

ӨНТҮС ЛІК ҚАЗАҚСТАН
MEDISINA
AKADEMIASY
«Оңтүстік Қазақстан медицина академиясы» АҚ



SOUTH KAZAKHSTAN
MEDICAL
ACADEMY
АО «Южно-Казakhstanская медицинская академия»



EDUCATIONAL PROGRAM

Educational program group: BM 089 Medical and preventive care

Educational program code: 6B10118

Name of the educational program: Medical and preventive care

The level of the educational program: Bachelor and profile magistracy

Shymkent, 2023

The educational program was developed by the members of the CPC «Medical and preventive care»

Agreed with employers:

Head of the Department of Sanitary and Epidemiological Control
Shymkent city of the Sanitary and Epidemiological Control
Committee of the Ministry of Health of the Republic of Kazakhstan



Tulebaev A.K.

Director of the branch of the Republican State Enterprise on the
right of economic management «National Center of Expertise»
in the Turkestan region of the Committee of Sanitary and
Epidemiological Control of the Ministry of Health of the Republic of Kazakhstan



Abdrazakov A.U.

Chairman of the EPC «Pediatrics»

Eskerova S.U.

Protocol № 10 from «23» 05 2023year

Approved by the Methodological Council

Vice-rector for Educational and methodical and student Well-being work

Anartaeva M.U.

Protocol № 12 from «26» 06 2023year

Approved by the Academic Council

Protocol № 12 from «24» 06 2023year

Passport of the educational program

1. The mission of the educational program is to train competitive personnel in accordance with modern requirements of education, science and healthcare systems.

2. The purpose of the educational program is to train qualified specialists with professional, research, managerial and communication skills to carry out independent activities in the field of ensuring the sanitary and epidemiological well-being of the population.

3. Justification of the educational program:

-for students: obtaining continuous integrated medical education, including basic training -bachelor's and master's degrees. At the end of 5 years of study, a graduate will be awarded an academic master's degree and a diploma with a doctor's qualification will be issued.

- The need in the labor market: provision of personnel with qualities such as high skill and professional perseverance, availability of the necessary practical and theoretical knowledge, competence, observation and insight, developed clinical thinking and passion.

4. The professional standard on the basis of which the educational program was developed:

Regulatory documents for the development of an educational program.

- Order of the Minister of Science and Higher Education of the Republic of Kazakhstan "On approval of state mandatory standards of higher and postgraduate education" dated 20.07.2022 № 2 with amendments and additions dated February 20, 2023 № 66;
- Order of the Minister of Health of the Republic of Kazakhstan «On approval of state mandatory standards for levels of education in the field of healthcare» dated 04.07.2022 No. Ministry of Health of the Republic of Kazakhstan-63;
- Order of the Minister of Health of the Republic of Kazakhstan «On approval of standard training programs in medical and pharmaceutical specialties» dated 09.01.2023 № 4;
- Order of the Vice-Minister of Health of the Republic of Kazakhstan «On approval of the phased implementation of continuous integrated medical education» dated 08.08.2022 № 661;
- Code of the Republic of Kazakhstan dated 07.07.2020 № 360 - VI «On the health of the people and the healthcare system» (with amendments and additions as of 04.07.2022);
- The Law of the Republic of Kazakhstan «On Education» dated 27.07.2007No.319-III,with amendments and additions dated04.07.2022.
- Order of the Minister of Education and Science of the Republic of Kazakhstan dated16.10.2013 No. 420 «On approval of Standard Rules of activity of organizations of higher and (or) postgraduate education» with amendments and additions dated 29.12.2021.;
- Order of the Minister of Education and Science of the Republic of Kazakhstan dated 20.04.2011No.152 «On approval of the Rules for the organization of the educational process on credit technology of education» (with amendments and additions as of 06.05.2021)
- Order of the Minister of Health of the Republic of Kazakhstan dated 30.01.2008No.27«On approval of the list of programs of continuous integrated education in clinical specialties» (with amendments and additions as of 05/14/2021)
- «On approval of Standard Rules for the activities of educational organizations of appropriate types and types», Order of the Minister of Education and Science of the Republic of Kazakhstan dated 30.10.2018 № 595 with amendments and additions dated 29.12.2021.
- «Guidelines for the development of educational programs of higher and post graduate education» Order of the Director of the Center for the

Bologna Process AM No. 45 o/d of the Ministry of Education and Science of the Republic of Kazakhstan dated June 30, 2021.

- «Regulations on the procedure and procedures for the development of educational programs» of JSC «SKMA» dated 29.05.2019.
- Internal regulatory documents of JSC«SKMA».

5. Field of professional activity: the field of professional activity of graduates who have mastered the educational program 6B10118 «Medical and preventive care» includes the protection of public health by ensuring the sanitary and epidemiological well-being of the population. Healthcare, education and science.

6. Objects of professional activity:

- environment,
 - medical organizations;
 - preschool institutions, educational organizations;
 - industrial enterprises;
 - agricultural facilities;
 - public service facilities, etc.
- organizations for the implementation of professional activities:
- institutions of sanitary and epidemiological control;
 - management of departments of sanitary and epidemiological control of the Ministry of Health;
 - department of SEC of the SECC ;
 - department of sanitary and epidemiological control;
 - centers of expertise of the SECC;
 - anti-plague stations;
 - disinfection centers;
 - sanitary quarantine and sanitary control points;
 - health care organizations;
 - educational organizations;
 - organization of science;
 - population;
 - asset of tools and technologies aimed at ensuring the sanitary and epidemiological well-being of the population.

Types of professional activity:

- sanitary and hygienic;
- anti epidemic;
- control and regulatory;
- organizational and managerial;
- information and analytical;
- sanitary and educational;
- scientific research;
- pedagogical.

№	Characteristics of the EP	Findings
1.	Registration number	6B10100109
2.	Code and classification of the field Of education	6B10Healthcare
3.	Code and classification of training areas	6B101 Healthcare
4.	Group of educational programs	BM089Medicalandpreventive care
5.	Name of the educational program	6B10118«Medicalandpreventivecare»
6.	Types of EP	New EP
7.	ISCED level	
8.	NQF level	6-7
9.	SQF level	6-7
10.	Distinctive features of the EP	Continuous integrated educational program
	University partner(JEP)	-
	University partner(DDEP)	-
11.	List of competencies	Learning outcomes
	CC1. Assessment and analysis	<p>A. Identify problems that threaten the sanitary and epidemiological well-being of the population:</p> <ol style="list-style-type: none"> 1. Use critical thinking to identify a public health problem/threat; 2. To assess the scale of the problem and determine further necessary actions, their algorithm based on evidence-based data and the specifics of the current situation; 3. Collaborate with colleagues inside and outside the organization to assess or identify a problem. <p>B. Conduct surveillance activities:</p> <ol style="list-style-type: none"> 1. Develop surveillance measures for specific cases, risks and threats to public health; 2. Determine the need for the necessary data for surveillance; 3. Be able to draw conclusions based on the data obtained and the work done; <p>Evaluate the effectiveness of surveillance (or individual surveillance activities);</p> <p>C. Examine acute and chronic conditions or other adverse outcomes in the population:</p> <ol style="list-style-type: none"> 1. Conduct a population health assessment; 2. Prioritize solutions to existing threats; 3. Select and apply adequate methods of studying and investigating the state of public health; 4. Generate hypotheses; 5. Assist in the design of the investigation (e.g., disease investigation, research or screening program). <p>D. Apply the principles of good ethical practice relating to the research, collection, dissemination and use of data:</p> <ol style="list-style-type: none"> 1. Adhere to ethical standards and principles in planning, conducting, collecting, disseminating and using data; 2. Apply relevant legislation in the collection and management of data; 3. Apply ethical standards in public health research;

