computer; conducting a search on the Internet; apply the components of the clinical question in the collection of health information.

D. 0. ADDITIONAL TYPES OF PREPARATION E.1. "PHYSICAL EDUCATION"

Total labor intensity: 13.3 credits

Practical lessons: 200 hours

Independent work: 200 hours

Final control: test

The purpose of the discipline. The formation of 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 strengthen their health and health their loved ones, family and work collective for a quality life and effective professional activity.

Discipline objectives:

- ensuring 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, attitudes 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 set 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.

A summary of the discipline. 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 classes an individual sport or a system of physical exercises Expected results of mastering the discipline.

Know:

- social role of physical culture in personality development and 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;
- main types of hardening procedures;
- characteristics of body types;
- program of 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:

- understand the issues of physical culture used for prevention and treatment;
- 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 means to restore physical performance;
- apply methods for assessing the physical development of a person;
- apply methods for assessing the human respiratory system;
- use massage techniques for prophylactic and therapeutic purposes.

Own:

- skills in using sources of information on healthy lifestyles, electronic databases, Internet resources;
- the skills of carrying out activities that increase a person's commitment to a healthy lifestyle; skills of filling out a diary of self-control when doing health related physical culture and sports;
- skills in developing recommendations for the population on the use of health-improving methods;
- methods of physical self-improvement and self-education.

D.2.0. MILITARY MEDICAL TRAINING

E.2.2. "ORGANIZATION OF TACTICS OF THE MEDICAL SERVICE"

Total labor intensity 4 credits (120 hours)

Lectures: 24 hours

Practical lessons: 36 hours

Independent work: 60 hours

Final control: offset

The purpose of the discipline. Training of students as medical officers who know the influence of the conditions of training and combat activities and military life on the health of personnel in order to develop and implement effective therapeutic and prophylactic (medical and evacuation, sanitary and hygienic and

anti-epidemic) and other special events Objectives of the discipline:

- training of medical officers of the Armed Forces of the Kyrgyz Republic, possessing knowledge of the basics of military medicine;
- providing medical assistance to the wounded and injured in combat conditions;
- provision of medical assistance in the event of a massive admission of wounded, when the enemy uses weapons of mass destruction.

A summary of the discipline. Organization of medical and evacuation measures. Fundamentals of the organization of sanitary-hygienic and anti-epidemic measures in the troops. The basics of organizing the provision of medical equipment to a unit and a unit. Sanitary losses of troops. Medical intelligence. Fundamentals of medical service management. Medical service brigade. Division Medical Service. Medical units and institutions of associations.

Expected results of mastering the discipline.

Know:

- organizational and staffing structure of military medical institutions;

- types of infections, methods of their spread;
- methods of localization and elimination of epidemic foci.

Be able to:

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

Own:

- triage rules;
- methods of providing medical care to the wounded and injured;

- skills of localization and elimination of epidemic foci;
- carrying out preventive vaccinations, emergency and specific prophylaxis.

E.2.3. "MILITARY TOXICOLOGY AND MEDICAL PROTECTION"

Total effort: 3.3 credits (99 hours)

Lectures: 18 hours

Practical lessons: 32 hours

Independent work: 49 hours

Final control: offset

The purpose of the discipline. The purpose of military toxicology as a branch of military medicine is to improve the system of scientifically grounded organizational and medical measures, means and methods to prevent or weaken the effect of highly toxic substances and military-professional poisons, as well as to preserve the life, health and professional performance of the affected military personnel and civilians. personnel Objectives of the discipline:

- study of the toxicity of substances, assessment of the risk of their impact on the health of military personnel and civilian personnel of the Armed Forces of the Kyrgyz Republic;
- identification of the peculiarities of toxicokinetics and toxicodynamics of highly toxic substances and military-professional poisons;
- study of the pathogenesis and clinical manifestations of toxic processes;
- assessment of the functional state of persons exposed to excessive doses of toxic highly toxic substances and military professional poisons • introduction into practice of medicinal and other means of prevention and treatment of chemical injuries, means and methods of maintaining combat and working capacity, preventing and minimizing the harmful effects of chemical exposure;
- introduction of regulatory documents aimed at ensuring the chemical safety of military personnel and civilian personnel in the event of a threat of emergencies, both in peacetime and in wartime.

