Catalog of elective disciplines for the 2023-2024 academic year

1. Department: "Department of History of Kazakhstan and Social and Social disciplines»
2. Level of training: Doctorate
3. Bilim bagdarlamalary: D141 - "Medicine"
4. Course: 1
5. Name of elective discipline: Educational technologies in universities
6. Number of credits : 4 credits
7. Objective: To acquaint doctoral students with the educational technologies of the university and master the competencies of their application in the educational process. The ability of doctoral students to combine pedagogical knowledge with general theoretical and practical knowledge, skills in pedagogy, knowledge gained in teaching general medical disciplines, the formation of new pedagogical thinking, competencies of pedagogical activity.
8. Tasks: To reveal the role and place of educational technologies in higher education in increasing the efficiency of the educational process;
- Analysis of the essence and integration of learning technologies into vocational education;
- Analysis of the features of the use of modern educational technologies in the medical education system;
- analysis of effective methods and techniques of teaching and their application in the educational process;
- to propose the main ways to improve educational technology and its practical application.
9. Content of the discipline: Goals and objectives of studying the subject "Educational technologies in higher education", its role and importance in teacher training. The importance and significance of innovative technologies in vocational education. The history of the emergence of educational technologies and the future development of educational technologies. The concept of individualization and differentiation of education. Personalization of training. Fundamentals based on personalized learning technologies. General characteristics of differentiated learning. Three-dimensional methodical training system. Essence and methodological aspects of three-dimensional pedagogical teaching technology. Individual - the concept of adaptive learning (education). Technology of profile education. Technology of critical thinking. Ideas and principles of pedagogical cooperation. Modular learning technology. Description of information technologies of instruction.
Concept, goals, objectives of distance learning, didactic functions and properties of computer technologies based on distance learning. Development of teaching technology. The main functions and features of problem learning.
10. Justification of the choice of discipline: This program is designed to provide doctoral students with the necessary knowledge, skills and abilities in the discipline, to achieve learning outcomes. In the context of distance learning, the Program is implemented through the automated information system Platonus (hereinafter-AIS Platonus), Zoom, Webex, etc.. For the development of the discipline, the materials that are included in the "Task" module of the Platonus AIS are used.
11. Learning outcomes:
1) demonstrates leadership, innovation and individuality in solving complex problems of the educational process and professional activity;
2) critically perceives the pedagogical concepts of educational technologies in higher education in connection with the world-historical development of mankind;
3) formulates the essence of educational technologies from the point of view of critical thinking;
4) analyzes the use of educational technologies in the educational process and ways to improve it and offers his opinion to the scientific community and society;
5) the ability to apply the features of the use of educational technologies in the educational process in the practice of higher and postgraduate education.
11. Prerequisites: Higher education pedagogy
12. Post-requirements: Research and teaching practice**.**

13. Literature:

in English:

Main:

1.Pedagogy [Текст] : textbook / K. K. Zhampeisova [and etc.]. - Almaty : Association of hiighereducational in stitutions of Kazakhstan, 2016. - 390 p.

Additionalinformation:

1. Educational management [Текст] : textbook / A. N. Kosherbayeva [and ect.]. - Almaty : [s. n.], 2016.

Electronic source databases:

1 ОҚМА Репозиторийі http://lib.ukma.kz/repository/
2 Республикалық жоғары оқу орындары аралық электрондық кітапхана http://rmebrk.kz/
3 «Aknurpress» сандық кітапхана https://aknurpress.kz/login
4 «Заң» нормативтік-құқықтық актілер базасы https://zan.kz/ru
5 «Параграф Медицина» ақпараттық жүйесі https://online.zakon.kz/Medicine/
7 Научная электронная библиотека https://elibrary.ru/
8 Ашық кітапхана https:// kitap.kz/
9 Thomson Reuters www.webofknowledge.com
10 ScienceDirect http://www.sciencedirect.com/
11 Scopushttps://www.scopus.com/

1. **The Department:** Biology and Biochemistry
2. **Program:** doctoral student
3. **Specialty:** Medicine
4. **Year:** 2
5. **Name of the elective disciplines:** Project management
6. **Number of academic credits:** 8
7. **Goal:**

Project management is a methodology for achieving success using modern scientific methods to achieve optimal results in terms of cost, time and quality, as well as meeting the interests of all project participants. In other words, the art of leadership in coordinating the efforts of people and using resources.

