

Catalog of elective disciplines

1. Department: Department "Introduction to the clinic"

2. Education level: Bachelor course

3. Educational programs: «6B10115» «Medicine»

4. Course: 1

5. Name of the elective discipline: Introduction to the profession

6. Number of credits: 3

7. Goal: To develop student's understanding about modern practical healthcare of the Republic of Kazakhstan in the conditions of professional activity of a doctor, medical ethics and communication skills in medical and preventive institutions, skills of observation and patient care and apply theoretical legal knowledge in practice.

8. Responsibilities: - Carries out its activities within the framework of the legislation of the Republic of Kazakhstan in the field of healthcare, is guided by their practical activities to ensure optimal medical care.

- Adheres to the rules of ethics, deontology and subordination, demonstrates interpersonal and communication skills that lead to effective information exchange and cooperation with patients, their families and medical professionals

- Complies with the norms for the implementation of public health protection, the sanitary and hygienic regime of the health organization and the epidemiological safety of the environment, labor safety standards for the organization of health protection

- It works on electronic databases of the healthcare system of the Republic of Kazakhstan, provides documentation of the processes of providing medical services

9. Content of the discipline: patterns of development and history of medical knowledge. Moral and ethical aspects of the doctor's professional activity. Healthcare organizations. Therapeutic and protective regime. Safe care. Communicative culture, ability, competence. Basic principles of effective communication with the patient, his family members, and colleagues. Tasks, principles of medical law. The right to health care and medical care. Legislation in healthcare, systematization of knowledge about the rights and obligations of medical and pharmaceutical workers, patients, and the grounds and conditions for the emergence of legal liability in health protection.

10. Basics of choosing a discipline: This program is designed to provide students with the necessary knowledge, skills and abilities in the subject, to achieve learning outcomes.

11. Learning result:

1) Knows the theoretical foundations of modern healthcare and medicine in the Republic of Kazakhstan and describes the difficulties and principles of the profession of "Doctor".

2) Knows the moral and ethical aspects of the professional activity of a doctor

3) Explains the principles of operation of the electronic health protection system of the Republic of Kazakhstan and applies regulatory documents regulating the activities of medical workers.

4) Evaluates the functional state of the patient, is able to formulate a conclusion on the collected material to ensure the sanitary and epidemiological regime in the health care facility.

5) Able to apply algorithms in monitoring and caring for the patient.

6) Values the sanitary and hygienic standards of a medical worker.

7) Able to demonstrate the knowledge and skills of medical ethics and communication skills with patients and colleagues.

8) Analyzes the main provisions of medical law and features of its application in the field of healthcare to ensure quality medical care

10. Prerequisites:

11. Post-requirements: Introduction to the profession (Post-requirements: normal musculoskeletal and skin systems, normal nervous system and sense organs and vision, normal cardiorespiratory system, normal digestive and endocrine systems, normal genitourinary system, normal blood and lymph)

12. Literature:

References Main literature:

1. Дәрігер мамандығына кіріспе. Клиника, құқық, этика және коммуникация негіздері [Мәтін] : оқулық / М.А. Асимов [жәнет.б.]. - 2-ші бас. - Қарағанды : АҚНҰР, 2019. - 232 бет.
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4. Pulnikova, A.V. Sestrinsky protsess [Text] : a textbook / A.V. Pulnikova, B. S. Imasheva. Almaty : Evero Publ., 2016, 300 p
5. Мейірбикелік дағдылар [Мәтін] : оқулық / А. Қаныбеков [ж. б.]. - Алматы : Эверо, 2016. - 476 б. с
6. Қаныбеков, А. Сестринские технологии [Текст] : учеб. manual / А. Каныбеков, Zh. Kanybekova. - 2nd ed., reprint. - Almaty : Evero, 2014. - 628 p
7. Fundamentals of nursing Текст: textbook / Patricia A. Potter [and etc.]. - Philadelphia : Elsevier, 2017. - 1365 p.