		<p>4. Interact with the local, national Bioethics Commission;</p> <p>5. Understand and be able to resolve conflicts of interest;</p> <p>6. Apply regulatory legal acts concerning the inviolability of private life, its confidentiality, the right to health, and the responsibility of the parties.</p> <p>E. Managing data obtained from surveillance, investigations, or other sources:</p> <ol style="list-style-type: none"> 1. Develop database requirements; 2. Work with databases. <p>F. Analysis of epidemiological investigation data:</p> <ol style="list-style-type: none"> 1. Create a data analysis plan; 2. Analyze the data. <p>G. Summarize the results of the analysis and draw conclusions:</p> <ol style="list-style-type: none"> 1. Apply knowledge of epidemiological principles and methods to make recommendations; 2. Determine the need for a special analysis, including a survival analysis, an analysis of economic efficiency/economic benefit/economic utility; 3. Draw conclusions about the work done, including being able to highlight key points. <p>H. Recommend specific evidence-based interventions and control measures based on epidemiologic data and setting:</p> <ol style="list-style-type: none"> 1. Take into account the cultural/social/political context for the recommendations or interventions being developed; 2. Utilize scientific evidence when recommending actions or interventions.
	<p>CC2. The scientific and practical basis of public health</p>	<p>A. To use modern knowledge about the causes of diseases for the practice and management of the epidemic process:</p> <ol style="list-style-type: none"> 1. Relate the major etiologic processes of human disease to subject areas of interest (e.g., infectious diseases, chronic diseases); 2. Apply knowledge of human and environmental biology and behavioral sciences and principles to identify potential disease mechanisms; 3. Apply principles of the host/agent/environment model to disease causation, prevention, and control; 4. Describe the role and influence of social and behavioral determinants (including societal, political, social, familial, and individual) of health and health maintenance; preservation; 5. Incorporate etiologic principles into disease prevention and control strategies. <p>B. Utilize laboratory methods and resources for epidemiologic interventions:</p> <ol style="list-style-type: none"> 1. Interpret laboratory data, taking into account factors affecting the results of screening and diagnostic tests; 2. Identify the roles and capabilities of laboratories as they relate to public health and epidemiologic well-being as they are used in epidemiologic research; 3. Plan and coordinate laboratory and epidemiologic activities including sampling, communication; 4. Make necessary arrangements for sample collection, storage and transportation. <p>C. Evaluate indicators of the sanitary and epidemiologic well-being of environmental and</p>

		<p>occupational facilities and professional activities:</p> <ol style="list-style-type: none"> 1. Assess the hygiene and epidemiological condition of the environment, workplaces, air, soil, water and foodstuffs; 2. Assess the physical development of children and adolescents, develop and implement health-improving measures; 3. To carry out dosimetric control and the main set of measures to organize radiation safety of the population. <p>D. Apply information technologies, including collection, processing and analysis of data for epidemiological practice:</p> <ol style="list-style-type: none"> 1. Use software tools that support searching, data collection, input, abstraction, management, analysis, planning, visualization and reporting; 2. Apply procedures and technical tools(security) to ensure the integrity and protection of confidential information in electronic systems; 3. Compile data from a variety of sources in creating new information for public health decision making; 4. Understand the principles of modeling epidemic and other processes using modern technology.
	<p>CC3. Communication</p>	<p>A. Be able to convey, communicate, and present relevant information to target audiences:</p> <ol style="list-style-type: none"> 1. Identify target audiences, methods, and content to communicate work done or planned; 2. Communicate activities to pre-professional audiences through written and oral communication tools; 3. Communicate epidemiologic information to the general public, media, and/or policy makers through written and oral communication tools; 4. Adapt the content of disseminated information, its scope, frequency of dissemination depending on the situation; 5. Participate in the development of risk messages that pose a threat to public health; 6. Respond to public inquiries about epidemiologic data or the situation; 7. Be able to explain or teach basic principles of public health to non-epidemiologists or lower level colleagues; 8. Identify risks in communication with colleagues and the public. <p>B. Utilize interpersonal skills in communicating with colleagues and the public:</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to listen effectively, especially when presenting public health data; 2. Demonstrate professional interpersonal, interdisciplinary, trans-disciplinary, and multi-disciplinary communication. <p>C. Utilize effective communication techniques:</p> <ol style="list-style-type: none"> 1. Participate in the selection of communication channels and determine their interface; 2. Implement policies that take into account security, privacy, and legal considerations when transmitting information via e-mail, alert networks, databases, etc.; 2; 3. Use effective educational, behavioral methods and tools to promote public health (e.g., through community education, behavior modification, collaborative policy development, promotion of ideas and community mobilization).

<p>CC4. Social and social significance and interaction for practice</p>	<p>A. Provide input to epidemiological studies, public health programs and public health planning processes at the national, regional and population levels:</p> <ol style="list-style-type: none"> 1. Utilize population-based information in the design, interpretation, and conduct of epidemiologic studies; 2. Contribute to the evaluation of the local public health system from a sanitary-epidemiologic welfare perspective to assist in public health planning at the national, regional, and population levels. <p>B. Participate in the development of community partnerships to support epidemiologic investigations:</p> <ol style="list-style-type: none"> 1. Identify partners and stakeholders needed for epidemiologic investigation; 2. Utilize participatory, engagement strategies to achieve community outcomes when planning, conducting, and evaluating epidemiologic investigations; 3. Explain the roles of partners and stakeholders in an epidemiologic investigation; 4. Participate in the design of epidemiologic studies, taking into account the views of the target groups.
<p>CC5. Professional activity management (current, strategic planning and management)</p>	<p>A. Manage events in professional activities:</p> <ol style="list-style-type: none"> 1. Set goals and objectives; 2. Clearly communicate requirements to performers; 3. Establish a schedule for accomplishing tasks; 4. Form a team, analyze the need for human and other resources to achieve goals; 5. Evaluate the performance of team members as they perform their duties; 6. Keep accurate records. <p>B. Understand and incorporate financial considerations when planning activities and workloads:</p> <ol style="list-style-type: none"> 1. Know the financial rules of the organization and budgeting; 2. Evaluate the resources needed to accomplish the objectives of the operational plan, including personnel, equipment, supplies, and travel expenses; 3. Track and estimate costs that may arise from unexpected epidemiologic activities such as operational investigations and emergency response; 4. Adjust activities as necessary to stay within the defined budget; 5. Train team members as needed in the performance of their duties.
<p>CC6. Leadership and systems thinking</p>	<p>A. Support and promote the importance of public health sanitary and epidemiologic well-being in health care:</p> <ol style="list-style-type: none"> 1. Promote the organization's vision in all programs and activities; 2. Assist in strategic planning; 3. Propose and implement changes; 4. Use performance measures to evaluate and improve the quality of epidemiology services; 5. Demonstrate ethical behavior in daily life and professional activities. <p>B. Promote workforce development:</p> <ol style="list-style-type: none"> 1. Organize a team with the skills necessary to perform epidemiologic activities at the appropriate level; 2. Encourage continuing education; 3. Motivate the team for quality performance and professional development.

