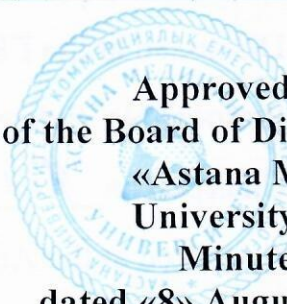


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	Educational program 6B10107 "General Medicine"	


 Approved by the
 decision of the Board of Directors
 «Astana Medical
 University» JSC,
 Minutes No. 9
 dated «8» August 2025

EDUCATIONAL PROGRAM

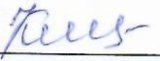
6B10107 "General Medicine"

Astana 2025

Developed in accordance with the State Mandatory Standard and the typical professional curricula for medical and pharmaceutical specialties

Discussed at the EPC Medicine meeting

Protocol No. 9 dated "30" June 2025

Chairperson  Kulzhanova Sh.A.

Approved at the Academic Council meeting

Protocol No. 7/1 dated «21» July 2025

/Chairperson  Zhunusova A.B.

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	Educational program 6B10107 "General Medicine"	

1. Educational program passport

Field of education	6B10 Healthcare
Direction of training	6B101 Healthcare
Group of educational programs	B086 General Medicine
Educational program	6B10107 - "General Medicine"
The purpose of the educational program	Training of a qualified specialist with the appropriate competence as a physician, possessing the skills of diagnosis, differential diagnosis and treatment of the most common diseases.
Type of educational program	Current EP
Qualification level according to the national qualifications framework	6
Sectoral qualifications framework qualification level	6
Distinctive features of educational programs	-
Awarded academic degree	Bachelor
Duration of training	5 years
Mission of the educational program	Training highly qualified specialists of the new generation based on the unity of education, science and practice
Accreditation and certification of educational institutions	Independent Agency for Accreditation and Rating. Accreditation period: April 29, 2022 - April 26, 2027. Registration number: AB 4411
Requirements for the previous level of education of persons wishing to master the educational program	General secondary education, technical and vocational education, post-secondary medical education or higher education
Professional standards (career enbek)	General medical practice, family medicine
Qualification characteristics of a graduate	
List of specialist positions	Potential employers of graduates of the educational program are representatives of all sectors of healthcare in the Republic of Kazakhstan.
Field of professional activity	Health care and social services
Functions of professional activity	Outpatient care, management, and dynamic observation of pediatric and adult patients, prevention and early detection of diseases, assessment of temporary and permanent disability; Conducting community work; Providing emergency and urgent medical care; Participation in the management of medical records and medical statistical information; Continuous professional development
Types of professional activity	Diagnostic, therapeutic, advisory, preventive, emergency

2. Graduate competencies and learning outcomes

2.1 Competencies and RO EP

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No.	Competencies	Learning outcomes
	General competencies	No. OK
1	Competencies in the field of general education	PO 1 Demonstrates knowledge and understanding of collecting a medical history, assessing the severity of a patient's condition, and preparing medical documentation
2	Personal and professional development	RO-2: Able to acquire new applied knowledge in the relevant professional field to identify the main pathological symptoms and syndromes of diseases. Able to conduct differential diagnostics based on the leading syndrome and interpret examination results to establish a clinical diagnosis of public health.
3	Communication skills	RO-7 Demonstrates advanced professional and scientific knowledge of the basic complexity level in the field of public health. Able to consider psychological and social factors affecting the health and quality of life of patients, and provide psycho-emotional support to patients of various ages with various conditions and illnesses.
4	Organizational and managerial competencies	RO-7 Demonstrates advanced professional and scientific knowledge of the basic complexity level in the field of public health. Able to consider psychological and social factors affecting the health and quality of life of patients, and provide psycho-emotional support to patients of various ages with various conditions and illnesses.
	Professional competencies	PC No.
5	Patient consultation	RO-1 Demonstrates knowledge and understanding of collecting a medical history, assessing the severity of a patient's condition, and preparing medical documentation
6	Evaluation of clinical signs	RO-2: Able to acquire new applied knowledge in the relevant professional field to identify the main pathological symptoms and syndromes of diseases. Able to conduct differential diagnostics based on the leading syndrome and interpret examination results to establish a clinical diagnosis of public health.
7	Providing emergency medical care	RO-3 is capable of providing primary and emergency medical care to patients of various ages in life-threatening conditions, as well as to the population in extreme conditions, epidemics and in areas of mass destruction.
8	Treatment	RO-4 is capable of providing medical care to patients of different ages with diseases within the framework of medical services, according to clinical protocols for diagnosis and treatment
9	Carrying out medical procedures	RO-5 Able to perform medical procedures within the professional competence of a general practitioner.

