ONTÚSTIK QAZAQSTAN

MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ MA 11,

SOUTH KAZAKHSTAN

MEDICAL ACADEMY

АО «Южно-Казахстанская медицинская академия»

Rector

Doctor of Medical Sciences,

Protestor M.M. Rysbekov

20 22 y.

EDUCATION PROGRAM

Educational program code:

7M10101

Name of the educational program:

Medicine

Level of the educational program:

Master

ONTÚSTIK QAZAQSTAN MEDISINA

SKMA

SOUTH KAZAKHSTAN

MEDICAL ACADEMY

АКАDEMIASY АСАDEMY
«Оңтүстік Қазақстан медицина академиясы» АҚ АО «Южно-Казахстанская медицинская академия»

«Medicine» educational programme committee Educational program 044-

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The educational program was developed by the members of the CEP:

Head of the Department of «Biology and Biochemistry», Ph.D., Professor

Yessirkepov M. M. M. M. S.

Agreed with the employer:

General Director of «Mediker SK» LLP

Deputy Head of the Department of Quality Control and Safety of Goods and Services of the Turkestan Region, Ph.D.

Deputy Chief Physician of the Mental Health Center of the Shymkent City Health Care Institution, Ph.D.,

Head of the Association of Private Clinics of the South Kazakhstan Region

Chairman of the CEP «Medicine»

Protocol № <u>11</u> <u>05</u> <u>08</u> 20 <u>22</u> y.

Approved by the Scientific Council

Approved by the Academic Council

Protocol № <u>15</u> <u>08</u> <u>08</u> 20 <u>22</u> y.

Pozilov B. D.

Akhmetov A. R.

Erezhepov E. V.

Timoshenko M. G.

Dosybaeva G. N.

Surmashey B. K.

| OŃTÚSTIK QAZAQSTAN | 2965 | SOUTH KAZAKHSTAN | |
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| MEDISINA | SKMA | MEDICAL | |
| AKADEMIASY | 31, | ACADEMY | |
| «Оңтүстік Қазақстан медицина академиясы» АҚ | | АО «Южно-Казахстанская медицинская академия» | |
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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 in-depth expert and analytical research and make effective decisions in priority areas of the healthcare system.
- 2. Purpose of the educational program: To train masters with in-depth theoretical and practical knowledge in a specific field of medicine with the skills to conduct expert, analytical, research and project activities.
- 3. Rationale for the educational program: Demand in the labor market: the educational program is focused on healthcare professionals who are able to conduct scientific research and implement organizational and management technologies to solve complex problems of protecting public health and developing an effective healthcare system in Kazakhstan.
 - 4. Professional standard on the basis of which the educational program has been 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. Health care organizers; heads of state and non-state medical and non-medical institutions.

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

Types of professional activity:

- organizational and managerial;
- scientific and research activities.

General information

| № | Description of the EP | Data |
|----|---|--|
| 1 | Registration Number | 7M10100146 |
| 2 | Code and classification of the field of | 7M10 Health care |
| | education | |
| 3 | Code and classification of the field of | 7M101 Health care |
| | study | |
| 4 | Group of Educational Programs | M144 Medicine |
| 5 | Code, name of the educational | 7M10101 Medicine |
| | program | |
| 6 | Type of EP | Current EP |
| 7 | ISCED level | 7 |
| 8 | NQF level | 7 |
| 9 | IQFLevel | 7 |
| 10 | Distinctive features of the EP | No |
| | Partner University (JEP) | - |
| | Partner University (DDEP) | - |
| 11 | List of competencies | Key competencies of the graduate of the program: |
| | | KC1 Methods in health care. |
| | | KC2 Population health and its physical, radiological, chemical and biological- |

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| | | environmental determinants. | | | | | |
|----|--|--|--|--|--|--|--|
| | | KC3 Health promotion: health education, health protection and disease | | | | | |
| | | prevention. | | | | | |
| | | KC4 Ethics. | | | | | |
| 12 | Learning Outcomes | LO1 Able to acquire new knowledge and applied skills in research and | | | | | |
| | | professional activities in the field of medicine. | | | | | |
| | | LO2 Plans professional activities in his field of qualifications in the field of | | | | | |
| | | medicine, based on the modern achievements of science and practice. | | | | | |
| | | LO3 Demonstrates knowledge and understanding of the interdisciplinary nature of | | | | | |
| | | medical research. | | | | | |
| | | LO4 Uses scientific information to develop the field of medicine and introduce | | | | | |
| | | new approaches within the framework of his qualifications. | | | | | |
| | | LO5 Clearly and unambiguously communicates information, ideas, findings, | | | | | |
| | | problems and solutions to both specialists and non-specialists in their field of | | | | | |
| | | medical qualifications. | | | | | |
| | | LO6 Able to solve problems in the field of medicine within the framework of his | | | | | |
| | | qualifications based on scientific approaches. | | | | | |
| | | LO7 Is engaged in professional growth in the field of medicine, demonstrates the | | | | | |
| | | skills of introspection. | | | | | |
| 13 | Form of study | In-person | | | | | |
| 14 | Language of instruction | Kazakh, Russian | | | | | |
| 15 | Amount of loans | 60 | | | | | |
| 16 | Degree Awarded | Master of public health in the educational program 7M10101 «Medicine» | | | | | |
| 17 | Duration of training | 1 year | | | | | |
| 18 | Availability of an appendix to the | KZ36LAA00011387 (018) | | | | | |
| | license for the direction of personnel | | | | | | |

