| Документ подписан простой электронной подписью | |
|--|---|
| Информация о владельце: | |
| ФИО: Ястребов Олег Александович State Autor | omous Educational Institution of Higher Education |
| Должность: Ректор | |
| Дата подписания: 19.05.2023 16:30:35 EOPLES | FRIENDSHIP UNIVERSITY OF RUSSIA |
| Уникальный программный ключ: | RUDN University |
| ca953a0120d891083f939673078ef1a989dae18a | |
| Ág | rarian and Technological Institute |

educational division (faculty/institute/academy) as higher education programme developer

COURSE SYLLABUS

Veterinary pharmacology

course title

Recommended by the Didactic Council for the Education Field of:

36.05.01 Veterinary

field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

36.05.01 Veterinary

higher education programme profile/specialisation title

1. GOALS AND OBJECTIVES OF THE COURSE

The aim of the mastering the course "**Veterinary pharmacology**" is to provide students with the necessary knowledge about the properties, action and use of medicinal substances for therapeutic and prophylactic purposes, as well as for the stimulation and pharmacological regulation of physiological processes in the body of animals.

2. REQUIREMENTS FOR LEARNING OUTCOMES

The implementation of the course "**Veterinary pharmacology**" is aimed at creating the following competencies (parts of competencies) for students:

Table 2.1. List of competencies formed by students during the development of the course (results of the development of the discipline)

| Competence | Competence descriptor | Indicators of competence | |
|------------|--|--|--|
| code | | accomplishment | |
| | | (within the discipline) | |
| PC-7 | Ability to choose or develop a treatment plan for a patient based on the diagnosis | PC-7.1 Is able to select medications | |
| | | calculate the dose and frequency of administration, and the duration of each drug course | |

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course " **Veterinary pharmacology** " refers to the mandatory part of block B1 of the Educational Program of Higher Education.

As part of the Educational Program of Higher Education, students also master other disciplines and /or practices that contribute to achieving the planned results of mastering the course "Veterinary pharmacology".

Table 3.1. List of Higher Education Program components disciplines that contribute to expected learning outcomes

| Competence code | Competence descriptor | | | or | Previous courses/modules, internships* | Subsequent courses/modules, internships* |
|--------------------|-----------------------|----|--------|----|--|--|
| PC-7 | Ability | to | choose | or | | Toxicology |

| develop a treatment plan | Dermatology |
|----------------------------|--------------------------|
| for a patient based on the | Cardiology |
| diagnosis | Endocrinology |
| | Nephrology |
| | Clinical internship |
| | Industrial practice |
| | Academic research |
| | practice with the |
| | preparation of a |
| | scientific qualification |
| | project |
| | Preparation for and |
| | passing the state exam |
| | |

4. COURSE WORKLOAD AND TRAINING ACTIVITIES

Course workload of the course "Veterinary pharmacology" is 8 credits.

Table 4.1. Types of academic activities during the period of the HE program mastering for <u>full-time</u> study

| Types of academic activities | | HOURS | | Seme | sters | |
|--------------------------------|----------|-------|-----|------|-------|---|
| Types of academic activitie | | 5 | 6 | - | - | |
| Contact academic hours | | 140 | 68 | 72 | - | - |
| including | | | | | | |
| Lectures | | 35 | 17 | 18 | - | - |
| Lab work | 105 | 51 | 54 | - | - | |
| Seminars (workshops/tutorials) | - | - | - | - | - | |
| Self-study | 110 | 56 | 54 | - | - | |
| Evaluation and assessment (exa | 38 | 20 | 18 | - | - | |
| grading) | | | | | | |
| | Academic | 288 | 144 | 144 | - | - |
| Course workload hour | | | | | | |
| Course workload | Credit | 8 | 4 | 4 | - | - |
| | unit | | | | | |

5. COURSE CONTENTS

Table 5.1 Content of the course (module) by type of academic work

| N | Module | es | Content of the modules (topics) | Types academ activiti | nic |
|--------|--------|---------|----------------------------------|-----------------------------|-----|
| Module | 1. | General | Topic 1.1. General pharmacology. | Lectures, | Lab |

| pharmacology. General | | work |
|--|--|-----------------------|
| recipe. | Topic 1.2. General recipe. | Lectures, Lab work |
| Module 2. Funds acting on the nervous system. | Topic 2.1. Remedies acting on afferent and efferent innervation. | Lectures, Lab work |
| | Topic 2.2. Substances acting on the central nervous system. | Lectures, Lab work |
| Module 3. Substances that regulate the functions of | Topic3.1.Substancesaffectingrespiratory and digestive function. | Lectures, Lab work |
| individual organs and systems. | Topic 3.2. Substances affecting the excretory function of the kidneys, cardiovascular system, hemostasis, hematopoiesis. | Lectures, Lab work |
| Module 4. Substances that primarily affect metabolic | Topic 4.1. Hormones and their analogues. | Lectures, Lab work |
| processes. | Topic 4.2. Vitamins and enzymes. | Lectures, Lab work |
| | Topic 4.3. Mineral substances. | Lectures, Lab work |
| Module 5. Means, correcting the immune | Topic 5.1. Remedies affecting immune processes. | Lectures, Lab work |
| status and productivity of animals. | Topic 5.2. Means correcting the immune status and productivity of animals. | Lectures, Lab work |
| Module 6. Antimicrobial, antiparasitic, antitumor | Topic 6.1. Disinfectants and antiseptics. | Lectures, Lab work |
| agents. | Topic 6.2. Chemotherapeutic agents. | Lectures, Lab work |
| | Topic 6.3. Rodenticides. | Lectures, Lab work |