		<p>C. Prepare for emergency response:</p> <ol style="list-style-type: none"> 1. Incorporate an epidemiologic perspective when developing an emergency response plan; 2. Participate in emergency response planning for the epidemiology unit; 3. Respond to emergencies in the area of public health.
	<p>CC7. Influence on health policy</p>	<p>A. Bring an epidemiologic perspective to the development and analysis of sanitary and epidemiologic welfare policies:</p> <ol style="list-style-type: none"> 1. Demonstrate an understanding of public health policy; 2. Participate in the development of policies related to sanitary and epidemiologic well-being; 3. Influence the transformation of public health policy through professional practice and research; 4. Adhere to the rule of law applicable to public officials and funding sources, including the issue of lobbying by certain interests.

12.	Learning outcomes	<p>LO1 Analyzes critically and applies in practice reliable, modern, scientifically-based information and knowledge in the field of socio-behavioral, biomedical, hygienic, epidemiological and clinical sciences.</p> <p>LO2 Builds effective professional interaction with authorities, organizations, the population, community members, the media in matters of ensuring the sanitary and epidemiological well-being of the population.</p> <p>LO3 He is proficient in information technologies, effectively uses in formation in the field of ensuring the sanitary and epidemiological well-being of the population to introduce new approaches within his qualifications and uses electronic systems to ensure the documentation of processes.</p> <p>LO4 Possesses the skills of organizing the work of the labor collective, human resource management, setting goals and formulating tasks, determining priorities of activity and supports continuous personal and professional growth.</p> <p>LO5 Applies in practice the normative legal acts of the Republic of Kazakhstan on the protection of the health of citizens; sanitary and environmental legislation, the legal basis for the activities of sanitary and epidemiological control specialists.</p> <p>LO6 He has the skills of laboratory and instrumental research, analysis and evaluation of quality indicators of various environmental objects and formulation of his own conclusions in the form of recommendations to prevent adverse effects on them.</p> <p>LO7 Organizes sanitary and epidemiological control of the environment, drinking water, food, supervision of vital objects, protection of borders from the import and spread of particularly dangerous infections in order to develop measures to ensure the sanitary and epidemiological well-being of the population, including in emergency situations.</p> <p>LO8 Collects information and medical and statistical analysis on the state of the sanitary and epidemiological situation, with an assessment of health indicators of various age and gender groups of the population, using data from official accounting and reporting documents, as well as on the basis of preliminary and periodic medical examinations</p> <p>LO9 Conducts a survey of the epidemic focus, assesses the epidemiological situation with the establishment of the cause of its occurrence and draws up a plan of anti-epidemic measures in epidemic foci of various types</p> <p>LO10 He is able to carry out epidemiological surveillance: collection, registration and formation of a data base of infectious (parasitic) morbidity and control over the implementation of preventive and anti-epidemic measures for them, as well as evaluation of the effectiveness of immune prophylaxis for children and adults.</p>
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		<p>LO11 Conducts sanitary and hygienic audit, sanitary and epidemiological expertise, medical investigation, examination, research, testing, toxicological, hygienic types of assessments of objects of economic and other activities, products, works and services in order to establish and prevent the harmful effects of environmental factors on humans, the causes of the occurrence and spread of infectious diseases and mass non-communicable diseases or poisoning, occupational diseases.</p> <p>LO12 Has the skills to develop, organize and carry out sanitary-anti-epidemic and sanitary-preventive measures to promote and protect public health, prevent infectious, parasitic and non-communicable diseases, assess their effectiveness.</p> <p>LO13 Conducts sanitary and educational work among the population, through the media on the prevention of diseases and the formation of a healthy lifestyle, improving self-development skills and observing social and ethical norms.</p> <p>LO14 Conducts scientific research based on the collection of primary material, interprets indicators from the database and research results, and also makes scientifically sound decisions based on the principles of evidence-based medicine and bioethics.</p>
13.	Form of education	Full-time study
14.	Volume of credits	Kazakh, Russian and English
15.	Language learning	5 years
16.	The duration of the training	300
17.	Academic degree awarded, qualification	Master, doctor-hygienist, epidemiologist
18.	Availability of application to the License for the direction of training	KZ36LAA00011387
19.	The presence of accreditation EP	yes
20	Name of accreditation organization	“Independent Agency for Accreditation and Rating”IAAR,10.06.2022
	Certificate of accreditation №, Validity period of accreditation	Magistracy-№AB4365,10.06.2022г.- 09.06.2027г.
	Information about disciplines	Application1.2

Application1.1

Matrix of correlation of learning outcomes in the educational program a saw hole with the formed competencies

CC \ LO	LO	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	LO11	LO12	LO13	LO14
CC 1		+					+	+	+	+		+	+		+
CC 2		+	+	+			+	+	+		+	+	+		
CC 3			+	+	+							+	+	+	
CC 4								+		+	+	+	+		
CC 5			+		+	+		+		+				+	+

CC 6		+	+	+		+	+						+	+
CC 7	+				+			+				+	+	+

Application1.2

Competence/ learning outcome attainment matrix

№	Name of discipline	Brief description of discipline	Cycle (GES, BD, SD)	Component (RC, OC, UC)	Credit number	Generated Learning outcomes
1	History of Kazakhstan	Formation of the world view, civil and moral positions of the future specialist based on a deep understanding and scientific analysis of the main stages, patterns and originality of the historical development of Kazakhstan, as well as the ability to use the methods and techniques of historical description to analyze the causes and consequences of events in the history of Kazakhstan.	GES	RC	5	LO1 LO3 LO14
2	Physical education	The formation of a personality that is competitive and capable of physical self-improvement through the skills of building a personal educational trajectory throughout life for self-development and career growth, focused on a healthy lifestyle to ensure full-fledged social and professional activities through methods and means of physical culture.	GES	RC	8	LO1 LO4 LO13
3	Foreign language	Formation of language using skills and speech means based on a system of grammatical knowledge for building communication programs in a foreign language, self-improvement and professional success; communication in oral and written forms in a foreign language to solve problems of interpersonal, intercultural and professional communication; analysis of information in accordance with the communication situation and the ability to interpersonal social and professional communication in a foreign language.	GES	RC	10	LO1 LO2 LO3 LO4