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| | MA MEDICAL | |
| AKADEMIASY (,) | ACADEMY | |
| «Оңтүстік Қазақстан медицина академиясы» АҚ | У АО «Южно-Казахстанская медицинская академия» | |
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| | training | |
|----|----------------------------------|--|
| 19 | Availability of EP accreditation | Yes |
| | Name of accreditation body | Independent Agency for Accreditation and Rating (IAAR) |
| | Accreditation Certificate No., | No. AB 3989, 10.06.2022 – 09.06.2027 |
| | Accreditation Validity Period | |
| 20 | Information about disciplines | Annex 1.2 |

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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 | | | | | | | |

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Annex 1.2

Matrix of achievability of competencies/learning outcomes

| № | Name of the discipline | A brief description of the discipline | (BD, PD) | Compo nent (UC, OC) | Number of credits | Generated LO (codes) |
|---|---------------------------------|---|----------|------------------------------|-------------------------|----------------------------|
| | | The cycle of basic disciplines | | | 10 | |
| | , | Mandatory / University component | | | 6 | |
| 1 | Management | Introduction to management: basic concepts. Functions, principles and elements of the management process. The evolution of management: the conditions and prerequisites for the emergence of management, school management. Features of Kazakhstan management. Integration processes in management. Management systems: functions and organizational structures. Planning, SWOT-analysis and forecasting in management. Management processes: goalsetting and assessment of the situation, making management decisions. Management mechanism. | BD | UC | 2 | LO1 LO2 LO6 |
| 2 | Foreign language (professional) | Purpose of discipline: allows to develop communication skills in a foreign language, intercultural competencies and business correspondence skills. The main types reading original sources of foreign-language, preparation of written reports on scientific topics by specialty. Listen to lectures, messages containing professional information. | BD | UC | 2 | LO3 LO4 LO5 |

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| 3 | Psychology of | Purpose of discipline: use knowledge of the basic provisions | BD | UC | 2 | LO1 |
|---|------------------|---|----|----|---|-----|
| | management | psychology of manage-ment. Approaches and principles of | | | | LO3 |
| | | psychological science in professional work. Presentation of | | | | LO5 |
| | | conclusions in the field of theoretical and practical | | | | |
| | | psychology of management; scientific and theoretical | | | | |
| | | worldviews on fundamental psychological concepts. | | | | |
| | | Analysis of management processes. Application of the | | | | |
| | | received knowledge in practice in management activities. | | | | |
| | Optional Con | mponent (Module on current issues of clinical research) | | | 4 | |
| 4 | Modern clinical | Advanced clinical methods and technologies for examining | BD | OC | 4 | LO1 |
| | research methods | patients with major diseases of internal organs. Modern non- | | | | LO3 |
| | | invasive and interventional methods for diagnosing diseases | | | | LO4 |
| | | of internal organs based on the principles of evidence-based | | | | |
| | | medicine and their importance in research activities. A | | | | |
| | | systematic approach to the analysis of medical information, | | | | |
| | | based on the principles of evidence-based medicine. | | | | |
| | Clinical and | Analysis of socially significant problems and processes. | BD | OC | 4 | LO3 |
| | diagnostic | Methods of the humanities, natural sciences, biomedical and | | | | LO4 |
| | laboratory | clinical sciences in various types of professional and social | | | | |
| | diagnostics | activities. Work with medical and technical equipment used | | | | |
| | | in working with patients, possession of computer | | | | |
| | | technology, obtaining information from various sources. | | | | |
| | | Possibilities of modern information technologies for solving | | | | |
| | | professional problems. | | | | |
| | | | | | | |

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| | | Cycle of profile disciplines | | | 25 | |
|---|--|---|----|-----|----|-------------------|
| | Unive | rsity component (General professional module) | | | 5 | |
| 6 | Health Organization and Management | Control and functioning of health authorities. Separation 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. | PD | UC | 3 | LO2 LO5 LO6 |
| 7 | 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 | 2 | LO1 LO4 LO6 |
| 8 | Industrial ptactice | training process, acquisition of practical skills, competencies and experience in professional activities in public health, as well as development of best practices. | PD | UC | 10 | LO1 |
| | • | mponent (Module on current issues of clinical research) | DD | 0.0 | 10 | T 0 4 |
| 9 | Interpretation of laboratory | Obtaining laboratory information, the ability to monitor the effectiveness of treatment of patients, the implementation of | PD | OC | 5 | LO4 LO5 |

