Federal State Autonomous educational institution of higher education «Peoples' Friendship University of Russia»

Agrarian and Technological Institute

THE FINAL STATE ATTESTATION PROGRAM

Specialty 36.05.01 - "Veterinary Medicine"

Focus of the program (focus (profile), specialization)

Graduate qualification: Doctor of veterinary medicine

1. General Provisions

1.1. The final state attestation in the specialty 36.05.01 - "Veterinary Medicine" is carried out in full-time format. However, due to the restrictions associated with the COVID-19 pandemic in 2020/2021, it is allowed to conduct part of the FSA events using distance learning technologies (hereinafter - DLT).

Full-time students undergo FSA events in full-time format. If a student, due to restrictions in connection with the COVID-19 pandemic, is trained in the DLT format, then his participation in the FSA events in the DLT format is allowed.

FSA includes:

- 1. State testing
- 2. State interdisciplinary exam (IDE), which includes 3 examination questions and a situational clinical task
 - 1.2. The results of the attestation tests included in the final state attestation are determined by the sum of points scored during the tests (according to a 100-point system) and marks "excellent", "good", "satisfactory", "unsatisfactory", corresponding to the points scored according to the point-rating system (PRS).

2. Goals and objectives of the final state attestation

2.1. **The purpose** of the final state attestation is to determine the compliance of the results of mastering the basic educational programs with the requirements of the ES HE PFUR / FSES HE.

The final state attestation is a state interdisciplinary exam established by the Academic Council of the University.

- 2.2. **The tasks** of the final state attestation are:
- checking the quality of teaching a graduate to the basic natural science laws and phenomena necessary in professional activity;
- determination of the level of theoretical and practical readiness of the graduate to perform professional tasks in accordance with the acquired qualifications;
- establishing the degree of a person's aspiration for self-development, improving their qualifications and skills;
- checking the formation of stable motivation for professional activity in accordance with the types of professional activity provided for by the ES HE PFUR / FSES HE;
- checking the ability to find organizational and managerial solutions in non-standard situations and the willingness to bear responsibility for them;
- ensuring the integration of education and scientific and technical activities,
- increasing the efficiency of using scientific and technological achievements, reforming the scientific sphere and stimulating innovation;
- ensuring the quality of training in accordance with the requirements of ES HE PFUR
 / FSES HE.

3. The program of the state interdisciplinary examination in veterinary medicine

- 3.1. The state interdisciplinary exam (IDE) consists of state testing, oral answers of students to the questions of the state exam and solving a situational clinical task in specialization.
- 3.2. As part of the state exam, the degree of mastering by graduates of the following competencies is checked:
 - GPC-1. Ability to determine the biological status and normative clinical indicators of organs and systems of the animal body;
 - GPC -2. Ability to interpret and evaluate in professional activity the influence of natural, socio-economic, genetic and economic factors on the physiological state of the organism of animals;
 - GPC-3. Ability to carry out and improve professional activities in accordance with regulatory legal acts in the field of the agro-industrial complex;
 - GPC-4. Ability to use in professional activity methods of solving problems with the use of modern equipment in the development of new technologies and use modern professional methodology to conduct experimental research and interpret their results;
 - GPC-5. Ability to draw up special documentation, analyze the results of professional activities and submit reporting documents using specialized databases;
 - GPC-6. Ability to analyzing, identifying and assessing the risk of disease occurrence and spread;
 - GPC-7. Ability to understand the principles of work of modern information technologies and use them to solve the problems of professional activity.
 - PC-1. Ability to collect anamnesis of life and disease of animals to identify the causes of diseases and their nature
 - PC-2. Ability to conduct a general clinical study of animals in order to establish a preliminary diagnosis and determine a further research program, as well as in accordance with the plan of antiepizootic measures, the plan for the prevention of non-communicable animal diseases
 - PC-3. Ability to develop animal research programs using special (instrumental) and laboratory methods
 - PC-4. Ability to conduct clinical studies of animals using special (instrumental) and laboratory methods to clarify the diagnosis
 - PC-5. Ability to make a diagnosis based on the analysis of anamnesis data, general, special (instrumental) and laboratory research methods
 - PC-6. Ability to develop a treatment plan for animals based on the established diagnosis and individual characteristics of the animals

