Toshkent State Medical University
Catalogue of Educational Programmes and Specialization Courses
Code and name of the educational program (specialty):____60910200-General Medicine____

T/r	Course code*	Name of the Subject	Brief Description of the Subject	Credit value	Semester
Compulsory Subjects					
1	LURFLM11209	Languages. Uzbek (Russian) Foreign Language in Medicine	The ability to express one's ideas independently through written and oral speech in live communication; acquiring the translation and pronunciation of words and phrases, as well as specialized vocabulary and the necessary language skills. The goal is to acquire linguistic knowledge, develop and improve speech skills and abilities in the Russian language in areas relevant to learners: academic, professional, and socio-cultural. Taking into account learners' specialization and professional needs, the aim is to expand and develop their foreign language knowledge by teaching medical terminology in a foreign language, and to form their communicative competence so that they can operate effectively in everyday, academic, and professional contexts.	9	1-2
2	MBGG1106	Medical Biology and General Genetics	It is necessary to develop a scientific worldview in specialists; to study humans as biosocial beings with an emphasis on biological laws; to foster interest in practical healthcare; to prepare them for independent work through theoretical, methodological, and practical skills; and to form a foundation for mastering both theoretical and clinical modules.	6	1
3	MCh1106	Medical Chemistry	Training specialists in family medicine who possess knowledge of the fundamentals of general, analytical, physical, and colloidal chemistry; are able to perform calculations of physicochemical quantities based on an understanding of physicochemical processes; have a grounding in organic chemistry; understand the structure, properties, and functions of biopolymers and bioregulatory substances involved in biochemical processes; can model processes involving these substances; comprehend the scientific basis of chemical processes occurring in living organisms at the cellular and molecular levels; and are able to apply their theoretical knowledge in practice.	6	1
4	MBP1205	Medical and Biological Physics	To provide students with the theoretical and practical knowledge necessary for correctly interpreting physiological processes in the functioning of organs and systems of the body, and to demonstrate the primary role of physical changes underlying the development of various diseases in organs and tissues.	5	2
5	LLMT1204	Latin Language and Medical Terminology	To enable students—based on educational and didactic principles, laws, and rules—to master the fundamentals of the "Latin Language and Medical Terminology" module for students of the faculties of Medicine, Medical Prevention, and Fundamental Medicine, as well as to apply this knowledge in general medical practice. It also aims to form anatomical, clinical, and pharmaceutical terminology and to expand and develop students' professional skills through learning medical terms and their Latin and Greek doublets. In addition, it is intended to develop their communicative competence for use in everyday, academic, and professional contexts.	4	2

6	ITI1205	Information Technologies in Medicine	The module “Information Technologies in Medicine” plays a special role today in solving medical problems and ensuring high-quality therapeutic and scientific-practical activities, as well as in training personnel capable of properly using information technologies. Bachelor students must be able to process and analyze medical and biological information obtained through modern computer technologies, automate work processes, and make informed decisions. In particular, they should be familiar with methods of mathematical modeling, working on the Internet, and using modern computer technologies. Understanding the importance and development trends of information technologies requires them to develop skills in effectively using technical, software, and network resources.	5	2
7	HAN112314	Human Anatomy	To develop students’ knowledge, skills, and competencies regarding the structure of the human body, as well as the functional and topographic anatomy of organs and tissues, and their age-related changes. To achieve this goal, the module is aimed at providing students with theoretical knowledge, practical skills, a methodological approach to studying the structure of the human body, and the formation of a scientific worldview.	14	1-2-3
8	HCEM12309	Histology, Cytology, Embryology	To study the embryonic development of organs and tissues of the human body, their microscopic and submicroscopic structure, as well as the basic laws of cytology and histophysiology of cells, and to acquire skills in identifying and interpreting histological preparations.	9	2-3
9	B13409	Biochemistry	Based on the current achievements of biochemistry, the aim is to develop in students a materialistic worldview and provide them with knowledge of the fundamentals of dynamic, functional, and molecular biochemistry. Students should master the metabolic processes occurring in the organism, their principles and patterns, and be familiar with normal biochemical parameters and be able to determine them. For future family physicians, it is especially important to understand the molecular basis of physiological functions, the molecular mechanisms of disease pathogenesis, and the biochemical foundations of disease prevention and treatment, as well as the biochemical principles of diagnosing diseases and monitoring treatment effectiveness. The training also aims to prepare specialists who are able to apply their theoretical knowledge in practical settings.	9	3-4
10	NF13410	Normal Physiology	To understand, based on the concept of functional systems, the mechanisms that ensure health and the functioning of a healthy organism. To acquire knowledge and skills in the scientific and methodological foundations of health diagnostics, assessment of working capacity, and prediction of individual functional activity. It also aims to prepare future general practitioners in the field of medical (professional) education for clinical practice.	10	3-4
11	MVI13410	Microbiology, Virology, Immunology	To teach students the theoretical and practical foundations and principles of microbiology, virology, immunology, mycology, and parasitology, and to develop their skills in isolating infectious disease agents, performing their detection (indication) and identification, and correctly interpreting the obtained results for practical application.	10	3-4
12	P1304	Psychology	To develop high moral and human qualities in students, including ethics, upbringing, and the ability to cope with various complex situations in life and professional activity. It also aims to	4	3

			foster independent thinking, anticipation of the consequences of one's actions, accurate self-assessment of personal capabilities, achievement of goals, and effective organization of educational and training activities. In addition, the course is intended to form knowledge, skills, and competencies in pedagogical and psychological approaches related to management and administration in medical education.		
