NJSC SHAKARIM UNIVERSITY OF SEMEY

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)

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 2023

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	Signature
Head of the Academic Committee	Yessengulova Nurlygul	Dean of the Faculty of Veterinary and Agricultural Management	
Educational program manager	Bilyalov Ermekkazy	senior lecturer of the Department of Veterinary Medicine, Ph. D.	
Member of the AC	Dyusembayev Sergazy	professor of the Department of veterinary medicine, doctor of Veterinary Sciences	
Member of the AC	Muratbayev Dauletbek	senior lecturer of the Department of Veterinary Medicine, PhD	
Member of the AC	Rakishev Zhanat	Head of the Republican State Institution "Territorial Inspection of the Veterinary Control and Supervision Committee of the Ministry of Agriculture of the Republic of Kazakhstan in the Abai region"	
Member of the AC	Baigaliyev Yerkebulan	The head OF THE MUNICIPAL STATE ENTERPRISE ON THE RIGHT OF ECONOMIC MANAGEMENT "SEMEY-VET" OF THE VETERINARY DEPARTMENT OF THE ABAY REGION	
Member of the AC	Mukatayev Aitbek	2nd year doctoral student	
Member of the AC	Balgabaikyzy Assem	2nd year doctoral student	

Reviewing

Full name of the reviewer	Position, place of work	Signature
Baryshev Yerzhan	Head of Veterinary Department of Abay Region.	

Reviewed

At the meeting of the Commission on Quality Assurance of Veterinary Medicine and Agricultural Management
Recommended for approval by the Academic Council of the University
Protocol № 4.1 "06" April 2023
Chairman of the Commission G.I. Dzhamanova

Approved at the meeting of the Academic Council of the University Protocol No. 8 "25" April 2023.

Approved

at the meeting of the Academic Council of the University
Protocol № 1 "01" of September 2023
Chairman of the Academic Council of the University Orynbekov D.R.

Content

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.

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 educational 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.Qualification characteristics of the graduate	
Degree awarded / qualification	Doctor of Philosophy PhD in the educational program 8D09101 8D09101 - Veterinary medicine
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
Graduate Model	On the basis of mastering the educational program 8D09101 a doctoral student can organize and implement experimental research work in specialized institutions in the field of veterinary medicine and biological sciences in accordance with pedagogical educational and industrial needs.

3.Modules and content of the educational program

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

Academic writing

Discipline cycle	Basic disciplines
Discipline component	University component
SubjectID	31316 (3011017)
Course	1
Term	1
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline

Forms the ability to present the results of scientific research in writing in the word a recommendation note expressing the potential team of the academic environment, expertise and industry. In this regard, the goal is to achieve reliability in order to improve the ability to independently build hypotheses of a theoretical and empirical nature. As well as the ability to work with sources of bibliographic works related to the search direction.

Purpose of studying of the discipline

With the main purpose of mastering the discipline, he will teach you to creatively describe the written semantic content in the form of a letter of the results of research work in the formation of a scientific and pedagogical qualified specialist. In this regard, he masters the ability to meaningfully convey the content of recordings of any creative nature in certain scientific areas in the field of veterinary medicine. Also owns links in the description of physiological or pathological processes based on general veterinary rules.

Learning Outcomes

ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary science.

ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the effectiveness of treatment based on the principles of veterinary therapy.

Prerequisites

Masters degree course

Postrequisites

Monitoring and treatment of gynecology diseases

Research methods

Discipline cycle	Basic disciplines
Discipline component	University component
SubjectID	31735 (3011018)
Course	1
Term	1
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline

It teaches the student to observe the ethics of scientific research, forming theoretical and practical skills in accordance with the principles of experimental clinical and morphological studies for veterinary purposes. In connection with theoretical and practical positions in determining the relevance of scientific research, they will be taught to rely on the sequence of statistical verification in determining the task of solving the task. Formation of skills to increase the ability to formulate on a scientific basis.

Purpose of studying of the discipline

The purpose of the discipline is to train a scientific applicant, drawing up a general plan of research work depending on its expected results with the possibility of choosing advanced models of scientific experimental research in the direction of scientific work in the development of models and opportunities in its field. She also teaches the scientific and theoretical justification of the expected research results. As well as the ability to correlate the results obtained with up-to-date information.

