



EDUCATIONAL PROGRAM

Educational program code: 7M10144
Name of the educational program: Medicine
Level of the educational program: Master

Shymkent, 2022 y.

The educational program was developed by the members of the CEP:
 Head of the Department of Biology and Biochemistry, Candidate of Medical Sciences, Professor

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Agreed with the employer:

General Director of «Mediker SK»

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Deputy Chief Physician of the Mental Health Center of the Shymkent City Health Care Institution Candidate of Medical Sciences

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Chairman of the CEP «Medicine»

Protocol № 11 05 08 2022 y.

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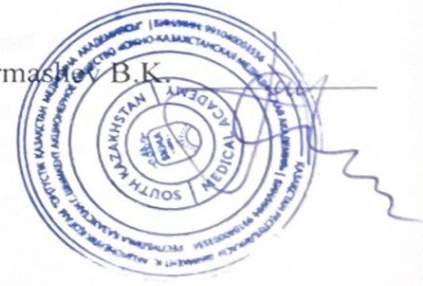
Approved by the Scientific Council

Vice-Rector by SCW
 Protocol № 5a 08 08 2022 y.

Nurmashev B.K. *B.K.*

Approved by the Academic Council

Protocol № 15 08 08 2022 y.



ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
«Medicine» educational programme committee		044-
Educational program		Page 3 of 23

Passport of the educational program

1. Mission of the educational program: To train Masters who have the skills of modern clinical research, are able to conduct research, analytical work and make effective decisions in priority areas of the healthcare system.

2. Purpose of the educational program: To train highly professional, competitive scientific, pedagogical, administrative and managerial personnel in the specialty «Medicine» for scientific and healthcare organizations with fundamental knowledge that guarantees them professional mobility in the real developing world .

3. Rationale for the educational program: Demand in the labor market: the educational program is focused on health care professionals who are able to conduct scientific research and implement organizational and managerial technologies to solve complex problems of protecting public health and developing an effective health care system in Kazakhstan.

4. Professional standard on the basis of which the educational program is 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 Compulsory Standards of Higher and Postgraduate Education» dated July 20, 2022 No. 2.
- Order of the Minister of Health of the Republic of Kazakhstan «On Approval of State Compulsory Standards for the Levels of Education in the Field of Healthcare» dated July 4, 2022 No. KR DSM-63.
- Order of the Minister of Education and Science of the Republic of Kazakhstan «On Approval of the Rules for the Organization of the Educational Process on Credit Technology of Training in Higher and (or) Postgraduate Education Organizations» dated April 20, 2011 No. 152.
- Law of the Republic of Kazakhstan «On Education» dated July 27, 2007 No. 319-III (as amended on 04.07.2022)
- Order of the Minister of Education and Science of the Republic of Kazakhstan «On Approval of the Model Rules for the Activities of Higher and Postgraduate Education Organizations» dated October 30, 2018 No. 595 (as amended on 29.12.2021)
- «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. The field of professional activity: Health care organizers, heads of state and non-state medical and non-medical institutions; Research activities at universities.

6. The object of professional activity: Healthcare management organizations, healthcare and social security organizations, organizations of higher and postgraduate education; Organization of science.

Types of professional activities:

- organizational and managerial;
- scientific and research activities.

General information

№	Characteristics of the EP	Data
1	Registration Number	7M10100055
2	Code and classification of the field of education	7M10 Healthcare
3	Code and classification of the field of study	7M101 Healthcare
4	Group of Educational Programs	M144 Medicine
5	Code, name of the educational program	7M10144 Medicine
6	Type of EP	Current EP
7	ISCED level	7
8	NQF level	7
9	IQF Level	7
10	Distinctive features of the EP	No
	Partner University (JEP)	-
	Partner University (DDEP)	-