- PC-7. Ability to select the necessary medicinal products of a chemical and biological nature for the treatment of animals, taking into account their combined pharmacological effect on the body
- PC-8. Ability to choose methods of non-drug therapy, including physiotherapy methods for treating animals
- PC-9. Ability to carry out medical, including physiotherapy, procedures using special equipment in compliance with safety rules
- PC-10. Ability to determine the need for the use of surgical methods in the treatment of animals
 - PC-11. Ability to develop a surgical plan, including the choice of pain relief
- PC-12. Ability to perform surgical intervention in the body of animals for the treatment of various diseases, castration, sterilization, for cosmetic purposes
- PC-13. Ability to develop recommendations for special feeding of sick animals for therapeutic purposes
- PC-14. Ability to conduct repeated examinations and studies of animals to assess the effectiveness and safety of the prescribed treatment and adjust the treatment plan for animals (if necessary) based on the results of evaluating the effectiveness of treatment
- PC-15. Ability to organize prophylactic immunizations (vaccinations), treatment and prophylactic treatments of animals in accordance with the plan of antiepizootic measures
- PC-16. Ability to organize organizational, technical, zootechnical and veterinary measures aimed at the prevention of non-communicable diseases in accordance with the plan for the prevention of non-communicable animal diseases
- PC-17. Ability to organize disinfection and disinsection of livestock buildings to ensure veterinary and sanitary welfare in accordance with the plan of veterinary and sanitary measures
- PC-18. Ability to draw up a plan for medical examination of animals, taking into account their types and purpose, conduct medical examination, develop recommendations for conducting therapeutic and prophylactic and therapeutic measures based on the results of examination of animals carried out within the framework of medical examination
- PC-19. Ability to perform postmortem diagnostic examination of animals in order to establish pathological processes, diseases, causes of death
- PC-20. Ability to develop an annual plan for anti-epizootic measures, a plan for the prevention of non-communicable animal diseases, a plan of veterinary and sanitary measures

- PC-21. Ability to carry out inspections of the veterinary and sanitary state and microclimate of livestock buildings in accordance with the plan of antiepizootic measures, the plan for the prevention of non-communicable animal diseases, the plan of veterinary and sanitary measures
- PC-22. Ability to organize measures to protect the organization from the introduction of infectious and invasive diseases in accordance with the plan of antiepizootic measures
- PC-23. Ability to analyze the effectiveness of measures for the prevention of animal diseases in order to improve them

Thus, for the state interdisciplinary exam, the graduate must to:

Know:

infectious and invasive diseases of animals in all the variety of biological and pathological aspects of their manifestation (natural history, distribution, etiology, pathogenesis, epizootology, diagnostics, immunity, prevention and control measures);

the essence of epizootology as a science of morbidity and epizootic process, general patterns of occurrence and spread of infectious animal diseases, causes, conditions,

the mechanisms of manifestation of the epizootic process in certain nosological forms, their epizootic stereotype;

basic concepts in the field of epizootology, parasitology, surgery, pathology, obstetrics, gynecology and andrology of animals and the organization of veterinary medicine, used in Russia and in foreign countries;

organizational structure of the state veterinary service, its information support, planning, organization and management;

and also have an idea of modern methods of monitoring the epizootic situation in the country and in the world;

Be able to:

apply the methods of clinical and laboratory research of animals for the detection of non-communicable, infectious and invasive diseases;

provide therapeutic, preventive, antiepizootic work with modern technical means and methods, bio- and chemotherapy drugs for vaccination, allergic diagnostics, treatment of animals, collection of material for serological, scatological and others research, pathological material for laboratory diagnostics;

analyze and summarize the information received, draw conclusions, using scientific terminology correctly;

Possess:

the theoretical foundations of diagnosis, treatment and prevention of non-communicable, infectious and invasive diseases in animals;

a professional approach to the diagnosis, prevention and treatment of non-communicable, infectious and invasive animal diseases;

the ability to conduct veterinary and educational work among animal owners, colleagues and the entire population;

the skill of applying knowledge in the field of veterinary medicine in any areas of their economic activities.

3.3. State examination scope:

The state interdisciplinary exam (IDE) consists of state testing, oral answers of students to the questions of the state exam and solving a situational clinical task in specialization.

The test part of the interdisciplinary exam includes 100 questions. For admission to the oral part of the state exam, a student must score at least 51 points.

The oral part of the state interdisciplinary exam includes 3 questions and a situational clinical task.

