

Federal State Autonomous Educational Institution of Higher  
Education «Peoples' Friendship university of Russia» Agrarian Technological institute

Adopted by the Academic Council  
of the agrarian technological institute  
15.02.2017 y. protocol №7



Affirm  
Vice-rector for academic work  
A.P .Efremov  
— 2017y.

**Basic professional studying programme of higher education**

**The direction of training (specialty)**  
**36.06.01 Veterinary and animal science**

The programme was designed appropriate to requirements of ES HE RUDN / FSES HE that was affirmed by rector's decree dated 26.02.2015 y. № 96 / Russian Ministry of education dated 30.07.2014 y. № 896

Graduate's qualification; Researcher. Mentor-researcher  
The direction of programme (profile, specialty):

06.02.01«Diagnostic of diseases and animals' therapy, pathology, oncology and morphology»

A normative period of programme mastering: 3 years  
Form of studying: full-time

Information about features of the basic studying programme:  
modular principle

Director of programme  
Vatnikov J.A

2017 y.

Agreed  
Director of MSSN  
Vatnikov J.A

2017 y.

Agreed  
Director of institute  
Plushikov V.G.

2017 y.

## **Description of educational programme.**

### **General BP HE characteristic**

#### ***1.1 Task (mission) of BP HE***

Mission (social significance) of 36.06.01 «Veterinary and animal science» programme for preparing high-quality employees (PhD) takes contemporary standards into account and prepares researchers, mentor-researches are capable to put research into practice in veterinary and animal science and to do mentorship in higher education educational programs.

Task of a programme 36.06.01 «Veterinary and animal science» is a preparing high-quality employees (PhD) – a developing personality that answer the requirements for work in the higher educational establishments, research organizations and other structures that realize a researches and a teaching citizens and also a forming universal, general and professional competences in conformity with requirements of ES HE RUDN in this training area.

#### ***1.2. Main information.***

The main educational program 36.06.01 «Veterinary and animal science» is the programme of training high-quality employees (PhD) that complies to *third level of higher education*. There are full-time and part-time forms for realization of PhD. Modular principle and using elements of e-Learning and remote educational technologies are features of the main educational programmes' realization. E-Learning and remote educational technologies provide reception-transmissions' ability of information by available forms for persons with disabilities in studying period.

By educational programme 36.06.01 «Veterinary and animal science» training of high-quality employees (PhD) offers training *for sections* that represent science specialization:

06.02.01 «Diagnostics of illnesses and therapy of animals, pathology, oncology and morphology»

*Area of graduates' professional activity* which had mastered PhD programme 36.06.01 «Veterinary and animal science» includes products and unproducts animal husbandry, saving and providing of animals and humans health, highly dangerous animals and humans diseases prevention, improving of productivity animal quality, animal husbandry products conversion, diagnostic and prevention of different etiology diseases, animal healing, forensic-veterinary examination, veterinary-sanitary examination, state veterinary supervision, veterinary drugs development and treatment, provision of sanitary safety for worldwide trading by animals, animal husbandry products and plants products.

*Professional activity objects of graduates* which mastered PhD programme 36.06.01 «Veterinary and animal science» are agricultural, domestic, labaratorical, exotic, cellular, wild and trading animals, birds, hydrobiontics and

other objects of seas and rivers trade, cellular cultures, microbiological and viral stamps, crude and prepared animals and plants products, beekeeping products, forage and fodder additives, its harvesting and storage places, biological active substances, drugs and biological drugs, production of drugs, products and foragw technological lines, rooms for animals' maintenance, pastures, ponds, slaughterhouses, livestock's graves, transport for animals carriage and also productions, conversions, saving, realizations of feeding products and animals and plants forages manufactures; productions and conversions of animal husbandry technological processes.