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| | research methods | laboratory research methods based on modern laboratory technologies, effective clinical use of the results. Organization of work on the practical use and implementation of research results. | | | | |
|----|--|---|----|----|---|-------------------|
| 10 | Molecular biological and genetic laboratory diagnostics | Analysis of the regularities of the functioning of individual organs and systems. The main methods for assessing the functional state of the human body, the principles of testing the psychological properties of the human personality, understanding the aging processes of the body, the physiological characteristics of the aging body for more successful therapeutic and diagnostic activities. Selection of the type of diagnostics. | PD | OC | 5 | LO4 LO6 |
| 11 | Actual issues of Biomedicine | Formation of a systematic understanding of the most pressing problems of modern biomedicine, their importance for society, and the effectiveness of measures taken to solve them. The use of modern technologies to solve topical issues of biomedicine, as well as research and production-technological tasks of professional activity, for the collection and analysis of biomedical information. | PD | OC | 5 | LO1 LO3 LO7 |
| 12 | Healthcare Project Management | Project and project management. The process of building work on a project. Project development and planning. Project management methods and systems. Risk management in project management. Features of project management in the healthcare sector, including in the field of medical care and services based on service and social services. | PD | OC | 5 | LO2 LO6 LO7 |

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| | | Experimental research work | 13 | |
|----|--------------------|---|----|---------|
| 13 | Experimental | It is based on modern achievements of science, technology | 13 | LO1 LO2 |
| | research work of | and production and contains specific practical | | LO3 LO4 |
| | a student, | recommendations and independent solutions to management | | LO5 LO6 |
| | including an | problems. Performed using advanced information | | LO7 |
| | internship and the | technologies; Contains experimental and research | | |
| | implementation | (methodological, practical) sections. | | |
| | of a master's | | | |
| | project | | | |
| | | Final examination | 12 | |
| 14 | Design and | Assessment of learning outcomes and key competencies | 12 | LO1 LO2 |
| | defense of a | achieved upon completion of the Master's degree program. | | LO3 LO4 |
| | master's project | | | LO5 LO6 |
| | | | | LO7 |
| | | TOTAL | 60 | |

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Annex 1.3

A matrix for achieving LO using various learning methods

| A matrix for achieving LO using various learning methods | | | | | | | | |
|---|----------------------------------|--------------------------------|--|--|--|--|--|--|
| LO | Teaching and learning methods | | | | | | | |
| LO1 Able to acquire new knowledge and applied skills in research and | Lectures, seminars, analysis, | Discussion of the results of | | | | | | |
| professional activities in the field of medicine. | regulation of pharmaceutical | the analysis, group work | | | | | | |
| | activities | | | | | | | |
| LO2 Plans professional activities in his field of qualifications in the field | Practical modeling | Analysis of the material, | | | | | | |
| of medicine, based on the modern achievements of science and practice. | | feedback from the | | | | | | |
| | | undergraduate | | | | | | |
| LO3 Demonstrates knowledge and understanding of the | Case study, material analysis, | Discussion, group work | | | | | | |
| interdisciplinary nature of medical research. | feedback from the | | | | | | | |
| | undergraduate | | | | | | | |
| LO4 Uses scientific information to develop the field of medicine and | Participation in the discussion, | Data analysis, strategy | | | | | | |
| introduce new approaches within the framework of his qualifications. | answers to questions | development and decision- | | | | | | |
| | - | making, working in small | | | | | | |
| | | groups | | | | | | |
| LO5 Clearly and unambiguously communicates information, ideas, | Material analysis, | Data analysis, practical tasks | | | | | | |
| findings, problems and solutions to both specialists and non-specialists | pharmaceutical activity | | | | | | | |
| in their field of medical qualifications. | analysis | | | | | | | |
| LO6 Able to solve problems in the field of medicine within the | Using interdisciplinary | Discussion, group | | | | | | |
| framework of his qualifications based on scientific approaches. | situations | assignments | | | | | | |
| LO7 Is engaged in professional growth in the field of medicine, | Conducting research activities, | Participation in the | | | | | | |
| demonstrates the skills of introspection. | publishing publications, club | discussion, answers to | | | | | | |
| | magazine | questions | | | | | | |