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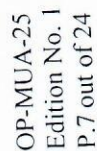
10	Application of ethical and legal principles	RO-6 Demonstrates knowledge and understanding of ethical and legal principles: carries out professional activities taking into account the moral and legal norms accepted in society; complies with the rules of medical ethics, laws and regulations on working with confidential information; maintains medical confidentiality
11	Assessment of the psychological and social aspects of the patient's illness	RO-7 Demonstrates advanced professional and scientific knowledge of the basic complexity level in the field of public health. Able to consider psychological and social factors affecting the health and quality of life of patients, and provide psycho-emotional support to patients of various ages with various conditions and illnesses.
12	Effective use of information and information technology	RO-8 Capable of using information and information-communication technologies in practical activities to analyze and monitor patient medical records and improve the quality of medical services provided
13	Research skills	RO-9 Demonstrates research skills: effectively searches for information in information databases, analyzes scientific data, and demonstrates a research and analytical approach
14	Promoting a healthy lifestyle	RO-7 Demonstrates advanced professional and scientific knowledge of the basic complexity level in the field of public health. Able to consider psychological and social factors affecting the health and quality of life of patients, and provide psycho-emotional support to patients of various ages with various conditions and illnesses.

2.2 Learning outcomes

No.	Code	Learning outcomes	Relevant job functions
1	ON1	Demonstrates knowledge and understanding of collecting a medical history, assessing the severity of a patient's condition, and completing medical documentation.	Labor function 1: Outpatient consultation, management and dynamic observation of pediatric and adult patients, prevention and early detection of diseases, assessment of temporary and permanent disability. Quality management of medical care
2	ON2	Able to acquire new applied knowledge in the relevant professional field to identify key pathological symptoms and disease syndromes. Able to conduct differential diagnostics based on the leading syndrome	Labor function 1: Outpatient consultation, management and dynamic observation of pediatric and adult patients, prevention and early detection of diseases, assessment of temporary and permanent

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		and interpret examination results to establish a clinical diagnosis of public health.	disability. Quality management of medical care
3	ON3	Capable of providing primary and emergency medical care to patients of various ages in life-threatening conditions, as well as to the population in extreme conditions, epidemics and in areas of mass destruction	Labor function 3: Provision of medical care in emergency and urgent cases
4	ON4	Capable of providing medical care to patients of various ages with illnesses within the framework of medical services, according to clinical protocols for diagnosis and treatment	Labor function 2: Conducting district work
5	ON5	Able to perform medical procedures within the professional competence of a general practitioner.	Labor function 2: Conducting district work
6	ON6	Demonstrates knowledge and understanding of ethical and legal principles: carries out professional activities taking into account the moral and legal norms accepted in society; complies with the rules of medical ethics, laws and regulations on working with confidential information; maintains medical confidentiality	Labor function 4: Participation in the management of medical records and medical statistical information
7	ON7	Demonstrates advanced professional and scientific knowledge of basic complexity in the field of public health. Able to consider psychological and social factors affecting patients' health and quality of life, and provide psycho-emotional support to patients of various ages with various conditions and illnesses.	Labor function 2: Conducting district work
8	ON8	Able to use information and information-communication technologies in practical activities to analyze and monitor patient medical records and improve the quality of medical services provided	Labor function 4: Participation in the management of medical records and medical statistical information
9	ON9	Demonstrates research skills: effectively searches for information in information databases, analyzes scientific data, and demonstrates a research and analytical approach	Additional Job Function 1: Continuous Professional Development