*Types of professional activity* for which graduates had mastered PhD programme 36.06.01 «Veterinary and animal science» are preparing:

- A) research activity in animal science and animal science area;
- B) mentors activity in higher educational training programs in morphology, physiology, biochemical, immunology, bio math, ecology, ethology, parasitology, pharmacology and toxicology, pathology, oncology, microbiology, virology, mycology, epizootology, diagnostic and animals' internal non-infectious diseases, obstetric and genecology, surgery, veterinarian sanitary, veterinarian sanitarian examination, organization of the veterinarian care, animals hygiene, animals breeding, selection and genetic, forage production, animals feeding and forage technology, fur-farming and hunting, special animal science, technology of animal husbandry products production, agricultural economic, management of commercial undertaking, professional jurisprudence and ethic, communication.

*Information about especial realization of the basic educational PhD programme 36.06.01 «Veterinary and animal science»:*

- to use form of educational activity organization, that based on modular principle of educational activity subject presentation and studying plans construction;
- a using of different educational technologies in educational programmes realization include e-Learning, remote educational technologies;
- The programme realize in 3 profile: «Diagnostics of illnesses and therapy of animals, pathology, oncology and morphology», «Veterinerian microbiology, virology, epizootology, mycology with micotoxicology and immunology», «Special animal science, production technology of animal husbandry products».

Subjects' sphere of PhD training programme 36.06.01 «Veterinary and animal science»:

A) sphere of research activity in veterinary and animal science area include:

- Fundamental research in veterinary and animal science area such as morphology, physiology, biochemical, immunology, bio math, ecology, ethology, parasitology, pharmacology and toxicology, pathology, oncology, microbiology, virology, mycology, epizootology, diagnostic and animals' internal non-infectious diseases, obstetric and genecology, surgery, veterinarian sanitary, veterinarian sanitarian examination, organization of the veterinarian care, animals hygiene, animals breeding, selection and genetic, forage production, animals feeding and

forage technology, fur-farming and hunting, special animal science, technology of animal husbandry products production, agricultural economic, management of commercial undertaking, professional jurisprudence and ethic, communication;

B) Sphere of mentors' activity in higher educational studying programme:

- working out training courses in professional activity area covering outcomes, theoretical and empirical researches including a preparing methodical material, training manuals and textbooks;
- mentoring of disciplines and study-methodic work in professional activity area;
- control of research work in educational organization including supervision of students' research work;

Agrarian technological institute FSAEI HE «Peoples' friendship university of Russia» (Moscow Maclay str. 8-2) is place of main educational programme 36.06.01 «Veterinary and animal science» realization high-quality employees (PhD) preparing.

### ***1.3. Specialty of BP HE realization.***

*Specialty of basic studying PhD programme 36.06.01 «Veterinary and animal science»:*

- The programme realize in profile: «Diagnostic of illnesses and therapy of animals, pathology, oncology and morphology».
- Using of educational activity organization modular form that based on modular principle. Construction of studying plans basing on modular principle specialty is a consisting from relative independent parts that form the competence or competences group during the mastery of study discipline or combination of disciplines covered by inter-disciplines attachments.

*Basic educational programme 36.06.01 «Veterinary and animal science» contents include a necessary part (basic) and forming by participants of educational relationship part (variable). Studying plan constructed by next blocks:*

Block 1 «Disciplines (modules)» includes disciplines (modules) relating to its variable part. Necessary disciplines for studying by all professions students relative to basic part of Block 1. Variable part of the first block include disciplines «By students' choice» where they can choose 3 of proposed appropriate profile speciality: «Diagnostic of diseases and animals' therapy, pathology, oncology and morphology», «Veterinarian microbiology, virology, epizootology, mycology with micotoxicology and immunology», «Special animal science, production technology of animal husbandry products».

Block 2 «Practice» represented by mentors practice that forming mentors skills of students (mentor, educater and reaserch activity).

Block 3 «Researches» means consolidating and deepening theoretical preparing of student and acquiring research skills that are necessary for working at articles, dissertations and abstracts text and for forming competences in the sphere of professional activity correspond to ES HE RUDN requirements in present preparing direction.

Block 4 «State final examination» includes preparing and passing of state exam in the preparing direction and profile; and presentation of science report about basic prepared scientific quality work (dissertation) outcomes. State final examination ends with giving qualification pointing in spatiality's list and higher education's preparing directions approved by Russian Federation Ministry of education and science.