Learning Outcomes

ON1 To offer diagnostic methods and advanced technologies in the field of veterinary medicine based on scientific research achievements.

ON2 To be able to justify and explain the discussions arising in the course of internship prerequisites.

ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary

science.
ON7 Introduction of a statistical sequence of veterinary and medical knowledge on a digital and technological basis into an automatic system.

Prerequisites
Bachelor

Postrequisites
Doctoral student research work, including internship and doctoral dissertation II

General pathology

Discipline cycle	Basic disciplines
Discipline component	University component
SubjectID	31736 (3011019)
Course	1
Term	1
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline
General pathology-teaching to study the patterns of development and completion of the disease on the basis of fundamental science. The basis of the discipline is the sciences of pathological anatomy and pathological physiology. In this regard, the teaching of the discipline studies the factors provoking the pathological process of dystrophy, necrosis, atrophy, disorders of blood and lymphatic nausea, immunopathological processes, allergies, fever, etc. In addition, independent diseases are considered from a special research point of view.

Purpose of studying of the discipline
The main purpose of studying the discipline is to explain pathophysiological phenomena in conditions of impaired function of organs and systems and factors affecting the patterns of development of painful processes in the animal`s body. In this regard, the teaching of the discipline mainly studies the mechanisms of development of dystrophy, necrosis, atrophy, disorders of blood and lymphatic mirroring, immunopathological process, allergies, fever, and other pathological processes.

Learning Outcomes
To evaluate, compare and propose, based on the biological characteristics of animals, the application of scientific and theoretical methods in veterinary practice.
ON6 To study pathological processes in particularly dangerous animal diseases.
ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the effectiveness of treatment based on the principles of veterinary therapy.
ON10 To make a consistent conclusion, in accordance with the classification of clinical and morpho-biochemical parameters of the animal s organism, taking into account its genotype and homostatic deviation in the etiopathogenetic process.

Prerequisites
Bachelor

Postrequisites
Doctoral student research work, including internship and doctoral dissertation II

Doctoral student research work, including internship and doctoral dissertation I

Discipline cycle	Profiling discipline
Discipline component	University component
SubjectID	31737 (3011026)
Course	1
Term	1
Credits count	15
Working practice	450hours
Total	450hours
Knowledge control form	Total mark on practice

Short description of discipline
The discipline is based on experimental research of scientific and search purposes, reveals a high level of knowledge and scientific hypothetical orientation. Teaches systematization and formation of skills and mastery of research methods in the field of targeted research. A doctoral student should have a high potential for independence among colleagues and the ability to recognize the specifics of creative thinking and the ability to solve current scientific problems in a modern way.

Purpose of studying of the discipline
The main purpose of the discipline of the doctoral student`s research work, which includes an internship and the completion of a doctoral dissertation, is to form applicants` own thinking about the results of the research. And also be able to draw up a reasoned conclusion of the results of scientific research in relation to them.

Learning Outcomes
ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary

science.
To evaluate, compare and propose, based on the biological characteristics of animals, the application of scientific and theoretical methods in veterinary practice.

Prerequisites
Bachelor

Postrequisites
Doctoral student research work, including internship and doctoral dissertation II

Teaching practicum

Discipline cycle	Basic disciplines
Discipline component	University component
SubjectID	31745 (3011032)
Course	2
Term	1
Credits count	10
Pedagogical practics	300hours
Total	300hours
Knowledge control form	Total mark on practice

Short description of discipline
Organizes activities characteristic of the educational process and the formation of pedagogical professional competence, teaches the process of improving competencies and systematization of knowledge. They will learn to justify the advantages of organizing a modern learning process and psychological justification of training in the management of educational work for the formation of a future specialist. Mastering the ability to form, adapt the general motivation and advanced model of students to modern, interactive technological features, in contrast to traditional teaching methods.