8. **Objectives:**

• To give doctoral students stable ideas, knowledge, skills and abilities in the disciplines that determine the direction (profile) of doctoral students training;.

• To study the real place of the disciplines that determine the direction (profile) of doctoral students' training in the modern practice of making managerial and clinical decisions, as well as in the process of implementing research and practical programs;

• To give doctoral students an understanding of the possibilities of using the tools of disciplines that determine the direction (profile) of doctoral students' training in solving complex interdisciplinary, intersectoral problems in the field of professional activity;

• To provide doctoral students with fundamental knowledge at the intersection of sciences, guaranteeing them professional mobility in the real developing world.

• work with scientific literature and electronic biomedical databases.

9. Justification of the choice of discipline:

- Solve research problems, relying on the principles of civilized, cultorological and informational approaches to the analysis of the studied processes;
- Set goals and formulate tasks related to the implementation of professional functions.
- Make management decisions in the framework of their professional activities based on the principles of evidence-based medicine;
- Possess the principles and modern methods of operations management in various fields of activity;
- Forecast the results of your professional activity; control the work process and objectively evaluate

its results;
- Solve complex interdisciplinary, intersectoral problems in the field of professional activity.

10. Learning outcomes (competencies)

№	Knowledge (cognitive sphere)	Skills and skills (psychomotor sphere)	Personal and professional competencies (relationships)
	Fundamentals of Effective Research Planning in Health Care. The main forms of research funding in the Republic of Kazakhstan. International legislation in the field of science. The main stages of research, substantiation of the application of the project approach. Research project methodology and design. Research protocol. Planning a research project. Planning a research project. The project as an object of management. Classifications and characteristics of the project. Project participants. Development of the project concept. Building a tree of goals. Development of the project charter. Development of the project concept and assessment of its effectiveness. The structure of the design analysis. Fundamental principles of professional project management. Place and role of project management in management activities. Development of the project concept. Building a tree of goals. Development of the project charter. Business plan and its structure Evaluation of the	Fundamentals of international and national law in the field of scientific research. New approaches to the regulation of biomedical research, adopted within the framework of the new Code of the Republic of Kazakhstan "On people's health and the health care system. Scientific and research programs by funding sources: budgetary scientific and technical progress (program-targeted and grant financing, innovative projects). Search and attraction of grants from domestic and foreign donor funds. Basic principles of scientific project management. Stages of planning a scientific project Statement of the problem, definition of the goal and objectives of the research project, Development of indicators of research. The main elements of the research plan. What is a research protocol. Providing a project work plan in the form of a PERT chart and in the form of a Gantt chart (Microsoft Project). Formation of a research group, justification of the project cost, description of the research environment). History and concept of project management. The project as an object of management. Terms and Definitions. Classifications and characteristics of the project. Fundamentals of project management. Processes in project management. Development and planning. Execution of work. Project control. Completion. Schemes of interaction between the organization and project management. Organizational structures for project management.	Able to present their own judgments and critically analyze the results of educational experiments. Able to defend their own judgments in practical exercises, at meetings of the student circle, student scientific conferences, etc. When planning and conducting training experiments, he is able to explain the observed facts and phenomena, their causal relationships. Able to work in a team, to make a collective decision. Able to transfer to students, teachers, examiners the knowledge gained in the process of studying the discipline.

	effectiveness of investment projects. Analysis of the project in terms of both risk and uncertainty. Structuring the project and design estimates. Material and technical preparation of the project. Types of contracts. Advantages and disadvantages. Basic concepts and rules for building network models.	Project life cycle and phases Project environment. Functions, subsystems and methods of project management. Evaluation of the effectiveness of investment projects. Project planning concept. Planning the subject area of the project. Planning the timing of the project. Methods for assessing the effectiveness of the project. Categories and types of efficiency. Efficiency assessment scheme. Planning principles. Planning the scope of the project. Basic and auxiliary planning procedures.	