- Modular principle and using elements of e-Learning and remote educational technologies can be applied during realization of PhD programme 36.06.01 «Veterinary and animal science». E-Learning and remote educational technologies provide reception-transmissions' ability of information by available forms for persons with disabilities in studying period.

- PhD programme 36.06.01 «Veterinary and animal science» studying realizes in state Russian Federation language and in languages determined by local RUDN act.

#### ***1.4. Labour markets' requirement in thus BP HE graduates.***

- Analysis of researches and educational development condition and tends in veterinary and animal science sphere show that forming and management of researchers and mentor-researches knowledge base are an important factor of our countries higher educational facilities, researches organizations and innovation active companies' that doing scientific and educational activity potential and competitive power increasing.

- Contemporary educational, researches and other innovation active companies are high needing in professional veterinarian surgeons and animal scientists and veterinarian surgeons and animal scientists that capable doing mentors and researches work, capable to develop scientific and mentors' activity, managing appropriate technologies and skills.

- Requirement for graduates of high-quality employees preparing Basic educational programme 36.06.01 «Veterinary and animal science» (PhD) was established by director basic on the rassian market's, scientific and scientic-mentors workers' labour analysis in veterinary and animal science sphere.

- Place of this programme in the labour market is appropriate requirements for quality of graduates training that recently needing at market and determined by directors of high-quality employees preparing basic educational programme in 36.06.01 «Veterinary and animal science» (PhD). All programme's graduates saccesfully find a job.

#### ***1.5. Rquirements for university entrant.***

Potential university entrant of high-quality employees preparing basic educational programme in 36.06.01 «Veterinary and animal science» (PhD) has to be prepared to activity that demanding deep resresearch and mentor preparing and has the competentions:

- *General professional competitions*: to be prepared to communicate in oral and written forms in Russian and foreign languages for professional activity problems solving; to be prepared to head a collective in the own professional activity sphere, to perceive social, ethnic, confessional and cultural difference tolerantly; to be capable to take organizational-management decisions;
- *Professional competitions in research activity area*: to be capable to generalize and critically estimate the outcomes that was received by Russian and foreignness researchers, to find perspective directions, to form programme of researches; to be capable to substantiate actuality, theoretical and practical meaning of chosen research's theme; to be capable to do original researches appropriate to prepared programme; to be capable to give outcomes of made research as article or paper to scientific community;
- *In mentor's activity sphere*: to be capable to use contemporary methods and methodic of disciplines teaching in professional educational organizations, higher educational organizations, supplemental professional organizations; to be capable to prepare studying plans, programme and appropriate methodical support for mentoring of disciplines in professional educational organizations, higher educational organizations, supplemental professional organizations.

## **1.6. Professional activity characteristic**

- High-quality employees preparing basic educational programme in direction of preparing 36.06.01 «Veterinary and animal science» (PhD) on profiles: «Diagnostic of illnesses and therapy of animals, pathology, oncology and morphology» developed appropriate to RUDN's higher educational standard in level of education – high-quality employees preparing (PhD).

**1.6.1. Area of graduates' professional activity** which had mastered PhD programme includes products and unproducts animal husbandry, saving and providing of animals and humans health, highly dangerous animals and humans diseases prevention, improving of productivity animal quality, animal husbandry products conversion, diagnostic and prevention of different etiology diseases, animal healing, forensic-veterinary examination, veterinary-sanitary examination, state veterinary supervision, veterinary drugs development and treatment, provision of sanitary safety for worldwide trading by animals, animal husbandry products and plants products.

**1.6.2. Professional activity objects of graduates** had mastered PhD programme are agricultural, domestic, labaratorical, exotic, cellular, wild and trading animals, birds, hydrobiontics and other objects of seas and rivers trade, cellular cultures, microbiological and viral stamps, crude and prepared animals and plants products, beekeeping products, forage and fodder additives, its harvesting and storage places, biological active substances, drugs and biological drugs, production of drugs, products and forage technological lines, rooms for animals' maintenance, pastures, ponds, slaughterhouses, livestock's graves, transport for animals carriage and also productions, conversions, saving, realizations of feeding products and

animals and plants forages manufactures; productions and conversions of animal husbandry technological processes.