3.4. Content of state examinations:

The test part and questions for an oral answer include topics on the organization and conduct of diagnostics, treatment and prevention of infectious and non-infectious diseases of animals, mass veterinary events, as well as general questions on the veterinary and sanitary assessment of products of slaughter of patients and suspected of being infected with infectious diseases of animals and conducting quarantine measures.

Approximate questions of the test part of the IDE are reflected in Application No. 1 to the FSA Program.

Indicative list of possible questions for the IDE:

General knowledge, pathology, organization of veterinary affairs

- 1. Organizational and legal foundations of veterinary affairs in the Russian Federation. Law "About Veterinary Medicine".
- 2. Epizootology and the doctrine of infectious diseases in the modern structure of veterinary education, science and practice.
- 3. The doctrine of infection. Modern view of infectious diseases and their classification.
- 4. Disinfection (disinfection, disinsection, deratization). Role and place in antiepizootic measures.
- 5. Natural focal infections and diseases common to animals and humans.
- 6. History of the fight against microbes and viruses.
- 7. Anti-infectious immunity of animals.
- 8. Active specific prevention of infectious diseases, its scientific and organizational foundations.
- 9. Basic types of diagnostics and basic principles of treatment of infectious diseases.
- 10. The value of synanthropic animals in the spread of infectious diseases in humans and animals.
- 11. Vector-borne diseases (infections and infestations) and methods of their prevention.

- 12. Principles of therapy (preventive, physiological, complex, active, economic feasibility).
- 13. General prevention of internal non-communicable diseases.
- 14. Clinical examination as an integral part of the general prevention of non-communicable animal diseases, methodological basis
- 15. Therapy regulating neuro-trophic functions (blockade of the autonomic nervous system in non-infectious internal diseases).
- 16. Methods of therapy according to the direction of therapeutic action (etiotropic, pathogenetic, symptomatic, substitutional).
- 17. Diet therapy in veterinary practice.
- 18. Surgical treatment, types of surgical operations.
- 19. Pathogenetic therapy in surgical practice.
- 20. Surgical infection (definition, classification of CI types, diagnostics, methods of treatment).
- 21. Asepsis and antiseptics in surgery
- 22. Traumatism of animals. Preventive measures, injuries, first aid for injuries.
- 23. Castration of females of various animal species. Economic value, indications, methods, complications.
- 24. Castration of males of various animal species. Economic value, indications, methods, complications.
- 25. Helminthiasis diagnosis, treatment and prevention,
- 26. General principles of combating helminthiases in animals.
- 27. Methods for the diagnosis of invasive diseases.
- 28. Methods for the prevention and treatment of invasive diseases.
- 29. Stationary cutaneous parasites of animals.
- 30. General characteristics, veterinary significance of blood-sucking insects. Measures to combat them.
- 31. Protozoa economic value, methods of diagnosis, prevention and treatment.
- 32. The sexual cycle and its violations. Pregnancy and infertility of females.
- 33. The role of obstetrician-gynecologist (reproductologist) in breeding work.
- 34. Organization of maternity wards at agricultural enterprises and nurseries. Preparing for birth.
- 35. Obstetric care during birth.
- 36. Artificial insemination (methods of obtaining, preparing and storing sperm, methods of insemination).
- 37. Methods for the diagnosis of obstetric and gynecological pathology.
- 38. Infertility of animals as gynecological and andrological pathology
- 39. Etiotropic and pathogenetic therapy for obstetric and gynecological diseases.
- 40. Cancer diseases of reproductive organs of small domestic animals.

Anthropozoonosis and economically significant infections and invasions

- 1. Rabies.
- 2. Leptospirosis and veterinary and sanitary examination of slaughter products.
- 3. Anthrax and veterinary and sanitary examination of slaughter products.
- 4. Brucellosis and veterinary and sanitary examination of slaughter products.
- 5. Tuberculosis and veterinary and sanitary examination of slaughter products.
- 6. Leukemia.