11. Prerequisites:

12. Post requisites:

13.Literature:

Main literature:

- Надлежащая практика научных исследований. Койков Виталий Викторович, Дербисалина Гульмира Ажмадиновна
- Гэмбл, Д. Э. Стратегиялық менеджмент негіздері:бәсекелік артықшылыққа ұмтылу = Essentials of strategic management : оқулық / Д. Гэмбл, М. Питереф, А. Томпсон ; Қаз. тіл ауд. Ж. Кушебаев . - 5-ші бас. - Алматы : Ұлттық аударма бюросы, 2019. - 536 бет.
- Шиллинг, М.А. Технологиялық инновациялардағы стратегиялық менеджмент = Strategic management of technological innovation : оқулық / М.А.Шиллинг ; Қаз. тіл ауд С. Зиядин [және т.б.]. - 5-ші бас. - Алматы : Ұлттық аударма бюросы, 2019. - 380 бет.
- Сыздыкова, К. Ш. Менеджмент в здравоохранении : учебное пособие / К. Ш. Сыздыкова, А. Р. Рыскулова, Ж. С. Тулебаев. - Алматы : ИП Изд-во "Ақнұр", 2015. - 236 с.
- Татарников, М. А. Управление качеством медицинской помощи / М. А. Татарников. - М. : ГЭОТАР - Медиа, 2016.
- Educational management : textbook / A. N. Kosherbayeva [and ect.]. - Almaty : [s. n.], 2016. - 306 p.

1. **The Department: Biology and Biochemistry**
2. **Program: doctoral student**
3. **Specialty: Medicine**
4. **Year: 1**
5. **Name of the elective disciplines: Scientific communication: oral and written**
6. **Number of academic credits: 4**
7. **Goal:**

Scientific speech is not only a means of mastering certain information, but also a means of its implementation in specific activities, such as writing scientific papers, reports and presentations at seminars and conferences, participation in scientific discussions, scientific reviewing.

Objectives:

• Scientific communication is a process and mechanism for the dissemination of scientific knowledge about the surrounding reality within the scientific community and in society as a whole.

• Scientific communication is carried out using various channels, means, forms and institutions of communication. Their specific list determines the stage of implementation of scientific communication:

• The first (internal) stage of scientific communication is communication between scientists within the scientific community on the approval of a scientific idea;

• The second (external) stage of scientific communication consists in interaction with a wide audience of the scientific community, which translates scientific knowledge into the mass consciousness.

• At the internal stage, scientific communication is realized directly within the scientific community. Usually it can be formalized in the form of oral reports, face-to-face scientific discussions, seminars, scientific publications, scientific conferences, scientific and technical exhibitions, etc. As a result of the implementation of two stages of scientific communication, the process of popularizing science should be launched. That is, the scientific community, possessing the necessary special knowledge, acts as a keeper and translator of science to the general public. At this stage, the media, which are represented by popular science magazines, blogs, television programs, scientific electronic libraries, various exhibitions, science festivals, etc., act as an intermediary of communication between scientists and society as a whole. Scientific communication can be successful only in the case of appropriate adaptation of the language of information delivery. In addition, the emphasis should be on performance, utility and predictions (rather than the empirical part of the research).

9. Justification of the choice of discipline:

- Solve research problems, relying on the principles of civilized, cultorological and informational approaches to the analysis of the studied processes;
- Set goals and formulate tasks related to the implementation of professional functions.
- Make management decisions in the framework of their professional activities based on the principles of evidence-based medicine;
- Possess the principles and modern methods of operations management in various fields of activity;
- Forecast the results of your professional activity; control the work process and objectively evaluate its results;
- Solve complex interdisciplinary, intersectoral problems in the field of professional activity.

11. Learning outcomes (competencies)

№	Knowledge (cognitive sphere)	Skills and skills (psychomotor sphere)	Personal and professional competencies (relationships)
	Scientific discourse. Stylistics and pragmatics of scientific discourse. The structure of the scientific text. The principles of the formation of the terminology of the scientific text. Definitions.	Discourse concept. Scientific discourse as a kind of status-oriented discourse. Key concepts of scientific discourse. The goals of scientific communication. Strategies for scientific discourse. Genres of scientific discourse Precedent texts. Discursive formulas. Scientific style as one of the main functional styles of the Russian language. General characteristics of the scientific style. Scope of use and functions. Style-	Able to present their own judgments and critically analyze the results of educational experiments. Able to defend their own judgments in practical exercises, at meetings of the student circle, student scientific conferences, etc.