11	List of competencies	<p>Key competencies of the graduate of the program:</p> <p>KC1 Health Care Methods.</p> <p>KC2 Population health and its physical, radiological, chemical and biological-environmental determinants.</p> <p>KC3 Health promotion: health education, health protection and disease prevention.</p> <p>KC4 Ethics.</p>
12	Learning Outcomes	<p>LO1 Plans professional activity in the area of his/her qualification in the field of medicine, proceeding from modern achievements of science and practice.</p> <p>LO2 Engaged in professional growth, demonstrates skills of introspection, experience for teaching at the level of the higher education.</p> <p>LO3 Capable to acquire new knowledge and skills of applied character in research, professional and pedagogical activity in the field of medicine.</p> <p>LO4 Demonstrates knowledge and understanding of cross-disciplinary nature of researches in the field of medicine.</p> <p>LO5 Uses scientific information for development of the medicine field and implementation of new approaches within the qualification.</p> <p>LO6 Accurately and unambiguously gives information, ideas, outputs, problems and solutions, both to specialists, and nonspecialists in the area of his/her qualification in the field of medicine.</p> <p>LO7 Capable to solve problems in the field of medicine within the qualification on the basis of scientific approaches.</p>
13	Form of study	In-person
14	Language of instruction	Kazakh, Russian
15	Amount of loans	120
16	Degree Awarded	Master of Medical Sciences in 7M10144 «Medicine»



17	Duration of training	2 years
18	Availability of an appendix to the license for the direction of personnel training	KZ36LAA00011387 (018)
19	Availability of EP accreditation	No
	Name of accreditation body	-
	Accreditation Certificate No., Accreditation Validity Period	-
20	Information about disciplines	Annex 1.2



Annex 1

**Matrix of correlation of learning outcomes in the educational program as a whole
with the competencies being formed**

	LO1	LO2	LO3	LO4	LO5	LO6	LO7
KC1							
KC2							
KC3							
KC4							

Annex 1.2

Matrix of achievability of competencies/learning outcomes

№	Name of the discipline	A brief description of the discipline	Cycle (BD, PD)	Component (UC, OC)	Number of credits	Generated LO (codes)
The cycle of basic disciplines					35	
Mandatory / University component					20	
1	History and philosophy of science	Philosophy and methodology of science as branch of philosophical knowledge. Structure of scientific knowledge. Scientific rationality. Features of the present stage of science development. Science as social institute. Natural sciences in structure of modern scientific knowledge. The history of formation of sciences about society, culture, history and person. Actual philosophical problems of specific sciences.	BD	UC	3	LO3 LO4
2	Foreign language (professional)	Extension and development of skills for practical usage proficiency language of specialty, for active application of a foreign language both in daily, and in professional communication: lexicon, grammar, possession of oral speech, written skills, audition, translation.	BD	UC	3	LO2 LO4
3	Pedagogics of the higher school	Pedagogics of the higher education. The main directions and trends of development of the higher education in the modern world. New paradigm of education. The higher	BD	UC	3	LO2

		education in the Republic of Kazakhstan. The essence and structure of pedagogical activity. The theory of training at the higher school (didactics). Modern educational technologies. The organization of educational process on the basis of the credit system of training. Education quality management system.				
4	Psychology of management	The essence of administrative processes. Object of psychology management. Psychology of activity of the organization head and of his personality psychology. Functional and structural analysis of administrative activity. The psychological problems arising between the head and the staff of the organization. A clear idea of distribution on responsibility levels of the manager.	BD	UC	3	LO6 LO7
5	Teaching practice	Master's students are involved in conducting undergraduate classes in order to develop practical skills in teaching and learning methods.	BD	UC	8	LO2 LO3
Optional Component (Module on current issues of clinical pharmacology)					15	
6	Personalized pharmacotherapy	Introduction to personalized pharmacotherapy. Individual factors affecting the pharmacological response. The human genome. Research in the field of pharmacogenetics and pharmacogenomics. OMICS technology. Pharmacogenetic aspects of therapy for diseases of various organs and systems. Theranostic. Pharmacogenetic test systems. Database of pharmacogenetic studies. Digital technology in personalized pharmacotherapy.	BD	OC	5	LO4 LO5