Purpose of studying of the discipline
The objectives of the discipline are based on the prerequisites for independent experience, the formation of creative skills of students in combination with future pedagogical activity. In addition, the purpose and objectives of the taught subject, based on the basis of the topic, should be formulated and presented on a modern basis of the skills and positions necessary for its development.

Learning Outcomes

Prerequisites
Doctoral student research work, including internship and doctoral dissertation II

Postrequisites
Doctoral student research work, including internship and doctoral dissertation IV

Modern technology and quality in the field of veterinary medicine

Obstetrics and Gynecology diseases of cats and dogs

Discipline cycle	Profiling discipline
Discipline component	Electives
SubjectID	31739 (3011021)
Course	1
Term	2
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline
In relation to obstetric and gynecological diseases of domestic animals, based on biological specificity, the basics of physiological and pathological processes of animals are understood. In this regard, he explains the functions of the genitals and mammary glands during the period of fertilization and fertilization of redproductive organs, reproductive, birth and postpartum periods. He also studies the needs for periods of infertility and tightness and the aura and postembryonic maturation of his cubs.

Purpose of studying of the discipline
In order to study the discipline, optimal schemes of obstetric care are considered in connection with the principles of reproduction of meat pets in the yard. In this regard, the theoretical park principles of early observation of the sign of factor auras of animal owners and measures of preliminary preparation will be mastered.
Diagnostic, therapeutic and preventive measures for the detection of obstetric and gynecological diseases will also be mastered. Methods of detection and delivery and obstetric care will also be mastered.

Learning Outcomes
ON4 Organize research and teaching activities in the field of veterinary medicine.
To evaluate, compare and propose, based on the biological characteristics of animals, the application of scientific and theoretical methods in veterinary practice.
ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the

effectiveness of treatment based on the principles of veterinary therapy.

Prerequisites

General pathology

Postrequisites

Doctoral student research work, including internship and doctoral dissertation III

Biotechnological methods of animal reproduction

Discipline cycle	Profiling discipline
Discipline component	Electives
SubjectID	31740 (3011022)
Course	1
Term	2
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline

Acquisition of knowledge about the course of physiological and pathological processes in relation to the reproduction of productive animals. In this regard, due to the biological specifics of animals, comprehensive training is conducted on the reproductive and reproductive development of the function of the genitals. As well as Biotechnics in reproduction, artificial insemination, the development of zootechnical special single-purpose services of the economy. Mastering the conditions of stimulation of female males in natural and artificial conditions.

Purpose of studying of the discipline

When studying the discipline, biotechnological conditions of animal reproduction are considered, corresponding to one special purpose based on the zootechnical position. In this regard, the substantiation of the theoretical principles of predicting genetic potential with veterinary and biological selection of recognition of morphofunctional features of animals will be studied. He will also learn how to analyze the opportunities that allow the use of advanced achievements, and give reasons for their implementation. He also has the ability to conduct biometric processing of experimental results.

Learning Outcomes

ON4 Organize research and teaching activities in the field of veterinary medicine.
ON8 Identify ways to solve modern problems of veterinary medicine.
ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the effectiveness of treatment based on the principles of veterinary therapy.

Prerequisites

Research methods

Postrequisites

Doctoral student research work, including internship and doctoral dissertation III

Monitoring and treatment of gynecology diseases

Discipline cycle	Profiling discipline
Discipline component	Electives
SubjectID	31738 (3011020)
Course	1
Term	2
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline

The discipline teaches models for monitoring obstetric and gynecological diseases based on physiological capabilities and related biological patterns in animal insemination. Biotechnics of modern methods of therapy of obstetric and gynecological diseases and the detection of infertility with the restoration of the function of the organ of reproductive function in the conditions of the occurrence of pathological processes in the genitals and mammary glands of animals, artificial insemination and the use of biologically active, harmonic substances.

Purpose of studying of the discipline

In teaching the discipline, they teach measures for the prevention and control of diseases that arise and are predicted due to the application of general strategic principles for obtaining offspring from a modern point of view, corresponding to technological and traditional practical goals of the economy based on the physiological capabilities of the animal organism, depending on their biological characteristics. At the same time, veterinary obstetrics teaches to apply the advantages of modern gynecological methods.