- 7. Foot and mouth disease and veterinary and sanitary examination of slaughter products.
- 8. Prion infections.
- 9. Mycoses and mycotoxicosis.
- 10. Food infections and veterinary and sanitary examination of slaughter products.
- 11. Infectious diseases of carnivores.
- 12. Infectious diseases of sheep.
- 13. Infectious diseases of horses.
- 14. Infectious diseases of rabbits and laboratory animals.
- 15. Viral infections of industrial livestock (IBR, diarrhea, parainfluenza). Young stock infections.
- 16. Acute epizootic infections of birds (except Newcastle disease and bird flu).
- 17. Newcastle disease and bird flu.
- 18. Particularly dangerous and exotic cattle infections (plague, ephemeral fever, etc.).
- 19. Bacterial infections of pigs (erysipelas, Escherichiosis, etc.) and veterinary and sanitary examination of slaughter products.
- 20. African and classical swine fever.
- 21. Viral infections of pigs (except for ASF and CSF).
- 22. Nematodes of horses.
- 23. Echinococcosis.
- 24. Babesiosis.
- 25. Eymeriosis.
- 26. Trichomoniasis of cattle.
- 27. Accidental disease (trypanosomiasis) of horses.
- 28. Arachnoentomoses of animals
- 29. Diseases caused by gadfly larvae (estrosis, rhinestrosis, hypodermatosis)
- 30. Dirofilariasis.
- 31. Dictyocaulosis.
- 32. Ascariasis of animals
- 33. Trichinosis.
- 34. Fascioliasis.
- 35. Opisthorchiasis and clonorchiasis of carnivores.
- 36. Dipylidiosis of dogs and cats.
- 37. Moniesiasis of ruminants.
- 38. Diphyllobothriasis of carnivores.
- 39. Cysticercosis of cattle and pigs.
- 40. Toxoplasmosis in animals.

Non-infectious pathology

- 1. Open mechanical damage (wounds). Bleeding and blood loss. Treatment of wounds.
- 2. Closed mechanical damage (bruises, sprains, dislocations, compression).
- 3. Injuries to the chest, open and closed. Types, features, first aid, treatment.
- 4. Diseases of the spinal column in animals. Etiology, diagnosis, treatment, prevention.
- 5. Diseases of muscles and tendon-ligamentous apparatus.
- 6. Diseases of the joints (diagnosis, treatment, prevention).
- 7. Fractures of bones in animals. Classification, diagnosis, general principles of treatment.

- 8. Diseases of horses' hooves and hooves in ruminants (diagnosis, treatment, prevention).
- 9. Laminitis in horses, cows and other ungulates.
- 10. Surgical diseases of the abdominal cavity and retroperitoneal space (differential diagnosis, treatment, prevention).
- 11. Hernias, eventrations, prolapses (classification, diagnosis, treatment).
- 12. Diseases of the eyes in animals (causes, diagnosis, treatment, prevention).
- 13. Neoplasms in animals (diagnosis, differential diagnosis, treatment principles).
- 14. Diseases of the intestines in animals.
- 15. Organic and functional diseases of the central nervous system (sun and heat stroke, inflammation of the brain and spinal cord and their membranes, stress, neuroses, epilepsy, eclampsia).
- 16. Diseases of protein and carbohydrate metabolism (ketosis, myoglobinuria, alimentary dystrophy, obesity, etc.).
- 17. Hypovitaminosis and microelementosis in animals.
- 18. Diseases of mineral metabolism (alimentary hyperparathyroidism, osteodystrophy, rickets).
- 19. Diseases of the blood system (anemia and hemorrhagic diathesis)
- 20. Diseases of the pleura and their complications (pleurisy, hydrothorax, hemothorax, pneumothorax).
- 21. Pneumonia (definition, classification, pathogenesis, diagnosis, treatment).
- 22. Diseases of the respiratory system of horses (emphysema, chronic obstructive bronchitis (COPD), etc.)
- 23. Heart disease (congenital and acquired)
- 24. Diseases of the kidneys and urinary tract (nephritis, nephrosis, nephrosclerosis, pyelonephritis, pyelitis, urocystitis, urolithiasis).
- 25. Diseases of the liver (hepatitis, hepatosis, amyloidosis, cirrhosis).
- 26. Gastrointestinal diseases in horses with colic syndrome (classification, diagnosis, differential diagnosis and therapy).
- 27. Diseases of the ruminant proventricles (atony, tympania, scar parakeratosis, traumatic reticulitis).
- 28. Diseases of the stomach (gastritis, their classification, pathogenesis and treatment, peptic ulcer)
- 29. Diseases of the duodenum, pancreas, gall bladder and biliary tract.
- 30. Pathology of pregnancy and abortion in animals (etiology, clinical picture, classification, doctor's actions, prevention).
- 31. Obstetric care during childbirth. Harbingers of childbirth, stages of the birth process, the norm and pathology of the birth process.
- 32. Pathology of the location of the fetus during childbirth. Delivery operations (fetotomy, cesarean section, perineal dissection, amputation of the pregnant uterus).
- 33. Diseases of the postpartum period, incl. MMA syndrome and postpartum paresis (etiology, diagnosis, treatment, prevention).
- 34. Diseases of the mammary gland in animals (etiology, classification, diagnosis, treatment, prevention).
- 35. Diseases of newborns of non-infectious etiology. Asphyxia of newborns (causes, diagnosis, first aid, prevention)
- 36. Diseases of the external genital organs of females.
- 37. Diseases of the ovaries (classification, diagnosis, treatment, prevention).

