

EDUCATIONAL PROGRAM

8D09 - Veterinary

(Code and classification of the field of education)

8D091 - Veterinary

(Code and classification of the direction of training)

0841

(Code in the International Standard Classification of Education)

D138 - Veterinary science

(Code and classification of the educational program group)

8D09101 - Veterinary medicine

(Code and name of the educational program)

Doctor of philosophy (PhD)

(Level of preparation)

Semey

Educational program

8D09 -- Veterinary (Code and classification of the field of education)

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PREFACE

Developed

The educational program 8D09101 - Veterinary medicine in the direction of preparation 8D091 - Veterinary on the basis of the State Compulsory Standards of Higher and Postgraduate Education approved by the Order of the Ministry of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No 2 (as amended by the order) was developed by the Academic Committee dated 20.02.2023 No 66).

Members of the Academic Committee	Full name	Academic degree, academic title, position
Head of the Academic Committee	Yessengulova Nurlygul Zhansapovna	Candidate of Veterinary Sciences, dean of the faculty
Educational program manager	Yermekkazy Bilyalov	Candidate of Veterinary Sciences, senior lecturer
Member of the AC	Akhmetzhanova Aizhan Yerkingazyevna	Master of Veterinary Science, acting head of the Department
Member of the AC	Dyusembayev Sergazy Turlybekovich	Doctor of veterinary sciences, professor
Member of the AC	Serikova Ainur Temeshovna	Candidate of Veterinary Sciences, Associate Professor
Member of the AC	Muratbayev Dauletbek Manarbekovich	Doctor of Philosophy, Professor M.A. kakhodastrylgan.
Member of the AC	Zhanat Rakishev	Head of the institution, RSU" territorial inspection of Abay region of the Committee for Veterinary Control and supervision of the Ministry of Agriculture of the Republic of Kazakhstan"
Member of the AC	Yerkebulan Amangalievich	Yerkebulan Amangalievich [yerkebulan amangalievich]
Member of the AC	Akhmadieva Ainur Zhomartovna	Doctoral student of the DVM-301 group

Reviewing

- to the time g	
Full name of the reviewer	Position, place of work
Baryshev Yerzhan Muratbekovich	GU "UPRAVLENIE VETERINARII OBLASTI ABAJ"

Reviewed

at the meeting of the Commission on Academic Quality of the Faculty of Veterinary Medicine and Agricultural Management by protocol No. 3 of January 09, 2024.

at a meeting of the Academic Quality Commission Research School of Veterinary Medicine and Agriculture. Recommended for approval by the University Academic Council Protocol No. 6 dated June 06, 2024

Approved

at a meeting of the University Academic Council by protocol No. 6/1 of January 19, 2024.

at a meeting of the University Academic Council by protocol No. 11 of June 28, 2024.

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Code and classification of the direction of training;

Code in the International Standard Classification of Education;

Code and classification of the educational program group;

Code and name of the educational program;

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Regional standard;

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1.Introduction

1.1.General data

The educational program 8D09101 "Veterinary Medicine" implemented by the Department of Veterinary Medicine, Faculty of Veterinary Medicine and Agricultural Management of the National Academy of Sciences of Semey Shakarim University, was developed taking into account the needs of the regional labor market, the requirements of regulatory documents of the Ministry of Science and Higher Education of the Republic of Kazakhstan and is a system of documents for the organization of the educational process. The educational program defines the goals, expected results, content, conditions and technologies for the implementation of the educational process.

When implementing the educational program, it is planned to use artificial intelligence tools in the educational process, thereby developing digital competencies among students in a rapidly changing technological environment.

The educational program provides for the education of a student with special educational needs in the conditions of a higher educational institution, as well as his socialization and integration into society.

1.2. Completion criteria

The main criterion for the completion of the educational process for the preparation of doctoral students is the development of at least 45 credits of theoretical training, including at least 10 credits of pedagogical practice, 10 credits of research practice, at least 123 credits of research work (R&D), at least 12 credits for writing and defending a doctoral dissertation. A total of 180 credits.