4	Kazakh (Russian) language	Formation of communication skills in oral and written forms in Kazakh and Russian languages to solve the problems of interpersonal, intercultural and professional communication; analysis of information in accordance with the communication situation and the ability to interpersonal social and professional communication in Kazakh and Russian languages; use of language and speech means based on the system of grammatical knowledge to build communication programs in Kazakh and Russian, professional success and self-improvement.	GES	RC	10	LO1 LO2 LO3 LO4
5	Information and communication technology	Formation of skills in information and communication technologies that contribute to the development of information literacy through the mastery and use of modern technologies in all areas of their lives and activities; use in personal activities of various types of information and communication technologies: Internet resources, cloud and mobile services for searching, storing, processing, Protecting and disseminating information, etc.	GES	RC	5	LO1 LO3 LO8
6	Philosophy	Formation of skills for assessing the surrounding reality on the basis of worldview positions formed by knowledge of the fundamentals of philosophy, which provide scientific understanding and study of the natural and social world by methods of scientific and philosophical cognition; interpret the content and specific features of the mythological, religious and scientific worldview; skills of quantitative and qualitative Analysis of social phenomena, processes and problems.	GES	RC	5	LO1 LO3 LO14
7	Psychology and cultural studies	Formation of general competencies that ensure the socio-cultural development of the personality of a future specialist on the basis of the formation of his worldview, civic and moral positions; skills of self-development and education throughout life; personality capable of mobility in the modern world, critical thinking; skills of operating social, business, cultural and ethical norms of Kazakhstan I society; skills of personal and professional competitiveness.	GES	RC	4	LO1 LO2 LO5 LO13
8	Sociology and political science	Formation of socio-political knowledge, skills of application and Generalization of scientific research methods. Sociology and sociological perspective. Social structure and stratification. Education and social inequality. Health and medicine. Civilizational identification of Kazakhstan in the global world. Politics in the structure of public life. Power as a political institution. State and civil society .Political culture, ethics and	GES	RC	4	LO1 LO2 LO5 LO13

		behavior. Sovereign Kazakhstan in the system of interstate relations.				
9	Legal, economic, environmental and scientific knowledge*	Integrated discipline: on the basis of economic, legal, environmental and scientific knowledge, the formation of one's own moral and civil position; general competencies of operating public, business, cultural, legal and ethical norms of Kazakhstani society for self-development and education throughout life, mobility in the modern world and critical thinking; skills in the application of scientific methods and techniques for the study of a particular science	GES	OC	5	LO1 LO2 LO5 LO13 LO14
10	Fundamentals of Economics and Law*	Market and competition. Money and inflation. Credit and monetary system. Financial system and fiscal policy. Features of the development of the national economy in the Republic of Kazakhstan. Choosing a business idea and a startup, business planning in the system of entrepreneurial activity, the content of a business plan, the skills to develop them. Basic ideas about law and state-legal phenomena. Basics of constitutional, administrative, civil and family, financial and labor, environmental and land and Criminal laws of the Republic of Kazakhstan.	GES	OC		LO1 LO2 LO5 LO13
11	Fundamentals* of anti-corruption culture and entrepreneurial skills	Formation of an anti-corruption culture. Theoretical and methodological foundations of the concept of "corruption". Political power and corruption. Nepotism. The transformation of corruption in modern states. Anti-corruption policy in the Republic of Kazakhstan and the role of the Social sphere in it. Legal liability for acts of corruption. Moral and ethical responsibility for acts of corruption in various fields.	GES	OC		LO1 LO2 LO5 LO13
12	Ecology and life safety. Methods of scientific research*	Environmental problems of our time and public health. The causal relationship of the general morbidity of the population with environmental factors and ways to reduce the burden on human health. Emergencies and the basics of life support. Methodological foundations of scientific knowledge. Science and other forms of mastering reality. Methods of scientific knowledge. Principles of the organization of scientific research. The role of medical research in modern science. Application of scientific research methods in theory and in practice.	GES	OC		LO1 LO2 LO5 LO13 LO14

13	Introduction to the profession (Introduction to the profession; medical ethics and communication skills; medical law)	Integrated discipline: Patterns of development and history of medical knowledge. The system of sanitary-epidemiological service of the Republic of Kazakhstan. Organization of work and structure of the sanitary-epidemiological service. Introduction to the profession of a specialist in sanitary and epidemiological control. Normative legal acts in the activities of workers in the sanitary and epidemiological sphere. Moral and moral aspects of the professional activity of a hygienist, epidemiologist. Communicative culture, ability, competence. Basic principles of effective communication with the population, colleagues. Objectives, principles of medical law. The right to health care and medical care. Legislation in the Field of health care.	BD	UC	4	LO1 LO2 LO5 LO13
14	Educational practice «As a laboratory assistant in a hygienic laboratory»	Skills of organizational support for the performance of laboratory and instrumental studies of human environmental factors, applied methods/methods of their determination and confirmation of compliance with the requirements of legislation in the field of sanitary and epidemiological well-being of the population. Methods of sampling and registration of accompanying documentation, research, interpretation, registration and statistical processing of results, sanitary-chemical, physical, toxicological studies depending on the sanitary-epidemiological situation.	BD	UC	1	LO1 LO2 LO3 LO5 LO6 LO13
15	Morpho physiology (Anatomy, Physiology, Histology)	Integrated discipline: the formation of fundamental knowledge aimed at understanding the morphological and functional characteristics of the human body, its topical basis. Anatomy, Physiology and histology of organs and systems are normal: musculoskeletal, skin, nervous, sensory systems, cardiovascular, respiratory, digestive, endocrine, hematopoietic, immune, blood system, urinary, sexual. Scientific research in morphophysiology.	BD	UC	8	LO1 LO14
16	General pathology (pathological anatomy and pathological physiology)	Integrated discipline: the formation of fundamental knowledge about the regularities of development of typical common pathological processes for the diagnosis of the most common diseases; skills of pathophysiological analysis of clinical and laboratory data, description of macro-and micro drugs, understanding of pathophysiological basis for the prevention and treatment of various diseases. Etiopathogenesis, morphogenesis, morphology, outcome.	BD	UC	6	LO1 LO6 LO13 LO14