A summary of the discipline. General characteristics of chemical weapons. Medical and tactical characteristics of foci of chemical damage. Poisonous and highly toxic substances of neurotoxic action. Poisonous and highly toxic substances of cytotoxic action. Poisonous and highly toxic substances of psychotomimetic action. Poisonous and highly toxic irritating substances. Poisonous and highly toxic substances of general toxic action. Poisonous and highly toxic substances of pulmonotoxic action. Highly toxic substances used for technical purposes. Field oxygen equipment and artificial lung ventilation devices. Medical and tactical characteristics of the damaging factors of nuclear weapons.

Medical protective equipment used in radiation injuries and in the centers of chemical damage. Technical means of individual and collective protection. Means and methods of radiation reconnaissance. Means and methods of chemical exploration. Means and methods of special processing. Basics for assessing the chemical environment.

Expected results of mastering the discipline.

Know:

- pathogenesis, clinical picture, prevention of lesions with chemical warfare agents and potent toxic substances;
- the procedure for the use of medical forces and equipment intended to provide medical assistance to military personnel from toxic and highly toxic substances.

Be able to:

- to organize the provision of first medical, first-aid, first medical medical-sanitary aid to servicemen in case of injury by poisonous and highly toxic substances;
- organize the conduct of sanitary and hygienic and anti-epidemic measures in the lesions.

Own:

- methods of assessing the medical and tactical situation in the lesions;
- methods of organizing and conducting radiation and chemical reconnaissance and control.

E.2.3. "EXTREME MEDICINE"

Total effort: 3.3 credits (99 hours)

Lectures: 18 hours

Practical lessons: 32 hours

Independent work: 49 hours

Final control: test, comprehensive exam in VMP

The purpose of the discipline. Formation of systemic knowledge among students, which are necessary for organizing the work of the medical service of disasters and the medical service of civil defense of health care during the elimination of the consequences of emergency situations of peace and wartime and carrying out medical and evacuation measures, the formation of the ability to apply theoretical knowledge when providing first aid to the injured population and rescuers in emergency situations peacetime and wartime, 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 objectives:

- training of medical personnel, creation of governing bodies, medical units, institutions, keeping them in constant readiness, material and technical support;
- preserving the health of the population, timely and effective provision of all types of medical care in order to save the lives of those affected, reducing disability and unjustified irrecoverable losses, reducing the neuropsychiatric and emotional impact of disasters on the population, ensuring sanitary well-being in the emergency area; conducting a forensic examination, etc. .;
- preserving the health of personnel of medical formations, planning the development of forces and means of health care and maintaining them in constant readiness to work in disaster zones, to eliminate the consequences of emergencies.

A summary of the discipline. Civil protection in emergency situations. The role and tasks of civil protection in modern conditions. Protection of the population in emergency situations. Assessment of the situation in emergency situations. Organization of anti-epidemic measures in the focus of bacteriological (biological) damage. Objectives and organizational structure of MSGS. Fundamentals of medical and evacuation support of the affected population in emergency situations. Medical and tactical characteristics of lesions arising in emergency situations of a technogenic nature. Medical and tactical characteristics of lesions arising in natural emergencies. Supply of formations and institutions of MSGS

with medical equipment. Measures to improve the stability of the functioning of health care facilities in emergency situations. Organization of medical measures in case of a threat of enemy attack. Organization of first medical, pre-medical and first medical aid in lesions. Protection of the population and territory in emergency situations caused by armed conflicts and terrorist acts. Medical and psychological protection of the population and rescuers in emergency situations.

Expected results of mastering the discipline.

Know:

- the basics of organizing medical support for the population during the elimination of the consequences of accidents, disasters and natural disasters;
- basic concepts of the discipline of disaster medicine, natural and man-made emergencies, natural disasters;
- preparation of healthcare facilities for work in emergencies in peacetime and wartime.

Be able to:

- to fulfill their functional duties when working as part of special health units;

- assess and analyze the situation, participate in the organization and provision of medical and preventive and sanitary and anti-epidemic assistance in the event of emergencies and natural disasters.

Own:

- the algorithm of work of the main medical measures in the provision of first medical aid in urgent and life-threatening conditions;
- skills in determining the circumstances arising in emergencies and natural disasters;
- skills in providing first aid to victims in emergency situations, including medical evacuation of sick and injured persons.