- 38. Endometritis (etiology, diagnosis, treatment, prevention).
- 39. Prolapse of the vagina and uterus (diagnosis, treatment, prevention).
- 40. Diseases of the reproductive system in males.

4. Methodological recommendations for the preparation and passing of the state interdisciplinary exam and the state exam in specialization

4.1. Recommended reading:

a) main literature:

- 1. Obstetrics, gynecology and biotechnology of animal reproduction: textbook / AP Studentsov, VS Shipilov, V. Ya. Nikitin [and others]; edited by G.P. Dyulger. 10th ed., Erased. St. Petersburg: Lan, 2020 .-- 548 p. https://e.lanbook.com/book/129090
- 2. Badluev E.B., Eshizhamsoev B.D., Tsybikzhapov A.D. Obstetrics and gynecology of farm animals. Workbook for laboratory and practical exercises and independent work: study guide 2019.-90s. https://e.lanbook.com/book/113386
- 3. Baimishev, Kh. B. Gynecology and andrology: guidelines / Kh. B. Baimishev. Samara: SamGAU, 2018 .-- 106 p. https://e.lanbook.com/book/109422
- 4. Workshop on internal diseases of animals: textbook / G. G. Shcherbakov, A. V. Yashin, A. P. Kurdeko [and others]; under the general editorship of GG Shcherbakov [and others]. 3rd ed., Erased. St. Petersburg: Lan, 2020 .-- 544 p. https://e.lanbook.com/book/139263
- 5. Nechaev, A. V. Internal non-communicable diseases: a tutorial / A. V. Nechaev, Yu. A. Kurlykova. Samara: SamGAU, 2020 Part 1: General prevention and therapy 2020. 122 p. https://e.lanbook.com/book/158657
- 6. Dyulger, G. P. Fundamentals of veterinary medicine: a textbook for universities / G. P. Dyulger, G. P. Tabakov. 3rd ed., Erased. St. Petersburg: Lan, 2020 .-- 476 p. https://e.lanbook.com/book/146658
- 7. Epizootology with microbiology: textbook / A.S. Aliev, Yu. Yu. Danko, I. D. Yeshchenko [and others]; Ed. V.A. Kuzmina. 2nd ed., Erased. SPb.: Publishing house "Lan", 2017. 432 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn FindDoc&id=465028&idb=0
- 8. Sidorchuk, A. A. General epizootology: a textbook for universities / A. A. Sidorchuk, V. A. Kuzmin, S. V. Alekseeva. 2nd ed., Erased. St. Petersburg: Lan, 2021 .-- 248 p. https://e.lanbook.com/book/156931
- 9. Epizootology with microbiology: a textbook for universities / AS Aliev, Yu. Yu. Danko, ID Eshchenko [and others]; Edited by V. A. Kuzmin, A. V. Svyatkovsky. 6th, erased. St. Petersburg: Lan, 2021 .-- 432 p. https://e.lanbook.com/book/162384
- 10. Skubko, OR Morphofunctional features and diseases of animal bones: a tutorial / OR Skubko, ON Shushakova. Omsk: Omsk GAU, 2020 .-- 52 p. https://e.lanbook.com/book/136157
- 11. Operative surgery in animals: a textbook for universities / BS Semenov, VN Videnin, A. Yu. Nechaev [and others]. St. Petersburg: Lan, 2020 .-- 704 p. https://e.lanbook.com/book/162365
- 12. Skubko, O. R. Methods of lectures of the academic discipline B1.B.23 "Operative surgery with topographic anatomy": a tutorial / O. R. Skubko, G. A. Honin, O. N. Shushakova. Omsk: Omsk GAU, 2019 .-- 65 p. https://e.lanbook.com/book/126630