17	Chemistry and laboratory research techniques	Formation of knowledge and skills of the basics of qualitative and quantitative analysis, titration technique in sanitary and hygienic examination of environmental objects. General laws of chemistry necessary for understanding physicochemical processes and the impact of the environment on the human body. Understanding the relationship between the chemical composition, structure, properties and biological activity of organic substances. Preparation of solutions of various concentrations used in sanitary hygiene. Registration of results.	BD	UC	3	LO1 LO6 LO8
18	Biochemistry	Formation of knowledge about the biochemical composition of the human body, about metabolism and its regulation. The influence of adverse environmental factors on body fluids. Composition, structure and biological functions of the most important components of the cell. Biochemistry of enzymes. Organ-specific enzymes of the body. The relationship between metabolism and energy in the body. Stages of metabolism of the main nutrients and their regulation. Functional biochemistry. Influence of harmful environmental factors on metabolic processes. Biochemical markers that determine the state of the body. Research in biochemistry.	BD	UC	3	LO1 LO6 LO14
19	Emergency medical care	Basic principles of first aid. The rights of the patient the provision of emergency care. Antiseptics and asepsis. First aid to victims with soft tissue injuries. First aid for blood loss. First aid for chemical, thermal, radiation burns. First aid for bruises. Resuscitation. Basic cardio pulmonary resuscitation (CPR).Advanced cardiopulmonary resuscitation(ACR).	BD	UC	3	LO1 LO2 LO5
20	Introduction to the clinic	Organization of medical staff and algorithms for performing various manipulations. Principles of care for a variety of profile and patients and the organization of therapeutic and protective regime. Performance of nursing procedures and familiarization with the rules of preparation for instrumental methods of research. Safe hospital environment and ensuring sanitary and anti-epidemic regime. Organization of transportation of patients. Working in the procedure room and keeping medical records.	BD	UC	3	LO1 LO2 LO12

21	Environmental health (environment and public health; general hygiene)	Integrated Discipline: Population Health and Environment. Skills of laboratory and instrumental research, analysis and evaluation of quality indicators of various environmental objects. Environmental protection and public health. Hygienic rationing of environmental factors. Sanitary and epidemiological control of the environment, drinking water, food, supervision of vital facilities, protection of borders from the importation and spread of especially dangerous infections in order to develop measures to ensure the sanitary and epidemiological well-being of the population, including in emergency situations. Fundamentals of sanitary and epidemiological monitoring. Normative documents.	SD	UC	5	LO1 LO5 LO6 LO7 LO11 LO13 LO14
22	Genetics and radiobiology (Molecular Biology, Radiobiology, Medical Genetics)	Integrated discipline: basics of chemical structure of biologically active substances and genetic apparatus. Molecular and cellular basis of heredity mechanisms, regularities of human embryonic development, its critical periods, new molecular genetic and preventive methods of detection of developmental anomalies. The importance of hereditary factors in the etiology of diseases, in the body's response to pharmacological and other types of treatment. Actions of ionizing radiation on macromolecules, organoids and cell divisions. Radiosensitivity of the organism. Research in the field of medical genetics	BD	UC	5	LO1 LO8 LO14
23	Microbiology and Parasitology (Microbiology, Virology, Medical Parasitology)	Integrated discipline: Morphophysiology and genetics of microorganisms, etiopathogenesis, immunity, laboratory diagnostics, prevention and etiotropic therapy of major bacterial, viral, fungal and parasitic diseases. Parasitism as an ecological phenomenon. Classification of parasitic diseases. Medical protistology. Medical helminthology. Medical arachnoentomology. Research in the field of microbiology	BD	UC	5	LO1 LO8 LO11 LO13 LO14
24	Educational practice «As a laboratory assistant of a microbiological laboratory»	Tasks, structure, equipment, rules of work and safety in the microbiological laboratory; acceptance, registration, selection of clinical material, samples of environmental objects and food products; preparation of the test material, nutrient medium, reagents and equipment for microscopic, microbiological and serological studies; conducting microbiological studies of clinical material, samples of environmental objects and food products; evaluation of the result of the research; Maintenance of accounting and reporting documentation	BD	UC	1	LO1 LO2 LO6 LO8 LO12

25	Fundamentals of Marketing and Management in Healthcare	Management in healthcare. The main functions and types of management. Classification of management decisions in healthcare. Leadership styles. Types of conflicts and ways out of them. Marketing in healthcare. Marketing concepts. The main approaches to marketing. Types and functions of marketing. Definition of non-commercial marketing. The marketing management process. Advertising and Promotion of the service market.	SD	UC	3	LO1 LO2 LO3
26	Fundamentals of project activities and evidence-based medicine (Project Activities; Fundamentals of Evidence-Based Medicine)	Integrated discipline: Project definition, its main characteristics. Project activity, types, goals, objectives. Features of project management in healthcare. Elements of project activity. Types and types of projects. Stages and phases of the life cycle of projects. Requirements for participants of project activity. Documents regulating project activity. The principles of evidence-based medicine. Methodology and tools of evidence-based medicine. Types and design of research. Composition of the plan and design of scientific research, processing of conclusions and recommendations. Clinical and economic analysis.	BD	UC	4	LO1 LO3 LO6 LO8
27	Introduction to scientific research (Fundamentals of Public Health; Biostatistics)	Integrated discipline: the study of policy in the field of public health of the Republic of Kazakhstan. International and national health care structures, the role and responsibility of the healthcare system in addressing issues related to the provision of medical care to the population. Application of regulatory legal acts of the health care system in practice. Formation of practical skills in the use of methods of descriptive statistics and the theory of testing statistical hypotheses in biomedical research, as well as the processing of statistical data using special software.	SD	UC	6	LO1 LO3 LO5 LO6 LO8
28	Fundamentals of pharmacology	General regularities of pharmacodynamics and pharmacokinetics of medicinal substances in dentistry. Primary pharmacological reactions. General principles of registration of recipes and preparation of prescription prescriptions. Calculation of doses and concentrations of medicinal substances. Classification of medicines. Comparative assessment of the pharmacological properties of anesthetics: anesthetic activity, effect on the central nervous system, ability to penetrate mucous membranes, toxicity. Adverse drug reactions, methods of prevention and correction of side effects.	BD	UC	4	LO1 LO12

29	Fundamentals of epidemiology	Formation of knowledge about the general laws of the emergence, development and extinction of the epidemic process of infectious diseases, about monitoring the effectiveness of disinfection, sterilization measures. Methods of epidemiology. Links of the epidemic process. Mechanisms, pathways and factors of transmission of infectious diseases. Preventive and anti-epidemic measures in the foci of infections. Epidemiological surveillance, analysis and diagnosis.	SD	UC	4	LO1 LO7 LO9 LO10
30	Propaedeutics of internal diseases	Subjective (questioning) and objective examination (palpation, percussion and auscultation). Understanding the basics of semiotics and syndromology. To justify the need for the collected material on. The use of basic methods of clinical examination for diseases of internal organs. Filling out medical documentation. Planning of laboratory and instrumental studies. Basics of communication when communicating with patients. Improvement of knowledge and skills, continuous professional development.	BD	UC	3	LO1 LO2 LO13
31	Fundamentals of surgical diseases and injury prevention	Formation of skills in the organization of primary surgical care. Asepsis and antisepsis. Injuries, burns and care for them. Wounds and wound process. Types of surgical sutures. Bleeding and blood loss. Local and regional anesthesia in surgery. General anesthesia. Issues of ethics and deontology in surgery. Fundamentals of surgery, analysis of the course of surgical diseases and their complications. Questions of etiology, pathogenesis, clinic, diagnosis and differential diagnosis, modern methods of conservative and surgical treatment of emergency and planned surgical diseases of organs and systems. Clinical thinking, skills, application of algorithms of medical activity in emergency and life-threatening conditions and methods of anesthesia in trauma, traumatic injuries, prevention of traumatism. Improvement of knowledge and skills	SD	UC	3	LO1 LO2 LO13