Additional literature:

1. Complete medical reference book of a paramedic [Text]:spr. - dop. - Moscow: Eksmo, 2015. - 832 p.- (Complete medical reference book)
2. Қаныбеков, А. Жедел медициналық жәрдем [Мәтін]: оқу құралы / А. Қаныбеков. - 2-ші бас. - Қарағанды: АҚНҰР, 2019. - 266 бет. с.
3. Дубицкий, А. А. Основы организации скорой медицинской помощи в Республике Казахстан [Текст]: научные / А. А. Дубицкий. Almaty : Evero Publ., 2014, 304 p. (in Russian)
4. Nurmanova, M. Sh. Collection of standards of nursing technologies in the discipline "Fundamentals of nursing" - Karagandy: ZHK "Aknur", 2013
5. Коммуникативтік дағдылар [Мәтін]: анықтамалық = Kommunikativnye skilki : spravochnik = Communication skills: directory / L. L. Matsievskaya [et al.]. - Almaty : Evero, 2014.-118 p.p
6. Molotov-Luchansky, V. B. Kommunikativnye skilki [Text]: textbook. manual / V. B. Molotov-Luchansky, L. L. Matsievskaya, N. A. Tsayukova. Almaty : Evero Publ., 2014, 138 p

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1. Мамандыққа кіріспе:,оқу құралы.-Қарағанды, 2020.- 165 бет.<https://aknurpress.kz/login>
2. Асимов М.А., Бағиярова Ф.А., Мадалиева С.Х., Оразбакова Г.О., Испаева Г.Б., Адилова Л.М.
3. Дәрігер мамандығына кіріспе. Клиника, құқық, этика және коммуникация негіздері». Оқулық, 2017/<https://aknurpress.kz/login>
4. Asimov M. A., Bagiyarova F. A., Madaliev S. Kh., Orazbakova G. O., Ispaeva G. B., Adilova L. M. Introduction to the profession of a doctor. Fundamentals of Clinic, Law, Ethics and communication. Textbook. 2017/<https://aknurpress.kz/login>
5. Коммуникативтік дағдылар. Communication skills. Communication skills. Matsievskaya Larisa Leonardovna, Abildina Nazerke Tursynovna, Bakirova Ryszhan Emelyevna, Vasilechko Sergey Vasilyevich, Kabieva Saule Mautovna, Molotov-Luchansky Vilen Borisovich, Tuimebayeva Aizhan Tolegenovna / under the general editorship of Matsievskaya L. L. / - Almaty, EveroLLP, 118 p https://www.elib.kz/ru/search/read_book/601/Мейірбике
6. Мейірбике manipulationsby algorithmderi (standartary) / oku kuraly / D. A. Dauletbaev, M. A. Ababkova, G. K. Yerdsova. Almaty: "Evero" VaspasyPubl., 2016, 224 pages. https://elib.kz/ru/search/read_book/737/Сейдуманов
7. Seidumanov S. T. et al. General nursing technologies / Edited by S. T. Seidumanov. – Алматы: Издательство «Эверо», 2020 - 230 с https://www.elib.kz/ru/search/read_book/397/
8. Molotov-Luchanskiy V.B.B 29 Bases of nursing skills in questions and answers: manual for students of medical universities / V.B. Molotov-Luchanskiy, N.A. Kudaka, L.V. Yevseyenko, V.L. Sidenko. - Almaty, Evero, 2020. - 124 p https://www.elib.kz/ru/search/read_book/613/
9. Коммуникативтік дағдылар: оқулық/У.М. Датхаев, М.А. Асимов, А.А. Сұлтанбеков. - Almaty: Evero Publ., 2020. - 260 b https://www.elib.kz/ru/search/read_book/3006/Лабораторные