13	CAN1504	(Topographic anatomy with operative surgery)	To provide theoretical and practical knowledge about the organs and systems of the human body and to form the topographic-anatomical basis of clinical thinking. The course aims to teach practical operative skills and the techniques of performing standard surgical procedures, as well as to provide information about modern surgical practices. It is also intended to develop the general cultural, general professional, and professional competencies required for the independent practice of a general practitioner in accordance with established requirements and standards.	4	5
14	PAN15607	Pathological Anatomy	It covers the history and development trends of the module, as well as its prospective issues. It provides an understanding of the etiological factors that cause diseases in the human body, their classification, and their interaction with the organism. It also creates a theoretical basis for future general practitioners to identify etiological factors of diseases, make diagnoses, and justify clinical signs, while developing students' clinical thinking skills.	7	5-6
15	PP15607	Pathological Physiology	The curriculum of the "Pathological Physiology" module, by applying modern pedagogical technologies to the teaching process, trains students to move from theoretical knowledge to basic practical skills and to integrate acquired skills with clinical practice. It also creates a foundation for independently determining the etiology and pathogenesis of diseases. The course provides an understanding of etiological factors causing diseases in the human body, their classification, and their interaction with the organism. It establishes a theoretical basis for future physicians to identify etiological factors of diseases, make diagnoses, and justify clinical signs, while also forming students' clinical thinking skills.	7	5-6
16	P15607	Pharmacology	In the process of training a family physician, the course aims to teach students the groups of medicinal drugs, their mechanisms of action, selection of therapeutic doses according to age, writing prescriptions for different dosage forms, routes of administration, indications for use in diseases, as well as their side effects and contraindications.	7	5-6
17	HME1406	Hygiene. Medical Ecology	To develop hygienic thinking skills in future practicing physicians, and to provide them with theoretical foundations of hygienic knowledge, as well as basic concepts and categories in hygiene and medical ecology. The module explains the specific impact of environmental and working conditions on the human body. It ensures the acquisition of both theoretical and practical knowledge related to the discipline and helps form in students the understanding of maintaining a high level of public health and ensuring well-being, as well as the ability to apply these concepts in practice. It also teaches how to use optimal environmental conditions for treatment and health improvement, taking into account environmental factors, socio-hygienic conditions, and local natural and climatic features in the development of diseases.	6	4

18	PHMM1606	Public Health. Marketing and Management	It aims to teach physicians the basic concepts and categories of the discipline related to preserving and studying population health in the Republic, as well as organizing medical care for the population. It also covers the fundamentals of market activity, the goals and tasks of marketing services in the healthcare sector, and the characteristics of a manager as a leader. In addition, the course is intended to develop theoretical, practical, methodological, and organizational knowledge and skills.	6	6
19	IMP1106	Introduction to the Medical Profession	The "Introduction to the Medical Profession" module belongs to the clinical block of the curriculum and is taught in the first year as the initial stage of training. As the first step in preparing future specialists, the module begins forming students' professional knowledge, skills, and competencies. It helps students develop a clear understanding of patient-related issues, learn effective communication skills, understand appropriate behavior in medical institutions, and acquire basic patient care skills.	6	1
20	PID15608	Propedeutics of Internal Diseases	This module program covers the history and development trends of the discipline, as well as its prospective issues. It provides an understanding of etiological factors that cause diseases in the human body, their classification, and their interaction with the organism. It also creates a theoretical basis for future general practitioners to identify etiological factors of diseases, establish diagnoses, and substantiate clinical signs. In addition, the module helps develop students' clinical thinking skills.	8	5-6
21	ID178911	Internal diseases	Internal diaseases - it is a module that teaches the etiology, pathogenesis, classification, clinical course, diagnosis (using laboratory, instrumental, and clinical methods), outcomes, complications, and preventive measures of common diseases. It also covers the provision of emergency care in urgent conditions, the ability to conduct independent patient examinations, assess working capacity, and understand the principles of treatment. This module plays a significant role in forming the thinking and worldview of a general practice physician at the bachelor level.	11	7-8-9