32	Obstetrics and gynecology	Organization of women's health protection in the Republic of Kazakhstan. The structure, content and methods of work of maternity institutions. Diagnosis of pregnancy. Reproductive health protection. Family planning. Management of childbirth. Extragenital pathology and pregnancy. Regulation of the reproductive system. Methods of examination of gynecological patients. Menstrual irregularities. Inflammatory diseases of the female genital organs. "Acute abdomen" in gynecology. Female infertility. Scientific research in the field of obstetrics and gynecology	BD	UC	3	LO1 LO2 LO14
33	Social medicine	Social medicine as a science and its role in the scientific development of health problems. Individual and public health, their types. Epidemiology as a science. Classification of epidemiological studies of individual and public health. Principles and methods of diagnosis, treatment, prevention of diseases. Socially significant diseases. Disability-definition, causes, types, types, socio-medical aspects. Examination of temporary and permanent disability.	SD	UC	4	LO1 LO8 LO11
34	Statistics in healthcare	The concept of statistics. Medical Health and Health Statistics. Demographic statistics. Medical records of health care institutions. Organization and stages of medical and statistical research. Standardization method. The main errors of statistical analysis. Methods of studying and assessing the health of the population, the activities of health care organizations. Graphical representation of the results of statistical research.	SD	UC	4	LO1 LO3 LO8
35	Bioethics of scientific research in health care	Scientific research in health care: types, goals, objectives. Features of the organization and conduct of scientific research on public health. Normative legal acts regulating activities in the field of scientific research. Principles, rules of biomedical ethics. Standard Operating Procedures. Ethics committees: goals, functions, requirements for participants. Informed consent. Conflict of interest. Ethical requirements for the publication of research results.	BD	UC	3	LO1 LO5 LO14

36	Disinfection and disposal of medical waste (Disinfection; safe collection and disposal of medical waste)	Integrated discipline: Organization of disinfection in the Republic of Kazakhstan. Disinfection tasks. Disinfection in a complex of preventive and anti-epidemic measures. Types, methods and means of disinfection. Preventive disinfection. Indications and means for preventive disinfection. Focal disinfection. Current and final disinfection, and means for their implementation. Stages of collection, temporary storage and transportation of medical waste. Requirements for the collection of medical waste. Procedure for the collection of waste class A, B, C, D, E. Rules for the collection of medical waste. Requirements for the conditions of temporary storage (accumulation) of medical waste. Accounting and control over the movement of medical waste.	SD	UC	6	LO1 LO3 LO9 LO10 LO12
37	Radiation hygiene and medical ecology (Radiation Hygiene; Medical Ecology)	Integrated discipline: Formation of knowledge about the purpose and objectives of radiation hygiene, about the basic laws of the interaction of ionizing radiation on the body of the population, measures to prevent their adverse effects and the organization of a set off medical and preventive measures aimed at improving the Level of health and reducing non-communicable morbidity of various contingents of the population, assessing the impact of the radiation factor on health and providing radiation public safety. Basic principles of radiation safety. Medical ecology, classification of environmental risk factors affecting public health. Xenobiotics. Indicators of public health as one of the criteria for assessing the quality of the environment.	SD	UC	7	LO1 LO3 LO6 LO7 LO8 LO11 LO12
38	Industrial practice «As a specialist in radiation hygiene»	Principles of placement and layout of laboratories of varying degrees of danger. Sealing of equipment. Features of the organization of ventilation, water supply and sewerage. Requirements for construction and cladding materials, surfaces of premises and equipment. Personal protective equipment. Personal hygiene of staff. Cleaning of equipment and overalls from radioactive contamination. Collection, storage, transportation, neutralization, disposal of radioactive waste. Sanitary and dosimetry control. Therapeutic and preventive measures.	SD	UC	2	LO1 LO3 LO6 LO7 LO 8 LO11 LO12

39	State sanitary and epidemiological surveillance	Legal framework for State sanitary and epidemiological supervision (SSES). The main legal acts regulating the provision of sanitary and epidemiological welfare of the population. Criteria for the selection of objects of supervision. Implementation of the supervisory function by the state sanitary and epidemiological surveillance bodies. Types of control and supervisory measures. The procedure for the provision of public services. Information and methodological support of activities. Preventive, routine sanitary supervision. Methods of sanitary and epidemiological control. Monitoring compliance with sanitary requirements and regulations. Accounting and reporting documentation and information systems in the SES. Forms and methods of sanitary and educational work.	SD	UC	4	LO1 LO3 LO5 LO6 LO 7 LO8 LO9 LO10 LO11 LO12 LO13
40	Laboratory tests in hygiene and epidemiology	Skills of methodical, technical organizational support of laboratory and instrumental research of human environment factors, methods (techniques) of their determination and confirmation of compliance with the requirements of legislation in the field of sanitary and epidemiological well-being of the population. Epidemiological well-being of the population. Definition algorithm: multiplicity and volume, methods of sampling and registration of accompanying documentation, research, interpretation, registration and statistical processing of results, sanitary-chemical, physical, toxicological, microbiological and radiological studies in the field of hygiene and epidemiology, depending on the sanitary-epidemiological situation.	SD	UC	4	LO3 LO5 LO6 LO7 LO8
41	Infectious diseases	Formation of knowledge on the early diagnosis of infectious diseases, on infectious safety and infection control in a medical and preventive organization, the use of preventive measures against infections associated with the provision of medical care. Rules for hospitalization of infectious patients. The structure and regime of infectious diseases hospitals. Infectious diseases. Etiology. Pathogenesis. Clinic. Diagnostics. Principles of treatment and prevention. Indications for hospitalization. Specific, general prevention of infectious diseases, antiepidemic measures in foci.	SD	UC	5	LO1 LO3 LO9 LO10 LO12