**1.6.3. Types of professional activity**, for which graduates had mastered PhD programme 36.06.01 «Veterinary and animal science» are preparing, were appointed appropriate to ES HE RUDN together with interested members of studying process, on the basis of labour market demands, researches and material-technical RUDN resources:

- *researches activity in economic area of scientific profiles sphere:*  
06.02.01.«Diagnostic of illnesses and therapy of animals, pathology, oncology and morphology»,
- *mentors activity on educational programmes of higher education in 36.00.00 «Veterinary and animal science»:*  
-*Specialty in the specialties: 36.05.01 «Veterinary science»;*

1.6.4. Tasks of professional activity, graduates which had mastered PhD programme 36.06.01 «Veterinary and animal science» prepare to it, were identified appropriate to ES HE RUDN for research and mentor's activity in the direction of «Veterinary and animal science» and in the profile of preparing/speciality appropriate to ES HE RUDN requirements.

-researches activity in morphology, physiology, biochemical, immunology, bio math, ecology, ethology, parasitology, pharmacology and toxicology, pathology, oncology, microbiology, virology, mycology, epizootology, diagnostic and animals' internal non-infectious diseases, obstetric and gynecology, surgery.

- mentor's activity in morphology, physiology, biochemical, immunology, bio math, ecology, ethology, parasitology, pharmacology and toxicology, pathology, oncology, microbiology, virology, mycology, epizootology, diagnostic and animals' internal non-infectious diseases, obstetric and gynecology, surgery.

## **1.7. Requirements to outcomes of PhD programme mastering**

The programme focus on preparing of high-quality scientific and scientific-mentors employees, forming and developing of their competences appropriate to professional standard; the final original scientific study contributing to creating, expansion and developing of scientific knowledge. Because of PhD programme mastering student's universal, general professional and professional competences should be formed.

At the student have to be formed the next universal competences:

Generating new ideas for research practical tasks including interdisciplinary area (UC-1);

Ability of complex researches' projecting and realizing including interdisciplinary researches based on holistic systematic scientific ideology using knowledge in area of history and science philosophy (UC -2);

Preparedness of participates in Russians and international research collectives' work to address of scientific and scientific-educational tasks (UC -3);

Readiness to use modern methods and technologies of scientific communication in the state and foreign languages, including readiness for

communication in oral and written forms in Russian and foreign languages for the solution of problems of professional activity, possession of foreign language communicative competence in official and business, educational and professional, scientific, sociocultural, daily and household spheres of foreign language communication (UC -4);

Ability of follows to ethic norms in professional activity (UC -5);

Ability of plans and solves own professional and personality development tasks (UC -6).

Graduate mastered PhD programme should has the next general professional competences:

Holding necessary knowledge system in area appropriate to the direction of preparing (GPC-1);

Holding methodology of researches in area that appropriate to the preparing direction (GPC-2);

Holding culture of research including using very new information-communication technologies (GPC-3);

Ability of use efficient research methods in an independent research activity appropriate to the direction of preparing (GPC-4);

Preparedness of organize research collective work in scientific branch appropriate to the direction of preparing (GPC-5);

Ability of self-improvement based on traditional morality (GPC-6);

Preparedness of mentor's activity at higher educational programme (GPC-7);

Ability of own motivated decisions in non-standard situations and preparedness to be responsible for its aftermath (GPC-8).

A graduate mastered PhD programme should to has the next professional competences:

Ability of understand contemporary veterinary and animal science problems and to use fundamental representations in professional activity sphere for positing and solving of new tasks (PC-1);

Ability to use the basic theories, concepts and principles in chosen activity area, ability of systematic thought (PC -2);

Having information independent analysis, finding a fundamental problemmes, positing of research tasks and goals, doing laboratory researches at solving the tasks in specialty using contemporary aperture and computational means, demonstrating responsibility for quality of work and science outcomes truly (PC -3);

Knowledge of veterinarian and animal science history and methodology increasing fundamental general professional preparing (PC -4);