1.3. Typical study duration: 3 years

2.PASSPORT OF THE EDUCATIONAL PROGRAM

2.1.EP purpose	The main purpose of the educational program is to master the doctoral students of modern diagnostic studies of veterinary medicine and issues of veterinary and sanitary measures.
2.2.Map of the training profile within the educat	ional program
Code and classification of the field of education	8D09 - Veterinary
Code and classification of the direction of training	8D091 - Veterinary
Code in the International Standard Classification of Education	0841
Code and classification of the educational program group	D138 - Veterinary science
Code and name of the educational program	8D09101 - Veterinary medicine
2.3.Distinctive features of the OP (double degree/joint, OVPO-partner, Double major, innovative)	
2.4.Qualification characteristics of the graduate	
Degree awarded / qualification	Doctor of Philosophy PhD in the educational program 8D09101 8D09101 - Veterinary medicine
Name of professional standard	1 Raising of dairy cattle 26.10.2022 2 Professional standard: Teacher (faculty) of higher and (or) postgraduate education organizations 20.11.2023
Atlas of new professions	-
Regional standard	-
Name of the profession / list of positions of a specialist	University lecturer, specialist in veterinary medicine
OQF qualification level (industry qualification framework)	8
Area of professional activity	In the field of medical activity: diagnosis, treatment, prevention of non-infectious diseases of animals, birds, fish and bees. In the field of experimental research: the study of the etiology, mechanism of development and features of the manifestation of animal diseases; comparative clinical, biochemical, postmortem and immunological studies of sick animals; the introduction of effective therapeutic and preventive measures for animal diseases of different etiologies. In the field of educational activity: pedagogical work in secondary vocational educational institutions in the specialty profile; training and retraining of specialists in veterinary, animal husbandry and biological profiles; training of owners on the basics of animal hygiene.
Object of professional activity	pedagogical activity, in higher, secondary specialized, vocational and technical educational institutions, scientific activity in research and production centers, departments of institutes.
Types of professional activity	production and management; - organizational and technological; - scientific research; - project;

	- pedagogical
2.5.Graduate Model	Based on modern achievements in the field of veterinary medicine, improving theoretical and practical qualifications in scientific areas of veterinary biology, it is possible to substantiate the expected results by planning new searches in the field of veterinary medicine.

3. Modules and content of the educational program

Модуль 1. Fundamentals of methodology and modern methods of research in veterinary medicine

Brief description of the module content

The module promotes the use of veterinary research methodology based on the objectives of the educational program in scientific research.

Module disciplines

Research methods

General pathology

Doctoral student research work, including internship and doctoral dissertation I

Teaching practicum

Modern technology and quality in the field of veterinary medicine

Brief description of the module content

The content of the module allows you to prove the qualitative advantages of using advanced technologies of modern achievements in the field of veterinary medicine.

Module disciplines

Statistics and experimental design using R

Academic writing

Obstetrics and Gynecology diseases of cats and dogs

Biotechnological methods of animal reproduction

Monitoring and treatment of gynecology diseases

Monitoring and treatment of parasitic diseases

Doctoral student research work, including internship and doctoral dissertation II

Especially dangerous helminthiasis

Especially dangerous protozoa

Doctoral student research work, including internship and doctoral dissertation III

Doctoral student research work, including internship and doctoral dissertation IV

Research scientific training

Doctoral student research work, including internship and doctoral dissertation V

Doctoral student research work, including internship and doctoral dissertation VI

Final certification

Brief description of the module content

Writing and defending a doctoral dissertation.