Learning Outcomes

ON8 Identify ways to solve modern problems of veterinary medicine.
ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the effectiveness of treatment based on the principles of veterinary therapy.
ON10 To make a consistent conclusion, in accordance with the classification of clinical and morpho-biochemical parameters of the animal s organism, taking into account its genotype and homostatic deviation in the etiopathogenetic process.

Prerequisites
Research methods

Postrequisites
Doctoral student research work, including internship and doctoral dissertation III

Monitoring and treatment of parasitic diseases

Discipline cycle	Profiling discipline
Discipline component	Electives
SubjectID	31742 (3011023)
Course	1
Term	2
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline
It teaches the formulation of the rationality of treatment in relation to the monitoring justification, depending on the parasitic epizootic situation. Analysis of the sequence of scientific research and comparative study with conclusions determine the prerequisites. Will learn to give a comparative justification of the rehabilitation effectiveness of the drug, based on the study of the nosological profile and optimizes training to determine the impact of therapeutic, preventive measures on the physiological status and natural resistance of the animal organism.

Purpose of studying of the discipline
The main purpose of the discipline is to develop a plan for veterinary measures to control parasitic diseases based on the geographical location of the farm and territory. It also teaches to study the general principles of theoretical and practical justification of the periodic specifics of disease control measures.

Learning Outcomes
ON6 To study pathological processes in particularly dangerous animal diseases.
ON7 Introduction of a statistical sequence of veterinary and medical knowledge on a digital and technological basis into an automatic system.
ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the effectiveness of treatment based on the principles of veterinary therapy.

Prerequisites
General pathology

Postrequisites
Teaching practicum

Doctoral student research work, including internship and doctoral dissertation II

Discipline cycle	Profiling discipline
Discipline component	University component
SubjectID	31744 (3011027)
Course	1
Term	2
Credits count	20
Working practice	600hours
Total	600hours
Knowledge control form	Total mark on practice

Short description of discipline
The discipline is based on experimental research of scientific and search purposes, reveals a high level of knowledge and scientific hypothetical orientation. Teaches systematization and formation of skills and mastery of research methods in the field of targeted research. A doctoral student should have a high potential for independence among colleagues and the ability to recognize the specifics of creative thinking and the ability to solve current scientific problems in a modern way.

Purpose of studying of the discipline
The main purpose of the doctoral student`s research work, which includes an internship and the completion of a doctoral dissertation, is to form applicants` own thinking about the results of the research. And also teaches to make a reasoned conclusion of the results of scientific research in relation to them.

Learning Outcomes
ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary science.
To evaluate, compare and propose, based on the biological characteristics of animals, the application of scientific and theoretical

methods in veterinary practice.

Prerequisites

Doctoral student research work, including internship and doctoral dissertation I

Postrequisites

Doctoral student research work, including internship and doctoral dissertation III

Especially dangerous helminthiasis

Discipline cycle	Profiling discipline
Discipline component	Electives
SubjectID	31741 (3011024)
Course	1
Term	2
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline

Especially dangerous helminthic diseases are studied on a parasitological basis from the point of view of complex biological science. In this regard, the study of particularly dangerous helminths prone to symbiotic survival in relation to parasitic life is considered. In addition, on the basis of a special classification, in the process of substantiating the biological potentiality of helminths, relevant information is given to the conditions "parasite-main host –external environment", the relationship between a living organism and itself.

Purpose of studying of the discipline

In order to study the discipline on the basis of parasitological science, the scientific and practical problems of the cycles of the biological existence of helminths that pose the greatest danger to human and animal health and consequences for the environment are considered. In this regard, it develops biological and veterinary measures to prevent the spread of dangerous helminths on the basis of control measures in accordance with the life cycles of dangerous helminths. Migration and biocenotic relations will also be studied, and the preparation of a plan for a common struggle will be mastered.

Learning Outcomes

ON4 Organize research and teaching activities in the field of veterinary medicine.
ON8 Identify ways to solve modern problems of veterinary medicine.
ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the effectiveness of treatment based on the principles of veterinary therapy.