Ability of creatable using contemporary computational technologies at collecting, saving, working, analyzing and transferring of information (PC -5);

Ability of understand and deep think philosophy natural science concepts, place of veterinary and animal science in output science thought (PC -6);



Using skills of professional collectives' work organization and guide, ability of interdisciplinary communication and free business communication in Russian and foreign languages, work in international collective (PC -7);

Ability of outcomes researches and production-technology works professional arrangement and presentation in approved forms (PC -8);

Using of normative documents' knowledges stalemating organization and method of realization researches and production-technology works, ability of lead work collective, provide limits of production security (PC -9);

Existence of forming studying stuff skills, reading lectures, readiness to mentoring in a higher school and leading students researches (SR), skills of studying stuff presentation in oral, written and graphic forms for different group of listeners (PC -10).

## **1.8. Matrix of competition**

## Матрица компетенций

### 2.1. Требования к результатам освоения основной образовательной программы

Вид профессиональной деятельности:

- научно-исследовательская деятельность в области морфологии, физиологии, биохимии, иммунологии, био-математики, экологии, этологии, паразитологии, фармакологии и токсикологии, патологии, онкологии, микробиологии, вирусологии, микологии, эпизоотологии, диагностики и внутренних незаразных болезней животных, акушерства и гинекологии, хирургии, ветеринарной санитарии, ветеринарно-санитарной экспертизы, организации ветеринарного дела, гигиены животных, разведения, селекции и генетики животных, кормопроизводства, кормления животных и технологии кормов, звероводства и охотоведения, частной зоотехнии, технологии производства продуктов животноводства, сельскохозяйственной экономики, управления коммерческим предприятием, профессиональной юриспруденции и этики, коммуникации

- преподавательская деятельность в области морфологии, физиологии, биохимии, иммунологии, био-математики, экологии, этологии, паразитологии, фармакологии и токсикологии, патологии, онкологии, микробиологии, вирусологии, микологии, эпизоотологии, диагностики и внутренних незаразных болезней животных, акушерства и гинекологии, хирургии, ветеринарной санитарии, ветеринарно-санитарной экспертизы, организации ветеринарного дела, гигиены животных, разведения, селекции и генетики животных, кормопроизводства, кормления животных и технологии кормов, звероводства и охотоведения, частной зоотехнии, технологии производства продуктов животноводства, сельскохозяйственной экономики, управления коммерческим предприятием, профессиональной юриспруденции и этики, коммуникации .

	Наименование дисциплин (модулей) в соответствии с учебным планом	Универсальные компетенции					
		УК-1: способностью к критическому анализу и оценке современных научных достижений, генерированию новых идей при решении исследовательских и практических задач, в том числе в междисциплинарных областях	УК-2: способностью проектировать и осуществлять комплексные исследования, в том числе междисциплинарные, на основе целостного системного научного мировоззрения с использованием знаний в области истории и философии науки	УК-3: готовностью участвовать в работе российских и международных исследовательских коллективов по решению научных и научно-образовательных задач	УК-4: готовностью использовать современные методы и технологии научной коммуникации на государственном и иностранном языках, в том числе готовностью к коммуникации в устной и письменной формах на русском и иностранном языках для решения задач профессиональной деятельности, владение иноязычной коммуникативной компетенцией в официально-деловой, учебно-профессиональной, научной, социокультурной, повседневно-бытовой сферах иноязычного общения	УК-5: способностью следовать этическим нормам в профессиональной деятельности	УК-6: способностью планировать и решать задачи собственного профессионального и личного развития
Блок 1	Базовая часть						
	Иностранный язык			+	+		
	История и философия науки	+	+				
Блок 1	Вариативная часть						
	Педагогика высшей школы						
	Методология научных исследований	+					
	Диагностика болезней и терапия животных					+	

	Анатомия и гистология животных					+	
	Патология животных					+	
	Основные этапы формирования животных					+	
	Русский язык как иностранный			+	+		
	Английский язык				+		
Блок 2	Вариативная часть						
	Педагогическая практика					+	
	Научно-исследовательская практика					+	+
Блок 3	Вариативная часть						
	Научные исследования			+			