22	D1704	Dermatovene-reology	The program is based on the State Educational Standard of the Republic of Uzbekistan and the qualification requirements of the bachelor's degree program. On this basis, using modern pedagogical technologies in the teaching process, it enables students to move from theoretical knowledge to the acquisition of basic practical skills and to apply these skills in clinical practice integrated with modern medical technologies. The Dermatovenereology module studies, from both clinical and dermatological perspectives, the normal structure and functions of the skin and their pathological changes, the close relationship between skin manifestations and the pathology of internal organs and systems, various skin diseases, and sexually transmitted infections. In bachelor training, the program focuses on mastering methods of diagnosis, treatment, and prevention of common dermatoses and sexually transmitted diseases.	4	7
23	FMLAMP 1704	Forensic medicine. Legal aspects of medical practice.	The aim of the "Forensic Medicine" module is to master its theoretical foundations, provide students with essential forensic medical knowledge required in future medical practice, and develop skills for applying this knowledge in practice. To achieve this goal, the module equips	4	7

			students with theoretical knowledge, practical skills, and a scientific-methodological approach to phenomena and processes of medico-biological and legal nature. The aim of the "Legal Foundations of Medical Practice" module is to provide students with theoretical knowledge of medical law and the legal norms regulating medical activity, as well as to develop the ability to apply them in medical practice. To achieve this goal, the module not only teaches theoretical knowledge and develops practical skills but also forms a scientific and methodological approach to the specific features of various legal relations in medical practice.		
24	P1704	Phthisiology	The content, subject, method, and essence of the "Phthisiology" module are reflected in this course. The program is based on theoretical knowledge and practical skills and provides students with an important independent learning component necessary for mastering the medical profession. It also includes students' independent work during the training process for preparing family medicine specialists, as well as the informational and methodological support of the phthisiology educational process. The module program is designed based on the general practice physician training curriculum and is intended for teaching phthisiology to students of therapeutic and professional medical education programs in medical universities.	4	7
25	MR1706	Medical Radiology	This program covers the physical foundations of medical radiology methods, radiobiology, and the principles of image formation in various radiological techniques. It also addresses the role of imaging diagnostics in examining different organs and systems, the basics and algorithms of radiological diagnosis, as well as the history, development, and future prospects of imaging diagnostics. It provides a foundation for future general practitioners to correctly select imaging methods, compare results with clinical and other diagnostic findings, and identify and properly interpret radiological signs of diseases.	6	7
26	EN1804	Endocrinology	To provide students with knowledge, skills, and competencies regarding the anatomical and physiological characteristics of the organism of children of different ages, including methods of examining organs and systems and the semiotics of their main diseases.	4	8
27	CP11004	Clinical Pharmacology	It aims to form theoretical and practical knowledge on selecting the most effective and safe drug in a specific pathological process, taking into account the clinical pharmacological properties of medicinal products, as well as on providing criteria for evaluating the effectiveness and safety of ongoing treatment.	4	10
28	NMG11006	Neurology. Medical Genetics	The neurology module is designed to teach students the fundamentals of general and clinical neurology, including disease prevention, early diagnosis, and methods of treatment. Medical genetics is aimed at providing students with theoretical foundations of hereditary diseases, as well as the main concepts of practical skills within the module and the ability to study and apply them in practice. Within the scope of learning, a bachelor is introduced to the main directions of the State Programs "Healthy Generation" and "Mother and Child"; normative indicators of physical and psychomotor development of children of different ages; the etiology of hereditary and congenital diseases in children, their origin, and the influence of social, climatic, and environmental factors. The course also includes the study of prevention, diagnosis, differential diagnosis, general therapy, and rehabilitation methods of genetic diseases, both in theoretical and practical aspects. In addition, it develops students' understanding of patterns of heredity in	6	10

			different age groups, forms a scientific and methodological approach to genetics, provides a comprehensive understanding of heredity, and introduces theoretical foundations of genetics. Students also study hereditary diseases, their prevention and early diagnosis, as well as indications and contraindications for modern treatment methods.		