Module disciplines

Doctoral dissertation

4.Summary table on the scope of the educational program «8D09101 - Veterinary medicine»

Name of discipline	Cycle/ Compone nt	Term	Number of credits	Total hours	Lec	SPL	LC	IWST	IWS	Knowledge control form
Модуль 1. Fundamentals of methodology and modern methods of research in veterinary medicine										
Research methods	BS/US	1	5	150	15	30		35	70	Examination
General pathology	BS/US	1	5	150	15	30		35	70	Examination
Doctoral student research work, including internship and doctoral dissertation I	AS/US	1	15	450						Total mark on practice
Teaching practicum	BS/US	3	10	300						Total mark on practice
Modern te	chnology and	quality in th	ne field of vet	terinary me	edicine					
Statistics and experimental design using R	BS/US	1	3	90	15	15		20	40	Examination
Academic writing	BS/US	1	5	150	15	30		35	70	Examination
Obstetrics and Gynecology diseases of cats and dogs	AS/CCh	2	5	150	15	30		35	70	Examination
Biotechnological methods of animal reproduction	AS/CCh	2	5	150	15	30		35	70	Examination
Monitoring and treatment of gynecology diseases	AS/CCh	2	5	150	15	30		35	70	Examination
Monitoring and treatment of parasitic diseases	AS/CCh	2	5	150	15	30		35	70	Examination
Doctoral student research work, including internship and doctoral dissertation II	AS/US	2	20	600						Total mark on practice
Especially dangerous helminthiasis	AS/CCh	2	5	150	15	30		35	70	Examination
Especially dangerous protozoa	AS/CCh	2	5	150	15	30		35	70	Examination
Doctoral student research work, including internship and doctoral dissertation III	AS/US	3	20	600						Total mark on practice
Doctoral student research work, including internship and doctoral dissertation IV	AS/US	4	30	900						Total mark on practice
Research scientific training	AS/US	5	10	300						Total mark on practice
Doctoral student research work, including internship and doctoral dissertation V	AS/US	5	20	600	600					Total mark on practice
Doctoral student research work, including internship and doctoral dissertation VI	AS/US	6	18	540						Total mark on practice
		Final certific	cation							
Doctoral dissertation		10	12	360						

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EDUCATIONAL PROGRAM DEVELOPMENT PLAN

8D09101 -"Veterinary medicine" for 2024-2027

Content

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1. Passport of the Development Plan of the EP doctoral program 8D09101 -« Veterinary medicine»

1	The basis for the development	Strategic plan of Shakarim University for 2023-2029. Staff of the Department of Veterinary
_		Medicine
2	Terms of implementation	2024-2027 гг.
		-provision of educational services at the level of world educational standards, ensuring the competitiveness of graduates in the labor market;
3	Expected results of implementation	-training of intellectually developed, creative specialists through the integration of the educational process, scientific research and innovation;
		training of qualified and competitive personnel for agriculture in accordance with the requirements of national and international

2. Analytical justification of the EP

2.1 Information about the educational program

The educational program has been developed in accordance with the National Qualifications Framework and Professional Standards, according to the Dublin Descriptors and the European Qualifications Framework. The typical period of mastering the educational program of doctoral studies is 3 years.

8D09101 -« Veterinary medicine was developed by the Academic Committee and reviewed at the meeting of the Quality Assurance

The main criterion for the completion of the educational process is the development of at least 180 credits, with the award of the degree of Doctor of Philosophy (PhD) in the educational program 8D09101 -« Veterinary medicine". The purpose of the educational program is to train highly qualified scientific and scientific-pedagogical personnel capable of innovative activities in the field of science, education, and management. Educational program 8D09101 -« Veterinary medicine implemented by the Department of Veterinary Medicine has been developed taking into account the needs of the regional labor market, the requirements of regulatory documents of the Ministry of Education and Science of the Republic of Kazakhstan and is a system of documents for the organization of the educational process.

The educational program regulates the goals, expected results, content, conditions and technologies for the implementation of the educational process, assessment of the quality of graduate training in this field of training and contains characteristics of the program and areas of professional activity of the graduate, learning outcomes and acquired competencies, the policy of evaluating learning outcomes, the organization of the educational process that ensures the quality of training of students, description of the modules that make up the educational program.