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Annex 1.4

The matrix of compliance of LO with assessment methods

| LO | Assessment methods | | | |
|---|----------------------------|-------------------------------|--|--|
| LO1 Able to acquire new knowledge and applied skills in research and | Portfolio | Testing | | |
| professional activities in the field of medicine. | | Oral interview | | |
| LO2 Plans professional activities in his field of qualifications in the field | Testing | Preparation and provision of | | |
| of medicine, based on the modern achievements of science and practice. | Oral interview | information at the | | |
| | | appropriate level | | |
| LO3 Demonstrates knowledge and understanding of the | Presentation of the topic | Preparation and protection of | | |
| interdisciplinary nature of medical research. | | the report | | |
| LO4 Uses scientific information to develop the field of medicine and | Self-assessment | Publications | | |
| introduce new approaches within the framework of his qualifications. | | | | |
| LO5 Clearly and unambiguously communicates information, ideas, | Oral response, oral survey | Essay (short and long) | | |
| findings, problems and solutions to both specialists and non-specialists | | | | |
| in their field of medical qualifications. | | | | |
| | | | | |
| LO6 Able to solve problems in the field of medicine within the | Summary/presentation | Publications | | |
| framework of his qualifications based on scientific approaches. | | | | |
| LO7 Is engaged in professional growth in the field of medicine, | Preparation of test and | Oral response, oral survey | | |
| demonstrates the skills of introspection. | situational tasks | | | |

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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 | IWMT | IWM | 1 year of study | Form of control | | | | | | | | | | | | |
|--------------------------|-------|---|---|-------------------|---------------|------------------|------|-----|-----------------|-----------------|--|--|--|--|--|--|---|-----|----|----|----|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | | | | | | | | | | | |
| BD | UC/OC | | BASIC DISCIPLINES | 10 | 300 | 100 | 60 | 140 | 10 | | | | | | | | | | | | | |
| | UC | | mponent (Interdisciplinary module) | 6 | 180 | 60 | 36 | 84 | 6 | | | | | | | | | | | | | |
| | | | Management | 2 | 60 | 20 | 12 | 28 | 2 | Exam | | | | | | | | | | | | |
| | | | Foreign language (professional) | 2 | 60 | 20 | 12 | 28 | 2 | Exam | | | | | | | | | | | | |
| | | | Psychology of management | 2 | 60 | 20 | 12 | 28 | 2 | Exam | | | | | | | | | | | | |
| BD | OC | 1) Optional Component (Module on current issues of clinical research) | | 4 | 120 | 40 | 24 | 56 | 4 | | | | | | | | | | | | | |
| | | M-MCRM | Modern clinical research methods | 4 | 120 | 40 | 24 | 56 | 4 | Exam | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | Clinical and diagnostic laboratory diagnostics | 4 | 120 | 40 | 24 | 56 | 4 |
| PD | UC/OC |] | PROFILE DISCIPLINES | 25 | 750 | 250 | 150 | 350 | 25 | | | | | | | | | | | | | |
| | | University comp | onent (General professional module) | 5 | 150 | 50 | 30 | 70 | 5 | | | | | | | | | | | | | |
| | | M-HOM | Health organization and management | 3 | 90 | 30 | 18 | 42 | 3 | Exam | | | | | | | | | | | | |
| PD | UC | | Clinical epidemiology and evidence- based medicine | 2 | 60 | 20 | 12 | 28 | 2 | Exam | | | | | | | | | | | | |
| | | IP | Industrial practice | 10 | 300 | 100 | 60 | 140 | 10 | Report | | | | | | | | | | | | |
| | ()(| 1)Optional Com clinical research | ponent (Module on current issues of | 10 | 300 | 100 | 60 | 140 | 10 | | | | | | | | | | | | | |

TOTAL

SKMA -1979-

SOUTH KAZAKHSTAN

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| | M-ILRM | Interpretation of laboratory research methods | 5 | 150 | 50 | 30 | 70 | 5 | Exam |
|------|---|---|-----|-----|-----|----|----|--------|------|
| | M-MBGLD | Molecular biological and genetic laboratory diagnostics | 5 | 150 | 50 | 30 | 70 | 5 | Exam |
| | M-AIB | Actual issues of Biomedicine | 5 | 150 | 50 | 30 | 70 | 5 | Exam |
| | M-HPM | Healthcare project management | 5 | 150 | 50 | 30 | 70 | 5 | Exam |
| ERW | EXPERIMENTAL RESEARCH WORK | | 13 | 390 | 130 | 26 | 50 | 13 | |
| ERWS | Experimental research work of a student, including an internship and the implementation of a master's project | 5 | 150 | 50 | 10 | 00 | 5 | Report | |
| | | 8 | 240 | 80 | 16 | 50 | 8 | • | |
| FE | | FINAL EXAMINATION | | 360 | 120 | 24 | 10 | 12 | |
| DDMP | Design and defense of a master's project | | 12 | 360 | 120 | 24 | | 12 | |

60

1800

600

1200