	The grammar of the scientific text. Rhetoric of scientific discourse. General information about science. Methodological foundations of scientific knowledge. Organization of research.	forming factors. Linguistic features of scientific texts: lexical, phraseological, morphological, syntactic. Varieties of scientific style. Subtypes: proper scientific, scientific business, popular science, educational scientific, scientific journalistic. Genres of scientific speech. Pragmatic characteristics of the scientific style. Stable text categories in relation to a scientific text 1) coherence; 2) structure; 3) integrity; 4) modality. Logical-compositional structure of a written scientific text. Pragmatic clichés in the design of the structural parts of a scientific text. The introductory part of the scientific text itself. The specifics of the formation of the main part of the scientific text. Types of scientific text conclusions. Principles of rubrication of a scientific text. Quotes and links.	When planning and conducting training experiments, he is able to explain the observed facts and phenomena, their causal relationships. Able to work in a team, to make a collective decision. Able to transfer to students, teachers, examiners the knowledge gained in the process of studying the discipline.

11. Prerequisites:

12. Post requisites:

13.Literature:

Main literature:

- Введение в профессию врача. Основы клиники, права, этики и коммуникации : учебник / М. А. Асимов, Г. О. Оразбакова . - Қарағанды : АҚНҰР, 2019. - 244 с.
- Дәрігер мамандығына кіріспе. Клиника,құқық, этика және коммуникация негіздері : оқулық / М.А. Асимов [және т.б.]. - 2-ші бас. - Қарағанды : АҚНҰР, 2019. - 232 бет.
- Спандияров, Е. Основы научных исследований и инновации : практическое пособие / Е. Спандияров ; М-во образования и науки РК. - Алматы : Эверо, 2013. - 136 с.
- Принципы планирования и проведения исследований в сестринском деле : учебное пособие / Г. А. Дербисалина [и др.]. - Караганда : АҚНҰР, 2020.
- Мейіргер ісіндегі зерттеулерді жоспарлау және жүргізу принциптері : оқу құралы / Г. Ә. Дербісалина [т. б.]. - Қарағанды : АҚНҰР, 2020. - 150 б.
- А.С. Кадыров, И.А. Кадырова, Ж.Ж.Жунусбекова Ғылыми зерттеулер негіздері:оқу құралы. "АҚНҰР" 2017 (ЭБ)
- Zammitt, N. Essentials of Kumar Clarks clinical medicine : textbook / N. Zammitt, A. O Brien. - 6th ed. - Philadelphia : Elsevier, 2018. - 889 p.

1. **The Department:** Biology and Biochemistry
2. **Program:** Doctorate
3. **Specialty:** Medicine
4. **Year:** 1
5. **Name of the elective disciplines:** Modern methods and principles of scientific research
6. **Number of academic credits:** 4
7. **Goal:**

- development of doctoral students' knowledge and skills of independent planning, conducting and evaluating the results of scientific research.
- clearly and clearly apply the acquired communication skills for the implementation of the dissertation research (substantiation of the topic of the dissertation, its design, publication, dissemination of research results) with specialists and non-specialists;
- knowledge of the methods and means used in scientific research can significantly facilitate the scientific training of a doctoral student, initiate his ability for further independent continuation of education.

Objectives:

- To give doctoral students stable ideas, knowledge, skills and abilities in the disciplines that determine the direction (profile) of training doctoral students;
- To study the real place of the disciplines that determine the direction (profile) of doctoral students' training in the modern practice of making managerial and clinical decisions, as well as in the process of implementing research and practical programs;
- To give doctoral students an understanding of the possibilities of using the tools of disciplines that determine the direction (profile) of doctoral students' training, in solving complex interdisciplinary, inter-sectoral problems in the field of professional activity;
- To provide doctoral students with fundamental knowledge at the intersection of sciences, guaranteeing them professional mobility in the real developing world.