Brief description of the discipline

Information about disciplines:			Cycle	Component	Loans	Generated results training (codes)								
No.	Name of the module/discipline	Brief description of the discipline				RO 1	RO 2	RO 3	RO 4	RO 5	RO 6	RO 7	RO 8	RO 9
Cycle of general education disciplines														
General education subjects. Compulsory component														
1	Modern history of Kazakhstan	Study of socio-economic, political, ideological, cultural events, phenomena, and processes that took place on the territory of Kazakhstan	General education disciplines (GED)	Required Component (RC)	5							+	+	+
2	Philosophy	The course studies philosophy as a special form of understanding the world by examining its main sections, problems and methods of studying them in the context of future professional activity through an understanding of the role of philosophy in modernizing public consciousness and solving global problems of our time to develop students' philosophical reflection, self-analysis skills and moral self-regulation for personal growth	OOD	OK	5							+	+	
3	Foreign language	This course examines the specifics of professional communication in a foreign language, including medical terminology, the structure and specifics of medical texts, as well as the linguistic features characteristic of communication in the medical field, necessary for further professional growth and successful mastery of basic, specialized disciplines.	OOD	OK	10							+	+	+
4	Kazakh (Russian) language	This course focuses on the functional, communicative, and scientific understanding of the nature of language, with an emphasis on the internal semantic structure of each linguistic unit, including medical terminology. Its goal is language	OOD	OK	10							+	+	+



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General education subjects. Elective component.

General education subjects, Elective component.																	
8	To teach how to apply physical and chemical principles to describe biochemical processes occurring in the body and to develop an understanding of the relationship between the structure, composition, and biological activity of substances. To understand the characteristics of the main metabolic processes in the human body and tissue and their regulation, molecular mechanisms, and the use of biochemical indicators for disease diagnosis and effective treatment.	OOD	Component of Choice (CV)	2													
	Medicinal chemistry				+											+	+
	Study of the mechanisms of storage, transmission and implementation of genetic information, the structure and function of biopolymers (proteins and nucleic acids), establishing the role and mechanism of functioning of macromolecules based on knowledge of their structure and properties.	OOD	KV	3												+	+
	Molecular biology				+												

Cycle of basic disciplines

Cycle of basic disciplines

A cycle of basic disciplines. University component

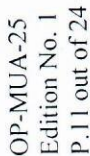
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		BD	VK	2	+	+	+	+	+	+	
21	First aid, Training in a set of emergency medical measures carried out on a suddenly ill or injured person at the scene of an incident and during the period of his/her delivery to a medical facility	BD	VK	2	+	+	+	+	+	+	
22	Propaedeutics of internal diseases Propaedeutics of Internal Medicine is a branch of medicine that includes methods of patient examination and syndromic diagnosis of internal diseases. This module teaches physical examination skills and develops knowledge and skills in diagnostic principles.	BD	VK	4	+	+	+	+	+	+	
	Propaedeutics of childhood diseases Propaedeutics of childhood diseases is a branch of medicine that includes the fundamentals of diagnostics and specific pathology of childhood.	BD	VK	4	+	+	+	+	+	+	
	Physiology Physiology is a crucial part of the theoretical disciplines that shape the modern physician. Without a thorough understanding of the physiology of organs and systems, it is impossible to uncover the mechanisms of dysfunction.	BD	VK	5	+	+	+	+	+	+	
Cycle of basic disciplines											
A cycle of basic disciplines. Elective component											
23	Biostatistics Biostatistics is a scientific field concerned with the development and use of statistical methods in scientific research. It also involves data collection, summarization, analysis, and drawing conclusions based on the observations obtained.	BD	KV	2							+
24	Biochemistry of organs and tissues Biochemistry of organs and tissues studies the composition, structure, metabolism, and function of individual organs and tissues of the human body. The role of hormones in regulating metabolism in individual tissues and the human body is examined.	BD	KV	3							+
25	Immunology Immunology is the science that studies the humoral and cellular mechanisms of the body's response to foreign substances called antigens. Immunology is one of the most promising and rapidly developing biomedical sciences, and its theoretical principles are increasingly being applied in practical healthcare. The data obtained by modern immunology are significantly changing our understanding of both the pathogenesis and approaches to diagnosis, treatment, and prevention of a wide variety of diseases.	BD	KV	2				+			+
26	Therapeutic nutrition in pediatrics Theoretical issues regarding the principles of rational and balanced nutrition for children of different ages. Principles of organizing therapeutic nutrition in medical and preventive institutions, menu planning guidelines. Diet therapy methods for various pathological conditions.	BD	KV	3					+		+
	General hygiene The formation of the foundations of hygienic knowledge that make it possible to address issues of primary and secondary prevention of infectious and non-infectious diseases, correct	BD	KV	2						+	+