Prerequisites

Research methods

Postrequisites

Doctoral student research work, including internship and doctoral dissertation III

Especially dangerous protozoa

Discipline cycle	Profiling discipline
Discipline component	Electives
SubjectID	31743 (3011025)
Course	1
Term	2
Credits count	5
Lections	15hours
Practical and seminar classes	30hours
Independent work of a student under the guidance of a teacher	35hours
Independent work of the student	70hours
Total	150hours
Knowledge control form	Examination

Short description of discipline

In the teaching of the discipline, particularly dangerous protozoan diseases caused by protozoa related to eukaryosis, prone to parasitic life are considered. In this regard, four types of protozoa are trained, which can exist in the human and animal bodies. Malaria is considered as a particularly dangerous prozoic disease of the world level. In the whole world, 4/1 of human substances are infected with parasites of the digestive tract. In this regard, due to the spread of the simplest diseases, both natural-climatic, socio-economic, and endemic and "cosmopolitan" cases.

Purpose of studying of the discipline

In the training of especially dangerous protozoal auras in animals, the rules of veterinary measures are theoretically mastered in accordance with pathogenic processes in infections, invasions and non-infectious factors that cause various etiological conditions. In this regard, the development of methods of early clinical and laboratory detection of protozoan diseases and the principles of differentiated treatment, ethotropic therapy and modern etiological classification. He also has the ability to justify physical, chemical and biological influencing factors in modern devastational positions.

Learning Outcomes

ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary science.
ON6 To study pathological processes in particularly dangerous animal diseases.
ON8 Identify ways to solve modern problems of veterinary medicine.

Prerequisites

Research methods

Postrequisites

Doctoral student research work, including internship and doctoral dissertation III

Doctoral student research work, including internship and doctoral dissertation III

Discipline cycle	Profiling discipline
Discipline component	University component
SubjectID	31746 (3011028)
Course	2
Term	1
Credits count	20
Working practice	600hours
Total	600hours
Knowledge control form	Total mark on practice

Short description of discipline

The discipline is based on experimental research of scientific and search purposes, reveals a high level of knowledge and scientific hypothetical orientation. Teaches systematization and formation of skills and mastery of research methods in the field of targeted research. A doctoral student should have a high potential for independence among colleagues and the ability to recognize the specifics of creative thinking and the ability to solve current scientific problems in a modern way.

Purpose of studying of the discipline

The main purpose of the discipline of the doctoral student`s research work, which includes an internship and the completion of a doctoral dissertation, is to form applicants` own thinking about the results of the research. And also be able to draw up a reasoned conclusion of the results of scientific research in relation to them.

Learning Outcomes

ON2 To be able to justify and explain the discussions arising in the course of internship prerequisites.
ON9 To understand and describe the processes of biological and physiological mechanisms of the animal in determining the effectiveness of treatment based on the principles of veterinary therapy.

Prerequisites

Doctoral student research work, including internship and doctoral dissertation II

Postrequisites

Doctoral student research work, including internship and doctoral dissertation IV

Doctoral student research work, including internship and doctoral dissertation IV

Discipline cycle	Profiling discipline
Discipline component	University component
SubjectID	31747 (3011029)
Course	2
Term	2
Credits count	30
Working practice	900hours
Total	900hours
Knowledge control form	Total mark on practice

Short description of discipline

The discipline is based on experimental research of scientific and search purposes, reveals a high level of knowledge and scientific hypothetical orientation. Teaches systematization and formation of skills and mastery of research methods in the field of targeted research. A doctoral student should have a high potential for independence among colleagues and the ability to recognize the specifics of creative thinking and the ability to solve current scientific problems in a modern way.

Purpose of studying of the discipline

The main purpose of the discipline of the doctoral student`s research work, which includes an internship and the completion of a doctoral dissertation, is to form applicants` own thinking about the results of the research. And also be able to draw up a reasoned conclusion of the results of scientific research in relation to them.

Learning Outcomes

ON1 To offer diagnostic methods and advanced technologies in the field of veterinary medicine based on scientific research achievements.
ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary science.