Justification of the choice of discipline:

- Solve research problems, relying on the principles of civilized, cultorological and informational approaches to the analysis of the studied processes;
- Set goals and formulate tasks related to the implementation of professional functions.
- Make management decisions in the framework of their professional activities based on the principles of evidence-based medicine;
- Possess the principles and modern methods of operations management in various fields of activity;
- Forecast the results of your professional activity; control the work process and objectively evaluate its results;
- Solve complex interdisciplinary, intersectoral problems in the field of professional activity.

Learning outcomes (competencies)

№	Knowledge (cognitive sphere)	Skills and skills (psychomotor sphere)	Personal and professional competencies (relationships)
	Fundamentals of national and international law in the field of scientific research: QPBR, GLP, GLP, GCLP, etc. Scientific research in medicine.	Science is focused on understanding the essence of objects and processes. Science operates with specific methods and forms, research tools. Scientific knowledge is characterized by planning, consistency, logical organization, and the validity of research results. Science has	Able to present their own judgments and critically analyze the results of educational experiments.

	Scientific and research programs by funding sources. Search and attraction of grants. Key components and stages of scientific research. Classification of research in public health. Qualitative Research in Public Health. Panel studies and trend studies in public health. The reasons for the unreliability of the research results: systematic and random errors. Unfair research practice. Recommendations for writing an article. Critical analysis of scientific articles in biomedicine.	specific ways to substantiate the truth of knowledge. Scientific research in medicine, as in the field of other sciences, can only be carried out by people who are honest and principled, truly devoted to the cause they serve. Such an act of a scientific supervisor is also immoral when he agrees or insists on the fact that in a scientific publication (monograph, article, abstracts, reports, etc.), in the part where the name of the true author of the scientific work appears, the names of false co-authors are put next there are individuals who did not participate in the scientific research. Industry and business often participate in government funding for research projects. Also, the municipality is a significant structure in the financing of scientific research, participating openly in financing regional development projects. These Rules for the submission of applications for attraction of related grants determine the procedure for submission of applications for attraction of related grants by central state bodies, taking into account applications from local representative and executive bodies to the central authorized body for state planning. Choosing a research topic. Definition of the object and subject of research. Defining goals and objectives. Wording of the title of the work. Development of a hypothesis. Drawing up a research plan. Working with literature. Selection of research methods. The organization of the conditions of the study. Conducting research (collecting material). Processing of research results. The formulation of conclusions. The design of the work. Cross-sectional studies. Cohort studies Case-control studies. Experimental research. Environmental (correlation) studies. Qualitative research in medicine. Panel studies and trend studies in medicine. Systematic review and meta-analysis.	Able to defend their own judgments in practical exercises, at meetings of the student circle, student scientific conferences, etc. When planning and conducting training experiments, he is able to explain the observed facts and phenomena, their causal relationships. Able to work in a team, to make a collective decision. Able to transfer to students, teachers, examiners the knowledge gained in the process of studying the discipline.

		Definition, scope, types of cohort study. Definition, types of systematic errors, types of random errors, their impact on the result, ways to minimize errors. The main criteria for writing a scientific article, work plan, structure, recommendations for the presentation of the material, the choice of a scientific journal. Work with research checklists of various designs in biomedicine.	

11. Prerequisites:

12. Post requisites:

13.Literature:

- Койков, В. В. Надлежащая практика научных исследований: Избранные вопросы методологии биомедицинских исследований и исследований в медицинском образовании : исследование / В. В. Койков, Г. А. Дербисалина. - Караганда : АҚНҰР, 2014. - 140 с.
- Спандияров, Е. Основы научных исследований и инновации : практическое пособие / Е. Спандияров ; М-во образования и науки РК. - Алматы : Эверо, 2013. - 136 с.
- Принципы планирования и проведения исследований в сестринском деле : учебное пособие / Г. А. Дербисалина - Караганда : АҚНҰР, 2020.
- Мейіргер ісіндегі зерттеулерді жоспарлау және жүргізу принциптері : оқу құралы / Г. Ә. Дербісалина - Қарағанды : АҚНҰР, 2020. - 150 б.
- А.С. Кадыров, И.А. Кадырова, Ж.Ж.Жунусбекова Ғылыми зерттеулер негіздері:оқу құралы. "АҚНҰР" 2017 (ЭБ)