The content of the educational program is implemented through a curriculum developed in a modular format, in which two cycles of disciplines are provided for the first level of education: basic and profile disciplines, final certification.

Graduates can hold positions:- veterinary research organizations; - RSE "Republican Veterinary Laboratory"; -State Institution "National Reference Center for Veterinary Medicine"; - enterprises for the production, processing, storage, sale of food products and animal and plant feed; - veterinary and sanitary examination laboratories - state customs service institutions and checkpoints; -pedagogical activities in higher educational institutions and colleges. Universities and colleges that have an EP in the direction of "Veterinary Medicine".

2.2 Information about students

Academic year The basis of training	2024-2025 academic year	2025-2026 academic year	2026-2027 academic year
Grant	3	4	4
Contract			
Total	3	4	4

2.3 Internal and external conditions for the development of EP

Doctoral students and teaching staff of the Department of Veterinary Medicine have unlimited access to information and educational resources and electronic library systems necessary to perform independent educational and research work. Electronic information resources: full access to databases – Scopus, Science Direct. The Portal of educational resources of the Shakarim University is functioning. Families (http://ais.semgu.kz /) which presents educational materials of disciplines in electronic format in the Kazakh language. The classrooms of the Department of Veterinary Medicine are connected to the WI-FI network for online conferences, lectures, seminars with the participation of leading scientists of Kazakhstan, near and far abroad.

Issues of vocational training, professional practice and employment of graduates are solved at the department with the mandatory participation of employers. Every year round tables are held at the department, which are attended by heads and representatives of city and district akimats, agricultural enterprises. The department organizes meetings with graduates-employers, seminars with practitioners.

Research is conducted in accordance with the approved end-to-end program of practices and generally meet the qualification requirements for training specialists in this profile.

The research projects implemented within the framework of the EP are held on the basis of the RSE "Republican Veterinary Laboratory", , laboratory of veterinary and sanitary expertise, NAO "Kazakh Agrarian and Technical University named after From Seifullin.

The Educational Department of "Veterinary Medicine" cooperates with: Scientific Research Institute of Veterinary Medicine under the Ministry of Agriculture of Azerbaijan, "Kazakh National Agrarian Research University", NAO "Kazakh Agrarian Technical University. From Seifullina", "St. Petersburg State University of Veterinary Medicine", "Omsk State Agrarian University named after P.A. Stolypin".

In 2022, a memorandum of cooperation was signed with the Caucasus University of Turkey.

In the 2024-2025 academic year, the Department of Veterinary Medicine plans to introduce elements of dual education. The contract will be concluded with a Municipal State enterprise on the right of economic management of the "Family-Vet" veterinary department of the Abai region. Contracts were concluded with the Scientific Agrarian Center and the farm "Kalikhanuly" of the Abai region.

2.4 Information about teaching staff implementing the educational program

№	Indicators	Units of	2024-2025	2025-2026	2026-2027
		measurement	academic year	academic year	academic year
1	Proportion of PTS with a PhD degree	%	100	100	100
2	Including the share of PTS with a degree in the DB/IC cycle	%	90	90	90

The Department of Veterinary Medicine carries out the educational process in three levels of study: bachelor's, master's and PhD doctoral studies. The formation of scientific and pedagogical personnel at the department is carried out by training through a master's degree, PhD doctoral studies, advanced training of faculty. Teachers of the EP undergo advanced training in leading universities of Kazakhstan (according to the plan of the FPK) and training seminars held by the Ministry of Education and Science of the Republic of Kazakhstan, universities and other organizations. The

results of the scientific activities of teachers are reflected in scientific publications with an impact factor. Scientists in the Department of Veterinary Medicine have the Hirsch index (h-index) in the WebofScience and Scopus databases.

2.5 Characteristics of the OP achievement

The educational program regulates the goals, expected results, content, conditions and technologies for the implementation of the educational process, assessment of the quality of training graduate in this area of study and contains a description of the program and areas of professional activity of the graduate, learning outcomes and acquired competencies, policy evaluating learning outcomes, organization of the educational process, ensuring the quality of training of students, a description of the modules that make up educational program, methodological materials that ensure the implementation appropriate educational technologies.