1. **Department: «Legal, economic, environmental and scientific knowledge»**
2. **Level of training -bachelor's**
3. **Educational program: 6B10115- Medicine; 6B10116- Pediatrics; 6B10117- Dentistry; 6B10118- Medical and preventive care.**
4. **Course-1**
5. **Name of the elective discipline- «Legal, economic, environmental and scientific knowledge»**
6. **Number of credits (at least 5 credits)-5**
7. Purpose- To acquaint students with the basic concepts and laws of legal and economic science, with the content of anti-corruption culture, scientific research and ecology; with the tasks and main sections of such disciplines as fundamentals of law, anti-corruption culture, economics, research methods, ecology and life safety.
8. Contents of the discipline (30-50 words)- The concept of the fundamentals of law, anti-corruption culture, economics, scientific research and environmental safety. General questions of the theory of law and economics, anti-corruption culture, methods of scientific research, fundamentals of environmental knowledge. Theory of state and law, formation of anti-corruption culture, fundamentals of economic knowledge, methodology of science, methods of collection, analysis and publication of scientific data, environmental safety of man and society.
9. Tasks- Formation of methods of spiritual and intellectual self-development, legal, economic and environmental literacy, culture of thinking and behavior.
10. Justification for choosing a discipline- This program is designed to provide students with the necessary knowledge, skills and abilities in the discipline, to achieve learning outcomes.
11. Learning outcomes (4-6 learning outcomes according to Dublin descriptors)-
CLO1-Knows and understands the main stages of scientific research and methods of processing scientific data.
CLO2-Demonstrates knowledge and understanding of the system of norms of the Constitution of the Republic of Kazakhstan, the main definitions and categories of the theory of law and the state, the most important norms of sectoral legislation and economic theory.
CLO3-Knows about the measures of legal and moral responsibility for corruption offenses within the framework of the current legislation in the field of anti-corruption.
CLO4-He is able to analyze the economic situation at the micro and macro levels, focusing on the economic laws and patterns of development of the modern economy.
CLO5-Understands the tasks of ecology and life safety and its basic concepts and knows the main factors that have an anthropogenic impact on the health of the population.
12. Prerequisites- The History of Kazakhstan
13. Post-requisites- Philosophy, Psychology and cultural studies, sociology and political
14. Literature:

1. Спандияров, Е. Ғылыми зерттеулер мен инновация негіздері [Мәтін] : оқу құралы / Е. Спандияров. - Алматы : ЭСПИ, 2021. - 116 бет. с.
2. Спандияров, Е. Основы научных исследований и инновации: практическое пособие / М-во образования и науки РК. - Алматы : Эверо, 2013. - 136 с.
- 3.Қазақстан Республикасының мемлекет және құқық негіздері. 1 бөлім : оқу құралы / құраст. А. Н. Ағыбаев. - Алматы : New book, 2022. - 338 бет.
- 4.Қазақстан Республикасының мемлекет және құқық негіздері. 2 бөлім : оқу құралы / құраст. А. Н. Ағыбаев. - Алматы : New book, 2022. - 246 бет.
- 5.Қазақстан Республикасының мемлекеті мен құқығы негіздері. 1 кітап : /құраст. Е. Баянов. - Алматы : New book, 2022. - 384 бет.
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- 7.Экономикалық және құқықтық білім негіздері:оқу құралы / Б. С. Битенова, Л. К. Мағзумова, А. А. Ахатова. - Қарағанды : АҚНҰР, 2019. - 310 бет
8. Газизова Н. С.Құқық негіздері : оқу құралы / Н. С. Газизова. - Алматы : New book, 2022. - 256 бет.

9. Ибрагимов Ж. И. Құқық негіздері : оқу-әдістемелік кешен / Ж. И. Ибрагимов. - Алматы : New book, 2022. - 256 бет.
10. Альжанова, А. Н. Основы права учеб. пособие / А. Н. Альжанова, К. К. Райханова. - ; Алматы : Эверо, 2014. - 134 с
11. Таскымбаева, С. М. Основы экономической теории [Текст] : учеб. пособие / С. М. Таскымбаева, Ф. М. Каратаева. - Караганда : АҚНҰР, 2017. - 200 с
12. Николас, Дж. Бизнес және заң. 1т. [Мәтін] : оқулық / Дж. Николас. - 3-бас. - Алматы : Дәуір, 2017. - 468 б. с.
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14. Сыбайлас жемқорлыққа қарсы мәдеиет негіздері. Оқу-әдістемелік құралы. М. А. Жанысбеков, Н. А. Абдурахманов, А. С. Еркинбекова. - Караганда : АҚНҰР, 2019. - 192 б.
15. Атикеева С.Н. Экология и устойчивое развитие. Учебное пособие. «Sky Systems» 2021
16. Нуржуманова Ж.М. Виды экологического контроля: учебное пособие «Sky Systems» 2019
17. Архангельский В.И. Гигиена и экология человека: М.: ГЭОТАР-Медиа, 2013
18. Кенесариев У.И. экология и здоровье населения : учебник для мед. вузов и колледжей Алматы: Эверо, 2020
19. Имашева Б.С. Социальная экология и устойчивое развитие – Алматы: Эверо, 2020