7	Research in clinical medicine	Advanced clinical methods and technologies for examining patients with major diseases of internal organs. Modern non-invasive and interventional methods for diagnosing diseases of internal organs based on the principles of evidence-based medicine and their importance in research activities. Providing medical assistance in life-threatening conditions.	BD	OC	5	LO3 LO5
8	Current issues of outpatient surgery	The use of scientific information, a scientific approach and statistical research in clinical matters, diagnosis and differential diagnosis, and treatment of: purulent-inflammatory diseases of the skin and subcutaneous tissue, diseases of the ligaments and joints, diseases of the breast, diseases of the rectum, diseases of the genitourinary system, injuries of the extremities and skin, thermal injuries.	BD	OC	5	LO5 LO7
9	Methodology for the rational use of medicines	Proper use of medicines. Principles of rational pharmacotherapy (minimization, controllability, individualization, thrift, etc.). Indicators of rational use of drugs. tasks of rational use of drugs. Priority groups of drugs in medical organizations. WHO policy on rational drug use.	BD	OC	5	LO5
10	Clinicians communication skills	Communicative competence and effectiveness of communication. Barriers and effective approaches to building relationships. Conflicts, ways to resolve them. Ethical problems of dying, resuscitation and death. Post sad news. Professional adaptation, image and	BD	OC	5	LO6 LO7

		communicative tolerance. Yatrogenic, medical errors. Leadership and their value in professional and research activities. Psychological types of effective leaders.				
11	Modern views on surgical infection	The use of scientific information, a scientific approach and statistical research in the following issues: the organization of surgical care, wounds and wound infections, infections of the skin and subcutaneous tissue, purulent surgery of the hand, purulent diseases of the lungs and mediastinum, peritonitis and sepsis.	BD	OC	5	LO1 LO3
12	Interaction and interchangeability of drugs	Pharmaceutical, pharmacokinetic and pharmacodynamic drug interactions. The interaction of drugs with food, alcohol, etc. Combination of drugs. Methods of dealing with unwanted interactions interactions. Computer programs interactions interactions. Scale assessment of adverse reactions. Original and generic drugs. Pharmaceutical, pharmacokinetic and therapeutic equivalence. Bioequivalence research methods. Legal and economic aspects of prescribing reproduced drugs.	BD	OC	5	LO3 LO5
13	Topical issues of gerontology and geriatrics	Features of the aging of organs and systems, mental changes. Principles of organization of geriatric care in the Republic of Kazakhstan. Modern methods of diagnosis and medical care for diseases of internal organs and the achievements of scientific research in geriatrics. Fundamentals of geriatric pharmacotherapy and gerodietiki. Geriatric rehabilitation. Moral, ethical	BD	OC	5	LO4 LO5

		and legal culture in geriatrics. A commitment to professional values and work in a multidisciplinary team.				
14	Modern methods of diagnostics and differential diagnostics in abdominal surgery	The use of scientific information, scientific approach and statistical research in matters of modern methods of diagnosis and differential diagnosis: surgical diseases of the stomach, large and small intestine, hepatobiliary zone, hernias of the abdominal wall, injuries of the abdominal organs.	BD	OC	5	LO3 LO7
Cycle of profile disciplines					49	
University component (General professional module)					12	
15	Fundamentals of the teaching methodology in medicine	Tasks of medical education. Teaching method. Development of individual educational trajectory. Methods of assessment of knowledge, skills, attitudes, competencies and practical implementation. Features of teaching clinical disciplines. Principles of organization of postgraduate and continuous professional development of doctors. Features of adult education. Self-education.	PD	UC	3	LO2 LO3
16	Research methodology in medicine	Fundamentals of national law in the field of scientific research. Fundamentals of international law in the field of scientific research. Descriptive and analytical studies. Systematic review. Metaanalysis. Information collection. Data processing. General requirements and rules of registration of research work. Reviewing research papers, report on the work, preparation of abstracts. Preparation of scientific materials for publication.	PD	UC	3	LO6 LO7
17	Health	Control and functioning of health authorities. Separation	PD	UC	3	LO5