42	Infection control in medical organizations	Healthcare-associated infections (HAI), scientific and organizational frameworks. Specificity of HAI in various medical organizations. Improvement of work in order to reduce HAI. Causes and signs of an infectious focus. Types of infectious focus. Regulatory documentation on disinfection, sterilization, pest Control and deratization.	SD	UC	3	LO1 LO3 LO5 LO9 LO10 LO12
43	Disease prevention (Health promotion and disease prevention; organization of work on preventive vaccinations)	Formation of the skill of a healthy lifestyle in order to promote health, organize and control immunopathology and vaccine prophylaxis of the population. Health promotion, principles. Quality of life, health and longevity. Basics of healthy lifestyle propaganda. Risk factors. Disease prevention. Maternal and child health. Organization of vaccination work. Equipment and equipment of the vaccination room. National Vaccination Calendar. Routine immune prophylaxis of children and adolescents. Tactics of preventive vaccinations. Prevention and investigation of post-vaccination complications.	SD	UC	5	LO1 LO2 LO3 LO10 LO12 LO13
44	Epidemiological control of infectious and parasitic diseases	Formation of knowledge, practical skills on infectious and parasitic diseases that require measures for the sanitary protection of the country's territory, clinical and epidemiological characteristics of individual nosological forms, the actions of medical personnel in identifying a patient, information and notification schemes, treatment and emergency prevention, kits, rules for sampling, transportation of material, the use of personal protective equipment, the mode of disinfection of various objects infected with pathogenic microorganisms. Methodology for assessing the risk to public health. Algorithm for collecting, storing (database), systematizing data necessary for epidemiological surveillance of infectious diseases based on official statistics and specially organized studies. Regulation in the field of epidemiological control of infectious and parasitic diseases.	SD	UC	4	LO1 LO3 LO5 LO8 LO 9 LO10 LO11 LO12 LO14

45	Epidemiological control of especially dangerous infections	Formation of knowledge and practical skills on especially dangerous infections (EDI) requiring measures for the sanitary protection of the country's territory, clinical and epidemiological characteristics of individual nosological forms, actions of medical personnel in identifying a patient, information and notification schemes, treatment and emergency prevention, packing, rules of sampling, transportation of material, use of personal protective equipment protection, disinfection regime of various objects infected with pathogenic micro organisms. Methodology of public health risk assessment. An algorithm for collecting, storing (databases), and systematizing data necessary for epidemiological surveillance of EDI based on official statistics and specially organized studies.	SD	UC	4	LO1 LO3 LO5 LO8 LO 9 LO10 LO11 LO12 LO14
46	Epidemiological surveillance of non communicable diseases	An epidemiological approach to the study of non communicable diseases (NCD). Causality in epidemiology. Risk factors for non communicable diseases in the human population. Epidemiological studies. Epidemiology of non-communicable pathology. State system of monitoring the state of health of the population. Fundamentals of the epidemiology of actual non- communicable diseases (theoretical and methodological foundations). Epidemiology of environmentally caused and cardiovascular diseases. Methodology for assessing the risk to Public health. Algorithm for collecting, storing(database), Systematizing data necessary for epidemiological surveillance of Non communicable diseases based on official statistics and specially organized studies.	SD	UC	3	LO1 LO3 LO7 LO8 LO11 LO12 LO14
47	Epidemiology of emergency situations, organization and conduct of sanitary and quarantine control	Fundamentals of anti-epidemic support for emergency situations (ES). Features of antibacterial support of emergencies. Biological terrorism. Epidemiology, prevention and anti-epidemic support of quarantine infections. Sanitary protection of the territory of the Republic of Kazakhstan. Organization of sanitary and quarantine control at the State Border of the Republic of Kazakhstan. List of quarantine infections. Organization of quarantine and observation. The procedure for the interaction of services in the event of the importation of quarantine infections. Functions of the UPC . The procedure for transmitting information in case of suspected quarantine infection. Carrying out general and special prophylaxis of the population. Regulatory documents on sanitary and quarantine control.	SD	UC	4	LO1 LO2 LO3 LO5 LO 6 LO7 LO9 LO10 LO11 LO12

48	Sanitary-epidemiological expertise	Legislative, regulatory and legal act sin the field of organization of sanitary and epidemiological expertise (SEE). Objects and procedure for conducting SEE. Features of the SEE in the field of radiation hygiene, food hygiene, labor, children and adolescents, project documentation. The procedure for issuing sanitary and Epidemiological conclusions.	SD	UC	4	LO1 LO3 LO5 LO8 LO11
49	Communal hygiene	Study of the state of environmental objects (water bodies, drinking water, atmospheric air, soil, harmful physical factors, artificial habitat) within residential areas, in order to study their quality in accordance with applicable sanitary rules and regulations. Sanitary and epidemiological supervision of the organization of water supply and sewerage of populated areas, sanitary cleaning of territories, waste management, quality of polymer and building materials, design and construction of residential and public buildings and facilities with the preparation of expert and sanitary-Epidemiological conclusions. Development of asset of preventive Measures to ensure optimal conditions for accommodation and residence of the population.	SD	UC	8	LO1 LO3 LO5 LO6 LO7 LO8 LO11 LO12
50	Food hygiene	Healthy nutrition of the population. Sanitary protection of food products and ensuring the safety of food raw materials and food products, the conditions for their production and sale, including at public catering establishments. Hygienic aspects of the problem of nutrition of the population. Prevention of alimentary diseases. Hygienic control over the adequacy of nutrition of the population. Hygienic assessment of diets. Dietary and therapeutic and prophylactic nutrition. Food poisoning and their prevention. Sanitary and epidemiological examination of food products. Normative documents in the field of food hygiene.	SD	UC	7	LO1 LO3 LO5 LO 6 LO7 LO8 LO11 LO12 LO13
51	Occupational hygiene	Occupational hygiene and industrial sanitation. Regulatory documents in the field of occupational health. Sanitary and hygienic requirements for the territory, the arrangement of buildings and premises of the institution(organization). Rationing of the industrial microclimate. Harmful production factors, their effect on the body of workers and their prevention. Occupational and industrial-related diseases and poisoning, and their prevention. Medical monitoring of working conditions and the state of health of workers. Medical examinations. Certification of work places. Promotion of healthy lifestyle.	SD	UC	6	LO1 LO3 LO5 LO6 LO7 LO8 LO11 LO12 LO13

52	Hygiene of children and adolescents	Methods of studying and assessing the health and physical development of children and adolescents. Food hygiene or children and adolescents. Hygiene of educational activities, physical education of children and adolescents, hardening. Hygiene of labor education, training and vocational education of students. Hygienic foundations of the design and construction of institutions for children and adolescents. Hygienic requirements for the improvement and equipment of children's and adolescent institutions. Normative documents in the field of hygiene of Children and adolescents. Promotion of healthy lifestyle	SD	UC	6	LO1 LO3 LO5 LO 6 LO7 LO8 LO11 LO12 LO13
53	Organization, economics and financing of healthcare	Modern health care, global trends in developed countries. Policy in the field of public health protection. Modern theories and concepts of public health. Rules of organization and provision of medical care in the conditions of Mandatory social health insurance. Information technologies in the health care management system. Quality control of medical services. Administrative and legal relations in health care. Labor legislation. Medical, social and economic efficiency of health care. Need for medical care and demand for medical services. Pricing. Financing of health care. Economic evaluations in health care: cost minimization method, cost-effectiveness method, cost-utility method, cost-benefit method.	SD	UC	6	LO1 LO3 LO8 LO11 LO12
54	Medical legislation	Legislation of the Republic of Kazakhstan in the field of healthcare, goals, objectives, principles. Licensing, accreditation, attestation and certification in the field of healthcare. Rights and social protection of officials in the implementation of state control and supervision in the field of sanitary and epidemiological welfare of the population. Rights and obligations of persons in the field of healthcare. Organization of medical care. Liability for violation of medical legislation.	SD	UC	3	LO1 LO2 LO5