1. Department: Department "Introduction to the clinic"

2. Education level: Bachelor course

3. Educational program: «6B10115» «Medicine»

4. Course: 2

5. Name of the elective discipline: Introduction to the clinic

6. Number of credits: 3

7. Goal: To form students' ideas of the organization of the work of the procedural room and algorithms for the provision of first aid in a medical institution in modern practical healthcare of the Republic of Kazakhstan.

8. Responsibilities:- Provides patient-oriented care in the field of biomedical, clinical, epidemiological and socio-behavioral sciences for the most common diseases.

- Carries out its activities within the framework of the legislation of the Republic of Kazakhstan in the field of healthcare, is guided by their practical activities to ensure optimal medical care

- Adheres to the rules of ethics, deontology and subordination, demonstrates interpersonal and communication skills that lead to effective information exchange and cooperation with patients, their families and medical professionals

- Performs diagnostics, provides qualified and urgent medical care in emergency and life-threatening situations.

- It works on electronic databases of the healthcare system of the Republic of Kazakhstan, provides documentation of the processes of providing medical services

9. Content of the discipline: "Introduction to the clinic" is a discipline that teaches the basic principles of working in the clinic with patients requiring supervision and care, the organization of the nursing process, mastering manipulation techniques, skills of pre-medical care for patients, special knowledge and methods necessary for monitoring and caring for patients. Mastering the discipline helps the student to use manipulation techniques in practice in the future.

10. Basics of choosing a discipline: This program is designed to provide students with the necessary knowledge, skills and abilities in the subject, to achieve learning outcomes.

11. Learning outcomes:

- 1) Memorizes the theoretical foundations of modern healthcare and medicine of the Republic of Kazakhstan and describes the difficulties, difficulties and principles of the profession of "Doctor", the structure of medical institutions, types of medical institutions and the basics of organizing their work; the rules of patient care, as well as the principles of admission and sanitary treatment of

patients, selects the rules of sanitary cleaning of premises and equipment in medical institutions, the principles of communication between a medical worker and patients.

- 2) At a professional level, formulates arguments and solves the problems of the studied area: applies the normative documents regulating the activities of medical professionals.
- 3) Characterizes its own conclusions when assessing the functional state of patients; distinguishes arguments based on the collected material about the basics of the organization of the work of medical institutions; formulates arguments based on the collected material to ensure the sanitary and epidemiological regime in the health care facilities.
- 4) Communicates their own knowledge, judgment and skills about the principles of communication of a medical professional with patients and their families, as well as colleagues.
- 5) Uses creative thinking in collecting information on the basics of organizing the work of medical institutions and ensuring the sanitary and epidemiological regime in them; applies creative solutions in collecting the knowledge and methods necessary for monitoring and caring for patients.
- 6) Examines the arguments in the implementation of monitoring and care of the patient; analyzes their actions to educate the patient on health promotion, rehabilitation and disease prevention.
- 7) Evaluates when receiving and sanitizing patients and interprets when providing patient care.