	Organization and Management	of health functions at different levels of government. Problems of reforming health systems. Management Theory. Control systems. Management focused on specific tasks. Quality management system in health care. Strategic management of the health care system. Hospital as an organization. Models of the organization of medical institutions. New organizational models.				LO7
18	Clinical Epidemiology and Evidence-Based Medicine	Processing and analysis of epidemiological research data. Epidemiological aspects of screening. Causal relationships in epidemiology. Epidemiological examination. Terminology, tools and methods of evidence-based medicine. Basic statistical knowledge needed to interpret evidence-based medicine data. Methods of qualitative and quantitative research in evidence-based medicine. Randomized controlled trials. "Gold standard". Levels of evidence.	PD	UC	3	LO3 LO4
19	Research practice	Familiarization with the latest theoretical, methodological and technological achievements of domestic and foreign science, modern methods of scientific research, processing and interpretation of experimental data and their application.	PD	UC	12	LO3 LO4
Optional Component (Module on current issues of clinical pharmacology)					25	
20	Clinical and economic expertise in clinical practice	Concepts of clinical and economic expertise. Economic evaluation of the quality of medical care. Methodology of evidence - based medicine in evaluating the efficacy and safety of medical technologies. Managing the quality	PD	OC	5	LO4 LO5

		of medical care and the role of clinical and economic analysis. Methods of pharmacoeconomic analysis VEN-ABC analysis, analysis of the cost of the disease, cost minimization, cost-effectiveness. Assessment of the quality of life in clinical and economic expertise. Polypharmacy. Monitoring the effectiveness of pharmacotherapy.				
21	Actual problems of pulmonology	Organization of pulmonary service in the Republic of Kazakhstan. Modern achievements of science and practice in the diagnosis and treatment of respiratory diseases: bronchial asthma, infections of the upper respiratory tract, acute respiratory infections of the lower respiratory tract, COPD, pulmonary hypertension, PEH, respiratory failure. Modern methods of diagnosis and treatment of diseases of the respiratory system, based on the principles of evidence-based medicine.	PD	OC	5	LO3 LO7
22	Actual issues of vascular surgery	Scientific approach and statistical research in clinical matters, diagnostics, differential diagnosis and treatment: diseases of the thoracic and abdominal aorta, diseases of the peripheral arteries, diseases of the venous and lymphatic systems. Application of diagnostic and treatment protocols. The use of innovative technologies in instrumental and laboratory diagnostics, methods of surgical treatment using the principles of evidence-based medicine.	PD	OC	5	LO1 LO5
23	Good clinical	Concepts and principles of good clinical practice.	PD	OC	5	LO3

	practice (GCP)	Legislative aspects of clinical research. Ethics Commission. Stages of clinical studies of drugs. The choice of study design, work with data and record keeping. Monitoring and auditing. The procedure for registration of new drugs.				LO5
24	Treatment problems in thoracic surgery	The use of scientific information, scientific approach and statistical studies in questions of clinic, diagnostics and differential diagnosis, and treatment of injuries of the chest wall and thoracic cavity organs, diseases of bronchi and lungs, diseases of mediastinum, diseases of the pericardium and heart.	PD	OC	5	LO1 LO5
25	Actual problems of gastroenterology and hepatology	Theoretical foundations of endocrinology and hematology. Organization of endocrinological and hematological services in the Republic of Kazakhstan. Topical issues endocrinology sections of diabetology, thyroid disease, malnutrition, obesity and metabolic disorders; hematology - anemia, hemoblastosis, coagulopathy, hemophilia. Modern methods of diagnosis and treatment of diseases of the endocrine system and blood diseases, based on the principles of evidence-based medicine.	PD	OC	5	LO3 LO7
26	Therapeutic drug monitoring	The concept of therapeutic drug monitoring, its function and practical significance. The range of therapeutic action. Research methods. Features of individual pharmacological response. Therapeutic drug monitoring in prescribing drugs that affect the function of various	PD	OC	5	LO3 LO6