	Наименование дисциплин (модулей) в соответствии с учебным планом	Общепрофессиональные компетенции							
		ОПК-1: владением необходимой системой знаний в области, соответствующей направлению подготовки	ОПК-2: владением методологией исследований в области, соответствующей направлению подготовки	ОПК-3: владением культурой научного исследования; в том числе с использованием новейших информационно-коммуникационных технологий	ОПК-4: способностью к применению эффективных методов исследования в самостоятельной научной области, соответствующей направлению подготовки	ОПК-5: готовностью организовать работу исследовательского коллектива в научной отрасли, соответствующей направлению подготовки	ОПК-6: способностью к самосовершенствованию на основе традиционной нравственности	ОПК-7: готовностью к преподавательской деятельности по образовательным программам высшего образования	ОПК-8: способностью к принятию самостоятельных мотивированных решений в нестандартных ситуациях и готовностью нести ответственность за их последствия
Блок 1	Базовая часть								
	Иностранный язык								
	История и философия науки								
Блок 1	Вариативная часть								
	Педагогика высшей школы							+	
	Методология научных исследований		+	+					
	Диагностика болезней и терапия животных	+						+	
	Анатомия и гистология животных	+						+	
	Патология животных	+						+	
	Основные этапы формирования животных	+						+	
	Русский язык как иностранный								
	Английский язык								

Блок 2	Вариативная часть								
	Педагогическая практика	+						+	+
	Научно-исследовательская практика	+				+			+
Блок 3	Вариативная часть								
	Научные исследования	+	+	+	+	+			

Наименование дисциплин (модулей) в соответствии с учебным планом		Профессиональные компетенции											
		ПК-1: способность понимать современные проблемы ветеринарии, зоотехнии и использовать фундаментальные представления в сфере профессиональной деятельности для постановки и решения новых задач	ПК-2: способность использовать основные теории, концепции и принципы в избранной области деятельности, способность к системному мышлению	ПК-3: способность к самостоятельному анализу имеющейся информации, выявлению фундаментальных проблем, постановке целей и задач исследования, выполнению лабораторных исследований при решении конкретных задач по специализации с использованием современной аппаратуры и вычислительных средств, демонстрацию ответственности за качество работ и научной достоверности результатов	ПК-4: знание истории и методологии ветеринарных и зоотехнических наук, расширяющих общепрофессиональную, фундаментальную подготовку	ПК-5: способность творчески применять современные компьютерные технологии при сборе, хранении, обработке, анализе и передаче информации	ПК-6: способность понимать и глубоко осмысливать философские концепции естествознания, место ветеринарных и зоотехнических наук в выработке научного мировоззрения	ПК-7: использование навыков организации и руководства работой профессиональных коллективов, способность к междисциплинарному общению и к свободному деловому общению на русском и иностранных языках, работе в международных коллективах	ПК-8: способность профессионально оформлять, представлять и докладывать результаты научно-исследовательских и производственно-технологических работ по утвержденным формам	ПК-9: использование знаний нормативных документов, регламентирующих организацию и методику проведения научно-исследовательских и производственно-технологических работ, способность руководить рабочим коллективом, обеспечивать меры производственной безопасности	ПК-10: наличие навыков формирования учебного материала, чтения лекций, готовность к преподаванию в высшей школе и руководству научно-исследовательскими работами (НИР) студентов, умение представлять учебный материал в устной, письменной и графической форме для различных контингентов слушателей		
Блок 1	Базовая часть												
	Иностранный язык												
	История и философия науки												
Блок 1	Вариативная часть												
	Педагогика высшей школы												
	Методология научных исследований			+	+	+	+						

	Диагностика болезней и терапия животных	+									
	Анатомия и гистология животных	+									
	Патология животных	+									
	Основные этапы формирования животных	+									
	Русский язык как иностранный										
	Английский язык										
Блок 2	Вариативная часть										
	Педагогическая практика							+			+
	Научно-исследовательская практика									+	+
Блок 3	Вариативная часть										
	Научные исследования		+	+					+		