10. Prerequisites: Introduction to the profession

11. Post - Requesitter: propaedeutics of internal diseases

12. Literature:

References Main literature:

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4. Теляева, Н. Н. Введение в клинику -2. Ч. 1 [Текст] : учеб. пособие / Н. Н. Теляева, А. Д. Каркабаева. - Астана : [б. и.], 2017. - 214 с.
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3. Қаныбеков А. Жедел медициналық жәрдем : оқу құралы / А. Қаныбеков. - 2-ші бас. - Караганда : АҚНҰР, 2017. - 266 бет. с.
4. Кабиева, С. М. Введение в клинику. Т. 1. [Текст] : учебник / С. М. Кабиева. - Алматы :Эверо, 2016. - 304 с
5. Аяпов К. Модернизация сестринского образования Казахстана : сб. / К. Аяпов. - 2-е изд., перераб. - [б. м.] : New book, 2022. - 220 с.
6. Kabiyeva, S. Introduction in clinic. Volume 1 [Текст] : textbook / S. Kabiyeva. - Almaty : "Evero" , 2016. - 263 p.
7. Hammer , Gary D. Pathophysiology of Disease: An Introduction to Clinical Medicine / Gary D. Hammer . - 7nd ed. - New York : Mg Graw Hill. Education, 2014. - 762 p.

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2. S. Kabiyeva Introduction in clinic: Textbook, volume I. – Almaty: 2020 – 263 p.https://elib.kz/ru/search/read_book/324/

3. Кабиева С.М. Введение в клинику: Учебник. Том I./С.М. Кабиева.- Алматы: Эверо, 2020. – 304 с https://www.elib.kz/ru/search/read_book/316/

Electronic resources:

1. Датхаев, У. М. Коммуникативные навыки [Электронный ресурс] : учебник / У. М. Датхаев, М. А. Асимов, Г. Ж. Умурзахова . - Электрон. текстовые дан.(5,21 МБ). - Алматы : Эверо, 2016. - 256 с. эл. опт. диск (CD-ROM)
 2. Асимов, А. А. Коммуникативтік дағдылар [Электронный ресурс] : оқулық / М. А. Асимов, А. А. Сұлтанбеков . - Электрон. текстовые дан.(7,30МБ). - Алматы : Эверо, 2016. - 260 бет. эл. опт. диск (CD-ROM).
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 4. Коммуникативтік дағдылар. Коммуникативные навыки. Communication skills. Алматы, ТОО "Эверо", 118 https://www.elib.kz/ru/search/read_book/601/
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 6. Жедел медициналық жәрдем Қаныбеков А. , 2017 /<https://aknurpress.kz/login>
- Диагностика және жедел медициналық көмек көрсету алгоритмі / algorithm of diagnosis and emergency care Алпысова А.Р. , 2015/<https://aknurpress.kz/login>

1. Department: Microbiology, Virology and Immunology

2. Level of training: Bachelor's degree

3. Specialty: 6B10115 "Medicine"

4. Course: 2

5. Name of elective discipline: "General immunology"

6. Number of credits: 5 credits (150 hours)

7. Purpose: to familiarize students with modern concepts of immunity, organs and functions of the immune system, humoral immune system, mechanisms of adaptive immunity, immune defense network in inflammation, phagocytosis, concepts of immunological resistance and the main groups of pathogenic factors.

8. Objectives:

- To study the patterns of formation of the body's resistance to infectious diseases (immunity).
- Development and improvement of methods of serological and allergic diagnostics of infectious diseases.
- Development and application of biological products (vaccines, immune serums, gammaglobulins for specific prevention and treatment of human infectious diseases).

9. The content of the discipline. Organs of the immune system. Central lymphoid organs. Peripheral lymphoid organs. Inflammation. The development of a root reaction. Migration of cells to the site of inflammation. Neutralization and destruction of pathogens. Activation of adaptive immunity mechanisms. Maintenance and chronization of the inflammatory process. Features of the fight against the inflammatory process. Stimulation of the inflammatory response. Adaptive immune protection. Antigen transport. Stopping lymphocytes and triggering the initial stages of an adaptive immune response. Cellular immune response. Immune reactions related to the function of antibodies. Allergy. Secondary immune response. The possibilities of managing adaptive immunity processes. A protection factor against phagocytosis and intracellular cytolysis. Features of immunity in diseases caused by various pathogens. Features of the immune response in viral diseases. Features of the immune response in bacterial infections. Features of the immune response in parasitic diseases.