29	ON1904	Oncology	It aims to teach the theoretical and practical foundations of prevention, diagnosis, differential diagnosis, general therapy, and rehabilitation methods of oncological diseases. It also includes the study of oncology in different age groups, including pediatric oncology, and the development of a scientific and methodological understanding of oncological thinking. The course provides students with a comprehensive understanding of oncology and introduces them to the theoretical foundations of the discipline. It covers primary and secondary tumor prevention, identification of risk groups, management of precancerous conditions and diseases, and the main nosological forms of malignant tumors, as well as their prevention and early diagnosis. Students also study modern treatment methods of oncological diseases, including their indications and contraindications. The module is aimed at forming clinical thinking in future specialists based on an objective assessment of the patient's condition.	4	9
30	PNMP11005	Psychiatry, Narcology. Medical Psychology	It aims to develop students' clinical thinking skills through modern pedagogical technologies and to teach the causes, clinical manifestations, types of disease progression, diagnosis and differential diagnosis, as well as treatment, care, and preventive measures of psychiatric and narcological disorders. **Medical Psychology** provides students with comprehensive knowledge of the rules and principles of medical-psychological examination, methods of psychological interviewing, psychohygiene, psychoprophylaxis, psychodiagnostics, psychotherapy, and functional assessment methods, as well as the development of practical skills in these areas. It also includes the study of cognitive processes in medical psychology and the formation of practical skills in their assessment. This module creates a foundation for future general practitioners to communicate effectively with patients and ensure comprehensive patient-centered care in clinical practice.	6	10
31	IDCIDE 1891011	Infectious diseases. Childhood infectious diseases. Epidemiology.	**Infectious Diseases.** Childhood infectious diseases.**:** The training of future general practice physicians is aimed at teaching the etiology, epidemiology, pathogenesis, main clinical symptoms, diagnosis, and treatment of infectious and pediatric infectious diseases, as well as the basics of prevention (both general and specific). **Epidemiology:** It aims to form theoretical and practical knowledge on selecting the most effective measures in specific epidemiological situations, taking into account the epidemiological characteristics of infectious diseases, and evaluating the effectiveness of preventive measures. The goal of teaching is to prepare highly qualified specialists with strong	11	8-9-10

			theoretical knowledge and practical skills who are able to develop modern preventive strategies against infectious diseases based on current medical knowledge and technologies.		
32	H11104	Hematology.	It aims to ensure that students master the basic principles of diagnosing, treating, and preventing anemia, leukemia, and hemorrhagic diatheses, as well as the fundamentals of transfusiology.	4	11
33	CAI11104	Clinical Allergology and Immunology	It aims to provide students with knowledge, skills, and competencies in the early diagnosis of acute and chronic allergic diseases among the population, promoting a healthy lifestyle, and using modern laboratory methods for the diagnosis of allergic conditions in order to find effective solutions to patients' medical problems.	4	11
34	ST11104	Simulation Training	It aims to improve students' skills in organizing safe medical care, to strengthen and deepen the knowledge and practical skills acquired during the educational process, and to encourage students' creative development.	4	12
35	OG18906	Obstetrics and Gynecology	Based on the qualification profile of a future general practice physician, and relying on the knowledge acquired in previous stages of training, the course provides evidence-based knowledge in obstetrics and gynecology. It focuses on the principles of effective perinatal care in both physiological and complicated pregnancies, as well as the management of normal and pathological labor and the postpartum period, and newborn care. The module also teaches the diagnosis, independent provision of primary care, and prevention methods in common emergency conditions encountered in obstetric and gynecological practice	6	8-9
36	PDP15606	Pediatric Diseases Propaedeutics	To provide students with knowledge, skills, and competencies regarding the anatomical and physiological characteristics of the organism of children of different ages, including methods of examining organs and systems, and the semiotics of their main diseases.	6	5-6
37	PD17906	Pediatrics	It aims to develop students' skills in communicating with healthy and sick children of different ages and their parents, examining children, diagnosing diseases occurring in childhood, providing emergency care, and determining appropriate treatment and preventive measures.	6	7-9