- 13. Latypov D.G. Protozoal diseases of animals, dangerous for humans (protozoal zoonoses): a tutorial / D.G. Latypov, R.R. Timerbaeva, E.G. Kirillov. SPb. : Publishing house "Lan", 2017. 208 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn FindDoc&id=464930&idb=0
- 14. Latypov D.G. Helminthiasis of animals, dangerous for humans: textbook / D.G. Latypov. 3rd ed., Rev. SPb.: Publishing house "Lan", 2017. 440 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn FindDoc&id=464941&idb=0
- 15. Latypov, DG Parasitology and invasive diseases of animals: a textbook for spo / DG Latypov, RR Timerbaeva, EG Kirillov. 2nd ed., Erased. St. Petersburg: Lan, 2021 .-- 520 p. https://e.lanbook.com/book/159517
- Yatusevich, AI Parasitology and invasive diseases of animals: a tutorial / AI Yatusevich, NF Karasev, SI Stasyukevich. Minsk: RIPO, 2020 .-- 266 p. https://e.lanbook.com/book/154220
- 17. Nikitin, IN Workshop on the organization of veterinary affairs: a tutorial / IN Nikitin. 4th ed., Rev. and add. St. Petersburg: Lan, 2020 .-- 324 p. https://e.lanbook.com/book/131031
- Nikitin, IN Legal support of veterinary activity: a textbook for professional training / IN Nikitin. 2nd ed., Erased. St. Petersburg: Lan, 2021 .-- 212 p. https://e.lanbook.com/book/155692
- 19. Zabolotnykh M. V., Ivkova I. A., Zhidik I. Yu. Fundamentals of the organization of veterinary and sanitary affairs: study guide 2020.-91s
- Nikitin, IN Veterinary clinic: textbook for universities / IN Nikitin, VV Ivanov, EN Trofimova. 2nd, erased. St. Petersburg: Lan, 2021 .-- 184 p. https://e.lanbook.com/book/162385

б) additional literature

- 1. Polyantsev, NI Workshop on obstetrics, gynecology and biotechnology of animal reproduction: a tutorial / NI Polyantsev. St. Petersburg: Lan, 2016 .-- 272 p. https://e.lanbook.com/book/71726
- 2. Medicines used in veterinary obstetrics, gynecology, andrology and biotechnology of animal reproduction: a tutorial / G. P. Dyulger, V. V. Khramtsov, Yu. G. Sibileva, Zh. O. Kemeshov. St. Petersburg: Lan, 2016 .-- 272 p. https://e.lanbook.com/book/75510
- 3. Biotechnology of reproduction of farm animals and birds: a tutorial / compiled by EI Shurmanova [and others]. Yekaterinburg: UrGAU, 2020 .-- 212 p. https://e.lanbook.com/book/155046
- 4. Kiseleva, EV Obstetrics and biotechnology of animal reproduction: a teaching aid / EV Kiseleva. Ryazan: RGATU, 2019 .-- 79 p. https://e.lanbook.com/book/137436
- 5. Fundamentals of veterinary medicine and biotechnology of animal reproduction, Non-infectious diseases of animals: a tutorial / E. M. Maryin, V. A. Ermolaev, P. M. Lyashenko, A. V. Sapozhnikov. Ulyanovsk: UlGAU named after P.A.Stolypin, 2015 .-- 352 p. https://e.lanbook.com/book/133785
- 6. Gertman, A. M. Diseases of the kidneys and organs of the urinary system of animals: a tutorial / A. M. Gertman, T. S. Samsonova. 2nd ed., Rev. St. Petersburg: Lan, 2016 .-- 388 p. https://e.lanbook.com/book/79324
- 7. Examination of northern fish species. Quality and safety: textbook for universities / A. A. Gnedov, O. A. Ryazanova, E. B. Tabala, V. M. Poznyakovsky; under the