6. COURSE EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

| Classroom for Academic Activity Type | Equipping the classroom | Specialized educational/laboratory equipment, software and materials for the development of the course (if necessary) |
|--|---|---|
| Lecture | An auditorium for conducting lecture- type classes, equipped with a set of specialized furniture; a board (screen) and technical means of multimedia presentations. | _ |

Table 6.1. Material and technical support of the discipline

| Laboratory | An auditorium for laboratory work, individual consultations, routine monitoring and interim certification, equipped with a set of specialized furniture and equipment. | - |
|--------------|--|---|
| Self-studies | An auditorium for independent work of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to an electronic information and educational environment. | _ |

7. RESOURCES RECOMMENDED FOR COURSE STUDIES

Main readings:

- Circulation and quality control of medicines for veterinary use in the Russian Federation: tutorial / A. Vatnikov, MI Shopinskaya, SG Drukovsky, EV Kulikov. -Electronic text data. - Moscow: PFUR, 2021. - 37 c.: http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=494768&idb=0
- 2. V., Kuznetsov S. V., Sakhno NV, Kapustin R. F. Veterinary pharmacology. Dictionary-Reference Book: a textbook for universities 2020.-136s https://e.lanbook.com/book/152613.
- 3. Lavrinenkova A.N. Course of lectures on veterinary pharmacology 2018.-104s https://e.lanbook.com/book/133070

Additional Readings:

- 1. Sokolov V.D. Pharmacology St. Petersburg: Lan' Publisher, 2013. 576c. https://e.lanbook.com/book/10255
- Samorodova I. M. Veterinary pharmacology and formulation. Workshop: textbook for universities / IM Samorodova, MI Rabinovich. - 7th ed. amended and supplemented - M.: Publishing house Yurite, 2018. - 278 c.
- 3. Nabiev FG, Akhmadeev RN Modern veterinary medicines St. Petersburg: Lan' Publisher, 2011. 816c. https://e.lanbook.com/book/1547
- 4. Pharmacology / Kharkevich DA, 10th ed. revised, revised and additional ed. M.: GEOTAR-MED, 2010. 752 c.
- 5. Donald K. Plumb Pharmacological preparations in veterinary medicine. Moscow: Aquarium-Print, 2016. 1060 c.
- 6. Fundamentals of pharmacology with prescription. Textbook / Astafiev V.A., Edited by Astafiev V.A. Moscow: Knorus, 2015. 595 c.

Internet sources

1. Electronic libraries (EL) of RUDN University and other institutions, to which university students have access on the basis of concluded agreements:

- RUDN Electronic Library System (RUDN ELS) http://lib.rudn.ru/MegaPro/Web

- EL "University Library Online" http://www.biblioclub.ru

- EL "Yurayt" http://www.biblio-online.ru

- EL "Student Consultant" <u>www.studentlibrary.ru</u>

- EL "Lan" <u>http://e.lanbook.com/</u>

- EL "Trinity Bridge"

2. Databases and search engines:

- electronic foundation of legal and normative-technical documentation http://docs.cntd.ru/

- Yandex search engine https://www.yandex.ru/

- Google search engine https://www.google.ru/

- Scopus abstract database http://www.elsevierscience.ru/products/scopus/

Educational and methodological materials for independent work of students during the development of the discipline/ module*:

1. A course of lectures on the course "Veterinary pharmacology".

2. Laboratory workshop on the course "Veterinary pharmacology".

* - The training toolkit and guidelines for the internship are placed on the internship page in the university telecommunication training and information system under the set procedure.

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL AS COURSE RESULTS

The assessment toolkit and the grading system^{*} to evaluate the level of competences (competences in part) formation as the course results are specified in the Appendix to the course syllabus.

* The assessment toolkit and the grading system are formed on the basis of the requirements of the relevant local normative act of RUDN University (regulations / order).

DEVELOPERS:

Associate Professor, Department of Veterinary Medicine Должность, БУП

Полпись

Kharlitskaya E.V. Фамилия И.О.

HEAD OF EDUCATIONAL DEPARTMENT:

Department of Veterinary Medicine

Signature

Vatnikov Yu.A. Full name.

HEAD OF HIGHER EDUCATION PROGRAMME: Director of the Department of Veterinary Medicine

Signature

Vatnikov Yu.A.