38	GS15606	General Surgery	It aims to teach the principles of antisepsis and asepsis in surgery, the concept of surgical infection and its prevention, and the types of purulent infections, including superficially located purulent diseases. The course also focuses on providing first aid in emergency surgical conditions, such as stopping bleeding, applying dressings, immobilizing injured patients, and ensuring their safe transportation.	6	5-6
39	SD18908	Surgical Diseases	It aims to teach the theoretical and practical foundations of prevention, diagnosis, differential diagnosis, treatment, and rehabilitation of surgical diseases. It also includes the study of the patterns of surgical diseases in different age groups and the formation of a scientific and methodological basis of surgical thinking. The course provides a comprehensive understanding of surgical diseases and introduces students to the theoretical foundations of surgery. It covers primary and secondary prevention of surgical conditions, identification of risk groups, management of surgical diseases, and the main nosological forms, as well as their prevention and early diagnosis. Students also study modern methods of surgical treatment, including indications and contraindications. The module is aimed at forming clinical thinking in future specialists based on an objective assessment of the patient's condition.	8	8-9

40	TON18906	Traumatology and Orthopedics, Neurosurgery	**Traumatology and Orthopedics** - It focuses on the importance of traumatology and orthopedics in the professional activity of physicians, the history of its development, types of trauma, and reparative regeneration of bone tissue. The course covers modern principles of diagnosis and treatment of injuries and diseases of the musculoskeletal system, its anatomy and physiology, classification of fractures and dislocations, as well as modern methods of management of musculoskeletal injuries and disorders. It also includes the etiology, pathogenesis, and treatment of common orthopedic diseases. **Neurosurgery**- It aims to provide students with theoretical, practical, and organizational knowledge and skills necessary for the prevention and organization of neurosurgical care, accurate diagnosis of patients, and provision of primary and specialized medical assistance. The course also includes the study of neurosurgical diseases in different age groups, including pediatric neurosurgery, and the formation of a scientific and methodological approach to neurosurgical thinking. Students are introduced to the theoretical foundations of neurosurgery, prevention and early diagnosis of neurosurgical injuries and diseases, as well as indications and contraindications for modern neurosurgical treatment methods. The module is aimed at forming clinical thinking in future specialists based on an objective assessment of the patient's condition.	6	8-9
41	UR1704	Urology	It aims to provide students with knowledge necessary for the correct diagnosis of urological diseases, identification of acute pathological conditions, and prescription of effective treatment. It also develops practical skills in performing essential diagnostic examinations and therapeutic procedures for patients, as well as knowledge required for carrying out dispensary follow-up and rehabilitation measures in patients with chronic diseases. The module is also aimed at forming clinical thinking in future specialists based on an objective assessment of the patient's condition.	4	7
42	ANR11004	Anesthesiology and Reanimatology	It aims to teach the theoretical and practical foundations of anesthesiology and reanimatology, including the concept of anesthesia, its methods, types, complications, and their prevention, as well as the basic principles of resuscitation. The course also provides students with a comprehensive understanding of anesthesia and intensive care, introduces them to the theoretical foundations of resuscitation, and develops skills in correctly diagnosing disorders of water-electrolyte and acid-base balance. In addition, it includes identifying risk groups and understanding indications and contraindications for modern treatment methods.	4	10
43	OTD11006	Otorhinolaryngology and Dentistry	The aim of teaching the subject "Otorhinolaryngology and Dentistry" is to provide students with knowledge of methods for examining diseases of the ENT organs, to teach them how to provide appropriate care for identified conditions, to differentiate these diseases from general systemic illnesses, and to learn preventive measures for their prevention.	6	10
44	OF1904	Ophthalmology	It aims to teach the theoretical and practical foundations of prevention, diagnosis, differential diagnosis, general treatment principles, and rehabilitation methods of ophthalmological diseases. It also includes the study of ophthalmological conditions across different age groups and the formation of a scientific and methodological basis of ophthalmological thinking. The course provides a comprehensive understanding of ophthalmology and introduces students to its	4	9

			theoretical foundations. It covers primary and secondary prevention of eye diseases, identification of risk groups, the main nosological forms in ophthalmology, as well as their prevention and early diagnosis. Students also study modern methods of treatment of ophthalmological diseases, including indications and contraindications. The module is aimed at forming clinical thinking in future specialists based on an objective assessment of the patient's condition.		