- general editorship of V.M. Poznyakovsky. 2nd ed., Erased. St. Petersburg: Lan, 2021 .-- 436 p. https://e.lanbook.com/book/155667
- 8. Internal non-communicable diseases: study guide: in 2 parts / compiled by T. N. Babkina, N. V. Lenkova. Persianovsky: Donskoy GAU, 2020 Part 2: Internal non-communicable diseases 2020 .-- 155 p. https://e.lanbook.com/book/148534
- 9. Prevention of infectious diseases of animals by aerosols of chemical and biological preparations: monograph / A.T. Kushnir, I.A. Bureev, Yu.O. Selyaninov [and others]. SPb.: Publishing house "Lan", 2016. 192 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=465095&idb=0
- 10. Infectious diseases common to many species of animals: teaching aid / V. K. Tikhonov, G. P. Tikhonova, O. Yu. Petrova, N. G. Ivanov. Cheboksary: ChGSKhA, 2018 .-- 557 p. https://e.lanbook.com/book/141997
- 11. Zubareva, IM Aspects of general epizootology of invasive diseases: a tutorial / IM Zubareva, VI Vasilevich, AS Donchenko. Novosibirsk: NSAU, 2016 .-- 275 p. https://e.lanbook.com/book/90996
- 12. Ataev, A. M. Ichthyopathology: textbook / A. M. Ataev, M. M. Zubairova. St. Petersburg: Lan, 2020 .-- 348 p. https://e.lanbook.com/book/146911
- 13. Fundamentals of veterinary medicine and biotechnology of animal reproduction, Non-infectious diseases of animals: a tutorial / E. M. Maryin, V. A. Ermolaev, P. M. Lyashenko, A. V. Sapozhnikov. Ulyanovsk: UlGAU named after P.A.Stolypin, 2015 .-- 352 p. https://e.lanbook.com/book/133785
- 14. Medvedeva, L. V. Fundamentals of veterinary operative surgery: a tutorial / L. V. Medvedeva, N. A. Malygina. Barnaul: AGAU, 2018 .-- 157 p. https://e.lanbook.com/book/137643
- 15. Avdeenko, V. S. Veterinary andrology: a tutorial / V. S. Avdeenko, S. V. Fedotov. St. Petersburg: Lan, 2019 .-- 308 p. https://e.lanbook.com/book/115500
- 16. Turitsyna, EG Anatomy of animals. Visceral systems of the body: splanchnology: a tutorial / E.G. Turitsyna. Krasnoyarsk: KrasGAU, 2018 .-- 183 p. https://e.lanbook.com/book/130131
- 17. Parasitology and invasive diseases of animals: textbook for universities: in 2 volumes / D. G. Latypov, A. Kh. Volkov, R. R. Timerbaeva, E. G. Kirillov. St. Petersburg: Lan, [b. year]. Volume 1 2021 .-- 548 p. https://e.lanbook.com/book/159484
- 18. Parasitology and invasive diseases of animals: textbook for universities: in 2 volumes / D. G. Latypov, A. Kh. Volkov, R. R. Timerbaeva, E. G. Kirillov. St. Petersburg: Lan, 2021 Volume 2 2021 .-- 444 p. https://e.lanbook.com/book/162360
- 19. Lutfullin, M. Kh. Veterinary helminthology: a textbook / M. Kh. Lutfullin, D. G. Latypov, M. D. Kornishina. 2nd ed., Erased. St. Petersburg: Lan, 2018 .-- 304 p. https://e.lanbook.com/book/102228
- Klimova, E. S. Cestodology: laboratory practice: a tutorial / E. S. Klimova, T. V. Babintseva. Izhevsk: Izhevsk State Agricultural Academy, 2019 .-- 74 p. https://e.lanbook.com/book/158573
- 21. Kudacheva, N. A. Organization of veterinary affairs: a tutorial / N. A. Kudacheva. Samara: SamGAU, 2019 .-- 131 p. https://e.lanbook.com/book/123535
- 22. History of veterinary medicine: textbook / compiled by N. A. Minenkov. Kursk: Kursk State Agricultural Academy, 2020 .-- 101 p. https://e.lanbook.com/book/134832

- 23. Organization of veterinary affairs: a tutorial. Stavropol: SPGU, 2019 .-- 300 p. https://e.lanbook.com/book/142440
- 24. Nikitin I.N. Organization and economics of veterinary medicine: textbook / I.N. Nikitin. 6th ed., Rev. and add. SPb.: Publishing house "Lan", 2014. 368 p. http://lib.rudn.ru/MegaPro/UserEnt

4.2. Additional recommendations

When preparing for the state interdisciplinary exam IDE, it is recommended to use the materials posted in TUIS and on the educational portal of the Department of Veterinary Medicine of the RUDN University, as well as information databases that are accessible to students of the Agricultural and Technological Institute of the RUDN University.