		systems and organs.				
27	Modern methods of research and treatment in cardiorheumatology	Theoretical foundations of cardiology and rheumatology. Organization of cardiological and rheumatological services in the Republic of Kazakhstan. Topical issues of cardiology and rheumatology in the sections of hypertension, arrhythmology, non-coronary and coronary, valvular pathology of the heart, heart failure, systemic diseases of the connective tissue and arthrology. Modern methods of diagnosis and treatment of diseases of cardiology and rheumatology, based on the principles of evidence-based medicine.	PD	OC	5	LO1 LO3
28	Topical issues of surgical endocrinology	The use of scientific information, scientific approach and statistical studies in questions of clinic, diagnostics and differential diagnosis, and treatment of: diabetes type 1 and type 2, complications of diabetes, diabetic foot syndrome, endocrine tumors of the pancreas, diseases of the parathyroid gland, obesity, metabolic syndrome, thyroid disease, diseases of the adrenal glands.	PD	OC	5	LO1 LO5
29	Monitoring and accounting of the use of medicines in medical organizations	Monitoring and accounting of drug use. Principles of medical records. Provision of medicines in medical organizations (outpatient, inpatient, inpatient, emergency, rehabilitative medical care. Medicines purchased under the Guaranteed amount of free medical care on a free and preferential basis. Inventory of medicines stored in medical organizations. Purpose and clearance of drugs .	PD	OC	5	LO4 LO5

30	Topical issues of acute surgical diseases of the abdominal cavity	Use of scientific information, scientific approach and statistical research in clinical matters, diagnosis and differential diagnosis, and treatment of acute appendicitis, acute gastrointestinal bleeding, perforating ulcers of the stomach and duodenum, acute cholecystitis, acute pancreatitis, acute intestinal obstruction, strangulated hernia, obstructive jaundice, and disorders of the mesenteric circulation, injuries of the abdomen.	PD	OC	5	LO1 LO5
31	Actual problems of endocrinology and hematology	Theoretical foundations of endocrinology and hematology. Organization of endocrinological and hematological services in the Republic of Kazakhstan. Topical issues endocrinology sections of diabetology, thyroid disease, malnutrition, obesity and metabolic disorders; hematology - anemia, hemoblastosis, coagulopathy, hemophilia. Modern methods of diagnosis and treatment of diseases of the endocrine system and blood diseases, based on the principles of evidence-based medicine.	PD	OC	5	LO1 LO5
32	Chemotherapy and Toxicology	Chemotherapy of infectious, parasitic and oncological diseases. Evaluation of the safety and efficacy of chemotherapy drugs. Cancer chemotherapy protocols. Forms of manifestation of toxic process in humans. Principles of treatment of poisoning with substances of various toxic effects. Means and methods of chemical indication. Activities of the medical service in the foci of chemical lesions.	PD	OC	5	LO4 LO5

33	Actual problems of nephrology	Organization of nephrology service in the Republic of Kazakhstan. Modern achievements of science and practice in the diagnosis and treatment of diseases of the kidneys and urinary tract: glomerular and tubulointerstitial diseases of the kidneys, renal failure. Modern methods of diagnosis and treatment of diseases of the urinary system, based on the principles of evidence-based medicine.	PD	OC	5	LO3 LO7
34	Improving diagnosis and treatment of abdominal sepsis	The use of scientific information, scientific approach and statistical research in the clinic, diagnosis and differential diagnosis, and treatment: sepsis, abdominal sepsis, systemic inflammatory response syndrome, multiple organ failure syndrome, septic shock, anaerobic infection, lung abscess, peritonitis, septicemia. Minimally invasive technologies in the treatment of abdominal sepsis.	PD	OC	5	LO1 LO5
Research work					24	
35	Master's research work, including internship and master's thesis	Planning of research in medicine. Literature review. Research in medicine. Data collection and analysis. Methods of scientific research in medicine. Evaluation of the study results			24	LO1 LO2 LO3 LO4 LO5 LO6 LO7
Final examination					12	
36	Design and defense of a master's thesis	Assessment of core competencies and learning outcomes achieved after completion of the Master's degree program.			12	LO1 LO2 LO3 LO4 LO5 LO6 LO7