Prerequisites

Teaching practicum

Postrequisites

Doctoral student research work, including internship and doctoral dissertation V

Research scientific training

Discipline cycle	Profiling discipline

Discipline component	University component
SubjectID	31749 (3011033)
Course	3
Term	1
Credits count	10
Working practice	300hours
Total	300hours
Knowledge control form	Total mark on practice

Short description of discipline
The possibilities of achieving the expected results within the framework of the educational program and during the course of research practice are studied in accordance with the goals, objectives and deadlines for the independent research work of a doctoral student. However, the implementation of research practice is carried out within the framework of the doctoral student`s scientific work in the form of the implementation of a specific research project and in the interests of a higher educational institution. At the same time, the main attention is paid to the relevance in solving the problems facing the advanced tasks in the protected scientific work.

Purpose of studying of the discipline
Has an analysis of the target areas of the main research work of a doctoral student in the study of the discipline. In this regard, the research object`s need for market requirements in relation to its industries is determined by the research practice program. In addition, it is planned to perform additional tasks for the research work of the cathedral. The preliminary terms of the agreement of the three parties are discussed here in advance. During the practice, the achievements of domestic and foreign scientific work and ways to achieve it will be analyzed

Learning Outcomes
ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary science.
To evaluate, compare and propose, based on the biological characteristics of animals, the application of scientific and theoretical methods in veterinary practice.

Prerequisites
Teaching practicum

Postrequisites
Final examination

Doctoral student research work, including internship and doctoral dissertation V

Discipline cycle	Profiling discipline
Discipline component	University component
SubjectID	31748 (3011030)
Course	3
Term	1
Credits count	20
Lections	600hours
Total	600hours
Knowledge control form	Total mark on practice

Short description of discipline
The discipline is based on experimental research of scientific and search purposes, reveals a high level of knowledge and scientific hypothetical orientation. Teaches systematization and formation of skills and mastery of research methods in the field of targeted research. A doctoral student should have a high potential for independence among colleagues and the ability to recognize the specifics of creative thinking and the ability to solve current scientific problems in a modern way.

Purpose of studying of the discipline
The main purpose of the doctoral student`s research work, which includes an internship and the completion of a doctoral dissertation, is to form applicants` own thinking about the results of the research. And also teaches to make a reasoned conclusion of the results of scientific research in relation to them.

Learning Outcomes
ON2 To be able to justify and explain the discussions arising in the course of internship prerequisites.
ON4 Organize research and teaching activities in the field of veterinary medicine.

Prerequisites
Research methods

Postrequisites
Doctoral student research work, including internship and doctoral dissertation VI

Doctoral student research work, including internship and doctoral dissertation VI

Discipline cycle	Profiling discipline
Discipline component	University component
SubjectID	31750 (3011031)
Course	3
Term	2
Credits count	18
Working practice	540hours

Total	540hours
Knowledge control form	Total mark on practice

Short description of discipline

The discipline is based on experimental research of scientific and search purposes, reveals a high level of knowledge and scientific hypothetical orientation. Teaches systematization and formation of skills and mastery of research methods in the field of targeted research. A doctoral student should have a high potential for independence among colleagues and the ability to recognize the specifics of creative thinking and the ability to solve current scientific problems in a modern way.

Purpose of studying of the discipline

The main purpose of the doctoral student`s research work, which includes an internship and the completion of a doctoral dissertation, is to form applicants` own thinking about the results of the research. And also teaches to make a reasoned conclusion of the results of scientific research in relation to them.

Learning Outcomes

ON1 To offer diagnostic methods and advanced technologies in the field of veterinary medicine based on scientific research achievements.

ON3 Formulate and compare theoretical methods in determining the tasks of research work based on the requirements of veterinary science.

Prerequisites

Doctoral student research work, including internship and doctoral dissertation V

Postrequisites

Final examination

Final certification

Doctoral dissertation

Credits count	12

4.Summary table on the scope of the educational program

«8D09101 - Veterinary medicine»

Name of discipline	Cycle/ Component	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										
Academic writing	BS/US	1	5	150	15	30		35	70	Examination
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 technology and quality in the field of veterinary medicine										
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 certification										
Doctoral dissertation		10	12	360						