45	OPTOD1111210	Outpatient-polyclinic therapy. Occupational diseases	It aims to prepare students for independent professional activity through the mastery of theoretical, methodological, and practical skills, and to form the foundational knowledge necessary for studying both theoretical and clinical disciplines. To achieve this goal, the module provides students with theoretical knowledge and practical skills related to the most common diseases, including their etiological basis, principles of pre-hospital diagnosis, clinical manifestations, laboratory and instrumental examination methods, treatment, rehabilitation, and prevention. It also helps students develop competencies in family physician tactics. The module "Occupational Diseases" includes the main sections of the discipline and is designed to enable medical university students to master its theoretical foundations, learn the main types of medical documentation in occupational diseases, acquire skills in diagnosing occupational pathologies, and gain practical competencies in the main diagnostic methods and treatment of occupational diseases.	6	11-12
46	OPPN1111207	Outpatient-polyclinic pediatrics. neonatology	It aims to develop students' skills in examining children of different ages, conducting physical development monitoring, and identifying, diagnosing early, treating, preventing, and rehabilitating diseases occurring in childhood. **Neonatology:** It provides an understanding of diseases in the neonatal period and teaches the diagnosis and treatment of conditions occurring in newborns based on evidence-based medicine and WHO guidelines. It also develops skills in examining newborns, monitoring their physical development, and determining measures for early diagnosis, treatment, prevention, and rehabilitation of neonatal diseases.	7	11-12
47	SDPS1111206	Surgical diseases. Pediatric surgery	**Surgical Diseases -** It aims to teach the theoretical and practical foundations of prevention, diagnosis, differential diagnosis, treatment, and rehabilitation of surgical diseases. It also includes the study of patterns of surgical diseases across different age groups and the scientific and methodological formation of surgical thinking. The course provides a complete understanding of surgical diseases and introduces students to the theoretical foundations of surgery. It covers primary and secondary prevention of surgical conditions, identification of risk groups, main nosological forms, their prevention and early diagnosis, as well as indications and contraindications for modern surgical treatment methods. The module also develops clinical thinking based on an objective assessment of the patient's condition. It includes postoperative patient care, wound management, and preventive measures to avoid disease recurrence. **Pediatric Surgery** - It focuses on the embryonic development of human organs, the causes of congenital malformations and anomalies in children, as well as their diagnosis and surgical treatment. The main principle of teaching the "Pediatric Surgery" module for students of medical	6	11-12

			and professional education programs is the identification of congenital developmental defects and anomalies based on the integration of fundamental and basic clinical modules. It is based on understanding human phylo-, ontogenetic, and embryological development, growth physiology and pathology, clinical semiotics, and modern laboratory and instrumental diagnostic methods, as well as the acquisition of practical surgical skills.		