In 2024, the educational program 8D09101 -"Veterinary medicine" was accredited for a period of 5 years by the international accreditation agency ARQA.

3. The main objectives of the development plan of the EP

No	Task name	Development timeframe	Stages of development			
1	Improving and improving the conditions for obtaining a full-fledged, high-quality professional education.	Entire training period.	Development of measures to improve educational services for the development of professional skills			
2	Updating the content of educational programs, forming the main professional competencies of future specialists in the field of veterinary sanitation.	Entire training period.	When updating the content of educational programs, include disciplines recommended by employers			
3	Creating prerequisites for the independent search and research activities of the student as part of the experiment at all its stages of training.	Entire training period.	Inclusion of research and experimental work in the study of educational programs			
4	Development of measures to develop work with scientific and technical information when using domestic and foreign experience in professional activities.	Entire training period.	Performance of measures for analysis and processing of the obtained results			
5	Consultations of employers and scientists of research institutes when choosing relevant and practically significant topics of master's and doctoral works.	Completion of doctoral studies	Employer, Stakeholder and Executive Advice			

4. Risk Analysis EP

№	Name of risks	Remedial Measures
1	Decrease in the number of students on EP	Regular high-quality career guidance
2	Insufficient level of language knowledge to introduce polylingualism.	Increased participation of doctoral students and faculty in language courses
3	Decrease in employment	Communication with institutions, organizations with a high opportunity to undergo industrial practice and further employment
4	Insufficient development of external and internal academic mobility of PTS doctoral students	Increased involvement of PTS and doctoral students in external and internal academic mobility
5	Risk of decrease in PTS stability according to EP	Increasing the number of PTS studying for targeted doctoral studies, activating the work of teachers who do not have a scientific title
6	Low number of publications in cited journals	Increase in the number of articles in scientific journals
7	Lack of funded research topics.	Increase in the number of projects on research topics

5. EP Development Action Plan

N≤	Criteria	Criteria Expected results		2024- 2025 academic year	2025- 2026 academic year	2026- 2027 academic year
	·	Direction 1. Training and methodological support		•		·
1.1	Updating the educational program based on professional standards taking into account the recommendations of employers		fact.	+	+	+
1.2	Monitoring and updating of catalogs of elective disciplines in accordance with the development of key and professional competencies, labor market requirements	Improving the quality of the content of educational programs by including elective courses aimed at developing the key and professional competencies of graduates in accordance with the requirements of the labor market.	fact.	+	+	+

1.3	Introduction into the educational process of modern learning technologies that contribute to the development of cognitive activity, communication ability of students	Improving the quality of teaching of educational disciplines, taking into account the novelty and variety of forms of work that contribute to the development of cognitive activity.	fact.	+	+	+	
1.4	Involvement of social partners and employers in the development, examination of the implementation of educational programs	Improving the quality of educational programs implemented taking into account market requests and employer recommendations.	piece.	1	1	1	
1.5	Development and implementation of elective courses in English	Introduction of disciplines in English into the educational process.	piece.	3	3	2	
1.6	Holding seminars and round tables on the application of innovative technologies in the educational process	Introduction of innovative technologies into the educational process.	piece.	-	-	1	
1.7	Publication of educational, educational, methodological and scientific literature on the implemented EP	Improvement of educational and methodological provision in the disciplines of educational programs being implemented.	piece.	4	4	4	
1.8	Conclusion of contracts with foreign and domestic partner universities in order to develop the academic exchange of students of all levels and PTS	Creation of a base of foreign and domestic universities - partners for the development of the academic exchange of students at all levels and faculty.	piece.	2	2	2	
1.9	Inviting students from partner universities to study for a semester, short-term internships, practice, etc.	Development of international recognition of educational programs, implementation of programs of academic mobility of doctoral students.	persons.	1	1	1	
1.10	Participation of PTS and doctoral students in international academic exchange programs	Development of international cooperation with foreign universities implementing educational programs in the direction of Veterinary medicine.	persons.	2	2	2	
1.11	Development of outgoing academic mobility of PTS and doctoral students in Veterinary medicine	Improving the educational program based on the use of experience in the implementation of such programs in leading universities of the Republic of Kazakhstan.	persons.	1	1	2	
	Direction 2. PTS						