10. Justification of the choice of discipline:

Modern immunology is a science that studies the interactions of cells and molecules of the immune system (SI) with biologically active agents – antigens, exploring their relationship with each other and with other cells and bioactive molecules in the body, leading to changes in homeostasis.

Interactions of biomacromolecules, both free (circulating) and cell-bound, are the basis for the development of various immune phenomena – from immunity to microorganisms, to hypersensitivity to allergens.

By now it has become obvious that, on the one hand, the body's resistance to infection or tumor transformation depends on the cells of the immune system, and on the other hand, damage and inflammation. They determine the effectiveness, norm and pathology of the inflammatory response to both infectious and non-infectious agents. Excessive reactions of cells of the immune system lead to the development of hypersensitivity: allergies and autoimmunity, reduced ones – to insufficient resistance of the macroorganism to pathogens, the development of infections and tumors.

The highly effective methods of immunodiagnostics, immunotherapy and immunorehabilitation of diseases proposed by immunology are widely used in modern medicine – in the clinic of infectious diseases, therapy, surgery, oncology, obstetrics and gynecology, pediatrics, the clinic of eye and eye diseases, neurology and psychiatry, as well as in many other medical fields.

11. Learning outcomes (competencies):

LO 1: Knows the main stages of the development of immunology, the place of immunology in the structure of medical disciplines; the significance of immunology achievements for the development of medicine.

LO 2: Knows the basic terms and concepts used in studying sections of general and clinical immunology

LO 3: Knows basic immunological concepts and modern immunological research methods;

LO 4: Knows the structure and functions of the human immune system, its age-related characteristics, cellular and molecular mechanisms of development and functioning of the immune system, immunodiagnostic methods

LO 5: Knows the structure and functions of the human immune system, the molecular mechanisms of development and functioning of the immune system.

LO 6: Knows the main stages of the development of immunology, the place of immunology in the structure of medical disciplines; the significance of immunology achievements for the development of medicine.

12. Prerequisites: the structural organization of human physiological processes.

13. Details: microbiology and Immunology; infectious diseases with clinical immunology and microbiology.

14. Literature:

1. General Immunology: Okula. Seitkhanova B.T. Almaty: Evero 2014. – 160 P.
2. Medalyk microbiology, virology and immunology : okulyk. Volume 2. Volume 1 / kazaktilin Auy. I. Kudaibergenuly; edited by V. V. Zverev. - M. : GEOTAR - Media, 2016. – 416 p.
3. Medalyk microbiology, virology and immunology: okulyk. Volume 2. In 2 volumes / Kazakh. til. aud. I. Kudaibergenuly. - M. : GEOTAR - Media, 2016. - 480 P.
4. General Immunology: Okulyk / A.A. Shortanbaev, S.V. Kozhanova. - Almaty, 2008. – B. 452
5. Klimov V.V. Fundamentals of immunology: a textbook. Tomsk: SibSMU Publishing House, 2017. 169 P.
6. Khaitov.M., Ignatiev G.A. I. Sidorovich.G. X19 Immunology: Textbook. — M.: Medicine, 2000. - 432 p.
7. L. K. Reshetnikova. Immunology. - Blagoveshchensk, 2019. 176 P.

1. Department: "Hygiene and epidemiology"

2. Level of preparation (bachelor / internship / magistracy / residency)

3. Specialty: 6B10115 -General Medicine

4. Course: 3

5. Name of elective discipline: "Clinical epidemiology"

6. The number of credits - 5

7. Purpose: the development and application of such methods of clinical observation, which enable students to draw fair conclusions, conduct retrospective and prospective studies.