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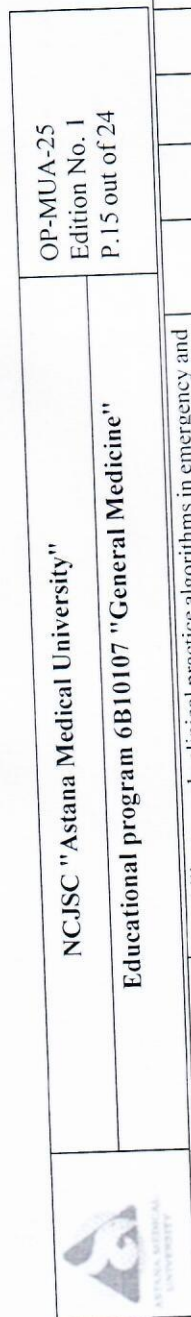
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FUNDAMENTALS OF CLINICAL MEDICINE		ASSESSMENT OF LEARNING OUTCOMES											
		Issues of diagnosis, treatment and prevention of the most common cardiothematological diseases.	PD	VK	4	+		+		+		+	
41	Fundamentals of Cardiothematology	developing students' knowledge of the fundamentals of epidemiological diagnostics of infectious and non-infectious diseases, principles of infectious disease prevention, and an understanding of the importance of clinical epidemiology as the basis of evidence-based medicine.	PD	VK	5	+		+		+		+	+
42	Fundamentals of Clinical Epidemiology	Issues of diagnosis, treatment and prevention of the most common pulmonary and endocrinological diseases.	PD	VK	4	+		+		+		+	+
43	Fundamentals of Pulmonology and Endocrinology	Knowledge of the main areas of general surgery is essential for physicians of any specialty, whether providing primary or advanced medical care. Being essentially a surgical discipline, general surgery requires teaching the fundamentals of clinical examination and treatment of surgical patients.	PD	VK	3	+		+		+		+	+
44	Basics of surgery	Psychiatry and narcology as a related discipline contribute to the development of knowledge, skills and abilities in the general principles of diagnosis and treatment, prevention and rehabilitation of major mental disorders and chemical dependencies in general medical practice.	PD	VK	5	+		+		+		+	+
45	Psychiatry and Narcology	Phthisiology develops knowledge and skills in the diagnosis, treatment and prevention of tuberculosis	PD	VK	3	+		+		+		+	+
46	Phthisiology	To develop knowledge, communication and practical skills in the examination and treatment of patients with surgical pathology of the chest and abdominal cavities, soft tissues, musculoskeletal and vascular systems.	PD	VK	4	+		+		+		+	+
47	Surgical diseases in the work of general practitioners												
A cycle of core disciplines. Elective component													
49	Obstetrics	Obstetrics is a field of clinical medicine that studies the physiological and pathological processes occurring in a woman's body associated with conception, pregnancy, childbirth, and the postpartum period, as well as developing methods of obstetric assistance, prevention, and treatment of complications of pregnancy and childbirth, diseases of the fetus and newborn.	PD	KV	6	+		+		+		+	+
50	Gynecology	Gynecology studies the physiological and pathological processes occurring in the female body related to the reproductive system. Understanding the basic examination methods for pregnant women, women in labor, women in childbirth, newborns, and gynecological patients will help establish a preliminary diagnosis, provide first aid for gynecological emergencies, and promote prevention and protection of women's reproductive health.	PD	KV	5	+		+		+		+	+
51	Pediatric neurology	Many nervous system diseases develop during fetal development and childhood. The diversity of clinical presentations is related to the etiology, nature, and location of	PD	KV	3	+		+		+		+	+

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