55	Industrial practice «As a specialist in the field of hygiene and epidemiology»	Organization and content of the work of specialists in sanitary-hygienic and epidemiological surveillance. Implementation of control and supervisory functions in the field of sanitary and epidemiological welfare of the population. Carrying out sanitary and anti-epidemic (preventive) measures. Laboratory instrumental studies at the objects of supervision and analysis of the results. Documentation; research activities: analysis of scientific literature and official statistical reviews, participation in statistical analysis and public presentation of the results obtained; participation in risk assessment in the implementation of activities related to the impact of environmental factors on humans.	SD	UC	5	LO1 LO2 LO3 LO4 LO5 LO6 LO7 LO8 LO9 LO10 LO11 LO12 LO13
56	Clinical epidemiology*	Formation of competencies for conducting clinical epidemiological studies using the principles of evidence-based medicine aimed at creating conditions for protecting the health of citizens; for the implementation of a set of measures for early diagnosis, identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on human health; on the organization and conduct of scientific research, including the choice of goals and formulation of tasks, planning, selection of adequate methods, collection, processing, analysis of data and their public presentation.	BD	OC	4	LO1 LO3 LO7 LO8 LO10 LO14
57	Health care management	Strategic management of the health system. Separation of health care functions at different levels of management. State regulation in the field of health care. Models of health care financing. Organizational and economic models of health care organization functioning. Strategic planning at different levels of the health care system. Activities within the framework of the legislation of the Republic of Kazakhstan. Assessment of public health and disease prevention	BD	OC		LO1 LO2 LO3 LO4 LO5 LO12

58	Management	Management as an informational and functional process. Principles and methods of management. Modern management approaches. Integration processes in management. Control in the management system. Activities within the framework of the legislation of the Republic of Kazakhstan. Organization as a system. Basic management functions. Connecting processes in management. The manager in the management system. Leadership, power and leadership. Continuous improvement of activities.	BD	UC	2	LO1 LO2 LO4 LO5
59	Management psychology	Formation of the psychological management culture of the head, which allows to effectively carryout organizational and managerial activities in the professional sphere. Psychology of managerial functions, planning, forecasting, organization, coordination, stimulation, motivation, managerial communications and decisions. Personality as an object of management, socialization and personal development. Psychological portrait of the head. Psychology of leadership and leadership, ethics and social responsibility of the head. Activities within the framework of the legislation of the Republic of Kazakhstan. Self-development of the leader. The internal and external environment of the organization, the corporate culture of the organization, the psychological climate in the team and the psychology of teamwork.	BD	UC	2	LO1 LO2 LO3 LO4 LO5
60	Foreign language (professional)	Formation and development of communicative competences (linguistic, sociolinguistic, sociocultural, strategic, discursive and pragmatic) necessary for the implementation of professional activities. Formation of a sufficient level of proficiency in a professional foreign language for the implementation of written and Oral information exchange necessary in scientific activity.	BD	UC	2	LO1 LO2 LO12 LO13 LO14
61	Management of scientific research in health care	International and national standards and other legal acts governing the rules and principles of the organization, conduct and ethical regulation of research in the field of healthcare. Elements of the research project. Development of a research program and plan. Formulation of the topic, purpose and objectives of the study. Formulation of conclusions, recommendations and preparation of Reports on research work.	SD	UC	3	LO1 LO5 LO6 LO8 LO14

62	Normative legal acts in the field of state sanitary and epidemiological control	Provision of public services in the field of sanitary and epidemiological welfare of the population. List of current regulations (sanitary rules, hygienic standards). Regulatory documents on the main activities of the sanitary-epidemiological service. The system of information support in the field of state Sanitary and epidemiological control.	SD	UC	5	LO1 LO3 LO5
63	Information systems and document management in the state sanitary and epidemiological control	The concept of the state office management system. Fundamentals of office management in organizations State sanitary and epidemiological supervision. The procedure for the promotion of documents. Types of documents: regulatory and technical, organizational and administrative, accounting and reporting. Requirements for the preparation and execution of documents. The importance of new regulatory documents of the Republic of Kazakhstan in the field of State sanitary and epidemiological supervision. Preparation of draft decisions (resolutions, etc.) Work on applications and complaints of the population. Uniform requirements in the field of information and communication technologies and information security. Information and communication technologies in the State sanitary and epidemiological supervision.	SD	UC	5	LO1 LO3 LO5 LO8
64	Criteria for assessing the degree of risk in the field of sanitary and epidemiological welfare	Normative documents. Objective criteria for assessing the degree of risk. Sources of information for determining industry risks and subjective criteria for assessing the degree of risk. Indicators of the degree of risk. Calculation of the risk indicator according to subjective criteria. The formula for calculating the indicator of significant violations. Rapid response measures. The degree of violation of the requirements for performers(targets)of control and Supervision during preventive e control with a visit.	SD	UC	4	LO1 LO3 LO5 LO8
65	Sanitary and epidemiological audit	Sanitary and epidemiological audit. Regulatory documents and the procedure for conducting a sanitary and epidemiological audit. Exemption from scheduled inspections and documents of compliance with sanitary standards and requirements. Requirements for auditors. Auditor's report and the procedure for Its issuance.	SD	UC	4	LO1 LO3 LO5 LO8 LO11

66	Occupational health and safety	State policy in the field of occupational health and safety. Occupational health and safety management system. The main legislative acts and regulatory documents on labor protection of the Republic of Kazakhstan and of international importance. Harmful and dangerous factors and conditions of the working environment. Legal, socio-economic, organizational, technical, sanitary-epidemiological, treatment-and-prophylactic, rehabilitation measures for labor protection. Promotion of healthy lifestyle.	SD	UC	4	LO1 LO2 LO3 LO5 LO8 LO12 LO13
67	Experimental research work				13	
	Experimental research work				5	
	Experimental research work				8	
68	Writing and defending a master's project and preparing and passing a comprehensive exam				12	
	Preparation and passing of a comprehensive exam				4	
	Writing and defending a master's project				8	

Application 1.3

List of practical skills for the «Medical and Preventive Medicine» program

№	Inventory	Level of mastery
1	Identify determinants of individual and population health, problems and threats to sanitary and epidemiologic well-being.	Be able
2	To know the methods of assessment and study of public health. Organize and conduct anti-epidemic and preventive measures.	Conduct under the guidance of a mentor
3	Manage data from designed and implemented interventions, use it for scientific and practical purposes.	Organize and conduct under the supervision of a mentor
4	To possess methods of assessment of water, soil, air quality, microclimate parameters, lighting, heating and ventilation in residential, public and industrial premises, to recommend measures for their organization.	Independently apply and master
5	To organize epidemiological control and supervision over infectious and non-infectious diseases, the state of environmental objects. To support and promote sanitary and epidemiological well-being of the population.	Independently organize and analyze