8. Tasks:

- to teach students to distinguish between the main types of clinical research;

- to teach the basic skills of using the database of clinical epidemiology;
- teach to critically evaluate medical information regarding clinical epidemiology;
- to give knowledge of the theoretical, methodological and organizational bases of clinical diagnosis for infectious and parasitic diseases;

9. The rationale for the choice of discipline: Clinical epidemiology is the selection and systematization of reliable results of various methods of diagnosis and treatment, the development and application of methods of clinical observation, which make it possible to draw fair conclusions, avoiding the influence of systematic and random errors. To exclude systematic errors take into account the features of patient selection.

10. Learning outcomes (competencies):

Knowledge (cognitive sphere)	Skills and abilities (psychomotor sphere)	Personal and professional competencies (relationships)
<ul style="list-style-type: none"> -Demonstrates knowledge of the subject; -knows the methods of clinical research, the system of epidemiological diagnosis; -owns the principles of organizing and conducting research in the field of clinical epidemiology; -knows the method of calculating the intensive and extensive indicators, assessing the clinical research indicators, predicting the manifestations of the epidemic process of infectious and non-communicable diseases; -knows the Code of the Republic of Kazakhstan "On the health of the people and the health care system"; -Knows the methodology for calculating and assessing population health indicators. 	<ul style="list-style-type: none"> - able to conduct clinical research facilities; - able to conduct research in the field of this discipline; - able to develop a set of measures for the prevention and reduction of infectious diseases, the prevention of importation and the spread of especially dangerous infections; - able to maintain accounting records using computer technology; - able to present and interpret legislation on the protection of public health, sanitary, environmental legislation of the Republic of Kazakhstan, the legal framework for the activities of specialists of the state sanitary and epidemiological service; - able to present personal judgments, arrange in the form of an abstract, presentation, project and present at 	<ul style="list-style-type: none"> -able to promote healthy lifestyle among the population; -able to implement methods of collecting, storing and processing information used in clinical epidemiology; -able to transfer to students their own knowledge and skills in working with information (educational, reference, scientific); -Own the skills of public speaking with the presentation of their own judgments, analysis and synthesis of information in the studied area.

	practical classes, student meetings, student scientific conferences, etc.	
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11. Prerequisites:

12. Post requisites:

13. Literature:

1. Amireev S.A. Standards and algorithms for activities with infectious diseases. Volume 1: A Practical Guide. –Evero, 2014.

2. Amireev S.A. Standards and algorithms for activities with infectious diseases. Volume 2: a practical guide. –Evero, 2014.

3. Infectious diseases and epidemiology: a textbook. - M.: GEOTAR - Media, 2013.- additional:

1. S. A. Amireev Immunization in practice [Text]: a practical guide / [and others]. - Almaty: [b. and.], 2013. - 448 p.

2. Alshinbaeva, G. U. Infectious diseases with the basics of epidemiology: a textbook. - Astana: ANkr, 2014. - 364 p.

3. Duysenbaeva, P. R. Current approaches to the study of epidemiology, clinic, diagnosis, treatment, prevention of measles, rubella, chicken pox and scarlet fever in children: a textbook. - Almaty: Evero, 2014. - 140 p.

4. Epidemiology. In 2 t. T. 1: textbook / N. I. Briko [et al.]. -; Rec. GBOU VPO "First MGMU them. IM Sechenov". - M.: Medical Information Agency LLC, 2013. - 832 p. : il.

5. Epidemiology. In 2 t. T. 2: textbook / N. I. Briko. -; Rec. GBOU VPO "First MGMU them. IM Sechenov". - M.: Medical Information Agency LLC, 2013. - 656 pp., Ill.

Electronic resources.

1. Infectious diseases and epidemiology [Electronic resource]: studies. for honey Universities / V.I.Pokrovsky [et al.]. - Electronic text data. (39.6 MB) - M., 2009. - 816 hrs. El. opt.disk (CD-ROM). - 1 copy

2. Schloss Leopoldskron Infectious Diseases and Epidemiology '98 [Electronic resource]: cornell Seminar in Saizburg / Leopoldskron Schloss. - Electron. text data. (623 MB). [S. l. : s.n.], 1998. - email. opt.disk (CD-ROM). - 1 copy Translation of the title: Infectious diseases and epidemiology.