TOTAL			120	
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Annex 1.3

A matrix for achieving LO using various learning methods

LO	Teaching and learning methods	
LO1 Plans professional activity in the area of his/her qualification in the field of medicine, proceeding from modern achievements of science and practice	Discussion of tasks for teamwork and case studies	Feedback
LO2 Engaged in professional growth, demonstrates skills of introspection, experience for teaching at the level of the higher education	Development and conduct of scientific research	Practical implementation of research analysis
LO3 Capable to acquire new knowledge and skills of applied character in research, professional and pedagogical activity in the field of medicine.	Conducting trainings and seminars	Additional materials, resources and tasks
LO4 Demonstrates knowledge and understanding of cross-disciplinary nature of researches in the field of medicine.	Solving situational problems	Conducting trainings and seminars
LO5 Uses scientific information for development of the medicine field and implementation of new approaches within the qualification.	Conducting seminars and discussions, feedback from the undergraduate	Development and conduct of scientific research
LO6 Accurately and unambiguously gives information, ideas, outputs, problems and solutions, both to specialists, and nonspecialists in the area of his/her qualification in the field of medicine.	Publication in scientific publications	Writing abstracts, scientific articles Public appearances
LO7 Capable to solve problems in the field of medicine within the qualification on the basis of scientific approaches.	Conducting seminars where undergraduates can discuss topics, solve problems in groups, analyze cases and exchange opinions	Teamwork: Undergraduates are divided into small groups to solve problems, discuss material and work together on projects

Annex 1.4

The matrix of compliance of LO with assessment methods

LO	Assessment methods	
LO1 Plans professional activity in the area of his/her qualification in the field of medicine, proceeding from modern achievements of science and practice	Essay (short and long) The short answer is	Feedback
LO2 Engaged in professional growth, demonstrates skills of introspection, experience for teaching at the level of the higher education	Publications Control	Monitoring Rating
LO3 Capable to acquire new knowledge and skills of applied character in research, professional and pedagogical activity in the field of medicine.	Testing Oral interview	Summary/presentation
LO4 Demonstrates knowledge and understanding of cross-disciplinary nature of researches in the field of medicine.	Oral interview	Feedback
LO5 Uses scientific information for development of the medicine field and implementation of new approaches within the qualification.	Portfolio creation of a portfolio of works, including various types of projects, written works	Evaluation of the execution process Evaluation of scientific research
LO6 Accurately and unambiguously gives information, ideas, outputs, problems and solutions, both to specialists, and nonspecialists in the area of his/her qualification in the field of medicine.	Testing	Self-esteem
LO7 Capable to solve problems in the field of medicine within the qualification on the basis of scientific approaches.	Analysis of the received data	Essay (short and long) The short answer is