2.1	Improving the professional level and training of scientific and pedagogical personnel for the implementation of educational programs once every 5 years	The share of PTS who have completed advanced training at the republican level is at least 20%	persons.	2	2	2
2.2	Improving the professional level and training of scientific and pedagogical personnel for the implementation of educational programs once every 5 years	Passing less than 2 teachers of the program of advanced training, retraining, internship of PTS at the international level.	persons.	1	1	2
2.3	Promotion of PTS publications in international publications indexed by WebofScience and Scopus databases	The increase in the share of PTS that published the results of scientific research in publications indexed by the WebofScience and Scopus databases is at least 30% of the total number of PTS.	%	2	2	3
2.4	Involvement of practical specialists in teaching and scientific activities	Participation in the implementation of educational programs of practitioners (at least 20% of specialists).	%	3	3	2
	Di	rection 3. Internationalization of educational programs				
3.1	Conclusion of agreements on international cooperation with foreign universities	Implementation of joint projects, preparation of scientific publications with foreign partners, creation of bases for scientific internships of students	piece.	1	1	2
3.2	Attracting foreign students to study under the educational program of the 8D09101 - "Veterinary medicine."	Increase in the number of foreign students.	persons.	1	1	2
3.3	Organization of joint scientific and practical activities with international partners	Increasing the efficiency of scientific and scientific- methodological activities of the PTS, exchange of experience with foreign partners.	piece.	1	1	2
3.4	Invitation of foreign specialists to give lectures and consultations on doctoral projects and dissertations	Improving the content component of educational programs based on the introduction of the experience of foreign specialists in the implementation of educational programs.	piece.	2	2	2
3.5	Expansion of cooperation with Advanced Foreign Scientific and Educational Organizations in order to attract the most qualified foreign specialists to the implementation of educational programs	Formation of key and professional competencies in accordance with the practice of leading universities.	persons.	1	1	2

		Direction 4. Logistics and digitalization				
4.1	Step-by-step equipping classrooms with technical training tools (projectors, panels, interactive and multimedia boards, multifunctional devices, webcam, projector screen, etc.)	Equipping classrooms assigned to the department with technical training tools (projectors, panels, interactive and multimedia boards, multifunctional devices, webcam, projector screen, etc.)	piece.	3	3	2
4.2	Automation of the educational process (testing, session management, movement of a contingent of doctoral students, dean's office, department, PTS load, schedule, library, syllabuses)	Information management based on the automation of the educational process (testing, session management, movement of a contingent of doctoral students, dean's office, department, PTS load, schedule, library, syllabuses)	fact.	100	100 %	100 %
4.3	Replenishment of the full-text database of the results of scientific research of PTS and students, PTS (articles, monographs, etc.)	Increase in the number of results of scientific works of scientists, research on PTS and students, PTS (articles, monographs, etc.)	piece.	3	3	2
4.4	Expansion of the fund of scientific and educational literature, including on electronic media according to the educational programs being implemented	based on modern educational and information resources, including electronic media	%	100	100	100
4.5	Monitoring of filling and improvement of the faculty website	Formation of the faculty website on various aspects of the implementation of educational programs.	%	100	100	100

Head of the Department/

A. Akhmetzhanova

CONSIDERED

at a meeting of the Faculty Quality Assurance Commission veterinary medicine and agromanagement Minutes of the meeting № 6 pat 06.06.2024 г. Chairman of the QAC ______ G.I.

G.I. Dzhamanova

COORDINATED

N. Yesengulova