5. Evaluation tools designed to establish, during certification tests, the compliance / non-compliance of the level of training of graduates who have completed the development of EP HE in the direction of training / specialty, the requirements of the corresponding ES HE PFUR / FSES HE.

A student is given no more than 60 minutes to conduct state testing. The student is given one try. The test contains 100 questions and is evaluated on a 100 point scale.

The assessment of questions of state testing within the framework of the IDE occurs automatically, at the rate of 1 point for one correct answer. Thus, a student can receive up to 100 points.

A student who scored less than 51 points for state testing is considered not certified and is not allowed to the next stages of the FSA.

In the course of answering the questions of the state exam and the student's presentation of the solution to the situational problem, the completeness and correctness of the answer, literacy of presentation, breadth of outlook, depth and relevance of knowledge of disciplines of specialization are assessed.

The final assessment of the answer to the questions and the solution of the problem of the State Interdisciplinary Exam is set based on the number of points scored by the student (Table 1).

Table 1. Exam grading table

Number of points	Final grade	
< 51		
	Unsatisfactory	
51 - 68		
	Satisfactorily	
69 - 85		
	Good	
86 - 100		
	Excellent	

The mark "5" (excellent) is given if:

- the content of the material of the examination questions is fully disclosed;
- the material is presented correctly, in a certain logical sequence;
- demonstrated systematic and deep knowledge of program material;
- terminology is used accurately;
- shows the ability to illustrate theoretical provisions with specific examples, to apply them in a new situation;
- demonstrated the assimilation of previously studied related issues, the formation and stability of competencies, abilities and skills;
- the verbal part of the answer sounded independently, without leading questions;
- demonstrated the ability to creatively apply knowledge of theory to solving professional problems;
- demonstrated knowledge of modern educational and scientific literature;
- one or two inaccuracies were allowed when covering secondary issues, which are corrected by remark.

The mark "4" (good) is given if:

- answers to examination questions are accurate and complete, materials are presented in a systematic and consistent manner;
- demonstrated the ability to analyze the material, but not all conclusions are reasoned and evidentiary;
- the assimilation of the main literature is demonstrated.
- the verbal answer mainly satisfies the requirements for the mark "5", but at the same time it has one of the disadvantages:
- there are small gaps in the statement that did not distort the content of the answer:
- one or two mistakes were made when covering the main content of the answer, corrected according to the comment of the examiner;
- a mistake or more than two shortcomings were made in the coverage of secondary questions, which are easily corrected according to the comment of the examiner.

The mark "3" (satisfactory) is given if:

- answers to some questions are incorrectly given, the content of the material
 is incomplete or inconsistently disclosed, but a general understanding of the
 issue is shown and skills are demonstrated that are sufficient for further
 assimilation of the material;
- the main categories on the considered and additional questions have been mastered;
- there were difficulties or mistakes in the definition of concepts, the use of terminology, corrected after several leading questions;
- with incomplete knowledge of the theoretical material, insufficient formation of competencies, abilities and skills is revealed, the student cannot apply the theory in a new situation;
- the assimilation of the main literature is demonstrated.

The mark "2" (unsatisfactory) is given if:

- answers to questions are wrong in more than 50% of cases
- in the course of the answer, the main content of the educational material was not disclosed;
- found ignorance or misunderstanding of the most important part of the educational material;
- mistakes were made in the definition of concepts, when using terminology, which were not corrected after several leading questions.
- competencies, skills and abilities are not formed.

The procedure for evaluating the results of mastering the educational program in accordance with the provisions of the point-rating system is reflected in Table 2.

Table 2.

Table of results of state examinations in accordance with the provisions of the Point-rating system

PRS points	Traditional marks of the Russian Federation	Marks ESTC
95-100	5 (отница)	A
86-94	5 (отлично)	В
69-85	4 (хорошо)	С
61-68	2 (D
51-60	3 (удовлетворительно)	Е
31-50	2 (Fx
0-30	2 (не аттестован)	F

The program is designed in accordance with the requirements of ES HE PFUR FSES HE.

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