Work plan for the entire period of study

The cycle of disciplines		Discipline code	Name of the discipline	Amount of credits	General hours	Practical lesson	IWM		1 year of study	2 year of study	Form of control
							IWMT	IWM			
1	2	3	4	5	6	7	8	9	10	11	12
BD	UC/OC	BASIC DISCIPLINES		35	1050	350	210	490	35		
		University component (Interdisciplinary module)		20	600	200	120	280	20		
	UC	M-HPS	History and philosophy of science	3	90	30	18	42	3		Exam
		M-FL	Foreign language (professional)	3	90	30	18	42	3		Exam
		M-PHS	Pedagogics of the higher school	3	90	30	18	42	3		Exam
		M-PsM	Psychology of management	3	90	30	18	42	3		Exam
		TP	Teaching practice		8	240	80	48	112	8	
BD	OC	Optional Component (Module on current issues of clinical pharmacology)		15	450	150	90	210	15		
		M-PerPh	Personalized pharmacotherapy	5	150	50	30	70	5		Exam
		M-RCM	Research in clinical medicine	5	150	50	30	70	5		Exam
		M-CIOS	Current issues of outpatient surgery	5	150	50	30	70	5		Exam
		M-MRILS	Methodology for the rational use of medicines	5	150	50	30	70	5		Exam
		M-CCS	Clinicians communication skills	5	150	50	30	70	5		Exam
		M-MVSI	Modern views on surgical infection	5	150	50	30	70	5		Exam

		M-IID	Interaction and interchangeability of drugs	5	150	50	30	70	5		Exam
		M-TIGG	Topical issues of gerontology and geriatrics	5	150	50	30	70	5		Exam
		M-MVDDAS	Modern methods of diagnostics and differential diagnostics in abdominal surgery	5	150	50	30	70	5		Exam
PD	UC/OC	PROFILE DISCIPLINES		49	1470	490	294	686	17	32	
		University component (General professional module)		12	360	120	72	168	12		
	UC	M-FTMM	Fundamentals of the teaching methodology in medicine	3	90	30	18	42	3		Exam
		M-MRM	Methodology of scientific research in medicine	3	90	30	18	42	3		Exam
		M-HOM	Health Organization and Management	3	90	30	18	42	3		Exam
		M-CEEBM	Clinical Epidemiology and Evidence-Based Medicine	3	90	30	18	42	3		Exam
		RP	Research practice		12	360	120	72	168		12
PD	OC	Optional Component (Module on current issues of clinical pharmacology)		25	750	250	150	350	5	20	
		M-CEECP	Clinical and economic expertise in clinical practice	5	150	50	30	70	5		Exam
		M-APP	Actual problems of pulmonology	5	150	50	30	70	5		Exam
		M-AIVS	Actual issues of vascular surgery	5	150	50	30	70	5		Exam
		M-GCP (GCP)	Good clinical practice (GCP)	5	150	50	30	70		5	Exam
		M-TPTS	Treatment problems in thoracic surgery	5	150	50	30	70		5	Exam
		M-APGG	Actual problems of gastroenterology and hepatology	5	150	50	30	70		5	Exam
		M-TDM	Therapeutic drug monitoring	5	150	50	30	70		5	Exam



	M-MMRTC	Modern methods of research and treatment in cardiorheumatology	5	150	50	30	70		5	Exam
	M-TISE	Topical issues of surgical endocrinology	5	150	50	30	70		5	Exam
	M-MAUDMO	Monitoring and accounting of the use of drugs in medical organizations	5	150	50	30	70		5	Exam
	M-TIASDAC	Topical issues of acute surgical diseases of the abdominal cavity	5	150	50	30	70		5	Exam
	M-APEH	Actual problems of endocrinology and hematology	5	150	50	30	70		5	Exam
	M-CTx	Chemotherapy and Toxicology	5	150	50	30	70		5	Exam
	M-APN	Actual problems of nephrology	5	150	50	30	70		5	Exam
	M-IDTAS	Improving diagnosis and treatment of abdominal sepsis	5	150	50	30	70		5	Exam
RW	RESEARCH WORK		24	720	240	480	8	16		
ERWI	Master's research work, including internship and master's thesis		7	210	70	140	7		Report	
			1	30	10	20	1			
			13	390	130	260	13			
			3	90	30	60	3			
FE	FINAL EXAMINATION		12	360	120	240	12			
DDMT	Design and defense of a master's thesis		12	360	120	240		12		
TOTAL			120	3600	1200	2400	60	60		