48	OGFM1111206	Obstetrics and Gynecology in Family Medicine	It aims to teach the management of pregnant women with physiological, complicated, and somatic diseases, as well as the conduct of the normal postpartum period. It also includes identifying risk factors for obstetric and perinatal pathology, and understanding the indications and criteria for hospitalization of pregnant women with complicated pregnancies and extragenital pathology. The course focuses on teaching diagnosis, emergency care, and safe and timely referral of patients to other medical institutions. It develops skills in diagnosing, treating, and dispensary follow-up of uncomplicated major gynecological diseases. In addition, it provides knowledge on all methods of contraception, counseling skills, insertion and removal of intrauterine devices, family planning, and the principles of safe motherhood.	6	11-12
49	RSM11204	Rehabilitation. Sports Medicine	It aims to develop in future family physicians a solid system of knowledge, practical skills, and professional competence related to medical, physical, psychological, social, and occupational rehabilitation measures in various diseases associated with medical practice. It also focuses on preserving human health and forming adherence to a healthy lifestyle among patients.	4	12
50	EMA11205	Emergency medical aid	It aims to develop students' theoretical, methodological, and practical skills in managing critical conditions, and to teach rapid diagnosis of emergency situations that may occur in both peacetime and disaster settings. It also focuses on forming the ability to provide timely and adequate emergency medical care in the required scope.	5	12
Elective Subjects					
1	FSR23-404	Fundamentals of Scientific Research	It aims to teach methods for identifying and implementing new measures to support and improve public health in the Republic, to conduct practical scientific research and self-assessment activities aimed at strengthening population health, and to meet the changing needs of healthcare service consumers.	3	3-4
2	LS2302	Life Safety	It aims to provide students with an understanding of the impact of natural, technogenic, and ecological emergency situations occurring in the modern world on public health, national economic facilities, and the state economy. It also covers the structure and principles of operation of radiation, chemical reconnaissance, and dosimetric instruments, as well as the timely provision of various types of medical care to affected populations. The module also explains the constant readiness of healthcare institutions and medical personnel, as well as individual and collective means of protection. To achieve this goal, the course develops students' theoretical knowledge, practical skills, methodological approaches to emergency situations and processes, and a scientific worldview.	3	3

3	B2302	Bioethics	It aims to create a foundation for understanding general ethical values in future physicians, such as duty, honor, dignity, honesty, and justice, and to develop the ability to identify, analyze, and resolve ethical problems arising in professional medical activity. The course introduces students to the historical models of medical ethics, the factors that influenced the formation and development of bioethics, as well as its current state and challenges. It ensures that students master the principles and rules of biomedical ethics and acquire skills in ethical analysis of various clinical situations. It also forms an understanding of moral values that serve as the basis for regulating and analyzing ethical conflicts in medical practice.	5	4
4	PULM2802	Pulmonology	The aim of teaching the "Pulmonology" module is to train highly qualified specialists—general practice physicians (therapists, surgeons, obstetricians-gynecologists)—who possess the necessary level of knowledge, skills, and practical competencies in pulmonology. The module provides students with knowledge and practical skills for the diagnosis and differential diagnosis of respiratory system diseases, their early detection, prevention, and treatment. It also includes the ability to maintain medical documentation and understand the main epidemiological indicators related to respiratory diseases.	2	7-8
5	SBTR2603	Simulation-Based Training	It aims to improve students' competencies in organizing safe medical care, to strengthen and deepen the knowledge and practical skills acquired during the educational process, and to encourage students' creative development. The module teaches skills in providing emergency medical care in frequently encountered situations using modern simulators; conducts training on innovative interactive applications in outpatient and hospital settings; and provides instruction on modern diagnostic and treatment standards through interactive platforms.	2	7-8
6	FTR2502	Fundamentals of Transfusiology	It covers the history and development trends of the module, as well as its prospective issues. It includes donorism, indications and contraindications for blood donation; the main characteristics of antigens and antibodies of the ABO system; the antigen composition of the Rh system; blood products and components; and the modern classification of blood substitutes. It also provides a theoretical basis for future general practice physicians in determining indications for transfusion therapy, managing post-transfusion reactions and complications, and taking appropriate emergency measures. In addition, it helps develop students' clinical thinking skills. The module focuses on the principles of blood and blood component transfusion, indications and contraindications for transfusion of blood and blood substitutes, methods of their application in medical practice, as well as prevention and treatment of post-transfusion complications and reactions, and the development of related practical skills.	2	5
	CLLD21202	Clinical Laboratory Diagnostics	It aims to provide a modern scope of medical diagnostic care at the primary level of the healthcare system to individuals and family members regardless of age or gender.	2	12
	PS2702	Patient Safety	It aims to teach students the standards of medical care that ensure patient safety.	2	7
	EDDTh21102	"Early detection of disability through	The aim of teaching the course "Early Detection of Disability through Assessment of an Individual's Health Status" is to prepare highly qualified specialists—general practice physicians—who possess the	2	11

		assessment of an individual's health status"	necessary knowledge and practical skills required in medical practice, as well as competencies in assessing an individual's health status to ensure early detection and prevention of disability through preventive methods.		
	KIM1702	Clinical Immunology	It aims to provide students with knowledge, skills, and competencies in the early diagnosis of immunological diseases in the population, promoting a healthy lifestyle, and using modern laboratory methods for diagnosing immunological disorders in order to find effective solutions to patients' medical problems.	2	7
Qualification name: General Practitioner					